

## PSYCHOLOGY & TOURISM

IVO JIRASEK<sup>1(ADEF)</sup>, ADELA DVORACKOVA<sup>1(BCDE)</sup>

<sup>1</sup>Department of Recreationology, Faculty of Physical Culture, Palacky University, Olomouc (Czech Republic)

Correspondence: Prof. Dr Ivo Jirasek, ivo.jirasek@upol.cz

# The development of group connectedness and sense of community during a twelve-day winter journey on snowshoes: non-formal education through the Czech Outward Bound course

Submission: 30.07.2015; acceptance: 14.08.2015

**Key words:** group connectedness, sense of community, snowshoeing, experiential education, non-formal education, sociometry, Outward Bound, Vacation School of Lipnice, fellowship

### Abstract

**Background and study aims.** This paper deals with the perception of group connectedness and a sense of community among participants from the Czech Republic in an Outward Bound course, consisting of a twelve-day winter journey on snowshoes.

**Methods.** For the purpose of this study we chose a mixed research design combining sociometric techniques (three measurements recorded in frequency charts), analysis of the essays of participants, information from a feedback questionnaire and mind maps.

**Results.** The analysis of the quantitative data points to a marked increase in the number of people included in the inner circle of specific respondents as well as an increasing total number of calculated relational points. Respondents' verbal expressions then show a change in their experience from the individual towards society, characterized moreover by terms such as fellowship or community, which indicate aspects of sharing, cooperation, harmony and assistance.

**Conclusions.** Courses involving over-night stays, hiking and camping in a winter landscape clearly have the potential to bring meaning to social issues and interpersonal relations with prosocial attitudes as a significant feature of non-formal education guided by tools of experiential education.

### Background

Group cohesion, group connectedness and sense of community are some of the basic characteristics of groups which have dimensions that are not only psychological (or social-psychological), but also educational. We can generally conceive of its pedagogical function on several levels [Hofbauer 2004; Paduraru 2013; Schwier, Seaton 2013]:

- formal education, i.e. education and training in the institutional form of schools and educational institutions at all levels, the educational context of which is generally shaped by the relationship between curriculum and teachers and students, as well as the certification system;
- non-formal education, i.e. voluntary education based on interest, but institutionalized through children's and youth centers and clubs, as well as museums, libraries, theaters and other cultural institutions or non-governmental organizations which focus on

organizing free-time educational activities or on professional development for interest groups and community initiatives;

- informal education, spontaneous, unsystematic, non-institutional and unorganized, often without direct educational objectives, but with behavioral effects; unlike the previous forms this is a lifelong process of accumulation of knowledge, skills and attitudes.

Within the context of non-formal and informal education we encounter, among other things, multi-day or multi-week projects that aim at helping in the personal development of the participants; this is accomplished through programmatic tools connected with and reflecting on the situation being experienced. In the Czech Republic, the term experiential education has come to be used as a collective term for the educational development of individuals in small social groups [Vazansky, 1992; Vazansky, Smekal 1995; Neuman 1998; Jirasek 2004] which semantically enters into the field referred

---

to as experiential education, experiential learning, outdoor education and adventure education. The authors of this article have applied four techniques of combined research design focused on determining the influence of such a project on the development of group connectedness and sense of community (specifically the winter experiential project, "Life is Gothic Dog 2012", which was implemented by the non-profit organizations: Vacation School Lipnice, Outward Bound Czech Republic).

### **Group cohesion, group connectedness and sense of community**

The group is a significant force in the development of the individual, as well as a factor that affects one's performance. The fact that good relations within the group improve performance was demonstrated in 1924-1932 by the so-called Hawthorne Studies conducted by Professor Elton Mayo at Western Electric Company [Bruce, Nyland 2011; Hermochova 2005; O'Connor 1999]. These studies have shown that good mutual interpersonal relationships improve performance. At the same time, they demonstrate the importance of the relationship between the members of the group as a whole as well as between the members individually. Group cohesion is a typical research topic for small social groups [Greer 2012; Evans, Dion 2012]. Several studies using sociometric tests to study group cohesion and stress in work groups during teamwork courses (using outdoor management training) have been published by Slechta [2000, 2002]. The aim of our investigation is to determine whether the growth in group connectedness and sense of community (an increase in the average number of positive choices and a decrease in the average number of negative choices) is valid not only for working groups participating in short courses (training) in teamwork (and thus made up of individuals who are more or less already know one another) but also for informal groups of participants; that is, groups formed from individuals who are unknown to one another (and whose sole objective is to complete the course). We also want to determine whether the subject appears in the respondents' answers, even if cohesion is not explicitly mentioned.

