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[ENGAGING VULNERABLE PEOPLE IN SPORTS-BASED PROGRAMS]

A master thesis on barriers, resources, and experiences in sports participation

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Abstract

Sports participation is thought to have many beneficial outcomes, but vulnerable people often do not partake in sports. This study investigated what is needed to engage vulnerable people in sports-based programs. In addition, since investigating experiences plays a role in understanding the positive outcomes of sports participation, the experiences of vulnerable people in sports programs were investigated. Semi-structured interviews with 10 healthcare professionals and 5 vulnerable adults were conducted. The results indicated that vulnerable people experience different personal, social/cultural, and environmental barriers to participate in sports. A sports coach, a safe sports climate with acquaintances, fixed and small sports groups, enjoyable and low-level activities, and some practical solutions (i.e. costs, accessibility, information) were found to play a role by overcoming those barriers. Furthermore, peers, sports coaches, and the physical environment were found to play a role in vulnerable people's experiences of the sports climate and voluntary and sports activities were experienced as good use of time, providing work, and improving well-being. Recommendations were made for future sports-based programs targeting vulnerable people, which included performing a needs assessment, a healthcare professional as sports coach, accepting acquaintances and arranging a buddy-network, offering low-level activities, and offering small groups.

Key words Sports participation, sports-based program, vulnerable people, barriers, needs, experiences

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1. Introduction

Vulnerable people make up a considerable amount of the Dutch population. In 2014, 20% of the total Dutch population were vulnerable (Bijl, Boelhouwer, Pommer, & Andriessen, 2015). Vulnerable people include a wide range of people, including the poor, homeless, unemployed, elderly and frail, people suffering from a range of chronic diseases or mental illnesses, members of ethnic minority groups, and ex-offenders released from prison (Baker, Mead, & Campbell, 2002; Mechanic & Tanner, 2007). In general terms, vulnerability results from an interaction between the resources available to individuals and the life challenges they face (Mechanic & Tanner, 2007). Socially vulnerable people face multiple stressors in their everyday life, such as income poverty, personal incapacities, low housing quality, developmental problems, and disadvantaged social status (Feinberg, Jones, Greenberg, Osgood, & Bontempo, 2010; Hawkins, Catalano, & Arthur, 2002; Mechanic & Tanner, 2007). Specifically regarding social stresses, vulnerable people experience challenges such as a lack of social support, social exclusion, and the experience of racism or cultural dissonance (Baker et al., 2002). On the other hand, vulnerable people lack resources. For example, social networks can be resources that provide both emotional and practical help when dealing with stressors (Mechanic & Tanner, 2007). However, vulnerable people are often not integrated in the community and feel excluded. They lack social networks which can lead to inadequate coping with (i.e. difficulty dealing with or handling) the life challenges they face (Mechanic & Tanner, 2007). Inadequate coping might, in turn, lead to the experience of stressors. It ensures senses of incompetence, low self-esteem, social disconnectedness, absence of ambitious thoughts, and negative experiences with social institutions (e.g. family, school, and health care) (Haudenhuyse, Theeboom & Nols, 2013; Haudenhuyse, Theeboom, & Skille, 2014; Vettenburg, 1998). Finally, regarding health status, socially vulnerable groups often have poorer mental as well as physical health (Baker et al., 2002).

One way to alleviate the problems experienced by vulnerable people and to improve their lives is sports participation. Sports participation is thought to have many beneficial outcomes, such as improved physical health (Khan et al., 2012), social and mental well-being (Bailey, 2005; Coakley, 2011), pro-social behavior (Bailey, 2005), and academic achievement (Terry, Hahn, & Simjanovic, 2014; Trudeau & Shephard, 2008). Furthermore, multiple studies on youth have shown that sports programs offer people contexts in which they could develop different life skills, such as physical and social competency, communication and teamwork, problem-solving, and decision-making (Armour, Sandford, & Duncombe, 2013; Holt & Neely, 2011; Weiss & Wiese-Bjornstal, 2009). These skills help them to deal with the life challenges they face and change difficult situations (Haudenhuyse et al., 2013; Hermens, Super, Verkooijen, & Koelen, 2017; Jones, Edwards, Bocarro, Bunds, & Smith, 2017). However, for sports programs to have beneficial effects on the lives of socially vulnerable people it is necessary that these people participate in such programs. Unfortunately, vulnerable people have a lower likelihood to participate in sports than non-vulnerable people (Vandermeerschen, Vos, and Scheerder, 2015). While everyone can experience barriers to participate in sports, this is even more so for vulnerable people. They experience all kinds of barriers, such as financial (i.e. affordability), social (e.g. lack of social support and role models and fear of discrimination), and physical (i.e. access and locality of sports facilities) barriers (Bailey, 2005; Bodde & Seo, 2009; Holt, Kingsley, Tink, & Scherer, 2011; Skinner, Zakus, & Cowell, 2008; Steenhuis, Nooy, Moes, & Schuit, 2009).

Since participating in sports can have beneficial outcomes, this study aimed to include socially vulnerable people in sports programs in order to improve their lives. This was done by focusing on the barriers of vulnerable people relating to sports participation and the needs to overcome those barriers. In their review on physical activity interventions for vulnerable people, Taylor, Baranowski, & Young (1998) stated that the assessment of barriers, needs, and preferences prior to an intervention is important so that barriers could be reduced or even removed. Furthermore, multiple studies have shown that the involvement of people in the development of a health promoting intervention leads to a more effective implementation (Bruce, Smith, Miranda, Hoagwood, & Wells, 2002; Glanz & Bishop, 2010; Wallerstein, & Duran, 2006). The intervention could then be more tailored to fit the interests of the intended participants. The elements of a sports program that are important for vulnerable people in order to participate may be different than for non-vulnerable people. For example, the role of the sports coach may be especially important in sports programs including vulnerable people (Haudenhuyse, Theeboom, & Coalter, 2012). Furthermore, since most research on sports-based programs were focused on youth (Haudenhuyse et al., 2014; Hermens et al., 2017; Perkins & Noam, 2007; Petitpas, Cornelius, Van Raalte, & Jones, 2005), this research focused on vulnerable adults to provide new insights. In order to identify the needs of vulnerable people, the following research question was applied: *What is needed to engage socially vulnerable people in a sports-based program?* This research question was answered by using two sub-questions: (A) *What are barriers for sports participation for vulnerable people as identified by healthcare professionals working with this target group?* and (B) *What are options to overcome these barriers as identified by healthcare professionals working with vulnerable people?*

As mentioned above, sports participation could have many beneficial effects for vulnerable people. Nevertheless, sports participation does not lead to positive outcomes per se. It could also lead to negative outcomes, such as feelings of rivalry, fear, rejection and isolation, and occurrence of injury (Haudenhuyse et al., 2012; Holt & Neely, 2011; Super, Wentink, Verkooijen, & Koelen, 2017). Sports participation can have benefits when people have positive and supportive experiences within a sports environment (Haudenhuyse et al., 2014). Literature namely posits that it is important to investigate the experiences of the people playing a sport to be able to understand how sports participation may produce positive outcomes (Coalter, 2013; Haudenhuyse, Theeboom, Nols, & Coussée, 2014). As Papacharisis, Goudas, Danish, & Theodorakis (2005) stated: "*It is probably not the mere participation in sport that enhances positive development but the individual's experience in sport that may be the critical factor* (p.247)". When the positive and negative experiences of vulnerable people are known, this knowledge could reveal points for improvement and make clear what can be changed to make programs as effective as possible, which was the second aim of this study. Accordingly, the second research question considered in this study was: *How do socially vulnerable adults experience their participation in a sports-based program?*

In sum, the first aim of this study was to include socially vulnerable people in sports programs in order to improve their lives. This was done by focusing on the needs of this population and answering the following research question:

1. What is needed to engage socially vulnerable people in a sports-based program?
    A. What are barriers for sports participation for vulnerable people as identified by healthcare professionals working with this group?
    B. What are options to overcome these barriers as identified by healthcare professionals working with vulnerable people?

Secondly, this research aimed to make sports-programs as effective as possible by focusing on the experiences of vulnerable adults participating in a sports-based program. This was done by answering the second research question:

2. How do socially vulnerable adults experience their participation in a sports-based program?

The research questions were discussed in relation to one particular case study: 'De Sportwerkplaats' (The Sports Workplace) in Wageningen, The Netherlands. The Sports Workplace is a project where sports training is organized for vulnerable people, such as people with psychiatric problems and/or an intellectual disability. It is a supervised work and learning place for people with limited access to the labor market. The organized sports groups will be supervised by people who are trained as social sports coaches. The goal of the Sports Workplace is to let vulnerable people participate in sports and learning them all kinds of skills, such as work-related and social skills (e.g. cooperation, communication, and dealing with setbacks). These skills are not only learned by participating in sports itself, but also by performing all kinds of voluntary work at the sports club.

