



# ORIENTEERING WITH CHILDREN AT RISK OF EXCLUSION

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# 1. ORIENTEERING WITH CHILDREN AT RISK OF EXCLUSION

Welcome to Module 3! You will find the University Loyola Andalucía's proposal for the third module of the course into this document. After seeing theory and map of competences into Module 1, and research methodology in Module 2, our institution proposes for Module 3 an example of practical use of a sport as a way to promote social inclusion. You will see how Modules 1 and 2 are needed to develop the intervention, therefore, the correspondance of previous modules with Module 3 is found throughout the text. The document is divided into 4 parts: the overview to understand the context and purpose of the intervention, information about orienteering sport, the structure and development of the proposal, and finally some references to read. You will also find an APPENDIX section where analysis instruments and specific resources are presented.

#### 1.1. OVERVIEW

Leader: University Loyola Andalucía

University Loyola Andalucía's group presents an extensive work in the field of youth and children. All members have worked with young people, teenagers, and children from contexts at risk due to diverse backgrounds (poverty, ethnic and cultural differences, language diversity etc.). Their work involves a multidisciplinary framework based on Martha Nussbaum Capability Approach Framework, the coordination and guidance in summer camps and after-school activities, the engagement concept related to academic dropout as well as the design and evaluation of empirical instruments to guide, follow-up and diagnose needs. The group also works with e-learning environments and technologies and its influence in national policies to attend social issues. It implies the creation of pedagogical resources and didactic tools to work in training contexts related to special education needs, language diversity and educational measure.

# **Description:**

According to University Loyola Andalucía's background, this proposal is directed toward children in risk of social exclusion. The sport selected to work with these participants is orienteering. This part of the course focuses on a proposal that implies practicing an orienteering race while the target group develop specific skills, values and knowledge related to their environment and personal interactions.

















The aim of this intervention is to allow future experts to design, implement and evaluate a proposal with children from sensitive contexts. University Loyola Andalucía presents an introduction to take a general look at orienteering, to deep orienteering sport in terms of inclusion with children, and to know what competences, resources and contents can be considered while the intervention is planned.

#### 1.1.1 TARGET GROUP: CHILDREN AT RISK OF EXCLUSION

In this proposal, orienteering is related to children as a potential social group in risk of exclusion according to the United Nations Educational, Scientific and Cultural Organization (UNESCO) (2015) and the Organization for Economic Cooperation and Development (OECD) (2018). These international organizations point out the achievement of the 4<sup>th</sup> Sustainable Development Goal in 2030 to consider education as a priority worldwide; specifically, paying attention to the most vulnerable individuals (children and young people) due to different exclusion reasons (UNESCO, 2016). From educational research, Brunton et al. (2003) suggested to promote physical activities among children to connect them with peers and the acceptance of physical, social and attitudinal differences. In this line, the meta-analysis conducted by Liu et al. (2015) points out the importance of sportif interventions from school settings. Authors found that leasure and academic activities are the most effective strategy to increse self-esteem and strenghten the self-concept of children at risk. The promotion of peace is another factor higlighted to work through sports, specifically those which include teamwork (Stura and Johnston, 2018).

As the European Commission (2017) warns, the preparation of educators and skateholders in terms of educational diversity is a key issue to work in this field. Due to this reason, working with the sourrounding context of schools in low socioeconomic contexts is a starting point. Several studies (Lin et al., 2017; Martens et al., 2014; Minh et al., 2017; Sellström and Bremberg, 2006) point out the importance of safety, well-being and cohesion in the neighbourhood of vulnerable children to promote their independence and positive relationships in these contexts. In fact, the practice of sports is associated with an increase in perceived levels of well-being, in addition to being a powerful tool in the prevention and treatment of depression (Garcia-Falgueras, 2015). However, in spite of all the advantages, the inclusion of sports in children and teenagers' daily routine is not an achievement yet.

















Many interventions are conducted since UNESCO (2012) relates meaningful learning experiences, as physical and sportif activities, with the right of children to receive a proper education. In fact, one the most useful strategies to deal with social exclusion is practising a sport. For instance, Tuñón and Castro (2014) highlight that social sports promote inclusive situations to enhance the connection between health and community, no matter the age, sex and social, cultural or ethnical status. UNESCO (2016) also presents the importance of giving visibility to sports into childhood for the purpose of preserving democratic values and cooperation in future adults and citizens. Some examples can be football, basketball and outdoor sports, that are highlighted to experience social inclusion and belonging to relevant groups for individuals (Spaaij 2015; Spaaij and Broerse 2018).

Thus, practicing sports in the educational setting allow children to understand specific values such as equity, equal contribution to the goal, make a group effort, forgiveness, facing mistakes and limitations, etc., that are also present schools. These values must be transversal to all physical and sportive activities, for this reason, University Loyola Andalucía sport's choice has been readjusted to give suitable answers to social demands that children need to confront in their closest scenarios.

# 1.1.2. CONTEXT FOR THE INTERVENTION

The group of children participants in this proposal belongs to a school located in Seville (Andalucia, Spain). The school is called "Escuelas Profesionales Sagrada Familia: Sevilla Blanca Paloma (SAFA Blanca Paloma)" and it is found in the neighborhood "Núcleo Residencial las Aves" or "Los Pájaros", named colloquially "Los Pajaritos". This neighborhood presents modest families since it was built; as time went on, this neighborhood has become a highly vulnerable and diverse context where immigrants and local people live together. Los Pajaritos does not show relevant associations for neighbors; this issue limits the social interaction and the community sense that, mainly, exists thanks to NGOs (Blanco and Subirats, 2008). Unemployment and poverty are present, as well as drugs and violence that impede the children' development due to the inexistence of enough economic and cultural resources (Iglesias-Pascual, 2017).

Poverty is, then, a social product that leave the most vulnerable population exposed to risk factors such as segregation and low opportunities to be part of their city. As Geyer Jr (2019) points out, it is

















necessary to promote healthy habits, policies, and relationships to achieve beneficial environments that allow to reduce poverty's stigma associated to discrimination. Los Pajaritos is considered to talk about marginalization and crime and stigma exists since indirect references (i.e. near areas, close neighborhoods) promote it (Torres, 2013). This type of neighborhoods presents children and young people whose expectations are unfulfilled due to the discomfort created by the environment (Oberwittler, 2007). The author also points out families and schools as key influential agents in the development of friendship, commitment, and interest in children. Moreover, school *climate* influences specifically in *the attitudes and behavior of children and adolescents* (Idem, 2007, p.796).

Therefore, from school SAFA Blanca Paloma, promotion and encouragement to practice physical activities that drive children to be active participants in their city presents a high influence in their well-being and life opportunities. Discovering new places, new people, interacting with their peers in a different place as well as knowing landmarks and monuments of the city, enable children expand their interests and enjoy orienteering sport while community values are being worked simultaneously.

#### 1.2. ORIENTEERING AS A SPORT

Foot orienteering is an endurance sport which involves the psychological dimension. There is not a marked route – the orienteer must navigate with map and compass while running. These two are the key features of this sport. The map gives detailed information about terrain, such as hills, ground surface, obstacles etc. To be successful in foot orienteering, athletes need good map reading skills (within images and texts), absolute concentration and the ability to make quick decisions on the best route while running at high speed. Orienteers run over rough ground, completely unprepared forest terrain or rough open hills – cross country in the true sense of the word. Therefore, considerable body strength and agility are needed (Orienteering | International Orienteering Federation, s. f.).

There is a wide variety of orienteering events: individual competitions and relays, ultra-short park races and mountain marathon events. Night orienteering with the aid of a head lamp is also a popular modality of orienteering (Orienteering | International Orienteering Federation, s. f.). For rules and more information, please visit the International Orienteering Federation website through clicking the next link: Orienteering Federation's website.

















# 1.2.1. ORIENTEERING AS AN INCLUSIVE SPORT

In the educational field, orientation is widely used by Physical Education teachers, since it offers different alternatives to be practiced in the school itself in addition to being an interdisciplinary sport with many possibilities in urban and natural environments (Introducing Inclusive Orienteering, s. f.). As previously discussed in relation to the development of technologies in society, this advance is also present in the field of guidance. In the past, tweezers with marks were used to check the passage through the beacons. In contrary, today an electronic system with a caliper, called Sport Ident, is used. This tool allows controlling, on the one hand, the passage through the beacons automatically and quickly, and on the other hand, the partial time and the total time. Following this system, different free applications allow timing the races by reading QR codes; for example, iOrienteering App and Orienteering Dibber DIB. Thus, continuous innovations with specific applications whose purposes are diverse, such as competition, recreation, and educational, are happening (Celestino & Pereira, 2013).

Framed in this context, orientation sport presents an ecology and form of organization that enable the accessibility of all individuals regardless of their condition or objectives of participation. The benefits of adapted sports at various levels, (i.e. psychological, physical, and social levels) are generally recognized by research conducted within the scope of Sport Sciences. These benefits present a positive impact on gains in autonomy and self-confidence for daily tasks' achievements. It also presents significant benefits in terms of self-esteem and self-concept formation to deal with disabilities. Consequently, projects based on sports practices within orienteering, its regulations and forms of accomplishment can be adapted to respond, firstly, to diversified functional impediments, and secondly, to mitigate barriers and constraints (Celestino & Pereira, 2015).

From this paradigm, orienteering in its inclusive form aims to meet the ideals of true sport for all. On the one hand, it seeks to include individuals of all conditions and states, particularly people with disabilities; on the other hand, it also pursues to break with the traditional paradigm of physical sport activities only allocated for groups in good physical condition. Thus, interaction with nature is promoted; time factor is relegated to the background and, consequently, physical capacity becomes a benefit, making possible to participate into competitions under equal circumstances. Physical and cognitive barriers are not present; however, the promotion of values and attitudes such as

















participation, respect, socialization, and promotion of health and well-being are included. This fact makes this modality a suitable example of good practice for social inclusion *in* and *through* sport (Sanchez et al., 2012).

#### 1.3. PROPOSAL

According to Floyd et al. (2011), parks are related to the increase of better life conditions for children in urban areas such as Seville city is. Due to this fact, orienteering is selected to be practised by a group of children from SAFA Blanca Paloma school. This sport is suitable for being practised in a wide area, where conditions allow the participants to interact in dynamic and quick routes. It will depend on the city and country where the sport and the intervention will be conducted. We present the remarkable María Luisa Park. Since this location presents areas of vegetation, playgrounds, squares as well as remarkable monuments to develop an orienteering circuit/race involving several beacons.

#### 1.3.1. DESCRIPTION OF THE INTERVENTION: A SPORT INTERVENTION CASE

The intervention consisted of three different phases. The first phase was the preparation of the day. Researchers contacted a bus company to pick up children from their school and take them back after the intervention. Researchers also bought breakfast, compasses and backpackes for children. They also went to Spain Square some days previously to the intervention's day. There, they measured distances, took pictures of beacons and strategic points, as well as doing a simulation of the intervention. Finally, researchers created a final budget and printed pictures and four maps with different routes.

The second phase was the implementation of the orienteering sport with children. The day of the intervention, researchers and some preservice teachers volunteers placed the beacons, checked the compasses and prepared all resources needed before children arrived. The race would consists of joining some words located in different places at the square. The objective for children was to join words and phrases located into the square to create a sentence related to inclusion through sport. There will not be a winner, as the objective implies to collaborate and test the children' comprehension of the sport and its values. The phrases that students had to collect and complete were "If you want to go fast, go alone, if you want to go far, go together" and "Cooperation is knowing that no one can reach the goal if we do not all get there".

















When children arrived, researchers divided the morning into three parts: first part consisted of general explanation about orienteering (i.e., how to use the compass, set directions, navigate with the map, etc.), the second part consisted of having breakfast and toilet time into the park; finally, thrid part consisted of doing the orienteering race. Researchers divided each of the two classrooms (11 years old A, and 11 years old B) into 2 groups. In this way, working with children at the square would be easier and it would allow to find them quickly in case any of them could be lost. A trial race was conducted in a close square, smaller than Spanish square, to practice the sport with the compasses and maps. Later, children took their breakfast (fruit and juices) and they talked to the researchers and asked them questions about the day. Finally, the orienteering race started into the Spain Square. A researcher and a preservice teacher volunteer were the captains of each group of children. The race was distributed throughout the place. Researchers had created 4 different circuits to avoid children being confused during the race. After one hour practising, children could join (or not) the words/phrases and could share with their instructors what they found and what impressions it generated on them.

The third phase consisted of evaluating the intervention and the creation of subsequent conclusions. Researchers decided to conduct focus groups with children in their race-groups. They recorded interactions and conversations between children and researchers/volunteers about the experience to analyze children' discourse later. After conducting the focus groups, researchers also gave a likert scale to children, teachers and preservice teachers volunteers who accompaigned them. With these two sources of information, researchers will be able to understand the valuation of the day.

To see how the intervention and focus groups were conducted, please, see the general video fcreated to sum up the interventions. In APPENDIX V you will also find some pictures related to the race.

#### 1.3.2. OBJECTIVES<sup>1</sup>

<sup>1</sup> Note that the objectives of the intervention are related with the proposed map of competences for experts on social inclusion through sport-based interventions. Please, check the intellectual output IO1 in case you want to compare the proposed objectives with the information facilitated in the map of competencies.

















The main objective of the proposal for **future experts** is to recognize the main features and principles of orienteering regarding groups in risk of exclusion, that is, the adaptation of the sport to individual and group needs. This objective is related with competence S.1 to S.6.

Specific objectives are:

- 1. To know and use quantitative and qualitative techniques to analyze the sport's impact in the target group (this objective is related with competence S.1)
  - 2.1. To create a checklist and conduct a observation register (journal)
  - 2.2. To create a focus group protocol
  - 2.3. To analyze quantitative information through a statistics software provided by the trainer
  - 2.4 To analyze qualitative information through thematic analysis in a qualitative software provided by the trainer

The main objective of the proposal for the **target group is** to know the physical and cultural environment, such as vegetation and monumental elements of María Luisa Park, as well as principles of orienteering sport (Seville, Spain). This objective is related with competence S1c). Specific objectives are:

- 1. To put technical skills related to orienteering races into practice (related with competence S1c).
- 2. To apply interpersonal skills when participating in the race (related with competence S3c).

#### 1.3.3. COMPETENCES

Concerning Future Experts: in this intervention, C.5 and C.6 are the competences to work on:

• C.5. Physical activity interventions (see block 1). This competence is defined as the set of knowledge, abilities and tools that enable to promote physical activity and healthy habits for children nd among society. It also includes the knowledge of specific sports and physical activities that can be used as tools to increase the wellbeing and inclusion. The main skill to be developed is:

















- S.1. To identify and defining problems and conflicts, detecting needs and complex cases, to propose, design, implement and evaluate diverse sport and physical activity solutions.
- C.6. Didactic methodologies (see block 1). This competence compromises teaching skills and life-long learning abilities. It is specifically defined as the competence to perform complex pedagogical duties, carry out well-founded planning, evaluation and assessment of tuition. It focuses on didactic analysis and development of teaching, with special regard to development of students through different teaching procedures, learning activities, applications and digital teaching aids, assessment and feedback. In this competence we are going to work a comprehensive range of cognitive and practical skills:
  - S2. To adapt the methodology in order to explain and act accessibly to students, players, etc
  - S3. To plan for and implement physical activities into the teaching process to enhance teaching interventions effectively
  - o S4. To manage and orchestrate physical activity interventions appropriately
  - S5. To use physical activities to enhance the interaction with learners, individually and collectively, within and outside the learning sessions
  - S6. To value continuous learning, self-learning, bibliographic sources, as well as personal adaptation to new realities and social situations

Concerning the **target group**, C.5 is the competene to work on in this intervention.