### **Experiential Education in the Czech Republic**

Experiential education is a pedagogical direction that tries to capture and analyze theoretically a holistic education through experience. This form of education typically tries to create an experiential event which is reprocessed into experience that the learners make use of later in their life. Experiential education in English speaking countries is well known worldwide because of the huge amount of literature which has been produced [Knapp, Smith 2011;

Roberts 2011; Warren, Loeffler, Mitten 2008], in addition to specific journals, such as *Journal of Experiential Education* published in the U.S.A., *Journal of Adventure Education and Outdoor Learning*, produced in the U.K., or *Australian Journal of Outdoor Education*. Here, it is necessary to make a note about language: there are no strict distinctions between the use of terms such as experiential, outdoor and adventure in connection with education, learning (or to therapy and recreation). This is problematic: the difficulty with concepts, terms and their connection to ideas is that they become more complicated when used internationally and cultural understanding even in this field means that outdoor terminology as it is used in British English and Czech [Turcova, Martin, Neuman 2005].

Although there is some information about the Czech version of experiential education in English-language literature [Bartunek, Neuman, Martin 2008; Jirasek, Martin, Turcova 2009; Kudlacek *et al.* 2009], there is a lack of information about the development of this pedagogical discipline from outdoor recreation to experiential education. That is why we have presented some basic information about this progress here (based not only on post-1990 literature available electronically using databases, but also on older, substantial and still relevant literature).

The roots of the Czech form of experiential education can be found in the broad outdoors movement (represented by scouting, woodcraft, tourism, as well as the writer and teacher Jaroslav Foglar and the unorganized Czech tramping movement). These are the sources from which the Czech camping schools grew in the 1960s [Snopek 1969; Starek 1974] and which gradually developed into modern forms of residential outdoor education guided by a so-called intense recreational regime [Gintel 1986; Holec 1982; Smekal 1986]. Today, these are seen primarily as experiential learning projects. From the outset, the Vacation School of Lipnice (VSL) has been seen as the leader in this field in the Czech Republic. It should be noted that over time generations of volunteers have created a profile for the VSL as a unique form of experiential education, known abroad as the "Czech Way" [Franc, Zounkova, Martin 2007], which has drawn particular attention due to its highly developed use of dramaturgy and dramaturgical practice, i.e. working with the objectives, themes, places, program resources and people [Gintel 1982; Hora *et al.* 1984; Holec *et al.* 1994; Paulusova 2004; Franc, Zounkova, Martin 2007; Drahanska 2009], which have been described abroad as design programs or courses [Leberman, Martin 2005; Martin 2001; Martin, Leberman 2005; Martin, Franc, Zounkova 2004]. The present research focuses on one of the projects of this form of non-formal education and examines the development of group cohesion among the participants of the winter experiential course "Life is Gothic Dog 2012".

## Characteristics of Project “Life is a Gothic Dog 2012”

One of the courses offered by the Vacation School of Lipnice is a winter project called “Life is a Gothic Dog 2012” (LGD). The history of this project dates back to 2000, the first year the course was offered. Since then it has passed through a considerable mental and conceptual development. Since the first years it has made use of traditional programs (winter programs with accommodation in a mountain cabin) and despite years of camping in tee-pees engaging in activities such as mushing, only in the last two years snowshoeing has become the basic programmatic tool. A significant dramaturgical line became the utilization the mental context of a journey on snowshoes through a winter landscape in the mode of travelling on a non-religious parallel to a religious pilgrimage [Jirasek 2014]. It is therefore not a survival test, but rather a journey as a path to a deeper understanding of oneself.

We describe it as a “project” because it was not a one-time 12-day course, but rather a greater whole which was divided into three parts. The prolog or “Appetizer” was designed to test, select and pre-prepare participants for the main part (4-6 November 2011). The “Main Course” was the mentioned twelve-day snowshoeing journey through the Bukovsky Mountains in eastern Slovakia (4-15 January 2012). To intensify and close the project, six weeks later there was a final “Cherry on Top” (1-4 March 2012) where participants had the opportunity to move “from themselves to the others” by serving with a charity helping disabled (including mentally disabled) elderly people. Thus, the time period for potential effects on participants was de facto extended to several months, as the participants were in contact with the implementation team even during the period between the various stages of the course and completed the tasks assigned to them.

Our research is concentrated on the main part of the project. In eleven daily stages, participants snowshoed a total of 107 km. The “normal” day in the program began with a wake-up call at 6:30, followed by cooking breakfast, packing things in the morning warm-up exercises and departure from the camp at about 9:00. The daily snowshoe phase consisted of approximately 10-12 km and ended around three o'clock in the afternoon. This was followed by putting up a tent, cooking dinner, collecting firewood, preparing the fire pit and then an evening program by the fire (approximately 6:00 p.m. to 10:00 p.m.). In the middle of the entire journey, a day of rest was planned and carried out (along with the previous and the following half-days); this was used not only for relaxing, but also for hygiene and a further accompanying program. This specific program was researched repeatedly with using different methods, for example systemic constellations, interview analysis [Jirasek, Jiras-

kova 2014; Jirasek *et al.* 2014], however, the topic of group connectedness and sense of community was not in a center of such an inquiry.