2. Theoretical framework

2.1 Needs of vulnerable people to participate in sports-based programs

2.1.1 Barriers for sports participation

In order to understand what is needed to engage socially vulnerable people in a sports-based program, it is necessary to know what barriers exist for people to participate in sports in the first place. Previous research has shown that factors influencing physical activity can be divided into five categories: (1) demographic/biological factors; (2) psychological, cognitive, and emotional factors, (3) behavioral attributes/skills, (4) social/cultural factors, and (5) physical environment factors (Bodde & Seo, 2009; Humpel, Owen, & Leslie, 2002; Trost, Owen, Bauman, Sallis, & Brown, 2002). The first three can be broadly defined as personal factors. It is commonly a combination of these personal, social, and environmental factors that determines physical activity behavior (Bodde & Seo, 2009; Sallis & Owen, 1998; Trost et al., 2002). Environmental barriers for non-vulnerable adults are related to costs, accessibility of facilities, opportunities, aesthetic attributes, and safety of environments (Allender, Cowburn, & Foster, 2006; Humpel et al., 2002; Trost et al., 2002). Personal barriers relate to lacking confidence and competence in core skills and having to show others an unfit body (Allender et al., 2006). Social barriers relate to lack of time, other priorities, family commitments, and lack of exercise partners (Salmon, Owen, Crawford, Bauman, & Sallis, 2003; Trost et al., 2002).

Some research has been done on factors influencing physical activity of people with different vulnerabilities. For example, research on people with physical disabilities showed that health and the disability itself were personal barriers for physical activity, whereas lack of facilities, high costs, lack of information, transport, and difficulties with accessibility were mentioned as environmental barriers (Jaarsma, Dijkstra, Geertzen, & Dekker, 2014; Rimmer, Riley, Wang, Rauworth, & Jurkowski, 2004). Social barriers included unfriendly environments, negative attitudes and behavior of persons without disabilities (including professionals), and lack of support from friends and family (Rimmer et al., 2004). People with visual impairments experienced barriers related to costs, lack of peers, and the visual impairment itself (Jaarsma, Dekker, Koopmans, Dijkstra, & Geertzen, 2014). Barriers for people with intellectual disabilities include costs, lack of transportation, lack of support from others, risk assessment concerns, and lack of awareness of the options (Bodde & Seo, 2009). Finally, some research exists on people with a low-income. Barriers to physical activity for them include illness or disability, lack of money, lack of recreational facilities, lack of transport, low awareness, and childcare (Chinn, White, Harlan, Drinkwater, & Raybould, 1999; Withall, Jago, & Fox, 2011).

Although some research exists on people with physical and intellectual disabilities, visual impairments and low socioeconomic status, overall evidence on factors influencing physical activity for socially vulnerable people is still thin and more research is needed. Vulnerable people may be faced with very different problems than non-vulnerable people and it is therefore important to have a good picture of the barriers that vulnerable people experience to participate in sports. Furthermore, most studies mentioned above focused on physical activity in general, including for example walking and biking in the natural environment. Little research focused on sports participation in particular, and none on a sport-based program. This study identified the barriers for

participation in sports-based programs for vulnerable people relating to the five categories mentioned above.

2.1.2 Tackling barriers for sports participation

Besides identifying the barriers vulnerable people experience to participate in sports, earlier research has indicated that understanding how to overcome those barriers is necessary in promoting the health of vulnerable people (Rimmer et al., 2010; Mendoza-Vasconez et al., 2016). Several authors have stated that identifying the needs of vulnerable people is necessary prior to developing an intervention, such as a sports-based program (Skinner et al., 2008; Taylor et al., 1998). In this way, interventions can be targeted for the specific group it is designed for and be more effective.

Although research on the resources for vulnerable people to overcome barriers to participate in physical activities, and in particular in sports-based programs, is thin and more research is needed, some research on facilitating factors has been done. Mendoza-Vasconez et al. (2016) reviewed factors that are important in promoting physical activity among different vulnerable populations. They concluded that good communication via multiple platforms, financial reimbursement, and convenience strategies (e.g. transportation and flexible scheduling) are important for ethnic minority groups, low-income populations, and people with disabilities. Regarding people with learning disabilities, good communication, including information about the benefits of physical activity, could facilitate engagement in physical activity (Hawkins & Look, 2006). Furthermore, research on sports participation for socially vulnerable youth has demonstrated that providing a safe and supportive environment to the participants is very important (Coalter, 2007; Haudenhuyse et al., 2013). Multiple studies on sports programs for this group found that a coach plays a great role in creating such an environment (Fraser-Thomas, Côté, & Deakin, 2005; Haudenhuyse et al., 2014; Hermens et al., 2017). A positive, supportive, and active relationship between participant and coach is shown to be important for youth engagement in activities (Coalter, 2007; Haudenhuyse et al., 2013). Rimmer et al. (2010) mentioned that a coach also plays an important role in ethnic minority groups with disabilities, suggesting that coaches can increase awareness on where and how to exercise and provide individually tailored suggestions. Furthermore, a study focused on soccer for homeless people showed that sports sessions should focus on low-level activities (in terms of skills and fitness), fun and joy (Magee, 2011). The focus on joy is important since a competitive element in sport often leads to some forms of exclusion (Magee, 2011). Fun and enjoyment were also mentioned in other research as key facilitators for physical activity engagement in youth with intellectual disabilities (Downs et al., 2014; Mahy, Shields, Taylor, & Dodd, 2010).

2.3 Experiences in sports-based programs

As mentioned earlier, previous research has indicated that it is important to investigate the experiences of the people playing a sport in order to understand how sports participation can lead to positive outcomes (Coalter, 2007; Dworkin, Larson, & Hansen, 2003; Haudenhuyse et al., 2014; Papacharisis et al., 2005). These experiences refer to positive or negative experiences of sport. Sports participation can have benefits for vulnerable people when they have positive experiences in the sports context, such as enjoyment (Haudenhuyse et al., 2014). Earlier research on youngsters has indicated that a supportive and motivational sports climate, in which the coach plays a great role, is important for creating positive experiences (Bailey & Dismore, 2004; Fraser-Thomas et al., 2005; Fry & Gano-Overway, 2010; Haudenhuyse et al., 2012). Furthermore, having good relationships,

including feelings of safety and belonging, is important in creating positive experiences (Draper & Coalter, 2016; Haudenhuyse et al., 2014). Research has stated that positive experiences in sports-based programs can improve emotional life skills, such as increased self-esteem or reduced depressive symptoms (Eime, Young, Harvey, Charity, & Payne, 2013). However, when people have negative sports experiences, this can lead to negative outcomes, such as low self-confidence (Fraser-Thomas et al., 2005). A factor leading to negative experiences can be a focus on competition or rivalry (Haudenhuyse et al., 2012). It is thus important to investigate the experiences of vulnerable people in a sports-based program to see how sports programs can be designed to create positive experiences, and eventually, positive outcomes.

3. Methods

Research on sports-based programs for vulnerable people have mainly focused on children and youth. No research exists on the inclusion of vulnerable adults in sports programs and their experiences in such programs. Therefore it is useful to perform an exploratory research (Gill, Stewart, Treasure, & Chadwick, 2008). With an exploratory research, new insights can be acquired about elements influencing the inclusion of vulnerable people in sports programs as well as the experiences of socially vulnerable adults in such programs. In this way, elements that are important in adult sport programs can come up that were not yet known in research on children and youth. Adopting an open view will be informative since it may well be that vulnerable adults think very differently about aspects of the program than children and young people do. For example, in research on children and adolescents the role of the parents is often indicated as an important factor, while this may be less important for adults. In the remainder of this section, explanation will be given about the particular sports-based intervention investigated in this study , after which the data collection methods will be discussed per research question.

3.1 Case study

The research questions were investigated in relation to one particular case study: The Sports Workplace. The Sports Workplace is a project in Wageningen, The Netherlands that is part of the Dutch Trainee Cup from the Life Goals Foundation. The Dutch Trainee Cup is an intervention that focuses on sports and social development for vulnerable people. In this intervention, a sports association and a healthcare or welfare institution enter into a partnership with the aim of structurally allowing the participants to train at the sports club and to gain working experience by performing voluntary work at the sports club. In this way, vulnerable people can actively participate in the society (again). The Dutch Trainee Cup consists of an intensive program in which the participants are coached at the sports club, on a sports level as well as on a social level. In addition to the concrete sports and volunteer activities, attention is also paid to the personal development of the participants. Through a series of Life Goals Sessions, developed by sport psychologists, coaches, and experiential experts, participants learn about the core values of sport, which also apply in everyday life, such as cooperation, communication, respect, positivity and setting goals. The sessions intend to increase the self-reliance of participants.

In the case of the Sports Workplace in Wageningen, the target group mainly consists of adults (18-70 years old) with an intellectual disability and adults with chronic psychiatric problems. Most of these adults live accompanied. However, people having other types of vulnerability are also able to join the program. The Sports Workplace is cooperating with two sport associations (a local soccer club and a local korfball club) and four healthcare organizations: 's Heerenloo (a care institution for people with intellectual disabilities), Thomashuis (a small-scale residential facility where people with intellectual disabilities live together with their care providers), RIBW (an organization providing care to people with chronic psychiatric problems), and Solidez (a welfare organization). Possible participants will be contacted via these organizations. People from the Odensehuis Wageningen (an organization for people with dementia) will also join the Sports Workplace activities. Sports trainings will be organized once a week by four social sports coaches. The sports activities include hiking, dancing, playing boules, soccer, table tennis, and "sport and games". The ultimate goal of the Sports Workplace is to accommodate the sports groups at the participating sports clubs.

