

## **Publishable summary**

### **Target group**

Academics, institutions providing educational training, practitioners, civil society.

### **Project objectives**

The objectives of this research project were:

1. To find out which meta skills and personality factors in a facilitator appear to be most influential, in terms of reinforcing participants' positive behaviours and attitudes.
2. To compare and contrast definitions, connotations and general usage of terminology in the standard literature of the UK, USA, Germany, and possibly other countries. Terms of interest are: (a) meta skills / personality / trainer ethics / and similar terms, (b) facilitator / trainer / instructor / etc., and potentially (c) Outdoor / Adventure / Experiential Education.
3. To investigate to what end neurocognitive instruments can be utilized in the evaluation of OEE activities.
4. To elicit possible interference factors on the programmes' success such as programme duration, content and location.

### **Work performed since the beginning of the project**

The primary target literature – in outdoor adventure education (OAE) – provided very little sources on the topic of meta skills. Therefore, an extensive cross-disciplinary literature review was conducted from the fields of school and general education, social studies, professional training, psychology, and psychotherapy. The focus of the search was on factors that influence the success of educational interventions aiming to increase social and personal key competences.

A list of interference factors less closely connected to the person of the educator was collated (project objective 4). In regard to the educator, relevant themes that emerged from the review were emotional intelligence, leadership, personality and values.

Standardised psychometric measures for emotional intelligence (EQi 2.0), personality (NEO-FFI-3), and leadership (MLQ 5X) were implemented in order to increase the scientific rigor of this project. These were combined into an online questionnaire using Bristol Online Survey (BOS), along with items on values and a demographic section gathering data flagged up by existing research to have potential impact on the learning outcome in OAE programmes. The questionnaire was completed by 65 outdoor educators in the UK, and descriptive and analytical statistics conducted using SPSS and Excel.

Based on the insights and findings from this, and expert discussion, two further online questionnaires were designed. One for OAE programme participants, and the other for their group leaders (i.e. teachers). Both addressed factors in the programme and OAE instructors that (a) supported, and (b) hindered learning for the participants, as well as possible mid-term effects. They were piloted with a local school, consecutively improved, and are now awaiting their wider launch, which will be promoted as part of the knowledge exchange activities with outdoor education centres.

### **Main results achieved so far**

*Objective 1:*

- A concise list of trainer skills and personality factors understood to be crucial for the learning process of programme participants was collated from the existing literature – which exhibits a high variance of academic quality.
- Statistical analysis of the data from the online questionnaire added some insight to the existing literature, while also posing further questions that will need to be answered in future research with qualitative methods (e.g. How did the instructors develop these qualities?). A proposed publication on the statistical results is currently under peer advice internally and planned to be submitted to the journal *Leadership Quarterly* early 2016.

*Objective 2:*

- A distinction between some of these terms is less important than expected, and some main publications of the field already offer explanations to that effect, thus rendering part of this objective obsolete.
- There is a high variance in the conceptions around 'good leadership' and outdoor / adventure / experiential education around the World stemming from cultural, geographical and historical reasons. A proposal for an edited book on 'Outdoor Adventure Education International' to present and compare these has been submitted for consideration to Routledge (Taylor & Francis). Decision pending.

*Objective 3:*

- The implementation of neurocognitive imaging in OAE is difficult since most devices are too large and immobile to be implemented in the field (literally). Clinical tests with facilitators or participants would be possible and highly interesting, but were considered unfeasible in the scope of this project.
- Four portable EEG devices (Insight® by Emotiv) with restricted capacities have been purchased and are now used in a small scale research project with OAE educators and programme participants to measure engagement and other factors during outdoor activities (project objective 3). This involves an MSc dissertation project of a part-time student, and as such is an ongoing study.

*Objective 4:*

- Since the project moved from investigating OAE facilitators during programmes to investigating them individually, these factors were not directly covered in the study. However, a list of dominant interference factors was generated from the literature review and is distributed in seminars, presentations, and publications.

**Expected final results**

The project was deliberately set up to be more sustainable than merely a concise two-year study. Therefore, the 'final results' (described above) from this funding period fluently link into piloting and preparations for a more extensive research project on factors that promote the growth of social and personal key competences in learners, with a focus on person-related aspects in (outdoor and other) educators.

**Potential impact and use**

- OAE facilitators who fill in the online questionnaire receive individual feedback on the profile their responses generates, as well as a summary of the overall research

findings of this project (so far). This can be used for personal and professional reflection on their leadership styles, etc. and their impact on programme participants.

- Directors of outdoor centres may use the findings for staff training purposes to increase the efficiency of their services. Meetings and discussions to that effect have so far only taken place informally as it is planned to be part of formal knowledge exchange events transforming this project into a more comprehensive one.
- Ongoing discussions with leading academics in the field on implications of the findings and issues around measuring personal and social development contribute to improving the quality of research in this area and to identifying crucial issues for future research.
- The approach of investigating processes in OAE by means of neurocognitive research methods is new to the field. Therefore, findings could help to fortify the foundations of OAE as a valuable educational approach, giving the ERA a head start in linking natural scientific methods with ways to promote key competences in the general population.
- Potential long-term wider societal implications of this continuing research: improvement of OAE programmes and thereby increase of key competences in the general (mostly pupil) population. the EU could profit from this through the implications for teachers, teacher training courses and the implementation of the findings in formal and informal education, strengthening the development of key competences in young citizens, attributing to the economic and social wealth of the European Community.

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