## Goal

There is an interesting model of personal growth through experience based on four directions [Greenaway 1998] including: *upward* to achieve one's full potential; *outward* to make contact and encounter others; *inward* to increase our awareness of who are we; and *downward* to touch the earth. Though this model was used as a methodological basis for literature review and thematic analysis of personal development through expeditions [Stott *et al.* 2015], this research was focused only on papers written in English. There is a question as to whether Czech participants in the course would confirm similar findings, meaning whether the outputs are not culturally limited to English-speaking populations and are true only for young people, but also adults. Of all the four directions possible we concentrate on one of them, the *outward* direction as learning about others. Authors see in this sociability factor [Stott *et al.* 2015: 219] also a dimension of connectedness to others and sense of community among others.

The aim of our investigation is to determine how group connectedness and sense of community develop while participating in groups during the twelve-day journey on snowshoes as a part of the course of the Life is a Gothic Dog 2012. Without a need to formulate a hypothesis we could test with statistical tools, we presume that group to group connectedness and sense of community grow over time.

## Methodology

To achieve this goal, we have chosen a mixed research design, i.e. a combination of qualitative and quantitative methods [Hendl 2008]. A case study allows us to monitor a particular group of people, especially the development of their relations and connections [Miovsky 2006]. We have taken advantage of the following research tools:

- a. frequency charts and the closeness of relationship s within the group;
- b. essays of participants;
- c. feedback questionnaires;
- d. mind maps.

## Sample

Twenty-nine participants took part in LGD 2012 course, 18 of whom were men and 11 women. In addition, over

the entire period of the course, a total of 5 instructors participated, 4 of whom were at least partly included in the research sample (3 men and 1 woman). Due to incomplete data, the research results included the responses of only 26 persons. The average age of the group was just less than 33 years. The youngest participant was 23 years old and the oldest 51 years old. Participants came from throughout the Czech Republic (a total of nine regions), while two were from Slovakia.

## The course and organization of research

### *Recording charts of frequency and close relationships within the group*

At the beginning of the course, each subject was given a diary in which there were three charts to fill out to determine their perception of the frequency and closeness of the relationships. The chart was in the form of circular sectors divided into three areas (space to write the names of people who are emotionally closest to the participant, a moderately interesting part and finally the edge for a list of individuals who are still interesting for the respondent). Respondents were not, however, required to record the names of all the participants. Each table was identified with a number under which each participant was recorded (to preserve anonymity). The measurement was carried out three times, on the first day, the sixth day and the twelfth and last day of the main part of the project. Before filling out the charts, the entire team of respondents was made aware that filling out the charts was voluntary and was informed that the data would be used only for the purposes of this research. Data were collected each morning after packing up the camp and after finishing the Main Course the responses were recorded in an Excel spreadsheets and converted into "reference points". For each name entered in the field of the greatest emotional proximity three reference points were assigned, in the middle section two points, and in peripheral arc one point.

### *Participants' essays*

As part of the course LGD 2012, after completing the main hike, participants had the task of writing an essay on the topic "*These twelve days of the context of my life.*" Participants sent their essays in electronic form approximately a month after the Main Course. Only those passages that relate to the issue being studied, group connectedness and sense of community, were selected from the essays. This means that not all the essays were analyzed nor was all the information contained therein, because our primary interest was not a comprehensive analysis of participants' experiences, but rather to probe the theme of group cohesion.

### The feedback questionnaire

Approximately six weeks after the end of the project, participants were asked to provide feedback by means of an on-line feedback questionnaire. Two questions directly related to group cohesion:

- How would you assess the coherence of the group as a whole (score range 1 strongest to 5 weakest)
- How much did you feel yourself to be a part of a group? (score range 1 most - least 5)

These questions were used to calculate only an average as a supportive indicator of the perception of participants after a period of time.

### *Mind maps*

As a part of the evening program on the third evening of the Main Course the participants were given the task of creating a mind map [Buzan 2007] around the fire. Mind maps depict relationships, and therefore may be more easily understood than verbal descriptions, whether spoken or written. They help to form associations between concepts and in understanding the concepts themselves. Each participant received a white sheet of A3 pasteboard on a hard cardboard surface along with colored crayons and were asked to draw a mind map on the topic "Life is Gothic Dog 2012" (while listening to music). The task was further specified by the statement, "What does the title mean for me personally?" The participants had approximately 45 minutes to complete their tasks. This research material was preserved for later comparison with a second mind map, which was created in the third part of the project – the Cherry on Top. The task was identical in both cases, so that subsequent comparison of results could be carried out. The mind maps, like the other data collected, were also not analyzed in their entirety but only a targeted selection of information relating to our researched topic, i.e. individuals and groups.