3.2 Face-to-face interviews with professionals

3.2.1 Study design and participants

In order to answer the first research question (*What is needed to engage socially vulnerable people in a sports-based program?*) eight semi-structured face-to-face interviews with professionals working with socially vulnerable adults were conducted. The interviews were semi-structured so that the questions asked to the participants were approximately the same, but there was still room for valuable insights of the respondents themselves and it was possible to ask in further detail to the answers given (Brinkmann, 2014; Britten, 1999; DiCicco-Bloom & Crabtree, 2006). Semi-structured interviews are a useful method because they provide a deeper understanding of social phenomena (DiCicco-Bloom & Crabtree, Gill et al., 2008). Professionals were interviewed because they have experience and expertise in the area of vulnerability and they know what it takes to work with vulnerable people and how they can be involved in activities. The professionals interviewed were: a community sports worker from a welfare organization, a participation coach working with people having psychosocial or psychiatric problems, a coach establishment working with refugees, a care entrepreneur caring for and living with people with intellectual disabilities, a coordinator of a project for people in social isolation, an initiator and general coordinator of a meeting-information-support center for people with dementia, a care counselor for people with a psychiatric illness, and a founder of a football project for people with mild intellectual disabilities.

3.2.2 Procedure

Before recruiting participants and conducting the interviews, this research was approved by the Social Sciences Ethics Committee of Wageningen University. After the approval, nine healthcare professionals of different organizations in Wageningen were invited to participate in the study. Different organizations were contacted in order to include a wide range of perspectives from people working with different kinds of vulnerabilities so that perspectives of the whole target group of the Sports Workplace were included. First of all, contact information of the five organizations cooperating with the Sports Workplace (i.e. 's Heeren Loo, RIBW, Solidez, Thomashuis Wageningen, and Odensehuis Wageningen) was obtained from the initiators of the project. The contact persons were healthcare professionals working within the five organizations who were already familiar with the project of the Sports Workplace. The contact persons were send an e-mail with information about the study and an invitation to participate. All five professionals agreed to take part in the study. In addition, in order to include views of people not yet cooperating with the Sports Workplace, Google was used to search for healthcare organizations working with people that fit in the target group of the Sports Workplace and are located in Wageningen. Contact information was obtained from the websites of the organizations and four organizations were contacted. The organizations included an organization providing homecare for elderly, people with a disadvantaged social status, and people with a disability; an organization providing assistance to refugees; an organization providing counseling to people in social isolation; and an organization that offers counseling and support to people with a psychiatric disability or psychosocial vulnerability. Three professionals agreed to take part in the study and one (organization providing homecare) did not respond. When the professionals agreed to take part in the study, a time and location for the interview was chosen by the professional. Before the interview, the respondents received information about the study and informed consent was discussed orally. It was ensured that the data would be treated anonymously

and that participants had the right to disengage from the research at any time. All participants gave permission to record the interviews. The interviews lasted between 37 and 52 minutes.

3.2.3 Interview guide

The interview questions were based on existing literature on the topic and were focused on personal, social, and environmental factors that can influence participation since physical activity behavior is usually determined by a combination of these factors (Bodde & Seo, 2009; Humpel et al., 2002; Trost et al., 2002). First, introductory questions were asked relating to the interviewee's job, the organization he/she works for, and the people they work with. Secondly, professionals were asked about current sports participation and physical activity behavior of the people they work with (e.g. 'Are your clients physically active? If so, how? How often per week?'). After that questions were asked about barriers and stimulating factors for vulnerable people for partaking in activities such as sport (e.g. 'Do your clients experience any obstacles to participate in sports or physical activity? If so, which ones?'). Lastly, questions were asked about how the professionals thought a sports-based program for vulnerable people should look like (e.g. 'How do you think the ideal sport and sports environment should look like for your clients?'). The interview guide can be found in Appendix A.

3.2.4 Data analysis

Afterwards, the interviews were transcribed intelligent verbatim and a thematic analysis was done (Bryman, 2016). Thematic analysis is useful because it provides a rich and detailed account of the data (Braun & Clarke, 2006; Vaismoradi, Turunen, & Bondas, 2013). With this method patterns or themes within the data can be identified, analyzed, and reported (Braun & Clarke, 2006). The guidelines for thematic analysis of Braun and Clarke (2006) were followed. They suggest six phases of data analysis. They start with familiarizing yourself with the data, followed by generating initial codes, searching for themes, defining and naming themes, and finally, producing the report (Braun & Clarke, 2006). While familiarizing with the data, it became apparent that the data could be divided into two parts: barriers that vulnerable people experience to take part in sports and resources or solutions that can remove those barriers. These two parts were used as the two main themes. The analysis of the barriers was deductive whereby the five categories influencing physical activity behavior were used as general themes: demographic/biological factors; psychological, cognitive, and emotional factors; behavioral attributes/skills; social/cultural factors; and physical environmental factors. The first three together form personal factors. These themes formed the sub-themes of the theme 'barriers for sports participation'. When familiarizing with the data, it was noted that the resources to overcome barriers were difficult to divide into these five categories, because some resources or solutions fell within several categories and some in none. It was therefore decided to generate new codes for the second main theme. During the first round of coding, 38 new codes were created. Overlapping and similar codes were then merged and codes not relating to the research question deleted. The remaining 24 codes were then collated to form five sub-themes: role of the sports coach, safe sports climate, sports groups, sports activities, and accessibility. An overview of the themes is shown in Figure 1.
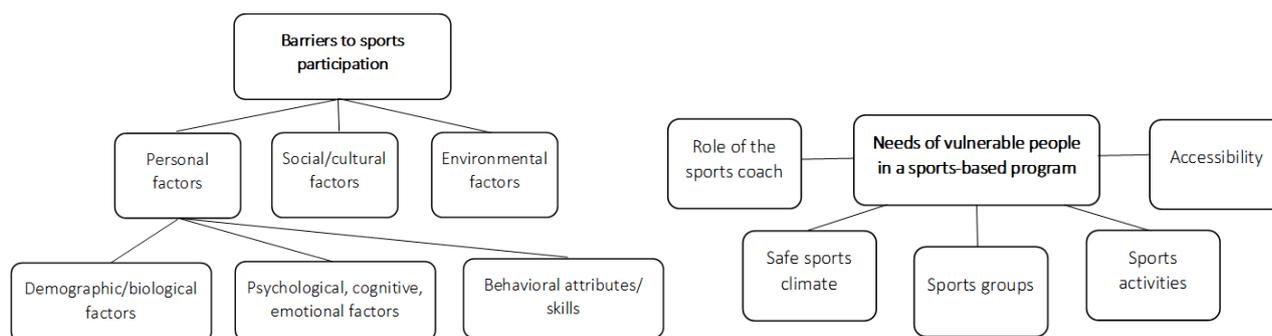
Figure 1. Overview of main themes and subthemes formed during data analysis

3.3 Face-to-face interviews with vulnerable adults

3.3.1 Study design and participants

In order to answer the second research question (*How do socially vulnerable adults experience their participation in a sports-based program?*) it was originally intended to use a visual interview method. Visual methods are useful to investigate experiences that are sometimes difficult to put into words (Bagnoli, 2009). The use of visual material can help to clarify interviews for vulnerable people. They can better express themselves which can lead to more valuable information (Driessnack, 2006; Jurkowski & Paul-Ward, 2007). One visual research method is the use of drawing. Drawing is a rich and insightful research method to explore how people experience their world (Guillemin, 2004). It facilitates people's ability to talk, especially when they find it difficult to describe things (Driessnack, 2006). Drawing can increase the amount of information people share and it is better in revealing subconscious or unrealized feelings and perspectives than written or oral methods (Literat, 2013). Drawing as a research method has proved valuable in multiple studies with children (Darbyshire, MacDougall, & Schiller, 2005; Driessnack, 2006; Mitchell, 2006; Literat, 2013), but Guillemin (2004) suggests that it is also a valuable method for research in adults. Furthermore, it is thought to be a useful method to use with vulnerable people because of its non-textual and highly accessible nature (Literat, 2013).

In this study, drawing was used as a research method in combination with face-to-face interviews with five vulnerable male adults participating in the Football Workplace. At the time of this study, the sports activities at the Sports Workplace had not yet begun. Therefore, participants from another sports-based program (i.e. the Football Workplace) were interviewed about their experiences in the program. The Football Workplace is a supervised learning workplace in Wageningen for 15 people (aged 18-30 years) with an indication for the Dutch Long-term Care Act (WLZ) or the Social Support Act (WMO). These are mainly people with a mild intellectual disability. Together they maintain the sports fields and buildings at a local football club (i.e. voluntary activities). In addition, they form a football team who train together twice a week and multiple times a month they play a match against all kinds of organizations, companies, and sports teams in the area of Wageningen.

3.3.2 Procedure

Before recruiting participants and conducting the interviews, this research was approved by the Social Sciences Ethics Committee of Wageningen University. After the approval, the coordinator and supervisor of the Football Workplace (who was also interviewed as a professional) was contacted via email to ask if the participants of the Football Workplace were willing to participate in this study. In consultation with the coordinator it was agreed to visit the football club for one day during the maintenance and sports activities. Five vulnerable adults were present that day who were all invited to participate in the study. All vulnerable adults agreed to participate. According to Kyale (1996), it is important to conduct an interview at a familiar place where the vulnerable adult feels at ease. Therefore, the interviews were held in a room in the club house of the football club. The participants came to the room one by one to be interviewed. An intern of the Football Workplace was attending the interviews.