- C.5c Physical activity interventions (see block 1). Knowledge, abilities and tools that enable
  to promote physical activity and healthy habits for children and among society. It also includes
  the knowledge of specific sports and physical activities that can be used as tools to increase
  the wellbeing and inclusion.
  - $\circ$  S1c. To interact with the context and peers
  - S2c. To learn by development
  - o S3c. To use physical activities to foster and enhance collaboration with each other.

#### **1.3.4. CONTENT**

















Content to be addressed related to **future experts** is presented as follows:

# Part I. The body: structure and functionality

- 1. Rules and principles to prevent accidents and injuries during physical-sports activities. See the attached resources as follows:
  - a. Orienteering preventing injury (please click on the next link)

    https://www.betterhealth.vic.gov.au/health/HealthyLiving/orienteering-preventinginjury?viewAsPdf=true
  - b. Prevent Sport Injuries (please click on the next link) https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=85&contentid=P00935

# Part II. Orienteering basics

Here you will find all the information that you and your students will need when starting to work on orientation sports such as equipment, maps, activities and games (please click on the next link: https://www.orienteeringalberta.ca/resources-intro-to-orienteering.html).

- 1. Maps and scale
- 2. Map legend and symbols
- 3. Contour shapes of the lands

# Part III. Basic orienteering skills

On this section you will access to educational resources where you could find what are the basic orienteering skills, digital resources and different exercises (please click on the next link <a href="https://issuu.com/byorienteering/docs/silva">https://issuu.com/byorienteering/docs/silva</a> book ages13-15 english web )

- 1. Orienting the map
- 2. Route choice
- 3. Safety recommendations

















The race would be done using images, making it accessible to avoid too technical vocabulary as well as to put previous selected competences into practice.

An example of a lesson is attached to guide future experts in their planning. Some tips and extra resources (cardinal directions and compass, exploring and navigating, reading a map, seeking and finding strategies and practical activities, etc.) are included below:

- <u>Lesson Plan Example</u>
- Extra-Material

# 1.3.5. MATERIALS, PROCEDURES AND RESOURCES

Basic equipment to practice this sport includes:

- **Sport Clothes**: A light-weight and stretchy suit protects from undergrowth whilst allowing maximum freedom of movement even if it gets soaking wet.
- **Shoes**: It is recommended light and strong shoes with non-slip soles to allow sure grip on all types of ground, including mud and bare rock.
- Map: a map provided by the organizer shows the path with the control points that must be visited. The map is designed to give detailed information on the terrain: hills, ground surface, and features such as boulders or cliffs.
- Compass: There is a wide variety of sophisticated compasses to choose from. Basically, they can be divided into two main categories: base plate and thumb compasses. Digital compass can also be an alternative.
- Control Card: To prove that they have visited all control points in the right order, the orienteers must punch their control card at each control using an electronic/analogic device. The control points will be fixed with adhesive to the trees (so as not to damage the environment and to facilitate the collection once the test is completed). At each control point the participants will find a code that they must copy to complete a sentence/text.

Main procedures to perform the orienteering race are:

Teachers to prepare, monitoring and control the race.

















- A map of the area at a scale of 1: 15,000 (maximum).
- Compasses (optional)
- Control sheets for each participant /group of participants.
- Beacons where the clamps or images will be found.
- A stopwatch.

#### 1.3.6. EVALUATION

The assesment is aimed at measuring the scope of each of the objectives. The evaluation proposal is also divided in two directions:

# Evaluation of future expert's performance

- Objective 1: To know and use quantiative and qualitative techniques to analyze the impact of the sport in the target group
  - 1.1. To conduct an observation journal
  - 1.2. To create a focus group protocol
  - 1.3. To analyze the quantitative information through statistic software (see Module 2 references and instructions)
  - 1.4. To analyze the qualitative information through thematic/content analysis in qualitative software (see Module 2 references and instructions)

The evaluation will be conducted through a rubric for each of the sub-objectives. The indicators to be considered are: exhaustiveness, relevance, sufficiency and validity.

# Evaluation of the target group's performance

- Objective 1. To know the physical and cultural environment: vegetation and monumental elements of María Luisa Park (Seville, Spain).
  - Checklist to record whether the participants have located the elements already indicated regarding Maria Luisa Park.
- Objective 2. To put technical skills related to orienteering races into practice.

















Checklist to evaluate orientation, speed, research, following patterns, self-orientation in space using landmarks.

• Objective 3. To apply interpersonal skills when participating in the race.

Self-evaluation through a Likert scale. Children will value their social skills and the group' ones. Interaction, empathy, companionship will be assessed.

#### 1.3.7. DATA ANALYSIS

This section presents some results, guidelines and examples of data analysis procedures conducted after intervention took place. As proposed from Universidad Loyola Andalucía in IO2 – Module 2, the methodology is based on a combination of qualitative and quantitative techniques.

# 1 3.7.1 Quantitative information: matrix and analyses of scales

In Appendix I, some guidelines to use SPSS software are presented. Please, watch the next video to understand this part of Module 3. To do so, just click on the next title or play the attached video: <u>Tutorial Quantitative Information SPSS</u>:







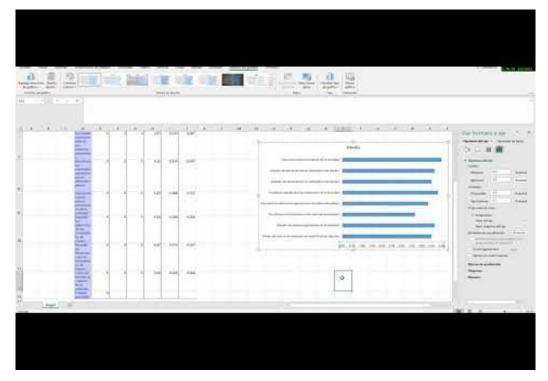












Through SPSS, researchers will be able to classify Likert scales' information into a Matrix, to obtain descriptive information (such as percentages related to specific variables to analyze, i.e., gender, age, other items...) as well as to do more complex statistical analyses. Moreover, graphics and visual representations are available into SPSS to summarize the results visually.

# 1. 3.7.2 Qualitative information: transcription and analyses of focus groups

In Appendix II, some guidelines to use Atlas.ti software are presented. Please, watch the next video to understand this part of Module 3. To do so, just click on the next title or play the attached video: <u>Tutorial Disciplins Atlas.ti Qualitative Analysis:</u>







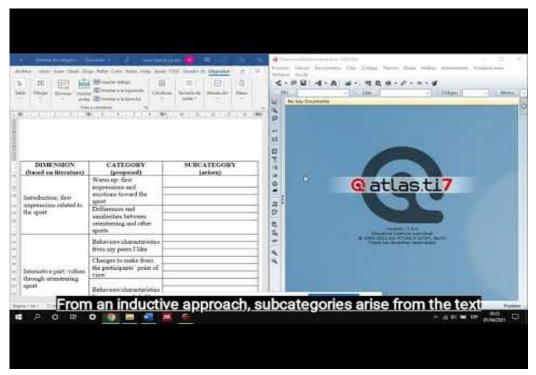












Through Atlas.ti webpage (see <a href="https://atlasti.com/">https://atlasti.com/</a>) experts can find more information, tutorials and training related to qualitative analysis. Although visualizing future findings through networks is not included in the video tutorial, you can find explanations related to this task in the official site too.

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#### **APPENDIX I**

# **Quantitative video tutorial guidelines**

#### <u>Introduction</u>

This video shows how to use some of the available features of SPSS Statistics. However, this software is very sophisticated in terms of functionalities. These features make the tool a powerful instrument for general analysis lifecycle. More information about SPSS Statistics Software can be found at: <a href="https://www.ibm.com/support/pages/ibm-spss-statistics-26-documentation">https://www.ibm.com/support/pages/ibm-spss-statistics-26-documentation</a>

For the module's purposes, this document pretends to provide a brief overview of some quantitative analysis techniques to analyze a specific sport intervention. To do so, a step-by-step, hands-on guide is presented. The file shown in the example of analysis is available upon request. You can follow along; performing same analyses and obtaining same results that are presented here.

# Opening a data file

From the menus in the top of the Software's window, choose: File > Open > Data... A dialog box to open files is displayed. By default, SPSS Statistics data files (.sav extension) are displayed. By default, the actual data values are displayed.

# Sample file (minute 00:00 to minute 00:06)

This example uses a data file which was the survey belonging to the sport intervention conducted in 2021 in Maria Luisa Park. File contains some example information. The data file is displayed in Data Editor. First column (ID) represents number of individuals. Second column (Perfil) gives information

















about the roles of participants (0 means referee and 1 means individual involved in the proposed intervention). Third column (Genero) represents the gender of participants (1 means women, 2 means men).

After this step, responses from questionnaires are shown. The first questionnaire (Scale A) with 8 items was completed by people who supervised and guide the intervention based on orienteering race with children. It aims to analyze attitudes and behaviors of individuals who participated in the intervention. Each question was a 5-point Likert scale from "never" to "always", whereas the second questionnaire (Scale B) shows 12 items and was completed by individuals who participated in the intervention. This second scale aims at measuring individuals' satisfaction with the proposed intervention. Each question was a 3-point Likert scale from "never" to "always". The complete set of questions (items) are illustrated below.

#### Scale A

- 1. (English version) Individual pays attention to sport-specific instructions
- 1. (Spanish version) Presta atención a las explicaciones específicas del deporte
- 2. (English version) Individual respects organizational guidelines of the proposed activity
- 2. (Spanish version) Respeta las pautas organizativas de la actividad
- 3. (English version) Individual is oriented correctly in the activity scenario
- 3. (Spanish version) Se orienta correctamente en los entornos propuestos
- 4. (English version) Individual recognizes elements highlighted in the map
- 4. (Spanish version) Reconoce los elementos expuestos en los diferentes planos
- 5. (English version) Individual works together with his/her team members to accomplish the proposed the activity

















- 5. (Spanish version) Trabaja en equipo para la consecución de la actividad
- 6. (English version) Individual respects her/his teammates' opinions
- 6. (Spanish version) Respeta las opiniones de los compañeros de equipo
- 7. (English version) Individual respects her/his teammates' decisions
- 7. (Spanish version) Respeta las decisiones de los compañeros de equipo
- 8. (English version) Individual treats material with respect
- 8. (Spanish version) Trata con respeto el material de la actividad

#### Scale B

- 1. (English version) I follow rules and I listen to explanations
- 1. (Spanish version) Cumplo las normas y atiendo a las explicaciones
- 2. (English version) I have an active participation in activities (for example, I raise my hand to ask, when they ask me something I answer, if I want to say something interesting I speak...)
- 2. (Spanish version) Participo en las actividades y juegos (por ejemplo, levanto la mano para preguntar, cuando me preguntan algo yo respondo, si quiero decir algo interesante lo digo...)
- 3. (English version) I show interest in improving in sport
- 3. (Spanish version) Me esfuerzo y demuestro interés por mejorar en el deporte
- 4. (English version) I know where I am with the help of a plan / map
- 4. (Spanish version) Sé situarme en el parque con la ayuda de un plano/mapa
- 5. (English version) I am able to orientate myself when directions are being plotted on a plan / map
- 5. (Spanish version) Soy capaz de seguir la dirección trazada en un plano/mapa
- 6. (English version) I am able to do a tour in the park and draw the path on a map

















- 6. (Spanish version) Soy capaz de hacer un recorrido en el parque y dibujarlo en el plano/mapa
- 7. (English version) I know what the most important instruments are for careers orientation sport
- 7. (Spanish version) Conozco los elementos más importantes de las carreras de orientación
- 8. (English version) I can recognize different places and objects / things (trees, monuments, lakes, squares) shown on a map
- 8. (Spanish version) Reconozco los diferentes lugares y objetos/cosas (árboles, monumentos, lagos, plazas) del plano/mapa
- 9. (English version) I work as a team with my teammates
- 9. (Spanish version) Trabajo en equipo con mis compañeros y compañeras
- 10. (English version) I respect my teammates' opinions
- 10. (Spanish version) Respeto las opiniones de los compañeros y compañeras de mi equipo
- 11. (English version) I respect my teammates' decisions
- 11. (Spanish version) Respeto las decisiones de los compañeros y compañeras de mi equipo
- 12. (English version) I treats material (compass, map,...) with respect
- 12. (Spanish version) Trato con respeto el material (brújula, mapa,...) de la actividad

Finally, last column (FormaFisica) refers to general physical condition of participants. This item was rated on a 5-point Likert scale ranging from "very poor to "excellent".

# Cronbach's Alpha – Scale A (minute 00:07 to minute 00:34)

Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is used when you have multiple Likert questions in a survey/questionnaire that form a scale and you want to determine if the scale is reliable for future studies or different contexts. For the purposes of the video,

















the scale A was used. Thus, a Cronbach's alpha analysis was run on the sample size. The alpha coefficient for scale A was above .700. This data confirms *an acceptable* reliability for the questionnaire (Sekaran & Bougie, 2010). Generally, it means that .796 per cent of the individuals agreed with the proposed scale indicating that items included in the questionnaire reliable.

#### Running an analysis - Scale A (minute 00:35 to minute 01:43)

In order to create a simple frequency table (table of counts), from the menus choose:

Analyze > Descriptive Statistics > Frequencies...

Then a frequencies dialog box is displayed. Ordinal variables are: ID, Perfil and Genero. Nominal variables are: B1, B2,...FormaFisica. An icon next to each variable provides information about data type and level of measurement.

Click the names in the source variable list and drag the variable of interest into the target Variable(s) list > Options bottom allows you to discriminate the Descriptive Statistics > Click OK to run the procedure.

Frequency table show categories; it can be presented in a table or a figure. Results from SPSS are displayed. An excel file was used to visually illustrate mean scores result from frequency table. Also, a bar chart is shown. The Viewer window gives information about mean scores along with the standard deviations and variance for the population from which the sample was drawn. Most of participants achieved a competitive score in *Always* and *Often* categories. Whereas participants who obtained values equal to *Sometimes*, *Rarely* and *Never* categories are not usual. From this analysis, we could guess that teachers and instructors, who supervised and guide the intervention, valued the attitude and behavior of individuals positively while doing the intervention.

# Running an analysis - Scale A (minute 01:44 to minute 03:22)

Additionally, the following two items scored the highest values disaggregated by items and considering referees' points of view. First, "Trata con respeto el material de la actividad" item was the best valued one. Results confirmed that this item obtained the maximum score in the category always (100%). Thus, there isn't any doubt about the adecuacy in the use that individuals made of the received

















materials. Second, and in line with this positive finding, 83.3% of the participants were always working effectively together to achieve the common goal of the proposed intervention and only 16.7% of the individuals were sometimes working cooperatively. This point could be explained by the fact that individuals are familiarize with cooperative learning methodologies.