## Results

### *Charts of the frequency and the closeness of relationships within the group*

The first diagram (Fig. 1) clearly shows the result of the first, second and third measurements. This presents the sum of relational points of the whole group and the proportion of the numbers for the probands. On the first day, each participant had an average of 12.61 "relational points", on the sixth day it was 23.52 and on the last day the number of "relational points" per subscriber rose to 32.73. While the minimum score is zero (if the chart was completely empty) and the maximum score is 99 (if the proband records the names of all persons in the field of a very close relationship for 3 relational points). As the chart shows, the number of relations and their depth



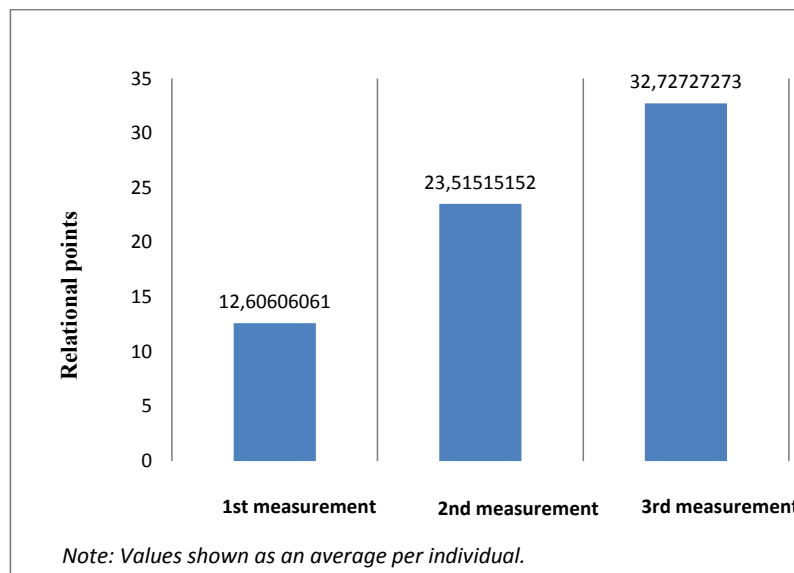


Figure 1. Development of the frequency of relationships within the group LGD2012

Table 1. Measured values of the participants converted to „relational points“

Points according to relationship number of participants	1 <sup>st</sup> measurement				2 <sup>nd</sup> measurement				3 <sup>rd</sup> measurement			
	1 <sup>st</sup> day				6 <sup>th</sup> day				12 <sup>th</sup> day			
	3	2	1	Σ	3	2	1	Σ	3	2	1	Σ
A	No. of people	No. of people	No. of people	Relation-al points	No. of people	No. of people	No. of people	Relation-al points	No. of people	No. of people	No. of people	Relation-al points
A	3	2	0	13	5	2	2	21	5	5	22	47
B	0	8	0	16	12	0	0	36	3	27	3	66
C	0	3	3	9	2	6	4	22	1	31	1	66
D	0	2	4	8	3	6	4	25	6	5	1	29
E	1	3	2	11	4	9	3	33	5	5	12	37
F	2	4	26	40	3	9	20	47	10	4	18	56
G	0	3	1	7	1	3	0	9	3	1	0	11
H	0	7	26	40	5	9	19	52	8	25	0	74
I	2	2	0	10	2	2	1	11	3	1	0	11
J	1	3	3	12	2	5	0	16	8	15	0	54
K	2	5	0	16	10	23	0	76	33	0	0	99
L	0	2	2	6	0	7	0	14	1	5	0	13
M	0	2	6	10	1	2	7	14	1	2	8	15
N	6	4	0	26	11	0	0	33	13	3	2	47
O	1	1	2	7	6	6	0	30	6	26	0	70
P	3	20	3	52	12	15	0	66	11	9	0	51
Q	0	2	2	6	0	3	5	11	1	5	4	17
R	9	0	0	27	16	17	0	82	13	20	0	79
S	1	5	9	22	1	7	8	25	2	8	22	44
T	1	1	1	6	2	3	1	13	5	3	0	21
U	0	0	2	2	2	4	5	19	3	11	0	31
V	0	1	5	7	1	6	5	20	1	7	0	17
W	2	4	0	14	7	5	0	31	3	4	3	20
X	1	3	0	9	0	4	1	9	0	6	2	14
Y	5	0	0	15	4	12	8	44	5	23	4	65
Z	6	0	0	18	6	2	2	24	5	3	5	26
<b>Σ points</b>	<b>51</b>	<b>83</b>	<b>97</b>	<b>416</b>	<b>113</b>	<b>171</b>	<b>95</b>	<b>776</b>	<b>155</b>	<b>254</b>	<b>107</b>	<b>1080</b>

Average / person 12,61

Average / person 23,52

Average / person 32,73

Change in % 86,54

Change in % 39,18

Note: Data from only 26 probands are included, but the total number of people included in the measurement is 33.