Prior to the interview, participants were orally informed about the research and consent was asked. It was ensured that the data would be treated anonymously and that participants had the right to disengage from the research at any time. In order to ensure it was understood by the participants, they were asked to summarize in their own words their understanding of the situation. Three participants gave permission to record the interviews. Two participants were not comfortable with the interviews being tape-recorded. After these two interviews notes were taken and a small summary of the interviews was made. The interviews lasted between 10 and 22 minutes.

3.3.3 Interview guide

Before the start of the interview, participants were handed a blank, unlined A3 paper (420mm x 297mm) and a packet of colored pens and pencils. Participants were asked to draw what comes into mind when thinking about the Football Workplace and how they experience it. Although it was emphasized that the quality of the drawing was not important, there was no right or wrong, and that there was enough paper to start over if the first result was not to their satisfaction, only one participant made a drawing. One participant was not able to make a drawing because of a visual impairment and three others indicated they would rather discuss their experiences orally than draw them on paper. The participant that made a drawing stopped quite quickly and indicated he would prefer to continue the conversation orally. Because of this, drawings could not be used as a basis for the interviews and questions about the drawings could not be asked. Therefore, questions were asked about participant's experiences with the sports program and different elements of the program, e.g. 'Why do you like to go to the Football Workplace', 'Can you describe what a training looks like?', 'How do you feel when you are playing football here?'. Although a questionnaire based on existing literature was made in advance to be used as starting point (see Appendix B), the interviews remained open conversations. No printed questionnaire was used and notes were taken afterwards so that the conversation would be more informal and make the participants feel more at ease.

3.3.4 Data analysis

Although the original method of drawing was not successful, it was still decided to take the interviews into account since vulnerable people are often excluded in research because of multiple challenges and complexities (Aldridge, 2014; Alexander, 2010; Ramcharan, 2006) and the interviews did contain some information on the experiences of vulnerable people.

After the interviews were conducted, the interviews that were recorded were transcribed intelligent verbatim. In the analysis of the data, the transcripts of the interviews as well as the summaries of the unrecorded interviews were taken into account. Inductive content analysis was used, following the steps of Elo & Kyngäs (2008). This analysis method is useful for exploratory research as it enables researchers to identify key concepts that are important in the area under investigation (Elo & Kyngäs, 2008; Mayring, 2004; Schamber, 2000). The transcripts and summaries were openly coded and five categories were formed (Elo & Kyngäs, 2008): peers, sports coach, physical environment, voluntary activities, and sports activities. The categories were then grouped under two main headings (Elo & Kyngäs, 2008): the sports climate (including peers, sports coach, and physical environment) and activities in sports-based program (including voluntary and sports activities). An overview of the categories is shown in Figure 2.
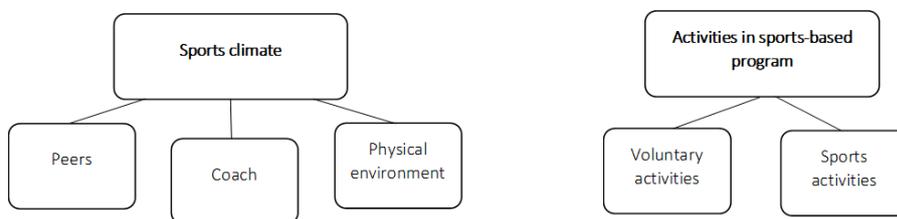
Figure 2. Overview of categories and sub-categories formed during data analysis

Although it was intended to analyze the drawings itself with Guillemin's (2004) modification of Rose's (2001) critical visual methodology framework, it was decided not to analyze the one drawing made by a participant. The drawing did not contain enough valuable information to be analyzed separately. This was decided because of the few elements that were drawn and the lack of specific use of color.

4. Results face-to-face interviews with professionals

In order to answer the first research question (*What is needed to engage socially vulnerable people in a sports-based program?*) interviews with professionals were conducted. It is important to remember that the professionals interviewed work with very diverse people, who all have different kinds of vulnerabilities (e.g. people with intellectual disabilities, people with psychosocial and psychiatric problems, and people with dementia). There were no apparent differences found between the results of interviews with professionals already cooperating and professionals not cooperating with the Sports Workplace. Therefore, the results of all interviews were taken together and will be discussed below. The discussion of the results is divided into the two main themes used during the analysis: barriers for sports participation and needs of vulnerable people in a sports-based program.

4.1 Barriers for sports participation

In order to understand what is needed to engage socially vulnerable people in a sports-based program, it is helpful to know what barriers exist for people to participate in sports in the first place. As mentioned in the theoretical framework, previous research showed that the barriers vulnerable people experience to participate in sports can be divided into five categories, of which the first three together form personal factors: (1) demographic/biological factors; (2) psychological, cognitive, and emotional factors, (3) behavioral attributes/skills, (4) social/cultural factors, and (5) physical environment factors (Bodde & Seo, 2009; Humpel et al., 2002; Trost et al., 2002). In the section below, the barriers for sports participation will be discussed in order of importance, i.e. barriers that were mentioned most frequently by professionals will be discussed first.

4.1.1 Personal barriers to sports participation

4.1.1.1 Demographic/biological barriers

During the interviews, a few demographic/biological factors were mentioned as barriers for sports participation for vulnerable people, i.e. low energy level, visual impairment, and dementia-related physical changes. First of all, it was mentioned by a few professionals that some people have diseases that cause an energy shortage or weight gain. These people often do not have enough energy to be physically active, which forms a barrier. A professional working with people in social isolation for example indicated:

> *"So the will is sometimes there, but the energy is not, while that is, again, very important." - Professional*

It was further indicated that there are people with a visual impairment that used to do a lot of sports before they were visually impaired, but are not able to do them anymore because of their impairment (e.g. playing chess). Furthermore, a professional indicated that the physical changes occurring in people with (early) dementia (e.g. cramping, walking crooked, changed stability) could be an obstacle to participate in sports. These changes partly relate to aging and partly to changes occurring in the brain.

4.1.1.2 Psychological, cognitive, and emotional barriers

The psychological, cognitive, and emotional barriers that vulnerable people experience include feelings of shame, anxiety, and insecurity, and not recognizing the need to take part in sports.

The most frequently mentioned psychological barrier was feelings of shame, anxiety, and insecurity. Professionals indicated that vulnerable people do not want to stand out (e.g. because of overweight), which forms a barrier to a sports club. Furthermore, it was mentioned that many people with psychosocial problems find it frightening to go somewhere (alone) for the first time, certainly because it is a place they are unfamiliar with and where they do not know other people. As demonstrated in the quote below, a combination of these barriers, such as a depression or anxiety disorder, can frighten vulnerable people and hence causes them to stay home.

> *"Going somewhere alone can be quite scary. And if you never do that and then you also have to work out, and you also have to change clothes, et cetera, you will get 'I stop, I will not go anymore, I will stay at home'. There are already too many factors to say 'I am staying at home'." - Professional*

Furthermore, multiple professionals mentioned a lot of people with psychiatric or psychosocial problems are not involved in sports and health and do not recognize the need of it. Professionals mentioned this is partly because these people have other priorities (i.e. being concerned about the basic things in life). As demonstrated in the quote below, the basis for thinking about sports at all is difficult.

> *"The people who live in a protected environment are perhaps more concerned with the basic things in life and see sports as a kind of luxury product. They are less likely to get to it." - Professional*

4.1.1.3 Behavioral attributes/skills

The last personal barrier relates to behavioral attributes and the (lack of) skills of vulnerable people. According to multiple professionals, most people with intellectual disabilities and people with dementia do not have the skills needed to participate in a regular sports setting (e.g. because of the pace and rules of games focused on competition and performance). Relating to behavioral attributes, different professionals mentioned that there are a lot of people that just do not know what kind of sports activity they would like to do.

4.1.2 Social/cultural barriers to sports participation

During the interviews, professionals mentioned a number of social/cultural barriers for vulnerable people to participate in sports: difficulty making contact, a sports setting being a large and busy context, lack of exercise partners and anonymity. Furthermore, regular training sessions, lack of time, and communication were mentioned as social/cultural barriers for refugees in particular.

First of all, the most frequently mentioned social barrier was difficulty making and maintaining contact. According to professionals, this is experienced as a barrier by people living in social isolation and people with psychosocial problems. A sports club is often a large and busy context and it was

mentioned that these people find it difficult to function in a group and enter a club or team as a 'new' person where everybody already knows one another. Although one-on-one contact is not always necessary, for example in the gym, professionals indicated this is still a crowded environment and people with psychosocial problems can feel looked at and unsafe. The threshold to go somewhere alone and ask people something or talk to them is very high, for example because other people might be daunting, as illustrated in the following quote:

> *"It is of course also true that you see all those cool people in the gym there. The fashionable sports suits. That really scares people. The bodybuilders in front of the mirror."* - Professional

This social barrier to go to a sports club in the first place was also mentioned for people with a mild intellectual disability. A professional working with these people for example indicated:

> *"The first step can also be too big to go by yourself, because you are looked at in a certain way, or you don't know all those people, it is very big and busy."* - Professional

Furthermore, the social network of people with psychiatric or psychosocial problems plays a role in sports participation. It was mentioned multiple times by professionals that these people often do not have exercise partners that propose to work out together. They either lack a social network at all or the social network that these people have does not partake in sports either. In addition, some professionals mentioned that anonymity in a sports club could be a problem for people with psychiatric problems, for example:

> *"In a certain way the anonymity also. If you don't come then no one will say anything about it. I think that these are things that make people drop out relatively quickly."* - Professional

With respect to refugees, it was indicated that training sessions at regular and fixed times is a barrier. As demonstrated in the quote below, this is difficult because refugees do not always want to come every week:

> *"If they want to play football at some point during the day, they will play football. But if they are member of a football club, they must play football at fixed times. Even when it rains, when they don't feel like it, or when they are hanging out with their friends. That's one of the problems."* - Professional

Professionals indicated that this barrier is related to refugees' culture. It was mentioned that refugees are not used to go to sports clubs from an early age and to the fact that they have to go regularly.