On the other hand, the item "Se orienta correctamente en los entornos propuestos" obtained the worst result. From the data and referees' points of view, it can be interfered that the individuals were not able to orientate themselves properly in the proposed scenario while developing the intervention. Specifically, only 33.3% of the individuals sometimes were able to orientate themselves and 66.7% of the individuals often were able to do so. More information is needed to extract conclusions from this finding. Possible factors to consider when analyzing this information can be the following: (i) participants' autonomy; (ii) age; or (iii) scenario complexity level.

# Running an analysis - Scale A (minute 03:23 to minute 04:18)

Below, information relates to independent-samples t-test using SPSS Statistics is presented. The independent-samples t-test, also known as the independent t-test, is used to compare the means of two sets of data. For example, you could run a t-test to see if the average test scores of males and females are different. The visualization of the video gives you information about the effect of gender variable in the intervention performed.

To do so, click Analyze > Compare Means > Independent-Samples T Test... on the top menu. After that, you will be presented with the independent-samples t-test dialogue box. Transfer the dependent variable (e.g., items from Scale A), into the test variable(s) box (Variables de prueba), and transfer the independent variable, (e.g. Genero – Gender) into the grouping variable box (Variables de agrupación), by highlighting the relevant variables and pressing the SPSS right arrow button. You then need to define the groups (Genero). Click on the define options button (Definir grupos). You will be presented with the Define Groups dialogue box. Enter "1" into the group 1 (Grupo 1) box and enter "2" into the group 2 (Grupo 2) box. Remember that we labelled the women group as 1 and men group as 2. Click the continue (Continuar) button. Then, click ok (Aceptar) button.

SPSS Statistics generates two main tables of output for the independent t-test.

















The first one is named as Group statistics (Estadísticas de grupo). This table provides useful descriptive statistics for the compared two groups, including mean and standard deviation. Unless you have other reasons to do so, it would be normal to present information about mean and standard deviation for this data. You might also state the number of participants that you had in each of the two groups. This can be useful when you have missing values and number of recruited participants is larger than the number of participants that could be analyzed.

The second one is named as independent samples test (Pruebas de muestras independientes). This table provides the actual results from the independent t-test. Significance (Sig.) is the most important value to look at. Sig. must be <.050 to affirm that there are differences according to the variable studied. In the example, all the items present a significance greater than .050. Therefore, we can affirm that statements asked in scale A do not vary according to the gender of individuals who performed the intervention.

#### Running an analysis - Scale B (minute 04:19 to minute 05:50)

Finally, illustration of correlation test can be visualized in the last part of the video. A correlation is a number between -1 and +1 that indicates to what extent 2 quantitative variables are linearly related. In short,

- a correlation "-1" indicates a perfect linear descending relation: high scores on one variable imply low scores on another variable.
- a correlation "0" means there's no linear relation between 2 variables whatsoever. However, there may be a (strong) non-linear relation nevertheless.
- a correlation "1" indicates a perfect ascending linear relation: high scores on one variable are associated with high scores on the other variable.

Firstly, it is important to navigate through Analyze SPSS Menu >> Correlations SPSS Menu >> Bivariate correlation, as shown in the video. Then, move all relevant variables into the variables box (scale B elements and FormaFisica variable). Click on the boxes of pearson, two-tailed and flag significant correlations options. Then, click the ok (Aceptar) button. By default, SPSS always creates a full

















correlation matrix. Each correlation appears twice: above and below main diagonal. The correlations on main diagonal are those between each variable and itself - which is why they are all 1 and not interesting at all. As a rule of thumb, a correlation is statistically significant if its "Sig." < 0.05.

In the example, attention is focused only on how items from scale B are related to general physical condition of participants. This is the reason why some other information from the table is deleted. For this analysis, Pearson correlation value is of interest. Results can be interpreted as in previous analysis (independent-samples t-test). In this specific case, four items from scale B are the one which correlate significantly with general physical condition of participants.

#### **APPENDIX II**

# **Qualitative video tutorial guidelines**

This video shows how to use some of available features of Atlas.ti. These features make the tool a useful resource to analyze and understand qualitative information. Into this software, you can create transcriptions from documents, upload audio clips or photos and integrate them in your analysis. However, we will focus on documents since focus groups transcriptions are the content to analyze. More information about Atlas.ti can be found at: <a href="https://atlasti.com/">https://atlasti.com/</a>.

For module's purposes, this document provides a brief overview of the qualitative analysis of focus group sessions as part of the intervention with children. The file shown in the video tutorial is available upon request. You can follow along; performing same analyses and obtaining same results that are presented here. Although software is in Spanish version, next instructions relate Spanish terms with their English terms to facilitate the replication. You will see two windows opened at the same time: a word document on the left, and Atlas.ti display on the right.

1. Firstly, it is necessary to create a categories template for the analysis process. In the video tutorial, this template is a grid where researchers wrote dimensions and categories that they previously selected. They were interested to investigate specific themes related to children and social inclusion through sport. They wanted to make the intervention and generate focus groups to understand the intervention from the children' points of view. After reading studies

















and theory related to the topic, researchers built dimensions and categories to be analyzed through focus groups. They also chose an inductive approach to find new information through the analysis, that is, they did not define everything they wanted to find since the beginning. New information became "subcategories" since it was found by the researchers through exploration of categories.

If they had chosen a deductive approach, they would have stablished subcategories previously, therefore, they directly could find these subcategories in the focus groups' transcriptions. However, they decided to obtain new information and study it after analyzing the transcripts: they can find information they did not previously planned to find through the text.

- 2. The researchers needed to create transcripts and read them a couple of times before starting the analysis process at the software. The reading step is essential to understand the text generated by the interview/focus group/narrative, thus, the researcher will be able to understand what is "under the words".
- 3. Once researchers created the transcription and **converted it into PDF** format (which is necessary for Atlas.ti), they imported the file into Atlas.ti. You can import as much transcripts as you need. All the transcripts together become "a project". To do so, click on DPS as the video tutorial shows you (0′6″). In English: Import documents → assign primary documents.
- 4. Next step is starting the codification process. The **codes** are used as an easy way to classify the text into categories and subcategories selected. Codes are brief and will be used for researchers as the same pattern of analysis. Codes are invented by the researchers, or they can use the codes grid from a previous validated template from other studies.

**From an inductive approach**, while researchers read the text (remember they already have read it before), they start to codify it. To this purpose, they need to include for the first time the codes in Atlas.ti while they are discovering subcategories. **From a deductive approach**, the codes would be already stablished, hence, researchers could include the list of codes in Atlas.ti for the first time before they started to analyze the text. In this way, they could codify directly from the codes list.

In the video tutorial (0'39"), researchers start **codifying content related to the first category**: emotions and perceptions at the beginning of the intervention. To codify is made by highlighting the sentences/word/part that you want to collect into the category. In this case,

















children felt happiness, fun and discomfort at the beginning of the orienteering race; researchers decided to establish different subcategories, one per emotion/feeling, and they highlighted from the text parts of children' discourse where they identified these emotions and feelings.

They coded each emotion with a short code, using a number in the first place to identify the category where the code belongs to. If other children repeated the feeling/emotion through the transcriptions, that is, another intervention, researchers would **codify it with the same code**; thus, they do not need to create another new code.

The second category is about sports related to the orienteering race experience. Researchers found swimming, hide-and-seek, etc., so they codified them too. Next categories in the grid are more complex and open, then, the codification process becomes more complex, and subcategories may be or not a word; a **subcategory can be a repeated idea**, **not just a word**.

- 5. Fourthly, and finally at Atlas.ti, when subcategories are defined and the text is completely codified, we can create a codes map. You can visualize a codes family, create memos linked to a quotation, and more possiblities (please, see some guidelines and examples here: <a href="https://atlasti.com/video-tutorials/atlas-ti-9-videos/">https://atlasti.com/video-tutorials/atlas-ti-9-videos/</a>).
  - In the video tutorial (2'57"), researchers want to obtain an **analysis document**. Therefore, they go to **codes**  $\rightarrow$  **print**  $\rightarrow$  **all codes with quotations**. We download the file and we run it automatically.
- 6. A Word document will open. Here researchers can visualize the quotations related to each code that they created/highlighted previously. All the extracts of text included into the group of codes will be the information to analyze and will describe the specific subcategory. A group of subcategories can explain the sense of a stablished category.
- 7. The last step consists of **interpreting** the quotations together, trying to **make sense of the information** that children gave to the researchers after the orienteering race.
- 8. Don't forget to save your project at Atlas.ti!

In Appendix III, you will find the protocol used for focus groups. In appendix IV, you will find the categories and subcategories grid that researchers created to analyze information through Atlas.ti.

















# **APPENDIX III**

# **Focus Groups Protocol**

Based on Brostolin and de Moraes (2021), Cañón, Díaz and Espinosa (2018) and Ha et al. (2019), the questions to be asked in different focus groups with the participants are generated and adapted. The questions respond to an interactive nature, developing over 3 different moments during 20 or 30 min. that focus groups last. The aim is to make children comment the intervention on different aspects of the orienteering experience, both among themselves and with the teachers in charge of the activity.

#### **Initial Part**

- How did you enjoy the day? (In case of affirmative answers, encourage satisfaction; in case of neutral or negative answers, try to follow this type of questions: Why didn't you like the activity? What would you have done if you had organized it on your own?).
- How would you describe today?: an adventure, a class like the ones you have at school?...
- How did you feel about orienteering? What are the differences or similarities between orienteering and other sports you like or practice?

# **Interaction Part**

- Now we must tell our partner on the right what we liked the most and the least about this
  sport (afterwards, the pair communicates their thoughts to the rest of the teammates; there
  will be coincidences and disagreements that adult must moderate).
- We are going to say out loud now what behaviors or qualities we liked the most and least
  about the members of our team, and you are going to explain why (give them several
  seconds to answer individually, then give each student the opportunity to thank others'
  comments).
- You are going to agree in group and tell me which of the following values have been practiced in the team and tell me moments of the race in which that value is present. The values are: responsibility in the team (wait a minute for their answer); respect for teammates (wait a minute for their answer); negotiating or agreeing in the team (wait a minute for their

















answer); helping someone when they didn't know or couldn't do something during the race (wait a minute for their answer); fighting or disagreements (wait a minute for their answer).

- You must discuss as a group to decide what you liked and disliked most and least about the adults who accompanied you during the race. Later, you must explain why you think so.
- What do you think about the objects used in this sport? Are they complex/difficult for you? Would you like to use these elements more often? Why?
- Which part of Maria Luisa Park did you like the most and why? Do you think the park is a suitable place to practice orienteering? Why?

# **Closing Part**

- How do you feel after practicing this sport? Have you felt different emotions and sensations
  during the race, such as anger, haste, insecurity, discomfort, a lot of joy...? In which moments
  have you seen your peers more concentrated? And more nervous? And more carefree?
- If you had to explain the sport of orienteering to a classmate who did not come to school today, what would you tell them?

# **APPENDIX IV**

Categories and Subcategories from Codification in Atlas.ti. Grid used by researchers

















DIMENSIONS	CATEGORIES	SUBCATEGORIES	CODES
Introduction: first impressions about the sport	Warm up: first impressions and emotions toward the sport	Fun	1_Fun
		Security	1_Sec
		Satisfaction	1_Sat
		Curiosity	1_Cu
		Discomfort	1_Disc
	Differences and similarities between orienteering and other sports	Gymkhana	2_Gym
		Treasure Hunt	2_Tre
		Swimming competitions	2_Sw
		Hide-and-seek	2_Hae
		Football	2_Foot
		Ridings	2_rid
Interactive part: values through orienteering sport	Behaviors/characteristic s from my peers I like	Caring	3_Car
		Attention	3_Atte
		Hard-working	3_Hw
		Open-mind learners	3_Ople
		Proactivity	3_Proa
		Agreements	3_Agree
		Helping each other	3_Hel
	Changes to make from the participants' point of view	Closeness of clues	4_Clue
		To increase difficulty	4_Diffi
		To introduce	4_Intro
		Impulsivity	5_lmp

















	Balancia della seria della	Cheaters	5_Che
	Behaviors/characteristic s from my peers I dislike	Interrupting opinions	5_Inter
		Ignorance	5_lgn
	Orienteering objects	Compass and map: Easy and difficult to use at the same time	6_Ob
		Improvements	6_lmp
Closing: conclusions	Emotions after practicing orienteering	Happiness	7_Hap
		Satisfaction	7_Sat
		Tiredness	7_Tir
		Resignation	7_Res
	Perceptions toward peers' feelings	Nervous toward the goal	8_Ner
		Lack of commitment	8_Commit
		Lack of ambition	8_Amb

# **APPENDIX V**

Pictures and materials for the intervention







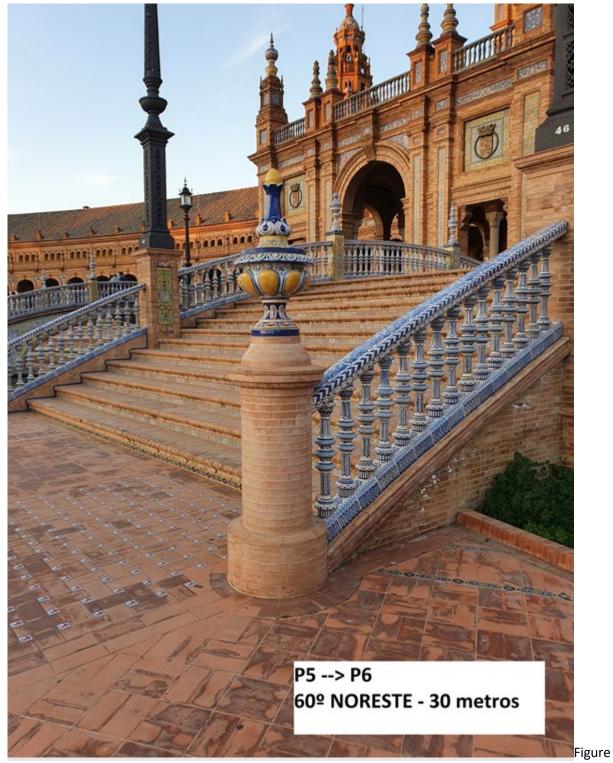












1. Picture of a beacon from Spain Square (María Luisa Park, Seville, Spain).







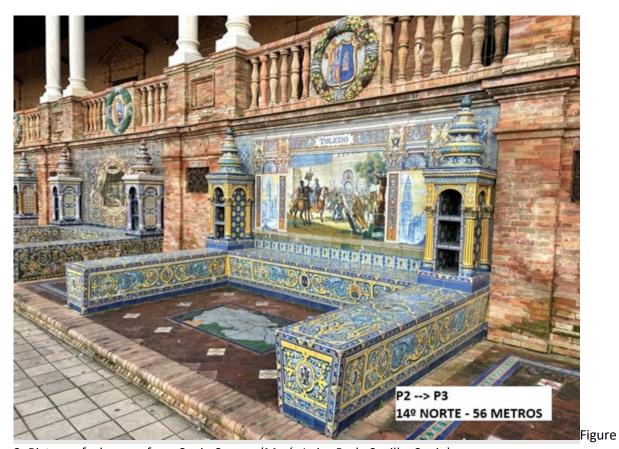












2. Picture of a beacon from Spain Square (María Luisa Park, Seville, Spain).

















# EXPERIENTIAL LEARNING IN THE NATURAL ENVIRONMENT WITH TEENAGERS AT RISK OF EXCLUSION

Project Title	Inclusion through sport interventions: DISCIPLINS Project	
	Reference Project: 3D4VET 2017-1-ES01-KA202-03800	
Output	Module 3	
Date of delivery	20/09/2021	
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	Rocío Valderrama Hernández	

















# 2. EXPERIENTIAL LEARNING IN THE NATURAL ENVIRONMENT WITH TEENAGERS AT RISK OF EXCLUSION

## 2.1. OVERVIEW

**Leader**: University of Seville

Universidad de Sevilla (US) is a highly ranked university in Europe and one of the top-ranked in the country with a student body of over 60.000. US has extensively developed structures for the development and management of international cooperation with the International Relations Office; in addition to highly specialised structures for International Research, Innovation & Technology Transfer. It ranks second among Spanish HEIs in terms of the number of Erasmus students and has international cooperation agreements with approximately 15 international organisations and with more than 50 universities around the globe.