Increasing values	At least two unchanging values	Decreasing values
-------------------	--------------------------------	-------------------

**Table 2.** Excerpts from the essays of selected participants in LGD2012

Respondent	Excerpt from the essay
1	„ <b>Community</b> , which together can do more than the sum of individuals.“
2	„Every night we stood around the fire in a circle, a beautiful ritual that culminated the day. I felt a sense of <b>solidarity</b> and the strength of our group.“
3	„It also showed me something that I had felt, and that I realized at the end of march. That a group of like-minded people can create a similarly functioning <b>community</b> . Although this is made easier by its short duration, it, nonetheless, fascinates me as a fact that has been almost entirely absent in my everyday life.“
4	„I could <b>rely on others</b> completely and at the same time I felt a responsibility to contribute to the common 'well-being'. When I think about what <b>united</b> us and how we came to work so well together, I think it was a common objective which we all wanted to achieve, yet we know that we need to achieve it together; moreover, this goal was clear and we were not distracted by any other issues. In addition, the road was fairly long and we were able to take leave of one another before cabin fever set in. The group also always appreciated the help of others, and thus quickly established its own social norms.“
5	„The other help me. I feel like I already belong to this party. „
6	„I realized, however, that without the other people I would certainly fail and without me they would also fail. The Group's success does not depend only on tough guys but also on those who work less, but within their abilities also contribute to the overall success. „
7	„I went into Gothic Dog, with a group of thirty strangers. I knew that I would 'share the ridge' with them for two weeks and that I would have to rely in them and they on me. Now it is precisely that <b>sense of solidarity</b> that we all felt certainly and we certainly each did our own considerable amount of work, but we managed. „
8	„I thanked my tent mates for the fact that I did not always have to pack the tent, that I did not always have to boil water for tea, that they left me space in the tent for packing, and gave me a piece of their 'blood sugar' because, through some misunderstanding, I had left a piece of mine at home.“

clearly increases with time. The increase in "relational points" on the 6th day is almost 87% higher than at the beginning of the course. By the end, the "relatedness" has increased by nearly 40% as compared to the second measurement.

Table 1 shows in detail the number of people recorded by the probands in different areas of the recording tables in the three measurements. At the same time it gives the equivalent value of the "relational points" and other detailed information about the decreasing or increasing average values.

Table 1 shows the increasing total values ("relational points") of the participants for each measurement: 416 points in the first measurement, 776 in the second and 1080 in the third measurement. There are big differences in the values for individuals. It is worth noting respondent G, whose values in all three measurements do not show a radical change in the perception of others (7, 9 and 11) or respondent H, whose values are significantly higher than average (40, 52, 74). For none of the respondents in the research group is the first measured value the highest. For nineteen of the 26 respondents with each measurement the value of the "relational points" gradually increases (see the gray box). For two probands the resulting point value has increased just once from the first measurement (see the white box). In five probands, we can notice an increase in value of the second measurement and a subsequent decline in the value of the third measurement (the number in the gray rectangle).

In addition to recalculating point values we can mention a number of names recorded in respondent's charts. The first measurement, 51 persons were recorded

in the first field, marked closest, in the second measurement it was 113, and in the last 155. In the moderately close field 83 persons were recorded in the first measurement, 171 persons in the second and in the last 254. In the most distant field with the value of one "relational point" 97 individuals were recorded in the first measurement, while in the second the number was 95 and 107 persons in the last. These numbers indicate not only the growing number of people that individuals perceived as closer over time, but also the increasing depth of relationships understood in this way (movement closer to the center).

### Essays

Some participants directly mentioned the cohesion and importance of groups in their essays. The final number of the essays represented 22 written works. Thirteen of them touched on group cohesion in the form of terms such as: society, community, solidarity, the power of groups, relying on others, unity, mutual aid, belonging. Selected excerpts from eight respondents are listed in Table 2.

### Feedback questionnaires

Table 3 and Table 4 present the responses of the participants to two questions related to group cohesion, which were part of a feedback questionnaire.

As is apparent from both tables, group connectedness and sense of community and personal involvement in the group intensifies over time (point values drop).

**Table 3.** Evaluation of answers to the question: **How do you assess the solidarity of the group participants as a whole?** Point range 1-5 (1 = strongest, 5 weakest)

	Group total	Individual average
After the Appetizer	71	3, 23
After the Main Course	47	2, 14
After the Cherry on Top	32	1, 45

**Table 4.** Evaluation of responses to the question: **How much did you feel yourself to be a part of a group?** Point range 1-5 (1 = best, 5 = least)

	Group total	Group total
After the Appetizer	62	2, 82
After the Main Course	51	2, 32
After the Cherry on Top	27	1, 23

**Table 5.** Comparison of the two concepts of mind mapping by selected individuals

Respondent	First Mind Map	Second Mind Map
A	Individual	Fellowship
B	-	People, meeting, sharing, friendship, harmony
C	desire to be alone, get to know friends	I am able to manage things on my own, but if we help one another, there will be time to get to know each other, the company of people makes me feel good
D	Group	Community, friends
E	Solitude	People -power, society, security, cooperation and assistance

**Mind maps**

For most of the participants, various concepts such as people, team, group, community etc. appeared in at least one of their mind maps. By comparing pairs of mind maps from a specific respondent the transformation of social perception is apparent, or classified into groups (Table 5). We offer an illustrative example of a pair of mind-maps created by participant A.