In addition, lack of time was mentioned as a barrier for refugees (e.g. because of jobs and a large family). It was further mentioned by professionals that communication is a problem. Sometimes refugees do not understand the language of the coach. As demonstrated in the quote below, this is not only the case during trainings, but also in digital communication.

> *"Language is an issue. If a training is canceled on WhatsApp, for example. Then they go once for nothing and then maybe next time they think there is no training and then they don't come." - Professional*

4.1.3 Environmental barriers to sports participation

Finally, there are five environmental barriers that are experienced by vulnerable people to participate in sports: costs, physical accessibility, lack of awareness, lack of options, and the people at a sports club. Almost all professionals mentioned costs as a barrier experienced by vulnerable people. It was indicated that a lot of people they work with are financially vulnerable and do not have the means to participate in sports, for example:

> *"The people I work with often have a minimum income. For them, sports has no priority. Even buying sportswear is a problem." – Professional*
>
> *"If you play football, you still have to pay contribution. Imagine, you are a mother with four boys. Then it becomes very difficult if you are on benefits." – Professional*

Difficulty with physical accessibility was another barrier frequently mentioned in the interviews (e.g. for people in a wheelchair or with a visual impairment). A professional working with people having intellectual disabilities for example indicated:

> *"We have a boy in an electric wheelchair. I can't go into the pool with him normally. That is weird. Everyone can just go swimming and he is in an electric wheelchair and cannot enter the pool because there is no hoist." – Professional*

Accessibility and lack of transport were further mentioned as barriers for people with dementia (not being able to find a place), people with a moderate and severe intellectual disability, and sometimes refugees (not owning a car or know how to ride a bike).

Furthermore, it was mentioned multiple times that vulnerable people are not always aware of the possibilities available to them to take part in sports, for example when they have a disability or are financially vulnerable.

In addition, people with intellectual disabilities experience a lack of options as a barrier. It was mentioned that not all regular sports clubs have a team for people having disabilities or are able to meet the demand for it and specific sports clubs for disabled people are mainly focused on people with more severe disabilities. However, it was indicated by multiple professionals that participation in regular sports settings is also related to the people at a sports club, who may have a negative attitude towards people with intellectual disabilities, do not understand their behavior, or are not

willing to change the rules and pace of the game. A professional working with people having an intellectual disability for example indicated:

"But with the mild intellectual disability group, some verbal and physical aggression sometimes occurs during games. That can sometimes lead to a hard kick at a billboard. Sometimes there are people within the club who don't like that at all. But it is very important that there is someone within the club who can understand their behavior." – Professional

4.2 Resources to overcome barriers for sports participation

In order to include socially vulnerable people in a sports program it was investigated what is needed for this target group to overcome the barriers mentioned in the previous section and participate in a sports-based program. Although the majority of the professionals interviewed think of a sports-based program specifically for vulnerable people as a good idea to increase the range and amount of sports offered to this group (i.e. remove the 'lack of options' barrier), others would rather see vulnerable people to take part in sports at regular sports clubs (for social interaction with the general population). Overall, all professionals concluded that sports participation could have many positive effects for vulnerable people, such as improved physical and mental health, gaining social contacts, and reduced social isolation.

During the analysis of the data, five sub-themes emerged that represent different factors that play a role in overcoming barriers to sports participation for vulnerable people, namely the sports coach, a safe sports climate, sports groups, sports activities, and accessibility. These factors will be discussed in detail below. Within the subsections, the resources to overcome barriers will be discussed in order of importance, i.e. resources or stimulating factors that were mentioned most frequently by professionals will be discussed first. However, it is important to note that every professional interviewed mentioned the fact that everyone is different, has its own story, its own obstacles, interests and wishes, for example:

"If you look at our average client, there is a lot of difference between them. Some people use drugs, but are physically completely fine. And we have 55-year-old people walking with a cane. So in that sense it's very different." – Professional

Furthermore, it should be taken in mind that the resources discussed below should be targeted to the specific individuals participating in a particular sports-based program. As the quotes below illustrate, it is important for the initiators, but also coaches, of a sports-program to talk and listen to the participants of the program so that activities, groups, and other elements will be targeted to the specific individuals participating.

> *"Look very much what the person wants. What are the whishes? Should we already increase the level or not? And also very much to ask them: what is your need? I think it is important that they constantly look at what the customers want and where the need lies, and respond to that."* – Professional

> *"The most important thing is that you want to adapt to the other, what is possible, what he or she finds important and what he or she likes."* – Professional

4.2.1 Role of the sports coach

First of all, all professionals mentioned that barriers to participate in sports could be reduced by the right guidance and coaching. The results of the interviews showed that a coach mainly plays a role in making people feel comfortable and safe, which, in turn, contributes to reducing personal barriers such as fear and insecurity, but also social barriers like making contact with others.

Some professionals suggested that a coach being a healthcare professional with some sports experience could provide a different kind of energy, which may be appealing to vulnerable people, and provide a sense of familiarity. Knowing the healthcare professional makes it less anxious to go for the first time (psychological barrier). The quote below demonstrates how a social sports worker also suggests a familiar coach could be a stimulating factor.

> *"The volunteers and coaches who organize sports activities are from the neighborhood. They are local people, who often know the neighbor, cousin, grandnephew et cetera. That makes it easily accessible because people know the coaches. They are all boys who organize sports in their own neighborhood. So all the children, adults, elderly people they reach are just the ones they know."* - Professional

Furthermore, professionals mentioned a sports coach could put vulnerable people at ease and make them feel safe by, amongst others, taking them seriously, talking and listening to them, and giving them confidence (which could reduce feelings of insecurity). Making people feel safe and at ease may also help them in making contact with others. In addition, according to professionals, it is important for a coach to build a relationship of trust with the participants (e.g. by being available for questions and help during and outside trainings), and being a key figure and a buddy.

A coach can stimulate people to take part in sports by helping them in overcoming the barriers they experience. Different professionals mentioned that a coach can think along with people about stimulating factors, difficulties, and organizing their time (when they experience lack of time as a barrier). This can help people to take the first step. A professional working with people having psychosocial problems for example mentioned:

> *"Certainly 'what moves people'? Then I think more like: what do you encounter, why do you find it hard to come, what happens now you don't come? And what happens afterwards? How do you organize your time? How do you pick that up? How do you include sports in your daily life? Which moments of the day do you manage to come and do you not succeed in coming? Such a role seems important to me."* - Professional

According to the professionals, aftercare is also really important to ensure people continue to participate in sports activities once they have started (i.e. increasing the discipline of people to keep going). It was mentioned that personal attention is important, just as making a commitment with the people and reward them for coming back. In this way people are involved and feel valued. The quote below shows how a professional working with people having psychosocial problems thinks aftercare should look like.

> *"Aftercare is important I think, and certainly in the beginning. After you've had the training, just have a chat with the people. Let's hear how it went. 'Did you like it? What did you encounter? What did you like? Do you want to come next week?' Also indicate that you hope to see them again next week. Just make a commitment with people. And when they come again, a bit of reward, like 'hey, how good, you are back'."* - Professional

4.2.2 Safe sports climate

Besides a good coach, multiple psychological and social barriers could be reduced by a safe sports environment (e.g. by taking along a friend or buddy, a sheltered place, and not many other people). According to almost all professionals, such a safe environment could be created with acquaintances of the vulnerable people. For sports activities or programs, it would therefore be helpful if people are allowed to take someone with them to the activities (e.g. a friend, neighbor, or care counselor). In this way, barriers relating to anxiety can be reduced. As demonstrated in the quotes below, it is less frightening to go somewhere you are not familiar when you bring someone you already know.

> *"Especially if you can take someone with you. Then you can go there together. That makes it all a bit less scary."* – Professional

> *"People will share it with their network and ask 'hey, can I take my neighbor'? For some people, it can lower the threshold to go with a neighbor or someone you know to do something they enjoy doing."* – Professional

However, although going together is helpful, some people do not have a social network to bring to these activities (a social barrier), for example people in social isolation. For these people, some professionals suggested it would be helpful to arrange a 'buddy-network' in which people are assigned a buddy that goes along to sports activities. The barrier relating to a lack of exercise partners is then removed. It was mentioned that a buddy can help people with low self-confidence and low self-esteem to take the first step and support them in making contact with other people (another social barrier). A buddy can also help figure out what kinds of sports people would like to do

when this forms a barrier. The quote below shows how a professional working with people in social isolation thinks a buddy network could help.