Alone in 2009 it managed more than 4000 mobilities. US participates in various European and international programmes and projects. In 2010 US has been granted the International Campus of Excellence Award by the Spanish Ministry of Education including extra € 70m to foster its expansion in South America and strategic development in Asia.

Since 2000, the University of Seville starts working with the field of research related to the concept of "Sport for all and for human development" by uniting concepts related to sport, social pedagogy, inclusion, equal opportunities and health.

#### **Description:**

According to University of Seville's background, this proposal is directed toward teenagers in risk of social exclusion. The metodology selected to work with these participants is experiential programs in the natural environment.

This part of the course focuses on a proposal that take adolescents out of their comfort zone (Dobub, 2016) where they feel they are in an unstable balance in which their previous skills do not help them too much. At that time, it is conducive to proposing new content to them involving safety and feeling accepted (Brown, 2008) where educators, therefore, have to have skills for active listening, as well as

















showing empathy, warmth and also be good care providers (Selekman, 2005). Thus, a program of proven success is achieved by reducing social conflict, violence, suicidal ideas, anxiety, depression, drug use, interrupted sleep, as well as previous impulsive, defiant or hostile behaviors (Behrens, Santa, & Gass, 2010, p.110) when returning to the settings where adolescents functioned normally.

## 2.1.1. TARGET GROUP: TEENAGERS AT RISK OF EXCLUSION

According to the European Commission (1998), sports are an ideal means for promoting a more inclusive society for combating intolerance, racism, violence, behavior related to health risks such as addictions or practices that imply misuse of spare time. Likewise, other studies (Balibrea, Santos, & Lerma, 2002) point out sports as an ideal tool for accepting rules, an aspect that adolescents resist complying with. In addition, the studies also indicate related roles, not only sociological but also psychosocial. Sports tend to be related to a world of emotions, and secondly, as a means of collective identity and, thirdly, it gives meaning to the lives of individuals in some cases.

On the other hand, we understand nature as an extension of ourselves, as Pérez-Brunicardi (2012) in its ecological model, and not as consumer goods more at hand of who is able to afford it, as a part of our body with which we must re-connect, that we have to take care of and that it brings us multiple benefits, often therapeutic, when we come into contact. In fact, I consider that it is possible that this lack of contact, which benefits the massive use of technology, is what aggravates many of the problems of our adolescents. Regarding this circumstance, Louv (2005) warns us and defines this endemic disease of large cities, disconnected from the natural environment, as the deficiency of nature, "Seen from this angle, both children and adults would suffer from what could be called a nature deficit disorder, not in a clinical sense, but as a circumstance caused by alienation from nature, including decreased use of the senses, attention difficulties, and higher rates of physical and emotional illness. (p.75)".

## 2.1.2 CONTEXT FOR THE INTERVENTION

The Boom group is an association comprised of volunteers that came into being in 1991 in a zone without associative resources for young people (Barriada de Martínez Montañés de Sevilla). This

















association is geared toward fostering volunteerism and citizen participation, and towards minors and families of the Polígono Sur area.

Ever since it was created, the association has undergone different stages; some are more productive, whereas others are more limited, from which distinct groups (by ages) have come forth with different activities, roles and objectives. The work is usually carried out on Thursdays and Saturdays, with outings or camping trips carried out over several days during festive seasons. The association also has a vindictive and active orientation through the "We are also Seville" Platform that schedules acts of denunciation in the neighborhood.

The association's funding comes from public grants, as well as from collaborating partners who contribute voluntarily. The association's budget has been changing varying with the general economic situation, with times of greater prosperity and times of crisis.

The association's activity is currently very limited by the possibilities generated by the pandemic. The work of the volunteers is organized by commissions, with clearly differentiated roles. There has been a drastic decrease in volunteers and a reduction in the number of collaborating partners.

The Martinez Montañez neighborhood, known popularly as the Three Thousand Housing Units (Tres Mil Viviendas), is located in the Poligono Sur area of the city of Seville. It entails an area segregated from other neighborhoods due to industrial facilities or infrastructures, which isolates it from the rest of the city's urban spaces. The Martinez Montañes neighborhood is one of six neighborhoods of the Poligono Sur area. This area of Seville has had a commissioner and a specific comprehensive action plan since 2003. This plan is based on four basic lines of basic action: Urbanism and neighborhood coexistence; Socio-labor insertion and promoting economic activity; Community health; and Socio-educational family intervention.

The activity of the association focuses on its volunteers, as well as the minors who participate in it. The group of responsible persons consists of 14 volunteers ranging in ages from 18 to 25, who are in charge of both boosting the different branches and managing the association itself.

The association is divided into four age groups: Cubs (7 to 11 years old), Apaches (11 to 14 years old), Pioneers (14 to 18 years old), and Mountaineers (+18 years old). A total of 45 boys and girls who present different difficulties influenced by the socioeconomic and family context in which they live. The majority are of gypsy ethnicity.

















The methodology they have developed is based on Sociocultural Animation and Street Education and contexts. It seeks to reinforce healthy leisure time and values through sports and contact with nature. The monitors introduce themselves as positive references, with an active and friendly presence that creates a relationship of trust. The educational action is eminently practical, with excursions from the neighborhood that opens up to new forms of communication for them and the search for security that they have lost.

The playful and creative component is also part of the association's methodology. The use of games as a methodology is intended to recover the lost motivation for learning in children. Reflection and self-evaluation also permeate how the association works, since it works on an assembly-based, collaborative and dialogic basis. Thus, they feel they are protagonists of decisions and are encouraged by the achievements made.

Other methodological elements that support the action are individualization and flexibility. The work carried out is intended to improve the situation of each boy and girl, depending on their contexts and needs, although there are obviously basic rules common to all that must be respected.

The activities are planned in groups and by weeks. Normally two activities are carried out at the civic center "El Esqueleto" every week that the city council allows it to be used. Outings are also organized from time to time that require increased planning.

The volunteers who make up the association live an ongoing process of personal training and development that strives for not only improvement of the association, but also for personal improvement. This work of the association is combined with the work carried out by other institutions and associations that make up a work network in the neighborhood.

On an economic level, the Boom association subsists thanks to the sponsors (about 20 members) who contribute an amount periodically from the sale of articles made in the workshops and charitable bars. With the money raised, the association deals with stationery and food expenses, as well as scheduled outings.

# 2.2. EXPERIENTIAL LEARNING IN THE NATURAL ENVIRONMENT AS A METODOLOGY

To work with this group, it has decided to use specific methodologies of work in nature, such as Wilderness Education, Outdoor Education or Adventure Therapy, based on Experiential Learning. Although in this case, you place the focus clearly on the person involved, who ceases to be a patient,

















client, or a sick person, as they are often referred to in field research, that is, to be a person with needs that are more or less temporary. Thus, the proposal you make will be in nature, starting with immersion in nature in a 15-day program that will follow a series of stages and will be based on the Pryor, Pryor, and Carpenter model (2018, p.74-75), which will contain tasks, challenges, teamwork, and leaving the comfort zone intermittently.

The design of the methodology of this work completely focuses on the profile of the people with whom we want to work, in this case, conflicting adolescents or at risk of radicalization; therefore, we will have to take into account several factors, including the age itself and the vital moment of adolescence and what that entails, the environment in which they live, as well as the circumstances that lead them to conflict or radicalization.

When designing the educational proposal for these people, you will take into account a series of structures that must guide our involvement, among those which clearly mark the limits, establish routines of the beginning and end of activities, have the family or person in charge of the child become involved with the educational process in which the child is going to participate (Baim and Guthrie, 2012, p.51).

With regard to the duration and content of an educational immersion program in nature based on Experience Learning, there are many currents, and experiences. We focus on those who work specifically with vulnerable adolescents. We observe that most of them work in programs ranging from 5 to 30 days, and with groups of 8 people (beneficiaries), as well as several professionals who accompany them, including at least one expert in physical-sports activities, an educator/social worker, and a therapist. In addition, activities usually include those of survival, use of ropes, hiking, camping, water or swimming, group dynamics among their most common activities... (Prior, 2008). And they have several stages in common, which are: a) Pre-program; b) Program: beginning, middle and end; and c) Post-program.

# 2.1.1. NATURE AS A MEANS OF TRANSMITTING VALUES

Just because of their evolutionary process, whether they have experienced a sensitive existential moment full of personal changes, insecurities and uncertainties, during this period that lasts several

















years, adolescents need good reference figures to guide and protect them in their transition period toward adult life. These figures, who should preferably be parents, coaches or persons close to the family core, are not always present or are not chosen by young people, in detriment to other maladjusted people who take that place, and who often harm, encourage and aggravate disruptive behaviors. These tend to be internalizing behaviors in girls such as anxiety, sadness, hypersensitivity and psychophysiological disorders and externalizing in boys such as behavior problems, substance abuse and aggression (Mújica and Reichhardt, 2005, p.40). These behaviors must be treated in time to avoid greater harm and even problems with the law. Thus, taking advantage of the healing power of nature (Louv, 2008), we want to propose an original program of personal development in conflictive adolescents, starting with the use of physical activities in the natural environment.

The structured Education through Adventure (Outdoor Education) or Treatment Based on Nature (Wilderness Based Treatment) programs with conflictive adolescents are relatively new in our country, and have been known mainly through others with which they share many similarities such as Adventure Therapy. The latter has a more therapeutic and psychological characteristic, it has been present in the United States for approximately 50 years since the creation of the "Outward Bound wilderness challenge model" and the figure of is creator: Kurt Hahn. At the heart of these programs, and which I will use for my proposal, since their effectiveness and importance have been proven, is self-efficacy promoted through the fulfillment of tasks, the restructuring of the adult figure as persons of authority and promoting group cohesion and development in natural environments. (Walsh y Russell, 2010).

Several authors such as Walsh and Russell (2010) agree on the importance of the special impact that these programs have on promoting: a) self-efficacy, understood as the ability to respond efficiently to a new circumstance, as well as to mobilize motivation, and cognitive resources (Wood and Bandura, 1989); b) resilience based on its three capacities, persisting, adapting, and transforming (Folke, Carpenter, Walker, Scheffer, Chapin and Rockström (2010); and c) Hope, as understood by Snyder (1995) as a process whereby individuals set goals, develop specific strategies to achieve those goals, and build and maintain motivation to execute those strategies

#### 2.3. PROPOSAL

















The "Personal development in conflictive adolescents through the use of physical activities and immersion in the natural environment" project is primarily intended to provide adolescents from vulnerable environments with tools for life, so that they may be able to self-manage the vicissitudes of their daily lives effectively, ethically and responsibly, so that they, not others, are those who take charge of their realities.

#### 2.3.1. OBJECTIVES

The general objective of the research project is to "Provide tools, through immersion and the practice of physical activity in the natural environment, to adolescents from vulnerable environments so that they are able to self-manage in an effective, ethical and responsible way the vicissitudes of his daily life"

The specific objectives that are intended to be reached through research are summarized as:

- 1. Generating participation spaces
- 2. Getting them to think for themselves
- 3. Getting them to be capable of managing their emotions efficiently
- 4. Connecting with their centers of interest
- 5. Increasing their resilience from self-assessment (Rocio)
- 6. Improving self-concept and self-esteem
- 7. Increasing perseverance
- 8. Increasing empathy and compassion
- Managing environmental, natural or urban resources appropriately and ethically for personal benefit and that of others
- 10. Getting participating persons to become leaders of their own group

# 2.3.2. COMPETENCES

After the completion of our intervention, the participants will be capable of achieving the following competences:

# Leadership:

















It is the competence by which individuals promote collaborative work with the team in order to achieve a common goal all together, knowing how to organize people, distribute tasks, promote innovation and effective decision-making.

Knowledge	Skills
<ul> <li>Specific leadership techniques</li> <li>Human nature and fundamental rules of interaction and social behaviour</li> <li>Different incentive schemes and motivation techniques</li> </ul>	<ul> <li>Have a comprehensive range of cognitive and practical skills to:</li> <li>Motivate people and foster their own initiatives/new ideas</li> <li>Establish a positive atmosphere within the team</li> <li>Listen to others and give constructive feedback if needed</li> <li>Be respectful with the rest of the team</li> <li>Be comfortable with disagreement and see it as an added value</li> <li>Promote collaborative relationships</li> <li>Generate a group identity</li> </ul>

## **Communications**

The skills and abilities through which someone can effectivelly monitor a communication process, understanding oneself as transmitter of a message, of how the innovation should be coded, and how recipients are going to understand this message.

Knowledge	Skills
<ul> <li>The specific approaches, methods and procedures to communicate new ideas.</li> <li>Specific methods, strategies and procedures to follow up and maintain relations.</li> <li>Verbal and non-verbal communication principles</li> </ul>	<ul> <li>Convey your message to obtain an assertive response.</li> <li>Demonstrate active listening skills leading to valid discussion exchange.</li> <li>Identify potential or current breaks in communication.</li> <li>Demonstrate empathy</li> <li>Detect and manage emotions and affective links</li> </ul>

















#### **Social Inclusion**

It is the process by which individuals respond respectfully and effectively to people of all cultures, languages, classes, races, ethnic backgrounds, religions, and other diversity factors in a manner that recognizes, affirms, and values the worth of individuals, families, and communities and protects and preserves the dignity of each.

Knowledge	Skills
<ul> <li>The different social realities and problems of social exclusion conceived in teenagers</li> <li>The principles of effective social inclusion</li> <li>The specific approaches, methods and procedures to promote social inclusion of all social realities</li> </ul>	<ul> <li>To know and connect with social realities, making them visible</li> <li>Ability for developing and interiorising the concept of social inclusion from the adolescents of vulnerable contexts</li> <li>Being able to interact with context and the people and adapt to them.</li> <li>Promote positive relationships based on cooperation, acceptance of differences and build the self-confidence and trust between people</li> </ul>

#### **2.3.3. CONTENT**

The proposal is based on an Immersion in nature through a program, which follows a series of phases that will contain tasks, challenges, teamwork, and outings to the natural environment, through which we will work the self-concept, self-esteem, personal and social skills, leadership and personal empowerment.