**Discussion**

Group cohesion, group connectedness and sense of community are a traditional topic of research in the discourse about experiential and outdoor education. Participants know that some expeditions could be unsuccessful because of a lack of attention directed toward the dynamics between group members [Cashel 1994]. Moreover, an intense sense of community and connection to the natural environment should be seen as a specific condition for understanding a wilderness expedition within the framework of a rite of passage [Andrews 1999]. There is research on the subject which makes use of quantitative approaches, such as using the Group Cohesion Evaluation Questionnaire [Glass, Benshoff 2002], as well as research using qualitative approaches [Breunig *et al.* 2008]. The mixed research design of our study,

combining multiple data collection techniques, helps provide more flexible and comprehensive information than a mere positive affirmation that group cohesion increases during the course.

From the results of the charts of frequency and relational closeness, it is clear that within the group there are large differences between the participants in terms of the number of names they record. This may be due to individual perception of the concept of “closeness” to a person. For some, a person they are close to may mean a person who they find very likeable, even if s/he may not have known them before, while for someone else a person they are close to may mean someone s/he has known for years and with whom s/he shares many experiences. Individual interpretation, thus, enters into interpersonal comparisons. However, if we limit ourselves to the evaluation of the group as a whole, it is evident that a course involving a journey on snowshoes while camping in a winter landscape had the potential, within the context of non-formal learning, to offer the possibility of increasing group connectedness and sense of community and to shift attention from the individual to the group.

The fact that the strength of the relationships grew, is evident from a comparison of individual waves of measurements: in the first, most participants are recorded in the charts at the extreme edges (for one relational point), while in the second and third measurements their rela-

tionships are closer, their number has not only increased, but also moved closer to the center (up to two or three “relational points”).

The concepts recorded in the mind maps, as well as pictorial symbolism of some artifacts also illustrate the growth in group connectedness and sense of community. As shown in Table 5, the social component of the course LGD 2012 was an indispensable, even central, element for some participants. We can assume that some individuals became friends, and that a mere group became a community. For example, at the beginning of the Main Course, respondent B did not envision any people under the term LGD 2012, but in the second mental map “people” and even “friendship” already appear. For respondent E a central concept of the first map was “solitude”, but in the second map that changes to “company”, “cooperation” and “help”.

All these findings together show a higher level of connectedness to others and sense of community thanks to participation in an Outward Bound winter course. Human movement and camping in a winter landscape can thus be a determinant for an increasing in sociability. Our research can confirm the findings of our literature review and thematic analysis [Stott *et al.* 2015] at least in the chosen dimensions of *outward* personal development. However, at the same time, we can expand on these outputs concerning these points, overlapping with the previous research:

- connectedness to others and sense of community increases not only among groups of youth participants, but also adults;
- this development is evident not only from expeditions longer than 14 days, but also from shorter winter outdoor course (concretely 12 days in our research);
- the result is not valid only for English speaking countries, but also for other cultural and social conditions (concretely from Slavonic countries).

### Limits of the research

We can consider it to be beyond the limits of this research to determine whether the resultant values in the tables had an unquestionable affect in the actual psychological disposition of the participants. We are not able to distinguish the effect not only of individuals but also of the group as a whole, or nature and the context of the winter landscape on the perceived closeness. We do not know the exact definition or interpretation of the concept of “closeness” about which respondents were asked. Therefore, the interpretation cannot be used for a deeper understanding of the experiences of individuals, but rather must remain at the level of the interpretation of group perception.

### Conclusion

The results show that group connectedness and sense of community among participants in LGD 2012 increased with time. Strong bonds were created between the participants and the result was a strong experience as a group. But whether the cohesion remains stable even after the end of the project, and whether in the end it remains and reaches into the future (e.g. such as in the form of meetings not organized by VSL) or, conversely, if group cohesion and the strength of relationships wane and how quickly was not the subject of our research.

Determining the presence of a strong sense of group and community in the winter adventure project Life is a Gothic Dog 2012 raises many questions. Is group connectedness and sense of community a self-evident outcome in the context of any non-formal education project? Or does the strong influence of the environment (the cold, the natural landscape, the demanding journey, etc.) affect the formation of strong mutual bonds between participants more strongly than other possibilities in other types of courses? Is the high level of group connectedness and sense of community an educative aim or rather a byproduct of other targeted influences on the participants? We can conclude that a higher level of group solidarity contributes to meeting the needs of safety and solidarity in the group, and thus to a greater opening of group members to their own development and to fulfilling their needs for self-actualization, as well as to the possibility of even deeper understanding of the issues that may be encountered when participating in these types of activities, such as (as testified to in the essays) existential reflections on the meaning of life and relationships with other people or the resolution to transform and enrich one’s life even after the course.

### References

1. Andrews K. (1999), *The wilderness expedition as a rite of passage: Meaning and process in experiential education*, “Journal of Experiential Education”, vol. 22, no. 1, pp. 35-43.
2. Bartunek D., Neuman J., Martin A. (2008). *Applying meta-analysis to Czech outdoor research*, “Horizons”, vol. 43, pp. 29-31.
3. Breunig M., O’Connell T., Todd S., Young A., Anderson L., Anderson D. (2008), *Psychological sense of community and group cohesion on wilderness trips*, “Journal of Experiential Education”, vol. 30, no. 3, pp. 258-261.
4. Bruce K., Nyland Ch. (2011), *Elton Mayo and the deification of human relations*, “Organization Studies”, vol. 32, no. 3, pp. 383-405.
5. Buzan, T. (2007). *Mentálnímápaní [Mental mapping. In Czech]*, Portal, Praha.
6. Cashel C.M. (1994), *Group dynamics: implications for successful expeditions*, “Journal of Wilderness Medicine”, vol. 5, no. 2, pp. 163-170.