> *"Especially to find out together with a buddy which sport would fit best, and especially to do it together. If you know you do not have to go on your own, but there is also guidance. And then every step is very small and also fun when you do it together with a buddy. Then you can just smile. The buddy contact is very functional, because the obstacles are easier to overcome together."– Professional*

Buddies could also be useful for refugees. It was suggested that a native person could be the buddy of a refugee and stimulate him/her to be physically active, help him/her integrate in the club, make contact and help with communication, and keep them involved. In this way, social/cultural barriers like communication and difficulty with regular training sessions are reduced. The quote below demonstrates the role of a buddy according to a professional working with refugees.

> *"A buddy could help to keep them involved. He can explain to them that you just have to attend the training and that it is an appointment that you have, just like school or work. I think that could help. So that people within the club like to make contact and ensure that people come to the training sessions."– Professional*

According to professionals a safe sports climate should be free of obligation and sanctions. Furthermore, professionals indicated participants should know what they can expect and where they stand, e.g. who the coaches are and how long an activity will take. In addition, as demonstrated in the quote below, it is important to ensure that participants can be themselves, everybody is equal, expectations are not too high and people are not pushed into things they cannot do.

> *"Also that it doesn't matter how you get there. If you have an old jogging pants, it doesn't matter. So not focused on looks and ostentation, but on having social contact." – Professional*

Lastly, the physical environment plays a role in creating a safe sports climate. Professionals mentioned that vulnerable people should not have the idea they are being watched. According to some professionals, a sports hall that provides a bit of shelter would therefore be nice, or organizing sports activities at times when there are not many other people. A sheltered place and not many other people help in reducing personal barriers like shame and anxiety (by not being watched), and the social barrier of a sports club being a large and busy context. However, other professionals would like vulnerable groups to take part in activities at the same time as other people to stimulate social integration.

4.2.3 Sports groups

Fixed and small groups were found to be important in sports-based programs to offer people safety and reduce barriers like anonymity, sports context being large and busy, anxiety, and difficulty making contact. According to the professionals, the composition and size of a sports group has an influence on the sports participation of vulnerable people. In terms of composition, it was suggested to start with a fixed group of people (i.e. instead of a changing group) so you can offer safety to the participants (which can reduce barriers like anxiety and difficulty making contact). The quote below shows how a professional working with people having psychosocial problems indicated fixed groups could lead to safety.

> *"I would initially say a fixed group. Because then you can offer safety at a certain point. If you have different people every time, you have to get used to others over and over again. This might be difficult. Then every time something you do fails, the other sees it again." – Professional*

A fixed group may also reduce the barrier of anonymity, since it will be easier to notice by others when someone does not show up, making it less easy not to come. Although a fixed group is important, multiple professionals mentioned the importance of mixed groups, i.e. a diverse group of people without labeled problems or disabilities. In this way, everyone can come into contact with each other. However, as demonstrated by the quotes below, sometimes it is needed to look at different target groups regarding level of the activities so that it is still fun and enjoyable for everyone.

> *"A 21-year-old boy who wants to work out very fanatically will have trouble connecting with someone of 55 who likes to play a game." – Professional*
>
> *"People with a psychiatric problem can think 'I am not going to do this or that together with someone with Down's syndrome in the same room.' That can definitely be a deal breaker. That can really ensure that the person does not go to the activity." – Professional*

In terms of group size, the professionals indicated it is better to start with small groups. In larger groups, it was expected by professionals that some people may disappear and will not get the attention they need. Also, large groups may be overwhelming and difficult for people with psychosocial problems. Multiple professionals indicated that 10-12 people per group would be the maximum. Small groups may reduce the barrier of a sports club being a large and busy context. For some people, one-to-one coaching could reduce barriers of anxiety and difficulty making contact. A professional working with people in social isolation for example mentioned:

> *"I think there should be the possibility to get one-on-one coaching. That you can actually come by yourself and that there is a safe coach who might be looking for a sports partner for that person, such as in tennis. (…) I certainly think that is nice for certain people. And that this could be built up, from one to one to four for example."– Professional*

4.2.4 Sports activities

The results indicated that sports activities focusing on joy instead of performance and having a low level adjusted to individuals could reduce barriers like insecurity, lack of skills, a particular impairment, and energy shortage.

It was mentioned by almost all professionals that activities in a sports-based program should not be about achievement or performance, but about feeling better and enjoying yourself. In this way, people who lack the skills for participation in regular sports clubs can also participate.

In addition, it was mentioned by professionals that it is important to start very basic and keep the level of the activities very low. It was indicated that this makes it easier for people to come for the first time, and give them the confidence they can do it (reducing insecurity). Along the way, the level of the activities must be adjusted so it remains interesting and enjoyable for everyone. According to multiple professionals, a sports coach must discuss the level of the activities with the participants, discover what is possible together, and give someone the courage to get everything out of their body and see for themselves what they can achieve. As demonstrated in the quote below, this can remove barriers like a lack of skills, a particular impairment or an energy shortage, since everyone will be able to do something at his/her own level and pace.

> *"In that way all kinds of other sports can just be done. That also applies if you have little oxygen. Then you think 'well, I am not able to participate in sports anymore', and then such a coach can say 'well with 30% lung capacity you can still do this and that. That would be fantastic."– Professional*

Furthermore, it was emphasized by multiple professionals that the type of activities people enjoy can vary greatly and it is important to ask the participants themselves about their interests (e.g. at an open day). An open day might also give people the option to see what they like to do (when not knowing this is experienced as a barrier).

4.2.5 Accessibility

Lastly, environmental barriers can mainly be reduced by factors relating to accessibility, such as a low fee, good physical accessibility, and providing an information brochure.

For a sports program to be effective, professionals indicated it is important that it is easily accessible. Organizing activities close by people's homes, in a familiar environment, will make the first step easier. It was emphasized by professionals that the physical accessibility to the sports hall or field is also very important, for example for people with a wheelchair. This also relates to facilities in the sports hall, such as sanitary facilities. For some people, transport needs to be arranged. When the physical accessibility and transport are properly arranged, the environmental barrier of inaccessibility will disappear. Furthermore, since many vulnerable people do not have the financial means to participate in sports, multiple professionals mentioned it is important that participation is free or only a small fee has to be paid. The environmental barrier of costs can then be overcome.

Furthermore, in order to participate in a sports-based program, it is important for vulnerable people to know it exists. As mentioned in the previous section, multiple professionals mentioned that vulnerable people are not always aware of the possibilities there are for them which forms a barrier to participate in sports. As demonstrated in the quote below, vulnerable people can be encouraged to be physically active by making physical activity negotiable and discussing the options available for people.

"We stimulate people by making it negotiable, and by, for example, indicating 'you have someone nearby with whom you could do it, go and meet him' or 'call the gym and see if you can get some trial lessons'. So we make it negotiable and discuss the options available."– Professional

According to multiple professionals, to remove the barrier of unawareness it would be nice to distribute an attractive brochure to people including the program for the upcoming month. Professionals suggested that the brochure could be distributed via the municipality, through healthcare or welfare institutions, or via social media. In addition, a professional stated that it is motivating to invite people in person and tell them the benefits of the program. In this way, the barrier of not recognizing the need to take part in sports may be reduced. A social sports worker for example indicated:

"What I often do is a nice pitch in person. 'You can move on to a job, you work on your personal development, what do you want in the future, you are playing football, it is fun, you meet new people, you are working with your hands and body'. Try to have a good pitch and make them enthusiastic to go and sign up." – Professional

4.3 Overview

Table 1 provides an overview of all the barriers for sports participation mentioned in section 4.1 linked to the resources needed to tackle those barriers mentioned in section 4.2. Looking at the Table, it becomes clear that there is a lot of overlap, i.e. some barriers can be tackled by multiple resources while some resources also tackle multiple barriers.

Table 1. Overview of the barriers and resources playing a role in sports participation for vulnerable people

Barrier to sports participation	Resource to overcome barrier
Personal barriers	
Low energy level	**Sports activities** (i.e. low, adjusted level and focus on joy)
Visual impairment	**Sports activities** (i.e. low, adjusted level and focus on joy)
Dementia-related physical changes	**Sports activities** (i.e. low, adjusted level and focus on joy)
Feelings of shame, anxiety, and insecurity	**Sports coach** (i.e. being a health professional, putting people at ease, be supportive, providing attention) **Safe sports climate** (i.e. bringing someone, providing a sheltered place) **Sports groups** (i.e. fixed and small groups) **Sports activities** (i.e. focus on joy and low levels)
Not recognizing the need to take part in sports	**Accessibility** (i.e. providing information including benefits of sports participation)
Lack of skills	**Sports activities** (i.e. low, adjusted level and focus on joy)
Not knowing what to do	**Safe sports climate** (i.e. arranging a buddy-network) **Sports activities** (i.e. organizing an open day)
Social/cultural barrier	
Difficulty making contact	**Sports coach** (i.e. making people feel safe and at ease) **Safe sports climate** (i.e. arranging a buddy-network) **Sports groups** (i.e. fixed and small groups)
Sports setting being a large and busy context	**Safe sports climate** (i.e. providing a sheltered place) **Sports groups** (i.e. small groups)
Lack of exercise partners	**Safe sports climate** (i.e. arranging a buddy-network)
Anonymity	**Sports groups** (i.e. fixed groups)
Regular training sessions	**Safe sports climate** (i.e. arranging a buddy-network)
Lack of time	**Sports coach** (i.e. help in organizing time)
Communication	**Safe sports climate** (i.e. arranging a buddy-network)
Environmental barrier	
Costs	**Accessibility** (i.e. free or low fee)
Physical accessibility	**Accessibility** (i.e. good physical accessibility of facilities and arranging transport)
Lack of awareness	**Accessibility** (i.e. information brochure)
Lack of options	A sports-based program for vulnerable people
People at a sports club	**Sports coach** (i.e. health professional as coach)

5. Results face-to-face interviews with vulnerable adults

In order to answer the second research question (*How do socially vulnerable adults either negatively or positively experience their participation in a sports-based program?*) face-to-face interviews with vulnerable adults participating in a sports-based program (i.e. the Football Workplace) were conducted. All interviewed participants stated they like to go to the Football Workplace, and two of them even stated they would like the ability to come more often. Participants mainly come for fun and work. During the interviews, different aspects came up to be important in the experiences of the participants in a sports-based program. The peers, sports coach and the physical environment play a role in the experiences of the sports climate, while activities like voluntary work and playing football also influenced the experiences of participants.