The beneficiaries of this proposal will be a small group of people in the adolescent stage who will work accompanied by a professional team in which there will be at least one expert in physical-sports activities, an educator / reference for the group, and a therapist

















## 2.3.4. PROGRAM DESIGN.

As can be seen in the following table, the project consists of three major stages: pre-program, program and post-program. I will explain them synthetically below.

- 1st Stage. Pre-Program. This itself is a preparation stage and lasts approximately 2 months. The adolescents who will be part of the group are selected during this period. We will contact the family, training will be given on basic skills and expected behavior in a natural environment, and participants will undergo an initial evaluation. A training/learning contract will be signed with them, and they will be given basic notions of what they will do on the camping trip, and what they need to bring for the experience mentally and physically and begin with the first experiences of nature.

At the same time, sports educators/monitors will decide the educational affinity among the participants who will be part of the expedition and comprise the group. At this stage, social elements including educators and social workers, psychologists, therapists and technicians will be involved.

- 2<sup>nd</sup> Stage. Program. It will consist of 3 days of immersion in the Dobub nature (2016), which will be divided as follows: the adolescent will acquire survival skills along with self-sufficiency in the first nine days. The educator consolidates his relationship with the participant and establishes a therapeutic focus during these days. The next two days, they have two days alone in self-reliance where they apply what they have learned, and they set up a refuge of fortune to have the best possible time. At that stage they will receive family support through documents written in the form of a letter (Rusell and Hendee, 2000) in which the reference figure will deal with the problems that have recently occurred at home. What was learned in the middle of nature, but with all their needs covered, will be worked on in a more relaxed way in the last four days. The objective here is to prepare follow-up plans, bad habit prevention strategies, and complete the program. At this time, the participants will be provided with a second letter of reference figures in which they recognize their own mistakes, and they are invited to write down how they would like for their family relationships to be henceforth, both individually and as a family (Rusell and Hendee, 2000). Upon returning home, the reference figures are provided with a guide to

















the progress and agreements made with the young person during the days of immersion that they will have to work on together in the following months. As of that moment, it is essential for them to maintain a careful attitude and follow up on the progress of their children (Rusell, 2005).

At this stage, the figure of the sports monitor, as well as that of the educators who will work together with the adolescent, will become very important.

# - 3rd Stage. Post-program

This stage, which will last 15 days, is created to put what has been learned during the immersion in the natural environment into practice. It lasts approximately from three to six months. During this period, there will be a follow-up on and guided toward different services that he or she requires, which defines the person who will accompany the individual and be available to listen actively when necessary. Work will be done and the first steps will be taken as they go realizing their vocation. In the meantime, they will be provided with strategies/competencies for life in training pills that enable them to enter the work world successfully throughout the process or when it is finished.

At this stage, social elements including educators and social workers, psychologists, therapists and technicians will be involved just like in the first stage.

#### 2.3.5. EVALUATION

The methodology used is mixed, although the qualitative part will be deepened, for which we will use as main tools the anecdotal record, the life stories, the discussion group and the interviews which we will combine with others of a quantitative nature that allow us to do a review of the people with whom we will work, thus we will use different scales that will be applied at the beginning and at the end of the program, such as:

- The Self-esteem scale of Rosemberg, 1965, which is based on the one-dimensional model of Guttman, whose specific function is to measure global self-esteem.

















- The scale of values of Suárez Delgado, Vega, and Jiménez. (2011) for adolescents whose objective is to evaluate values within the framework of the promotion of positive development.
- The Scale for the evaluation of social skills of Oliva, Antolín, Pertegal, Ríos, Parra, Hernando and Reina (2011).

#### 2.3.6. DATA ANALYSIS. PRINCIPAL RESULTS

The initial profile of adolescents who carry out the program of activities in nature is defined by a lifestyle (M = 70.20, SD = 6.72), where 80% of the participants indicate that they always consume 4 to 8 glasses of water up to date; that always include the consumption of fruits between meals; They sometimes read food labels and always come in for a medical check-up once a year. Similarly, 60% indicate that they frequently consume balanced foods; that they never eat food with artificial or chemical ingredients; that they always carry out activities that involve movement of the body; that sometimes identify the causes that generate tension or concern; who frequently propose alternative solutions to problems; that they always interact and maintain good interpersonal relationships with others; who always take into account the recommendations of health personnel and who frequently participate in activities that enhance their health.

In relation to self-esteem (M = 28.20, SD = 3.42), as can be seen in Table 2, 60% of the participants totally disagree that they feel useless; agree that they can do things as well as others and that they would like to appreciate themselves more and fully agree that they have good qualities and that they have many reasons to be proud.

According to aggressiveness (M = 25.20, SD = 8.64), as can be seen in Table 3, 60% of the participants highlighted that they sometimes fight with people.

With regard to the importance they give to certain actions (M = 131.80, SD = 20.42), as shown in Table 6, 60% of the participants emphasize that it is quite important to do things the best one can, although not He liked me; It is very important to respond to the needs of others and do things that we find pleasant and, finally, be honest with others, fight against social injustices, act according to the

















principles that one believes, not blame others for our own mistakes And acknowledging and taking responsibility when something wrong has been done is the most important thing.

In a complementary manner, normality and homoscedasticity tests were performed on the sample to decide the statistical tests to be used. A normal distribution of the sample was determined, as well as the homogeneity of variances for the main variables of the study (Kolomogorov-Smirnov and Shapiro-Wilk tests, p> .05). For this reason, it was decided to run in the statistical analyzes performed for this research parametric tests. These tests are recommended when, as in this research, the size of the subgroups to be compared is not unequal. Specifically, Student's t tests were performed for related samples to compare the variables under study in the pre-test and in the post-test.

Making comparisons between the variables under study in the pre-test and post-test, no statistically significant differences were found (p> .05). However, a statistically significant difference was found in the variable "Styles" (p < .05), indicating that the participants showed a greater healthy lifestyle in the pre-test than in the post-test.

To complement the significance of the results, we evaluated the effect size. This data provides the magnitude of the result, which allows us to offer an estimate of the scope of our findings. We could say that the effect size refers to a way of quantifying the size of the difference between two groups. The statistic used for this data was Cohen's d. The intervention has caused changes in the people involved, although these are not statistically significant.

In a second moment, a qualitative analysis of the contributions made by the educational agents who have participated in the intervention program has been carried out through the reflections and the diary that was provided at the end of each work session. By the research team a collaboratively edited field journal. The conclusions drawn from this diary provide valuable data that can be transferable to other inclusive work contexts.

We start from some participants whose families are "grateful" for the activity and "collaborators". In the same way, the team of monitors and monitors express their motivation and what this intervention means in terms of "injection of motivation" for the Boom Team.

















In general, the research team observes that the target participants of this intervention are "educated", "friendly", "sensitive", "open" and "confident" young people. However, on occasion, a need for notoriety, to "be valued", lack of motivation and / or "low self-esteem" has been detected. An example of this was when, in the survival activity, the girls "did not identify any quality that they could bring to the group". On another occasion, the positive effect on specific motivation on them in moments of reluctance has been detected.

Less motivation is shown for traditional regulated activities, as an example when a "kind of exam" was presented. In the same way, issues related to gender equality seem to be extensively worked on in educational centers. However, we doubt the effectiveness of this work due to the responses and attitudes to these issues.

Sometimes they have joined the family activities of the research team, which has led to the detection of positive effects of inclusion and cohesion in the group. Young people have shown their satisfaction in group activities such as those on the boat.

Finally, they have shown great interest when they have been involved in the design of activities, for example in the design of the camping program.

By way of conclusion, we can extract some important aspects to take into account when designing physical-sports activities in this population group:

- 1. Activities where the final result depends on group work.
- 2. Preference for activities that are not conceptually related to the traditional regulated school context.
- 3. Progressively stagger the activities so that they can be carried out in short periods with continuous instructions.
- 4. Use individualized motivational strategies.
- 5. Work with diverse groups (cultural, social, etc.).
- 6. Select activities in which at some point each of the members of the group feel like "protagonists" or especially valid.

















7. Involve the group in the selection and design of programs and activities.

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## **APPENDIX**

Tasks	Activities	Benefits/Expected meanings	Timing
Pre-Program			
Previous information  Family contact/implication  Individual Evaluation  Selecting the Group  First incursions into the natural environment  Preparation of the field trip	9 Contact, knowledge, and meeting 16 Team Building, dynamics of Knowledge. River 23 Leadership work, decision-making. Orientation. 30 Interviews with therapist, gender work February	Responsible freedom of choice  Confidence in the process and in the educators  Creating a holistic confidence network  Hope/appreciation  Decision-making	From January 9 to March 30, 2021
	6 Signing of Learning contract, Informed consent, interview with families  13 Rock climbing workshop and Rappel Acquisition skills. Confidence	Teamwork  Acquisition of skills  Leadership	

















	Cerro del Hierro bike ride, leadership and enjoyment workshop.  27 Canyoneering workshop Skills and self-confidence March  6 Rafting workshop Team building  13 Preparation for camping, work and awareness, preparation of materials	
Program		
Start		
Preparation activities and group knowledge	19 <b>20</b> and 21	Personalized individual support
Setting individual objectives	Camping Camping. Solo	Individual decision-making
Development of a secure group		Sentiment of belonging to a group / Group Cohesion
Setting group goals	Camping setup. Necessary information	Sequential acquisition of
Training for a "main event"	Knowledge dynamics. Assembling rafts/team building	skills and abilities

















Going out to activities	Hiking route. The cave as a metaphor	necessary for survival in	
		the natural environment	
	<ul> <li>Marching and reading in the cave of the letter of the reference figures.</li> </ul>	Destate a maltan	
	Establishing couples, today I take care of you, tomorrow	Decision-making	
	you take care of me.	Gaining trust in the	
	you take our corme.	educator	
	Trust dynamics.		
	- Bike route		
	- Kayak route.		
	The itinerant camping:		Days March 19
	- I guide		
	- I prepare the meal for everyone		
	- I am in charge of the medicine cabinet		
	Basic survival activities		
	- Setting up a fortune refuge		
	- Making fire with a stick		
	- Basic ropes and knots		
	- Animal traps		
	- Obtaining potable water from a natural		
	environment - Guiding oneself through natural means		
	- The illuminating aloneness		
	- Protections from insects and animals		

















The main event "/ The trip  The reflection  Additional activities Arrival at the campsite  Put into practice the skills learned to  - Go camping - Survive two days - Find hidden objects - Get to a point on the map and communicate with educators Reading of the letter of the reference figures.  Educators and emotional checkpoints  Control points associated with tests to be carried out. Monkey bridge assembly, climbing, rappelling  Characters of the place, heartfelt conversations and experience  Bite of the spirit Intermediate Welcome  Most intense experience of the physical and mental experience  Awareness of what was lived in the experience and its implications for their life Preparing to return  Days March 20		<ul> <li>First aid</li> <li>What do I put into my backpack?</li> <li>Ritual of leaving Campfire.</li> </ul>		
The reflection  - Go camping - Survive two days - Find hidden objects - Get to a point on the map and communicate with educators Reading of the letter of the reference figures.  Educators and emotional checkpoints  Control points associated with tests to be carried out. Monkey bridge assembly, climbing, rappelling  Characters of the place, heartfelt conversations and experience  The physical and mental experience  Awareness of what was lived in the experience and its implications for their life  Preparing to return  Days March 20	Intermediate part			
	The reflection  Additional activities  Additional entries	<ul> <li>Go camping</li> <li>Survive two days</li> <li>Find hidden objects</li> <li>Get to a point on the map and communicate with educators</li> <li>Reading of the letter of the reference figures.</li> <li>Educators and emotional checkpoints</li> <li>Control points associated with tests to be carried out.</li> <li>Monkey bridge assembly, climbing, rappelling</li> <li>Characters of the place, heartfelt conversations and</li> </ul>	the physical and mental experience  Awareness of what was lived in the experience and its implications for their life	Days March 20

















Individual work sessions	Dynamics of conflict Understanding my "opponent". I	Secure transition with	
	position myself from different angles. (P.181) book Peter	support for persons and	
Group work sessions	Con who would not	the group	
Public storytelling	See, play and act	Celebrating what has been	
	Wording of commitment agenda	gained	
Reinforcing strategies acquired for	Family constallations?	Barried	March 21
the change	Family constellations?	Public recognition of	
Celebration activities:	Team Building- Rafting	efforts and changes made	
	Laughter therapy	Analysis of possible	
	Laughter therapy	transfers to learning	
	Fireside stories. I recognize where I come from and how		
	I have been		
	Letter from reference figures.		
	Solving conflicts efficiently		
	Rite of passage. The four elements		
Post-Program			
Personalized follow-up and	Periodic coffee awareness	Transition toward real life	
guidance toward services and	i choule conce awareness	Transition toward real life	
support	Rehabilitation therapy, when accurate.	Reinforcing skills acquired	

















Accompaniment/follow-up on recovery / rehabilitation  Accompaniment/vocational follow-up, training, and education  Accompaniment/community follow-up  Peer leadership / mediation opportunities	Personal training.  I take responsibility over other people. Volunteering for vulnerable people.  Periodic group workshop with the camping team. Life group  I try, I grow	New opportunities for contributing positively in their environment  Recognition of individuality: meaning, purpose, and belonging	Since the day after camping, March 27 henceforth (while the need persists). From 3 to 6 months.
Job opportunity program			

















# THE PRACTICE OF SITTING VOLLEYBALL

Project Title	Inclusion through sport interventions: DISCIPLINS Project Reference Project: 3D4VET 2017-1-ES01-KA202-03800
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Author(s)	Alessandra Boccia Federico Blanc

















# 3. GOOD PRACTICES OF SOCIAL INCLUSION THROUGH SPORT-BASED INTERVENTIONS WORKING IN SPORTS CONTEXTS WITH MENTALLY OR PHYSICALLY DISABLED PERSONS

#### 3.1. OVERVIEW

Leader: Federations Italiana Pallavolo (FIPAV)

**Description:** the work carried out by FIPAV during the 3 training modules is based on its direct experience developed in the field of sports inclusion of people with physical or mental disabilities. After having analysed the skills needed to participate actively in sports contexts (Module 1 - Subject 5) and proposed a case study for developing social inclusion processes and the tools needed for evaluating them (Module 2 - Subject 5), this module focuses the attention on the practice of sitting volleyball as example for introducing people with disabilities to sports activities, and also as a way to integrate able bodied and disabled people in the same game. Aim of the subject is to allow students to understand and learn how to ideate/develop sports programs/training, starting from the comprehension of the reference context (content n. 1). The analysis of some good practices will be the instrument used for studying the best tools and techniques implemented by the experts in this specific field of intervention (content n. 2). After having achieved a good understanding of the context and of the specific sport discipline, students will be able to ideate their own sports program/training (content n. 3).