7. Drahanská, P. (2009), *Puzzle and cake*, "Gymnasion", vol. 11, pp. 47-54 [in Czech].
8. Evans C.R., Dion K.L. (2012), *Group cohesion and performance a meta-analysis*, "Small Group Research", vol. 43, no. 6, pp. 690-701.
9. Franc D., Zounkova D., Martin A. (2007), *Learning by experience and play: A practical guide for the instructor*, Computer Press, Brno [in Czech].
10. Gintel A. (1982), *The defence of the leading ideas or dramaturgy*, "Metodickelisty pro telo vychovne brannoucinnost", vol. 10, no. 2, pp. 7-9 [in Czech].
11. Gintel A. (1986), *Modern forms of outdoor education*, "Teorie a praxetelesne vychovy", vol. 34, no. 9, pp. 518-520 [in Czech].
12. Glass J.S., Benshoff J.M. (2002), *Facilitating group cohesion among adolescents through challenge course experiences*, "Journal of Experiential Education", vol. 25, no. 2, pp. 268-277.
13. Greenaway R. (1998), *In search of respectable adventure*, "Horizons", vol. 14, pp. 24-26.
14. Greer L.L. (2012), *Group cohesion: then and now*, "Small Group Research", vol. 43, no. 6, pp. 655-661.
15. Hendl J. (2008), *Qualitative research: basic theories, methods and applications*, Portal, Praha [in Czech].
16. Hermochova S. (2005), *Group dynamics in the classroom*, AISIS, Kladno [in Czech].
17. Hofbauer B. (2004), *Children, youth and leisure*, Portal, Praha [in Czech].
18. Holec O. et al. (1994), *Instructor primer*, Prazdninovaskola Lipnice, Praha [in Czech].
19. Holec P. (1982), *Educational viewpoints of managed recreational activities*, "Teorie a praxetelesne vychovy", vol. 30, no. 5, pp. 272-277 [in Czech].
20. Hora P. et al. (1984), *Holidays with whipped cream*, Mladafronta, Praha [in Czech].
21. Jirasek I. (2014), *Wandering phenomenon as a symbol of spiritual dimension in personal development in experiential education discourse*, "Pedagogic káorientace", vol. 24, no. 1, pp. 5-21 [in Czech].
22. Jirasek I. (2004), *Definition of experiential education*, "Gymnasion", vol. 1, pp. 6-16 [in Czech].
23. Jirasek I., Jiraskova M. (2014), *Winter wandering on snow shoes as a non-religious pilgrimage*, "Ido Movement for Culture. Journal of Martial Arts Anthropology", vol. 14, no. 2, pp. 47-51; doi: 10.14589/ido.14.2.7
24. Jirasek I., Jiraskova M., Majewska P., Bolckova M. (2014), *Experiencing spiritual aspects outdoors in the winter: a case study from the Czech Republic using the method of systemic constellations*, "British Journal of Religious Education"; doi: 10.1080/01416200.2014.984586.
25. Jirasek I., Martin A., Turcova I. (2009), *Games and play: Jaroslav Foglar's influence on Czech education in nature*, "Horizons", vol. 45, pp. 28-32.
26. Knapp C.E., Smith T.E. (2011), *Sourcebook of experiential education: key thinkers and their contributions*, Routledge, New York, NY - London.
27. Kudlacek M., Bocarro J., Jirasek I., Hanus R. (2009), *The Czech way of inclusion through an experiential education framework*, "Journal of Experiential Education", vol. 32, no. 1, pp. 14-27.
28. Leberman S.I., Martin A.J. (2005), *Applying dramaturgy to management course design*, "Journal of Management Education", vol. 29, no. 2, pp. 319-332.
29. Martin A.J. (2001), *Dramaturgy: A holistic approach to outdoor education*, "Australian Journal of Outdoor Education", vol. 6, no. 1, pp. 34-41.
30. Martin A., Franc D., Zounkova D. (2004), *Outdoor and Experiential Learning: An Holistic and Creative Approach to Programme Design*, Gower Publishing, Aldershot.
31. Martin A.J., Leberman S.I. (2005), *Personal Learning or Prescribed Educational Outcomes: A Case Study of the Outward Bound Experience*, "Journal of Experiential Education", vol. 28, no. 1, pp. 44-59.
32. Miovisky M. (2006), *Qualitative approach and methods in psychological research*, Grada, Praha [in Czech].
33. Neuman J. (1998), *Adventure games and exercises in nature*, Portal, Praha [in Czech].
34. O'Connor E. (1999), *Minding the workers: The meaning of 'human' and 'human relations' in Elton Mayo*, "Organization", vol. 6, no. 2, pp. 223-246.
35. Paduraru M.E. (2013), *Managing formal, non-formal and informal economic education*, "Review of International Comparative Management / Revista de Management Comparat International", vol. 14, no. 4, pp. 637-643.
36. Paulusova Z. (2004), *Meaning and significance of dramaturgy in the preparation of experiential education events*, "Gymnasion", vol. 1, pp. 85-89 [in Czech].
37. Roberts J.W. (2011), *Beyond learning by doing: Theoretical currents in experiential education*, Routledge, Taylor & Francis Group, New York, NY.
38. Schwier R.A., Seaton J.X. (2013), *A comparison of participation patterns in selected formal, non-formal, and informal online learning environments*, "Canadian Journal of Learning and Technology", vol. 39, no. 1, pp. 1-15.
39. Smekal V. (1986), *Education and stay in nature*, "Teorie a praxetelesnevychovy", vol. 34, no. 6, pp. 358-362 [in Czech].
40. Snopek V. et al. (1969), *Camping school*, Mladafronta, Praha [in Czech].
41. Starek M. (1974), *Camping schools as they were, how they are and how they should be*, "Metodickelisty pro pobyt v prirode a turistiku", vol. 4, no. 3, pp. 15 [in Czech].
42. Stott T., Allison P., Felter J., Beames S. (2015), *Personal development on youth expeditions: A literature review and thematic analysis*, "Leisure Studies", vol. 34, no. 2, pp. 197-229; doi: 10.1080/02614367.2013.841744.
43. Slechta P. (2000), *Sociometric diagnosis of social groups*, "Bulletin PsÚ", vol. 6, no. 1, pp. 73-87 [in Czech].
44. Slechta P. (2002), *Using of sociometric test in the evaluation of the working groups*, "Psychologie v ekonomicképraxi", vol. 37, no. 1-2, pp. 87-90 [in Czech].
45. Turcova I., Martin A., Neuman J. (2005), *Diversity in language: Outdoor terminology in the Czech Republic and*