5.1 Sports climate

First of all, the peers in the sports-based program were shown to contribute to positive experiences of the participants by the ability to make new friends, creating a good and relaxing atmosphere, and providing support, although providing support could also lead to negative experiences. Secondly, the sports coach was shown to positively influence the experiences of participants by being involved, caring, and supportive, taking into account what people can(not) do and discussing people's behavior. Lastly, the physical environment was experienced as contributing to a relaxing atmosphere.

All interviewed participants mentioned the good relationship they have with their peers at the Football Workplace as a positive aspect. Fun with peers and socializing is one of the most important reasons mentioned by all participants for going to the sports-based program. All participants mentioned that the Football Workplace has helped them in making contact with new people and the peers have all become friends. As demonstrated in the quote below, this creates a good atmosphere.

> *"We can have a nice chat and laugh with each other, talk about how things are at home and so on. My teammates are very nice." – Participant sports-based program*

In addition, all participants had positive experiences with their coaches and they indicated that the sports coaches at the Football Workplace are nice and friendly. It was mentioned by multiple participants that the sports coaches positively influence the atmosphere by being social and have a laugh together, but also by talking to people about their behavior when things get out of hand and correcting them. One participant indicated how the coaches talk to people when jokes get out of hand:

> *"It is, of course, sometimes the case that we make jokes and we start to fool around a bit. Sometimes that goes a bit too far of course. You know what it's like with men and football. That is always crazy and is always about drinking and women. If things get out of hand or jokes go too far, we are approached by the trainers. That helps to keep the atmosphere good and fun." – Participant sports-based program*

In addition, a sports-based program specifically designed for vulnerable people was also experienced to contribute to a good atmosphere. The participants positively experienced the sphere at a specific sports program for vulnerable people in comparison to the sphere at a regular football club. This

mainly related to social inclusion. Participants mentioned to feel more included in the sports group since everyone has some kind of vulnerability. One participant for example indicated:

"When I look at my soccer team at the regular football club (in a regular team) and here it is really a difference. The atmosphere here is much better and more fun. Everyone is included in the group. I think everyone has their own things. Everyone has some problems or is lagging behind, or perhaps has a mild disability. Then it is much easier together." – Participants sports-based program

However, when playing matches, one participant negatively experienced the inclusion in the team. Although he was unable to mention the underlying reason, the interviewee indicated that the participants do not always play well together, as a team, since some people are more focused on their own. This participant for example indicated:

"In my team for people with a disability at the regular sports club, we play together more. At the Football Workplace we are not always one team during the matches. Sometimes - teammate - just goes all the way forward and doesn't play together." – Participant sports-based program

Furthermore, the participants experienced a supportive sports climate as positive. This supportive environment is created by both the peers and the sports coaches. The majority of the participants mentioned that the peers at the program provide each other support. It was mentioned that everyone has their own problems or limitations, but they help each other and things are easier when doing it together. One participant for example indicated:

"At the regular soccer club, I could not play football anymore because that level was a step too high for me regarding my disability. That all went too fast, so I had to stop playing football. At the football Workplace I can play football because all the boys take into account my disability and what I can do." – Participant sports-based program

However, some participants also mentioned to have negative experiences with supporting their peers. As demonstrated in the quote below, providing support to other people in the program can be stressful and exhausting when doing it too much.

"I like to help people. At the beginning I did that too much. Then I came home and I was super tired and stressed and exhausted. Now I am less concerned with others and I come home more relaxed." - Participant sports-based program

The majority of the interviewed participants experienced the sports coaches to contribute to the good and supportive atmosphere by being involved, caring, and supportive and helping people learn new things by taking into account what people can and cannot do and see what is possible together. This was positively experienced by the participants. Two participants for example indicated:

> *"Every day they look together with me at the possibilities: what is feasible for me with my disability? In this way I learn something new every day, by constantly looking one step further to see what I can do that day." – Participant sports-based program*
>
> *"The trainers take everyone's limitations very much into account. Myself, I have (…) and this is very well taken into account here. The coaches are very compassionate and think along with you: 'What are we doing here? What do you want to do? What else do you want to learn? What can we still teach you?'." – Participant sports-based program*

Lastly, participants mentioned the physical environment of the Football Workplace contributes to a good atmosphere. It was mentioned that a quiet, remote place close to the forest creates a relaxing and restful atmosphere. One participant for example indicated how this environment makes him feel better by being able to escape the hectic in his everyday life:

> *"When I get home after I have been here I feel a lot of relief. I think the whole environment of where the Football Workplace is, is what I like. My neighbor at home is in a psychosis. That is difficult for me, for example to sleep at night. Then I am happy that I can get out of there and that I can find a bit of peace here all day. And it's a nice place of course, isn't it? I find it very beautiful and restful here. The forest. I think that's really cool. You can run here, you can do anything." – Participant sports-based program*

5.2 Activities of the sports-based program

In addition to the experiences of a good, supportive, and relaxing sports climate, the participants also talked about their experiences of the activities they perform at the Football Workplace. The project consists of doing maintenance work at the sports club (voluntary activities) and playing football (training and matches). All respondents indicated that they enjoy going to the Football Workplace and it is a good project. The majority indicated that the project is a good way to spend time (e.g. instead of hanging around on the streets) and that it provides (voluntary) work for vulnerable people who may have difficulties finding a job. Two participants for example indicated:

> *"I really come here to do good things with my time. I used to hang a lot on the street, you know. This keeps young people off the street, which is good." – Participant sports-based program*
>
> *"People with a disability cannot always work everywhere. They cannot stand in a store or something. That is why I think it is very good that this is here, so that these people can still work. They can do a lot with their hands. I think they should do this project in more places." – Participant sports-based program*

Furthermore, apart from some specific chores, performing voluntary work was positively experienced. The variety of chores that had to be done was considered to be nice, just as the feeling to be able to do something for the football club. The latter was especially thought to be nice because of the things the participants get in return for their work, e.g. the ability to play football and being invited to a fun activity. Two participants for example indicated:

> *"I like to do something for the club. I do this for the club so that they can play football on Saturdays. (…) We take care of maintenance at the club. We help in the things that need to be done and in exchange, we are allowed to play football here, which is nice." – Participant sports-based program*

> *"And what we now get from 'Zorg van de Zaak', we now go to Utrecht, watch a professional match. Of course they don't just do that. We have worked hard for that. That's nice." – Participant sports-based program*

Furthermore, multiple participants positively experienced participating in football and being physically active. One participant for example indicated how playing football helps him to feel better and get rid of his frustration:

> *"I can get rid of my frustration by playing soccer and being physically active. When I come home, I feel relaxed." – Participant sports-based program*

The training sessions were considered to be fun and enjoyable, especially when new things are learned (e.g. tricks and taking the right positions). In addition, multiple participants positively experienced the matches that are organized against different companies in the surrounding area. It was mentioned they like to do something else than trainings, organize the matches themselves (including finding opponents and telling people about the project), and get into contact with other parties and getting them to be physically active.

6. Discussion

Since sports participation is thought to alleviate the problems vulnerable people experience and these people often do not take part in sports, this study investigated what is needed to engage socially vulnerable people in a sports-based program so that they are included in future programs. Answering sub-question 1A (*What are barriers for sports participation for vulnerable people as identified by healthcare professionals working with this group?*), the results indicated that vulnerable people experience multiple personal (e.g. feelings of anxiety, lack of skills), social/cultural (e.g. difficulty making contact, lack of exercise partners), and environmental (e.g. high costs, poor physical accessibility) barriers to participate in sports. Answering sub-question 1B (*What are options to overcome these barriers as identified by healthcare professionals working with vulnerable people?*), the results showed that the sports coach, a safe sports climate, sports groups, sports activities, and accessibility are factors that play a role in tackling the barriers for sports participation for vulnerable people. In addition, the experiences of vulnerable people in a sports-based program were investigated in order to understand how sports programs produce positive outcomes. Answering research question 2 (*How do socially vulnerable adults experience their participation in a sports-based program?*), the results indicated sports experiences of vulnerable people are mainly positive and influenced by the sports climate, including peers, coach, physical environment, and the sports activities.