# 3.2. OBJECTIVES, CONTENTS AND COMPETENCES OF THE SUBJECT

After the completion of this subject, you will be capable of achieving the following **objectives**:

Ob1. To become able to analyze different contexts understanding their main characteristics and the needs of the people acting in each context

Ob2. To learn how to adapt different sports disciplines to different contexts, learning from the observation of good practices

Ob3. To learn how to implement a sports programm, adapting it to different target groups

Ob4. To become able to ideate and build physical activity interventions

Furthermore, the **contents** of this subject are the following:

Cont1. Sports contexts with mentally or physically disabled persons

1. General characteristics of the context

















2. Main integration and inclusion problems

# Cont2. Sitting Volleyball practice

- 1. Rules and structure of the game
- 2. Good practices in the field of sitting volleyball

## Cont3. How to build an educational/sports program

- 1. First steps for introducing people with mental or physical disabilities to the practice of a sports discipline
- 2. Ideating a sports program including some progression phases
- 3. Testing phase of the program and assessment of the effectiveness

# Additionally, below the **competences** of this subject are presented:

General competences	<ul><li>C. 5 – Physical activity interventions</li><li>C. 6 – Didactic methodologies</li></ul>
	C. 5 - Progressively adapt, teach and energize physical and recreational activities
Specific	C. 5 - To identify and defining problems and conflicts, detecting needs and complex cases, to propose, design, implement and evaluate diverse sport and physical activity solutions
competences	C. 6 - To plan for and implement physical activities into the teaching process, so as to enhance the effectiveness of teaching interventions
	C. 6 - To appropriately manage and orchestrate physical activity interventions
	C. 1 - Leadership
Transversal competences	C. 2 – Communication C. 3 - Social Inclusion
	C. 3 Social Melasion

# 3.3. CONTENT 1. SPORTS CONTEXTS WITH MENTALLY OR PHYSICALLY DISABLED PERSONS

















## 3.3.1. GENERAL CHARACTERISTICS OF THE CONTEXT

The unique ability of sports to transcend linguistic, cultural and social barriers makes it an excellent platform for strategies of inclusion and adaptation. Persons with disabilities often face societal barriers and disability evokes negative perceptions and discrimination in many societies. As a result of the stigma associated with disability, persons with disabilities are generally excluded from education, employment and community life which deprives them of opportunities essential to their social development, health and well-being. In some societies persons with disabilities are considered dependent and seen as incapable, thus fostering inactivity which often causes individuals with physical disabilities to experience restricted mobility beyond the cause of their disability.

Sport can help reduce the stigma and discrimination associated with disability because it can transform community attitudes about persons with disabilities by highlighting their skills and reducing the tendency to see the disability instead of the person. Through sport, persons without disabilities interact with persons with disabilities in a positive context forcing them to reshape assumptions about what persons with disabilities can and cannot do. Sport changes the person with disability in an equally profound way by empowering persons with disabilities to realize their full potential and advocate for changes in society. Through sport, persons with disabilities acquire vital social skills, develop independence, and become empowered to act as agents of change. Sport teaches individuals how to communicate effectively as well as the significance of teamwork and cooperation and respect for others. Sport is also well-suited to reducing dependence and developing greater independence by helping persons with disabilities to become physically and mentally stronger. These skills can be transferred into other new arenas including employment and advocacy work further helping to build self-sufficiency.

The power of sport as a transformative tool is of particular importance for women as women with disabilities often experience double discrimination on the basis of their gender and disability. It is reported that 93% of women with disabilities are not involved in sport and women comprise only one-third of athletes with disabilities in international competitions. By providing women with disabilities the opportunity to compete and demonstrate their physical ability, sport can help to reduce gender stereotypes and negative perceptions associated with women with disabilities.

# 3.3.2. MAIN INTEGRATION AND INCLUSION PROBLEMS

There is limited descriptive and comparative data on the participation rates and physical activity patterns of people with a disability but where that data does exist, it shows that people with a disability

















by and large engage in less physical activity than their able-bodied peers. Global estimate's suggest that more than 60% of adults worldwide do not engage in levels of physical activity that will benefit their health and that physical inactivity is reported as being even more prevalent among both women and people with a disability.

Participation in sport is influenced by a wide variety of factors. These factors include the perceived benefits of participation in sport, however there are also barriers or constraints, which may hinder participation. These factors and others, influencing participation in sport have been widely explored in relation to able-bodied sport and more recently within the realms of disability sport.

Research on leisure and sport participation constraints are well established within the field of leisure studies including a wide array of empirical studies and considerable theoretical developments, with three main categories in which to classify constraints to participation in leisure suggested:

- Structural, which includes facilities, time, money and transportation;
- Intrapersonal, or more specifically the psychological state of the individual such as stress, anxiety, and perceived self-skill;
- Interpersonal which explores the interaction between individuals.

The number of studies that focus on the constraints of people with a disability in sport are still very limited. Sherrill and Rainbolt in a study on elite athletes with cerebral palsy found lack of time, inadequate equipment and facilities including access, distance and availability, no one to train with, lack of transportation, lack of adequate knowledge among coaches, and lack of a regular coach as the major constraints to ongoing, regular participation. Ferrara, Dattilo & Dattilo again identified inadequate facilities, inadequate equipment, lack of transportation and lack of coaches as major constraints to sports participation but also recognised that athletes experienced different constraints depending on their chosen sport. Blind athletes most often cited transportation as their major constraint whereas wheelchair athletes tended to have more equipment and/or financial constraints. Crawford & Stodolska also identify lack of qualified coaches, limited availability of equipment, inadequate facilities, negative attitudes towards people with a disability and lack of financial resources as the major determinants of sports participation or non-participation within a developing country context. One particular study identifies not only the barriers or constraints to physical activity but also identifies a number of factors that could facilitate participation. They identified 178 barriers in their research, which they grouped under a number of themes including barriers related to the natural environment, equipment, economic issues, information, professional knowledge, perceptions and attitudes, and policies.

In many of the studies these same constraints to sport continue to reappear for both adults and children with a disability. The Sport England "Disability Survey - Young People With A Disability & Sport", found that, in children with a disability, the most common barriers to participation in physical activity were having no one to go with, unsuitability of local sports facilities, a lack of money, and health considerations. Other constraints included lack of transportation, unwelcoming staff, discrimination, children's own inhibitions, and clubs do not provide for my disability. In Ireland transportation and accessibility appear to be the major barrier to sports participation by people with a disability.

















On an individual level, people with a disability may face a number of additional barriers to participation in sport compared with people without a disability.

Some common barriers include:

- lack of early experiences in sport (this varies between individuals and whether a disability is from birth or acquired later in life);
- lack of understanding and awareness of how to include people with a disability in sport;
- limited opportunities and programmes for participation, training and competition;
- lack of accessible facilities, such as gymnasiums and buildings;
- limited accessible transportation;
- limiting psychological and sociological factors including attitudes towards disability of parents, coaches, teachers and even people with disabilities themselves;
- limited access to information and resources.

#### 3.4. CONTENT 2. SITTING VOLLEYBALL PRACTICE

#### 3.4.1. RULES AND STRUCTURE OF THE GAME

Sitting Volleyball is perhaps the most widely known form of ParaVolley thanks to its inclusion in the Paralympic Games since Arnhem in 1980. Played by over 10,000 athletes, in more than 75 countries worldwide it is a truly global game that anyone can play. The Sitting Volleyball rules are based on the FIVB rules for able-bodied volleyball, with a few minor modifications. It requires a smaller court (10m x 6m) and a lower net (1.15m for men, 1.05m for women), and the game is considerably faster than standing volleyball. It's played in a best-of-five set format, and the first to reach 25 points (with at least a 2-point lead) wins the set.

Teams compete in male and female events, with six on the court at a time. At all times, a portion of the athlete's torso must be in contact with the ground, and service blocks and attacks are allowed.

#### A team scores a point:

- by successfully grounding the ball on the opponent's playing court;
- when the opposing team commits a fault;
- when the opposing team receives a penalty.

**Fault** - A team commits a fault by making a playing action contrary to the Rules (or by violating them in some other way). The referees judge the faults and determine the consequences according to the Rules.

















**Rally and completed rally** - A rally is the sequence of playing actions from the moment of the service hit by the server until the ball is out of play. A completed rally is a sequence of playing actions which result in the award of a point. If the serving team wins a rally, it scores a point and continues to serve. If the receiving team wins a rally, it scores a point and it must serve next.

**The match** - A set (except the deciding, 3rd set) is won by the team which first scores 25 points with a minimum lead of two points. In the case of a 24–24 tie, play is continued until a two-point lead is achieved. The match is won by the team that wins two sets. In the case of a 1 set all tie, the deciding set (the 3rd) is played to 15 points with a minimum lead of 2 points.

**Team starting line-up** - There must always be six players per team during the play. The rotational order is determined by the team's starting line-up, and controlled with the service order and players' positions, throughout the set. When the receiving team has gained the right to serve, its players rotate one position clockwise: the player in position 2 rotates to position 1 to serve, the player in position 1 rotates to position 6, etc.

Contact with the court/net - At all times during playing actions the players must be in contact with the court with some part of the body between the buttocks and shoulders. To stand up, raise the body or take steps is forbidden. It is permitted to penetrate into the opponent's space under the net, provided that this does not interfere with the opponent's play. It is permitted to touch the opponent's court beyond the center line with any part of the body provided that it does not interfere with the opponent's play. Contact with the net by a player is not a fault, unless it interferes with the play. Players may touch the post, ropes, or any other object outside the antennae, including the net itself, provided that it does notinterfere with play. For safety reasons it is forbidden to hang oneself on the net with arms or other parts of the body.

**Service** - The ball can either be hit with one hand or any part of the arm after being tossed or released from the hand(s). Only one toss or release of the ball is allowed. At the moment of the service hit, the server's buttocks must not touch the court (the end line included) or the floor outside the service zone. The server's foot(feet), leg(s) or hand(s) may touch the court and/or the free zone outside the service zone. After the hit, he/she may move outside the service zone, or inside the court. To block an opponent's service is permitted.

Official Sitting Volleyball Rules

https://www.worldparavolley.org/wp-content/uploads/2017/06/2017-2020-SITTING-Volleyball-Rules-with-Diagrams.pdf

#### 3.4.2. GOOD PRACTICES IN THE FIELD OF SITTING VOLLEYBALL

















**Sitting volleyball guidelines** - The Office for Civil Rights (OCR) of the U.S. Department of Education issued a Dear Colleague Letter on January 25, 2013 clarifying elementary, secondary, and postsecondary level schools' responsibilities under the Rehabilitation Act of 1973 (Rehab Act) to provide extracurricular athletic opportunities for students with disabilities. The guidance clarifies when and how schools should include students with disabilities in mainstream interscholastic athletic programs, defines what true equal treatment of student athletes with disabilities means, and urges schools to create adapted interscholastic athletic programs for students with disabilities.

https://athletics4all.files.wordpress.com/2014/05/sitting-volleyball-guidelines.pdf

**WOVD – World Organisation of Volleyball for the Disabled -** This handbook is provided to the WOVD – World Organisation of Volleyball for the Disabled to assist in the development and support of teachers and coaches of athletes with a disability who play sitting volleyball. The presented Foundation Course Handbook should encourage a wide range of those wishing to introduce volleyball for the disabled to the potential candidates, especially to the young athletes and beginners. It is the author's experience that the person with sports background can see the educational possibilities in the game within a relatively short period of time after directing their attention to the issues.

https://www.pef.uni-lj.si/fileadmin/Datoteke/Zalozba/pdf/Vute WOVD Handbook.pdf

**Volleyball Canada** - Some examples of drills that can be used when playing sitting volleyball. When athletes first start playing the game, the two areas that need to be addressed are the ability to move quickly and efficiently on the floor using the feet and hands and then quickly pulling up the hands to play the ball.

http://www.vcdm.org/global/images/misc/SIT\_Drills\_All.pdf

**International Paralympic Committee - Sitting Volleyball videos** 

https://www.paralympic.org/sitting-volleyball/videos

# 3.5. CONTENT 3. HOW TO BUILD AN EDUCATIONAL/SPORTS PROGRAM

# 3.5.1. FIRST STEPS FOR INTRODUCING PEOPLE WITH MENTAL OR PHYSICAL DISABILITIES TO THE PRACTICE OF A SPORTS DISCIPLINE

















There are people with disabilities who have had little or no experience of physical activity or exercise. They need, first of all, to develop their motor skills through adapted physical activity programmes and through physiotherapy where indicated. Other people with disabilities do not have the opportunity to participate in active leisure pursuits and sports that suit and appeal to them. They have had little or no opportunity to engage in physical exercise and sport with others and enjoy their social aspects. In school and in college the experience of children and young adults with disabilities are not always quality ones. Everyone with a disability, including athletes with a disability, need to be adequately catered for and their potential recognised, respected and nurtured.

Sitting volleyball has influenced the development of the particular skills, increasing large and fine muscle development and control, allowing players to gain mental alertness, develope social awareness and the need for fair play. Sitting volleyball requires moving on the floor by using hands and quick reactions for getting into position early enough to play effectively. This requires sufficient practice of basic techniques, plenty of play time, and the development of hand-eye and body co-ordination. For sittingvolleyball to be played successfully on the elementary level, basic skills must be established.

Teachers and coaches ought to receive specialised training in educating this substantial portion of the population. If the principle of gradual inclusion of disabled persons is accepted, and if a coherent policy is applied, all teachers, irrespective of their specialisation or the level at which they are qualified, should receive at least a basic training in teaching persons with disabilities. The significant role of adapted physical activities in education, re-education and leisure activities should be recognised, including psycho-motor ability, well-being, functional gesture, motor behaviour and sports movements. Physical activities form a link between rehabilitation or education on the one hand, and leisure on the other. The comprehensive training of any future teacher or leader of volleyball for the disabled should include a sound knowledge of the adaptation of physical activities. Teachers and coaches should be capable to introducing activities for disabled or health-impaired adults. Awareness must be heightened of the need of educate and train competent staff to promote and improve the conditions in which adapted physical activities are taught to and practised.

# General safety considerations at the training site:

- Teachers or coaches should be informed about medical status and specific requirements of all players involved in training;
- Teachers or coaches should have basic educational background to work with disabled athletes;
- It is important that records be kept on the training site to keep track of any problems which players might have. Keep in touch with medical personnel;
- It is very important that teachers, coaches and instructors in the volleyball for the disabled programme are aware of and understand any rules which may govern their session;

















• It is also essential that teachers, coaches and instructors have sufficient insurance to cover them in the event of an accident on the playing sitting or standing volleyball premises.

<u>Demonstrations are very important and the best form of explaining an activity or movement to</u> athletes. For effective demonstration the teacher or coach should:

- organise the teaching or coaching environment that the players are positioned to see the demonstration;
- minimise the effects of noise;
- gain the concentration from players when demonstration is going on;
- highlight what to do instead what not to do;
- it is important which player makes a demonstration;
- work with players individually or in small groups if necessery.

#### 3.5.2. IDEATING A SPORTS PROGRAM INCLUDING SOME PROGRESSION PHASES

The game requires some movements to catch the ball in different points of the court as the case may be. You will need a good warm-up to avoid various types of wrist traumas. The use of upper limbs, to move and to play, requires high rapidity so as to get to the right place, and then to choose the most suitable fundamental, to be performed correctly and accurately.