- Britain, "Journal of Adventure Education and Outdoor Learning", vol. 5, no. 2, pp. 101-117.
46. Vazansky M. (1992), *Leisure and education by experience*, Nakladatelství Masarykovy university, Brno [in Czech].
47. Vazansky M., Smekal V. (1995), *Basics of leisure education*, Paido, Brno [in Czech].
48. Warren K., Loeffler T.A., Mitten D. [eds.] (2008), *Theory & Practice of Experiential Education*, Association for Experiential Education, Boulder, CO.

### **Rozwój więzi grupowej i poczucia wspólnoty w ciągu dwunastu dniowej zimowej podróży na raketach śnieżnych: nieformalna edukacja w Czechach w ramach programu Outward Bound**

**Słowa kluczowe:** więzi grupowe, poczucie wspólnoty, wędrówki na raketach śnieżnych, edukacja empiryczna, edukacja nieformalna, socjometria, Outward Bound, Szkoła Wakacyjna w Lipnicach, społeczność

#### **Streszczenie**

Tło i cel badania. Artykuł dotyczy postrzegania więzi grupowej i poczucia wspólnoty wśród uczestników z Czech biorących udział w programie Outward Bound obejmującym dwanaście dni zimowej podróży na raketach śnieżnych, w czasie którego uczestnicy przebyli ponad 107 kilometrów.

Materiał i metody. Na potrzeby tego badania wybrano projekt badawczy łączący techniki socjometryczne (trzy pomiary zapisane w wykresach częstotliwości), analizę esejów uczestników, informacje z ankiet zwrotnych i mapy myśli. W programie wzięło udział 29 osób (19 mężczyzn i 11 kobiet). Jednakże ze względu na niepełne dane, wykorzystano wyniki badań z wypowiedzi 26 osób. Średnia wieku w grupie wyniosła 33 lat. Najmłodszy uczestnik miał 23 lat, a najstarszy 51 lat. Uczestnicy pochodzili z całej Republiki Czeskiej (w sumie dziewięciu regionów), a dwóch respondentów pochodziło ze Słowacji.

Wyniki. Analiza danych ilościowych wskazuje znaczny wzrost liczby osób objętych konkretnymi badaniami, jak również wzrost ogólnej liczby obliczonych punktów relacji. Wypowiedzi respondentów wskazują na zmianę ich doświadczeń z przejścia od poczucia jednostkowego do relacji zmierzających w kierunku społeczeństwa i pojawieniem się takich terminów jak wspólnota lub społeczność, które wskazują na aspekty dzielenia się, współpracy, harmonii i pomocy.

Wnioski. Programy obejmujące parodniowe wyjazdy, chodzenie i nocowanie w scenerii zimowego krajobrazu wyraźnie mają potencjał, by wnieść znaczenie do kwestii społecznych i relacji interpersonalnych z postawami prospołecznymi, będącą znaczącą cechą edukacji pozaformalnej kierującą się narzędziami edukacji empirycznej.