While moving, it will be crucial to maintain a good balance as well as an adequate orientation with regard to teammates and players of the opposing team. The starting position for you to move will be with your hands on the ground, not too close to the body, finger muscles ready to tense. Depending on the type of disability, players develop their own mode of movement. It is very rare for the ball to reach the player with precision, so it is important to keep your hands on the ground, to anticipate the movement and put yourself in the ideal position to perform the proper technical gesture.

The movement in the game of sitting volleyball is one of the hardest skills in this version of the game to learn. Therefore, teachers should incorporate movement into almost every drill they utilize. By teaching students the proper movements, they are being trained to think about moving without the ball which is also a key to standing volleyball. The ready position in the sitting game is legs in front, slightly bent. Player's arms should be down with hands on the floor ready to push in all directions. Further, players must be alert and ready to move in any direction due to the quick pace of the game.

When teaching students to spike or attack the ball, teachers should have the students start with their body four to five feet away from the net. Next, have them move towards the ball by using their arms and pushing or pulling with the lower body. Similar to standing volleyball, teach the student to pull back the hitting arm as if they were pulling (drawing back) to shoot a bow and arrow. When swinging

















forward they should do so quickly, while reaching as high as they can, and rotating their shoulders. When students become more skilled they will be able to direct the ball in part by turning their wrist in different directions as they follow through while striking the ball.

The skill of overhead passing (setting) is a difficult skill to master but the principles are the same in both versions of the sport. Teach students to open their hands and spread fingers into a ball shaped "cup" above their forehead, allow the wrists and hands to be loose, make a triangle with the thumbs and pointer fingers and flick the wrists and extend the arms to push the ball to the target. The hardest part of teaching this skill in sitting volleyball is that fact that students will not have the use of their feet or legs for momentum. Therefore, much time must be spent on teaching this skill, not just by executing stationary setting drills, but also through incorporating movement to the ball and setting it to a target.

Forearm passing/digging should be taught by having students place their thumbs together and even in height. Teachers should instruct students to point their thumbs downwards, and keep their elbows locked out to create a platform with their forearms. Further, students should position their platform to create an angle that allows the ball to rebound towards their target.

Serving is another sitting volleyball skill that must be taught to students. Teach students to pull back their hitting arm as if they were going to draw back a bow and arrow. In their non-serving hand, students should raise the ball to shoulder height with their arm in front of their body and toss the ball gently 1-2 feet above their head. Students must then swing through the ball to their intended target. Other pointers/cues that could be taught are to allow the wrist to be loose so that it snaps on contact with the ball to create a top spin serve or keep the wrist rigid and consistent for a float serve.

When teaching blocking, have students start with their hands down, ready to move side-to-side as quickly as possible. Once students get into position, they must raise their arms with hands open wide and fingers spread apart to cover the most surface area. Further, they should be taught to turn wrists outwards so the thumbs point upwards and they must position their eyes on the hitter, not the ball. From there, students should extend their arms across the net without touching it and flick their wrists toward the middle of the court. Blocking can be a difficult skill to master because of the timing involved in the skill but when adding this skill to as many drills as possible, students will become more proficient.

## 3.5.3. TESTING PHASE OF THE PROGRAM AND ASSESSMENT OF THE EFFECTIVENESS

Evaluation involves the systematic collection of data for several purposes. Evaluation could provide information: about activities; about outcomes that reveal what the activities are actually doing and affecting the programme design; in assisting the decision making; in assessing the overall need for the programme; in determining weak points of the programme; in determining how the players feel about the programme; in determining strong points of the programme.

















The most important reason to evaluate the training programme is to improve the programme design. Evaluation is useful when it is based on quality information. As much as possible evaluation should include the views and opinions of the participants, investigating for example if the goals and objectives of the sitting volleyball course are clear; the course duration is right; theoretical and practical seasons are well balanced; teaching material helps to better understand the course material; instructor – participant communication is friendly and supportive; the location and technical equipment is appropriate; the programme promotes interaction among participants; the programme uses appropriately qualified personnel.

# 3.6. BIBLIOGRAPHY/RESOURCES

Convention on the Rights of Persons with Disabilities

https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-30-participation-in-cultural-life-recreation-leisure-and-sport.html

General Assembly Resolution: Sport as a means to promote education, health, development and peace (A/RES/69/6)

https://www.un.org/en/ga/search/view\_doc.asp?symbol=A/RES/69/6

Young People with Disability in Physical Education/ Physical Activity/Sport In and Out of Schools: Technical Report for the World Health Organization <a href="https://www.icsspe.org/sites/default/files/YOUNGPEOPLE.pdf">https://www.icsspe.org/sites/default/files/YOUNGPEOPLE.pdf</a>

Constructing Diverse Sports Opportunities for People With Disabilities - Howard L. Nixon II <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.565.1434&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.565.1434&rep=rep1&type=pdf</a>

Sports for Individuals with a Physical Disability <a href="https://www.physio-pedia.com/Sports">https://www.physio-pedia.com/Sports</a> for Individuals with a Physical Disability

Teaching and coaching volleyball for the disabled – Foundation Course Handbook <a href="https://www.pef.uni-lj.si/fileadmin/Datoteke/Zalozba/pdf/Vute\_WOVD\_Handbook.pdf">https://www.pef.uni-lj.si/fileadmin/Datoteke/Zalozba/pdf/Vute\_WOVD\_Handbook.pdf</a>

Sitting Volleyball: A Skill Enhancing and Physically Demanding Activity <a href="https://www.nchpad.org/1073/5480/Sitting~Volleyball~~A~Skill~Enhancing~and~Physically~Demanding~Activity">https://www.nchpad.org/1073/5480/Sitting~Volleyball~~A~Skill~Enhancing~and~Physically~Demanding~Activity</a>

Official Sitting Volleyball Rules

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# HOW TO MAKE SENIOR CITIZENS PHYSICALLY ACTIVE?

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Author(s)	Arto Tiihonen Riitta Dincay

















## 4. HOW TO MAKE SENIOR CITIZENS PHYSICALLY ACTIVE?

# 4.1 OUTDOOR ACTIVITIES, RECREATIONAL FOOTBALL AND INSIDE CURLING AS EXAMPLES OF SOCIAL INCLUSION IN SPORT AND PHYSICAL ACTIVITIES

#### 4.1.1 INTRODUCTION

The purpose of this presentation is to describe the different policies and interventions that have been used to increase the social inclusion of senior citizens through exercise and sport. These examples have attracted senior citizens to physical activity and sports who have not previously had suitable sports opportunities, adequate support, or a social group.

Finland has one of the oldest populations in the world, so there are very many people over the age of 60 or 65, both in absolute and relative terms. A large proportion of them live alone, have various functional problems or live in places where it is difficult to organize group exercise for seniors. Another problem is that many forms of exercise and sports are as such unsuitable for seniors with functional difficulties.

Increasing social inclusion through exercise and sport is important for many reasons. Mobility, especially moving with others, affects the physical, mental, social, and experiential functioning of seniors (Pohjolainen 2014). Active exercise also reduces the incidence of several diseases (Barengo et al 2017). It is also good to know the essentials about the amount of mobility and the factors influencing it, such as age, level of education, social class, and housing arrangements, before interventions and the introduction of new practices (Borodulin et al, 2016).

Interventions are almost always designed to overcome the background factors that have negatively affected the movement of seniors. A well-educated, lonely, incapacitated and, for various reasons, less mobile people are involved in effective interventions and practices. Therefore, background information on, for example, the exercise of seniors and their structural reasons must be challenged in new interventions and obstacles to movement must be overcome.

Interventions cannot affect the level of education, social class or place of residence of seniors, even if they explain the low level of mobility. Instead, the experiences provided by the activity, the opportunities for social interaction, the quality of the activity and its suitability can be influenced in many different ways. Awakening and supporting seniors' own activity, as well as the agency that is built through it, are extremely important factors in any project that increases physical activity (Jyrkämä 2008).

















# 4.2 DIFFERENT MODELS, ORGANISATIONS AND TYPES OF SOCIAL INCLUSION IN SPORT AND PHYSICAL ACTIVITIES

The practices presented here have been developed by three different organizations and have targeted slightly different types of senior citizens.

## 4.2.1 GO OUT WITH THE ELDERLY CAMPAIGN AS AN EXAMPLE OF MULTIDISCIPLINARY, LONG-TERM, MULTI-ORGANIZATIONAL AND MULTI-STAKEHOLDER COLLABORATION

Go Out with the Elderly Campaign is a good example of the social inclusion of seniors through exercise and outdoor activities. Seniors can have a variety of physical limitations in their movement, which also affects the amount of outdoor activity. However, most can go outside, especially if help and support is available.

Go Out with the Elderly Campaign has provided a wide range of support and outdoor activities for seniors in various ways for ten years. The campaign has produced a wealth of support material and has also taken advantage of social media opportunities to attract outdoor friends and various organizations.

Indeed, the permanent construction of social inclusion requires long-term action in cooperation with various organizations. In this long-running campaign, various connections and practices have been built for years, outdoor friends have been recruited and trained systematically, and campaign material has been produced innovatively. The action has evolved by doing and experimenting with learning.

The first introduces a model in which students in the last grade of primary school take the residents of a nearby service house outside. It is therefore very important that people of different generations and ages do things together. It breeds "generational Intelligence," which is important in aging societies so that seniors do not become excluded from society. It is also important that the younger generations get to know the older population through doing things together. (Biggs & Lowenstein 2011; Saarenheimo 2014ab).

In another example, an outdoor friend is an elderly neighbor. There are many lonely elderly people in Finland whose families and relatives have either died or live far away from their loved ones. The tradition of informal neighborhood assistance has also not been built in the fast-growing big cities. That is why this campaign awakens new community and encourages neighbors to help each other under the wings of this campaign. The benefit can also be mutual, as the "helper gets" as well, as stated in the volunteer study (Yeung 2005).

In the third example, we move and play outdoors with the power of four generations. The strong urbanization that took place in Finland from the 1950s to the 1980s separated large age groups (birth years 1945-1960) from their parents and grandparents, who were often hundreds of kilometers away

















in the countryside. It led to a long-term decline in the communality of different generations. In recent decades, even in big cities, three or even four generations of families live quite close to each other. The video uses the example of one family to show how to play outdoors between three generations. (Saarenheimo 2014ab; Pohjolainen & Tiihonen 2015)

The fourth example is a rather typical solution of Finnish and Nordic society to social problems and, for example, the organization of sports, ie the activities of voluntary organizations in the third sector for the common good. In this case, the Go Out with the Elderly Campaign has partnered with the Lions Club. The campaign has trained Lions Club volunteers to be outdoor friends, who then take care of outdoor activities for the elderly. The importance of third sector organizations in Finland is very great in sports, youth activities, the social and health sectors, but also in the work of the elderly.

The Go Out with the Elderly Campaign is a ten-year-old form of activity, which is based on a multidisciplinary research and development activity and the Power for Aging action program <a href="https://www.voimaavanhuuteen.fi/en/">https://www.voimaavanhuuteen.fi/en/</a>), which was launched in 2005 (<a href="https://www.ikainstituutti.fi/in-english/">https://www.ikainstituutti.fi/in-english/</a>) works in close co-operation with the Finnish gerontological research community, sports science and administration, both municipal applied sports and senior service house associations.

The Go Out with the Elderly Campaign is an excellent example of how different sectors of society and a wide range of actors are blowing one coal and creating nationwide volunteering that reaches a wide range of senior citizens in their own social contexts.

From the description of the study (below), it is good to point out that the number of participants in the campaign did not start to rise sharply until after the campaign had been implemented for about four years. Indeed, perseverance is often the most important factor in transforming interventions into permanent practices. An organization such as the Age Institute was able to continue its activities, even though the first years did not bring a clear increase in the number of participants.

The videos produced by the campaign give a good idea of how social inclusion works by involving family and family communities, school children and neighbors. In this way, seniors in a wide range of circumstances are found and the appropriate sports can be implemented into workable practices.

## 4.2.2 RECREATIONAL FOOTBALL AS A RDI MODEL FOR THOSE WHO LIKE PLAYING TOGETHER

Seniors are not very commonly recommended or offered team games or competitive forms of exercise. Those who enjoy veteran sports and very active play find team play and competition very meaningful from an experiential point of view. (Tiihonen 2011; 2012; 2013; 6-0! Recreational football project)

Learning by Developing model is challenging the traditional way of teaching and acting. It requires more cooperation between the actors of different fields and presupposes that a student is an equal

















partner in learning and RDI processes. (Raij 2018, 14) Low threshold funded projects, e.g. Erasmus+ Sport, are excellent projects to support and proceed LbD model actions in daily studies in Laurea.

The project 6-0! seems to be a fine example of LbD action model possibilities in the RDI projects. Many stakeholders — students, teachers, Espoo city, third sector actors, private companies and especially end-users, the 60+ players, have been benefiting and learning from the 6-0! project. With the words of one participant "No one believed me, when I told that I start to play football", describes the hidden capacities of many of us. We just need to be curious, need to explore and exploit the possibilities of individual will and capacity. Recreational football for senior citizens is a valid tool for increasing physical activity level.

Laurea's Learning by Developing (LbD) model emphasises learning actions in projects, which are connected to real–life situations. The resulting outcomes are individual learning, community learning and produced innovations. Erasmus + Sport funded five nations' 6-0! project engage students, work life and citizens 60+ years to support individual's health, wellbeing and social cohesion by playing recreational football. (<a href="https://journal.laurea.fi/6-0-recreational-football-project-for-persons-60-years-in-the-core-of-the-lbd-process/#ff1f9474">https://journal.laurea.fi/6-0-recreational-football-project-for-persons-60-years-in-the-core-of-the-lbd-process/#ff1f9474</a>)

From the perspective of social inclusion, fitness football offers a new opportunity for senior citizens who perceive team ball games as a form of exercise that suits them. The fitness football project is described in more detail below through a study of it.

# 4.2.3 INDOOR CURLING AS AN EXAMPLE OF AN EASILY APPLIED FORM OF ADAPTED PHYSICAL ACTIVITY AND SPORT

A third example of a socially inclusive form of exercise suitable for seniors is indoor curling. This is a very small-scale activity that is very relevant to the participants. Indoor curling started almost randomly in the Helsinki Association of the Disabled. However, the game proved to be suitable for members of the association who have a wide range of disabilities. It is also well suited for different ages and genders. (see Saari 2011)

Sometimes social inclusion in physical activity and sport does not require very large arrangements and resources, but a form of physical activity suitable for the target group is almost in itself a sufficient factor. Of course, here too there was a need for enthusiastic volunteers and game practitioners, but if a community exists, then a new, one-size-fits-all form of exercise may be a sufficient factor in the emergence of a new, but now long-lasting, social pastime.

## **4.3 SUMMARY**

The main goal in each example is to attract seniors who have not had enough suitable opportunities to exercise.

















The purpose is to describe the objectives of each intervention, ie. social inclusion and other objectives, target group, methods, implementation methods, results and feedback, and further recommendations.

Some have had an illness or disability, some have not had the opportunity to exercise close to home, and many have not found a suitable form or group of exercise to exercise.

These policies and interventions have succeeded in finding physically passive and physically beneficial groups using innovative ways to find them. Cooperation with the public and voluntary sectors in particular has been utilized.

Theories of experiential mobility, agency, and broad-based functioning have been used as theoretical foundations for social inclusion.

Experientially suitable forms of exercise and different dimensions of experiences have been sought for the target group, and learning by doing has been used as an aid to guidance. Theoretical thinking has been utilized in guiding seniors and knowledge of a wide range of functional abilities in mobility applications. All have also used the Learning by Doing model, either consciously or unconsciously.

Next, we present each policy or intervention separately and review in more detail the objectives of each intervention, i.e. social inclusion and other objectives, target group, methods, implementation methods, results and feedback, and further recommendations.

### 4.3.1 GO OUT WITH THE ELDERLY CAMPAIGN: STUDY DESCRIPTION

### 4.3.1.1 NEED

Regular outdoor exercise is part of a good old age. It improves mood and mobility. Outdoor exercise is the most important hobby of old people, but more than 60 % of person over 80 years have difficulties in walking 500 meters. More than 50 % have difficulties in walking a flight of stairs. (Borodulin & Sääksjärvi 2017). In a study people with major walking problems were asked which were the main factors inhibiting outdoor activity. Most common environmental factors were snow and ice in winter, steep uphills/downhills in neighborhood, lack of benches in wintertime, lack of benches and bad walking routes.

Most common individual factors were bad weather, slippery streets, fear of falling, darkness and lack of companion. This result shows there is a need for outdoor friends. They could be the solution for many of these factors mentioned.

## **4.3.1.2 AIMS AND TARGET GROUPS**

Age Institute annual Go Out with the Elderly campaign promotes outdoor activities in safe company. The goal is to encourage different people to offer their helping hand and go out with an old person.

















We challenge volunteers in NGOs, students, elder care professionals, families and neighbours to participate. With their help older adults with decreased functional capacity around Finland have a possibility to go out regularly.

### 4.3.1.3 **ACTION**

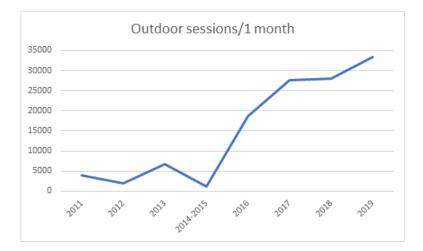
How to participate in the Campaign

- 1. Go out with the elderly.
- 2. Record the outdoor event on website.
- 3. Share your "outdoor stories" on website or in social media.
- 4. Challenge your friends, colleagues to participate too.

In support of local campaigning, various kinds of communication materials have been produced, for example leaflets, guidebooks and diplomas for participators. We have also made videos that showed different ways of being an outdoor friend (go out with your neighbor, with your family, four generations together and how school pupils can participate in the campaign). You can also organize walking groups in the neighborhood or nature trips.

### **4.3.1.4 RESULTS**

The campaign has been organized for nine times, since year 2011. The length and season has varied. In wintertime there's been less participants. In 2019 campaign there were over 33,300 recorded outdoor events in one month. 146 municipalities of Finland's total of 310 municipalities participated. Over 285 organisations participated, most of them were service houses but also NGOs, congregations, some companies and other organisations took part.



















The campaign received visibility in media (202 news hits), mostly in local newspapers but also in radio, tv and social media (723 posts). A campaign is also a good way to inform decision-makers that older people have a right to go out and they need support doing it. A national campaign reaches actors who otherwise would not recognize older people's needs. (Starck 2017)

### 4.3.1.5 RESOURCES ABOUT GO OUT WITH THE ELDERLY

Go with the elderly students. (0.45 s).

https://www.youtube.com/watch?v=ITsjD94nOQQ&list=PLSGkbeFujqqGY4BN | 13IOV3Ditbh6Z1Ij

Going out with your neighbour (45 s).

https://www.youtube.com/watch?v=ovt2o9IPVyE&list=PLSGkbeFujqqGY4BN\_l3IOV3Ditbh6Z1Ij&index=4

Go out with the elderly no age limit.

https://www.youtube.com/watch?v=ltyKBF4l7lg&list=PLSGkbeFujqqGY4BN\_l3lOV3Ditbh6Z1lj&index =3

Go out with the elderly volunteers.

 $\underline{https://www.youtube.com/watch?v=kE8yt7B8a50\&list=PLSGkbeFujqqGY4BN\_l3IOV3Ditbh6Z1lj\&index=2}$ 

### 4.3.2 RECREATIONAL FOOTBALL FOR THOSE WHO LIKE BALL GAMES

### 4.3.2.1 BACKGROUND

Senior citizens have traditionally exercised, ie walking, skiing or cycling, or indoor gymnastics, group gymnastics or swimming (Ruuskanen 2019). The actual sport has been practiced only by veteran or adult athletes (Masters sport) Many sports have been considered unsuitable for seniors. (Tiihonen 2012; Julin 2019ab).

However, in the recreational football project, it has been thought that even seniors like the ball game, which is also Finland's largest sport, ie. football. However, the starting point in recreational football is to include those who do not have any previous football hobby or experience behind them. Thus, social inclusion affects both those who have played football in the past but for whom it has not been organized, but also those who like to play, even if they do not have a football background.

In addition to recreational football, walking football has been started in Finland, both of which expand the opportunities for exercise and physical activity to older groups in a completely new way. Lowering

















the participation threshold for both physical and social functioning has resulted in a workable solution for social inclusion.

### 4.3.2.2 RECREATIONAL FOOTBALL PROJECT

The following is a recreational football intervention implemented by Laurea University of Applied Sciences together with an international recreational football project. The presentation is based on the thesis "Factors influencing the motivation of seniors for exercise", interviews with instructors and video material on the subject produced by the Finnish Football Association. (Patova & Venäläinen 2020)

The recreational football project is funded by the EU's Erasmus Sport + fund. Laurea University of Applied Sciences coordinates the project and in addition to Finland, recreational football is played in England, Spain, France and Denmark (6-0! Recreational Football info, 2019; 6-0! Project info, 2019.)

For the purposes of this study, a senior is defined as over 60 years of age, as the target group for f recreational football is 60+ years of age (6-0! Project info, 2019), although the official definition of an older person is over 65 years of age by physically loading the body (Terveyskylä 2019).

The aim of the project is to promote recreational football activities aimed especially at the senior population through club activities and to produce a permanent, functional way of training for seniors (60+) in the spirit of recreational football (6–0! Project info, 2019). The second goal of the project is to create practical guidelines for people over the age of 60 to make playing football safe and effective. To achieve this, the project will produce material and guidance in five different languages, ie for each participating country ((6–0! Project info, 2019; 6-0! Recreational Football info, 2019).

The project began in the fall of 2018. In the spring of 2019, rules were agreed and exercises and schedules were planned. In the fall of 2019, playing recreational football began in all five countries. There were two groups, a training group and a control group. Both have 25 members. The internship was aimed at people over 60 (6-0! Project info, 2019). In the Finnish internship group, the age range was 65–80 years, because the target group of the project is seniors.

## 4.3.2.3 SOCIAL FUNCTIONING, IMPACTS AND SOCIAL INCLUSION IN RECREATIONAL FOOTBALL

There is no unambiguous definition of social functioning. The concept is mentioned in several publications, but it is not explained exactly what it means and what factors make up social functioning (Pohjolainen, 2014; Metsävainio 2013, 16.)

The publication of the National Institute for Health and Welfare (THL 2020b) mentions that the whole of social functioning consists of dynamic interactions between the individual, the social network, the

















environment and the community. This aspect of functional capacity manifests itself, for example, as social activity and experiences of inclusion. (THL 2020a.)

Social background factors in health are the conditions in which people are born, grow up, live, work and age (Lääkäriliitto 2016).

Social networks define and reinforce meaningful social roles through opportunities for participation. Social roles make you feel valued, belong to something and feel committed. These emotions and roles are positively associated with quality of life and experience of ability, as well as lower rates of depressive symptoms. Participating in productive activities, such as gardening and volunteering, can maintain feelings of ability and usefulness and strengthen a sense of life control. Feeling useful and capable of oneself can be a factor that manifests the positive effects of social activity (Pynnönen 2006, 5, 12).

Seniors who participate in physical activity are more interacting with their families and loved ones and have better health, ability to work, and more stable mental health. Participants in the sport also had a better level of financial success as well as quality of leisure. Oh, A-R. & Yi, E-S. (2017) found in their study that health determinants such as fun, maintaining health, and stress relief had a large effect on motivation to participate in exercise.

Social networks build a social identity, self-esteem and enable the use of resources for seniors. A social network can include relatives, friends, hobby relationships, and other human relationships (Partala 2009, 17).

Recreational football is intended to offer seniors the opportunity for a low-threshold form of exercise where previous special skills in sports such as golf or volleyball are not required, but fitness football can be played without previous sporting background or experience in football (Julin 2019a).

In team sports, the social side of physical activity also comes to the fore, which offers seniors the opportunity to socialize alongside physical activity. The Danes have developed a form of low-threshold training from football and called it recreational football. (Krustrup et al 2010).

### 4.3.3 RESULTS AND SUMMARY OF RECREATIONAL FOOTBALL INTERVENTION

### Moving together

Together, the main theme of movement arose from the sub-theme of getting to know new people, which was obtained by combining expressions that together manifested fun, community and the creation of new social relationships. The interviews highlighted that playing football is a fun collaboration. Recreational football was perceived as a refreshing and meaningful activity.

## Like-mindedness

















The main theme of like-mindedness was derived from the sub-themes of willingness to participate and willingness to continue. In the sub-theme of willingness to participate, expressions emerged in which the team spirit increased the willingness to participate or created a sense of responsibility towards fellow enthusiasts to participate in the exercises.

### Learning something new

The main theme of the new learning consisted of the sub-themes of different hobbies, learning techniques, interest in the sport and experiences of success. Interviewees highlighted in interviews how football was not a familiar sport as a pastime, but there was interest in experimenting.

The results of the interviews showed that those who played recreational football met new people during the training period and thus created new social relationships, which in part also continued in their free time.

Based on the interviews, the age or skill level of the participant was not relevant to the motivation to participate in the training, as football was played together and thus the most important factors became the liking of the training and having fun. The study revealed the importance of community as part of motivation to participate in internships. Together, training and "belonging to the group" increased an individual's sense of responsibility and motivation to practice. Training was felt to increase leisure-time exercise skills in order to cope better with fitness football exercises and other activities.

According to the interviewees, learning something new, as well as different themes in the exercises, also increased the enthusiasm for the practice. Some of the exercises were also described as play, which brought "joy of play". Learning something new and the successes that came with it were good experiences that increased interest and motivation in practicing recreational football. The exercises used in the training sessions were applied in the free time to the practice of football. Participants who had previously practiced football emerged from new perspectives on training, and they participated in training to help and advise new players. (Patova & Venäläinen 2020)

Check the next resources to know more about this topic::

- 6-0!-hanke liikuttaa senioreita | Suomen Palloliitto.
- New project promotes fitness football for over 60s | Coventry University.

### 4.3.4 INDOOR CURLING FOR PLAYERS OF DIFFERENT AGES AND ABILITIES

### 4.3.3 BACKGROUND

Indoor curling is an applied sport that suits everyone. This example is an indoor curling hobby implemented by the Helsinki Disabled People's Association, which manages to achieve social inclusion through sport from people from a wide variety of backgrounds.

















As a sport, it is suitable for everyone in terms of its rules and equipment. Assistive devices for different groups of people with disabilities and players with different disabilities are well available. The game can also be played while sitting or standing. It is also suitable for all ages and all genders. It is also important that the rules can be applied to suit the players.

### 4.3.4 DESCRIPTION OF ACTIONS

The indoor curling hobby began more than ten years ago when the association received an indoor curling set as a gift from the Finnish Sports Association for the Disabled. Initially, the game was played in the hallways of the office until the team set up a turn at their current venue. In the indoor curling group, the age range has been from 40 to 70 years.

The target group for this hobby is members of that association who have various barriers to functioning. It was implemented as an open group to which everyone is welcome regardless of age and ability to function. You can come with or without an assistant.

The activity was initially organized with the help of a hired coordinator, but now it is carried out with the help of volunteers and previously played peer mentors. The association supports its activities by marketing the group in various ways.

### 4.3.5 PLAYER REVIEWS OF INDOOR CURLING

The big thing is, players have experienced meeting each other and doing meaningful things together. For other participants, the game is more socially than physically important.

Everyone challenges themselves, even when played as teams. At the same time, a couple of games can be played at the same time, allowing players to be put on level teams according to their ability to function. More competitive players may also be able to set up their own game.

During the game, you have time to discuss everything. Peer support is important. Even if the injuries are very different, it is something that unites the participants.

Indoor curling is therefore a meaningful thing to do, where the level of competition can also be chosen by everyone. Sociality and social support are also very relevant issues.

### **4.3.6 SUMMARY**

There are many factors in indoor curling that promote social inclusion. The organization of activities is relatively easy, as the space requirements are low and no actual instructor is needed. The game can be adapted to the players and status of the game without suffering from it.

















Players find the game meaningful and socially rewarding. It provides experiences, inclusion and it increases agency, even if it is a game that competes and challenges identity.

### 4.3.6.1 INDOOR CURLING FOR ALL RESOURCES

Adapted New Age kurlinggroup from Finland <a href="https://www.youtube.com/watch?v=q3AQUj5Ngzg">https://www.youtube.com/watch?v=q3AQUj5Ngzg</a>

## 4.4 HOW TO MAKE SENIOR CITIZENS PHYSICALLY ACTIVE THROUGH SOCIAL INCLUSION PRACTICES? SHORT SUMMARY

This chapter explored three different approaches or interventions in which previously low-mobility senior citizens have been made to move and play sports. The task is not easy, which is probably best reflected in the Go Out with the Elderly Campaign, which took more than four years to bring about a clear increase in the number of participants. Indoor curling is also a good example of an activity that has been going on for a long time. One of the explanatory factors in this was that the movers belonged to the same background community.

The long-term effects of recreational football cannot yet be said for sure, but its popularity during the project is a good basis for the activity to become an excellent model for socially inclusive sport.

The physical activities, exercises and sports presented are very different. Outdoor activities and walking are suitable for everyone, indoor curling is a sport suitable for everyone, when football is very close to a normal sport. Of course, even that has been applied and adapted somewhat to seniors in recreational football.

It can also be said that the principle of learning by doing (LbD) or experiential learning has been used in all modes of action, ie the action has been continuously researched and developed during the action. Quite rarely does any activity succeed with just a good upfront plan.

The obstacles found in the backgrounds of the participants have been made to be overcome by making the activity possible for each participant. Knowledge of adapted physical activity, but also interactive pedagogy and innovation, are factors that also help seniors with various disabilities to find a socially inclusive form of sport or physical activity.

Finding social groups in which activities can be organized or used as activators can be considered as a facilitator of social inclusion. It is also important to find a form of exercise, physical activity and sport that is of interest to seniors. Central to the activities themselves are the experiences that make the activities meaningful and adapted and socially inclusive pedagogical approach that supports participants in many ways.

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