6.1 Discussing barriers for sports participation and resources to overcome barriers

Many of the barriers for sports participation identified in this study are in line with earlier research on vulnerable adults (Bodde & Seo, 2009; Chinn et al., 1999; Jaarsma, Dijkstra et al., 2014; Jaarsma, Dekker et al., 2014; Hawkins, & Look, 2006; Rimmer et al., 2004; Withall et al., 2011), but also on non-vulnerable adults (Allender et al, 2006; Humpel et al, 2002; Salmon et al., 2003; Trost et al., 2002), for example lack of skills, lack of exercise partners, costs, and difficulties with accessibility. This suggests that results from research focusing on non-vulnerable adults could be used in conjunction with specific factors that are found to be important for vulnerable adults when developing sports-based programs. For example, this research found some specific barriers for refugees (e.g. not being used to exercise). Furthermore, in contrast to earlier research, this study indicated that feelings of shame, anxiety and insecurity, difficulty making contact, and a sports setting being a large and busy context are important barriers for vulnerable people to partake in sports. These barriers not being mentioned in earlier research could be explained by the fact that previous research has mainly focused on non-vulnerable adults (Allender et al., 2006; Reichert, Barros, Domingues, & Hallal, 2007; Salmon et al., 2003; Trost et al., 2002) or people with intellectual disabilities (Bodde & Seo, 2009; Hutlzer & Korensky, 2010; Temple, 2007) and a low income (Chinn et al., 1999; Hoebeke, 2008; Humbert et al., 2006; Withall et al., 2011). These people may be less affected by these barriers. Little research has focused on barriers for people with psychosocial and psychiatric problems, while these people have been included in this study and it was indicated by professionals that these people are likely to experience the barriers mentioned above. When developing sports-based programs for vulnerable people, these specific barriers for vulnerable people should be taken into account.

Most earlier research on barriers for sports participation did not specify how particular barriers could be overcome (Chinn et al., 1999; Jaarsma, Dijkstra et al., 2014; Rimmer et al., 2004). Therefore,

linking the barriers found in this study to the resources found provides some interesting insights. Firstly, a sports coach mainly reduces personal (e.g. insecurity and lack of discipline) and social/cultural (e.g. difficulty making contact) barriers by putting people at ease, make them feel safe, support them, and provide personal attention. This is in line with earlier research by Haudenhuyse et al. (2012) who indicated the sports coach might be especially important in programs for vulnerable people. Secondly, a safe sports climate plays a role in reducing mainly psychological (e.g. anxiety) and social (e.g., going alone to a large and busy environment, communication) barriers. The results indicated that such a climate could be created by giving people the option to take someone with them and arranging a buddy network for people in social isolation and refugees. This is supported by Withall et al. (2011) who suggested attending with a friend could enable low income people to be physically active. Furthermore, fixed and small sports groups and sports activities that focus on joy and have a low level which is adjusted for individuals could reduce personal (e.g. anonymity and lack of skills) and social barriers (e.g. sports club as large and busy context). This is similar to research of sports-based interventions by Spaaij (2012), who found that modifying the rules of the game created an inclusive environment in which everyone could participate. Interesting to see is that personal and social/cultural barriers could thus mainly be reduced by multiple resources (coach, safe sports climate, sports groups and activities). In contrast, environmental barriers (e.g. high costs, poor accessibility, and lack of awareness) can mainly be reduced by more practical solutions, like having to pay no or only a little fee, good physical accessibility (both within a sports location itself and possible transport that must be arranged), and a good information brochure (in line with research on facilitators by Mendoza-Vasconez et al. (2016)). When developing future sports-based programs for vulnerable people these resources are important to consider, since including these in the program might help in engaging vulnerable people to participate in sports.

This research investigated what is needed to engage vulnerable people in a sports-based program by focusing on the barriers these people experience to participate in sports and the resources needed to overcome those barriers. However, although barriers have a strong association with physical activity levels (Brownson, Baker, Housemann, Brennan, & Bacak, 2001; Reichert et al., 2007; Salmon et al., 2003; Sherwood & Jeffery, 2000), this does not necessarily mean that removing the barriers for sports participation inevitably leads to vulnerable people participating in sports (Bodde & Seo, 2009; Reichert et al., 2007). Physical activity, including sports participation, is a complex behavior which has multiple determinants (Dishman, Sallis, & Orenstein, 1985; Sallis & Hovell, 1990; Salmon et al., 2003; Reichert et al., 2007). Other factors, such as self-efficacy, social support and demographic factors also have an influence (Anderson, Wojcik, Winett, & Williams, 2006; Bauman et al., 2012; Cardinal, Kosma, & McCubbin, 2004; Trost et al., 2002). These factors should be taken in mind when designing sports-based programs. Therefore, future research could measure these factors and investigate the role they play in the sports participation of vulnerable people. This would provide a better overall picture of the factors associated with sports participation of vulnerable people and can be used in developing more effective interventions for this target group.

This research focused on personal, social, and environmental barriers to sports participation and how those barriers can be overcome. This division has also been used in earlier research (Bodde & Seo, 2009; Humpel et al., 2002; Trost et al., 2002), which made it easier to compare the results of this study to earlier studies. Earlier research has indicated that it is important to focus on reducing or removing environmental and social barriers prior to focusing on personal barriers (Bodde & Seo,

2009). This is thought to be important because vulnerable people often lack control over their surroundings, and, therefore, over the environmental and social barriers they experience (Bodde & Seo, 2009). This is also one of the reasons it is thought by researchers that health behavior theories are not always useful to investigate vulnerable populations, i.e. because such theories often believe that people have control over their activity choices (Messent, Cooke, Long, 1999). A theory that focuses on factors predicting behavior of non-vulnerable people may not accurately reflect behavior of vulnerable people (Bodde & Seo, 2009). However, future research could use a socio-ecological model to indicate the needs of vulnerable people regarding sports-based programs more precisely. This study has shown there are multiple barriers and resources influencing sports participation of vulnerable people acting at different levels. It illustrated how complex sports participation for vulnerable people is. A socio-ecological model acknowledges that there are multiple levels influencing a particular behavior, in this case participating in sports, and takes into account cumulative and interactive effects (Eime et al., 2013; Fleury & Lee, 2006; McLeroy, Bibeau, Steckler, & Glanz, 1988; Sallis, Owen, & Fisher, 2015). This study showed there are multiple environmental barriers vulnerable people can experience to take part in sports. A socio-ecological model, in contrast to many other theories, acknowledges the importance of environmental factors (Humpel et al., 2002). It includes intrapersonal, interpersonal, community, environmental, and organizational factors (Eime et al., 2013; Fleury & Lee, 2006; Sallis et al., 2015) and states that interventions are more effective in changing behavior to improve health when focusing on all factors (Sallis et al., 2015). Using a socio-ecological model in future research could provide a more structured view of all the factors important in sports participation for vulnerable people.

6.2 Discussing sports experiences

Relating to the second research question, the experiences of vulnerable people in a sports-based program were investigated. Studying experiences is important in understanding how sports programs can produce positive outcomes (Coalter, 2007; Dworkin et al., 2003; Haudenhuyse et al., 2014; Papacharisis et al., 2005). Overall, the results indicated that the experiences were mainly positive. The peers, sports coaches, and the physical environment were found to play a role in the experiences of the sports climate as having a good, supporting, and relaxing atmosphere, which is in line with research on youth by Fraser-Thomas & Côté (2009) and Haudenhuyse et al. (2014). Peers were shown to contribute to positive experiences by the ability to make new friends, creating a good and relaxing atmosphere, and providing support, although providing support could also lead to negative experiences when done too much. This is similar to research on soccer in youth from Tjomsland et al. (2015) who found that the enjoyment of participants was associated with being with friends and collaborating with team mates. The sports coach was shown to positively influence the experiences of participants by being involved, caring, and supportive, taking into account what people can(not) do and discussing people's behavior. This is supported by earlier research on vulnerable youth that point out the important role of a coach in creating positive experiences by, for example, creating an environment in which participants can experience feelings of success and acceptance (Haudenhuyse et al., 2014; Super et al., 2016; Super et al., 2017). Relating to the physical environment, it was found that a quiet, remote place close to the forest creates a relaxing and restful atmosphere. In addition, both the voluntary and sports activities were positively experienced. The project was seen as a good way to spend time, and providing work for vulnerable people and participating in sports was experienced as contributing to well-being. These factors are found to positively influence experiences of vulnerable people participating in a sports-based program, and since positive experiences are

thought to be a prerequisite for creating positive outcomes (Haudenhuyse et al., 2014), these factors should be taken in mind when developing sports programs to make them more effective. Furthermore, these results create new insights since most research on sports-based programs focused on (vulnerable) youth, while this research focused on vulnerable adults. As shown above, most of the results found are in line with earlier research on youth, although some factors found in youth research (such as the important role of parents (Haudenhuyse et al., 2012; Holt & Neely, 2011)) were not found in this study. Overall, this suggests that results from research focusing on experiences in sports-programs for vulnerable adults could be used in conjunction with factors that are found to be important for vulnerable youth when developing sports-based programs. However, more research on this is needed to provide a more thorough insight in the sports experiences of vulnerable adults.

Although research has stated that investigating experiences is important in understanding how sports participation can produce positive outcomes, more research is needed on the link between sports experiences and beneficial outcomes, such as life skill development. Earlier research has indicated that knowledge on how sports experiences relate to outcomes is still lacking Coalter, 2007; Hansen, Larson, Dworkin, 2003; Haudenhuyse et al., 2013; Super et al., 2017). Although this study provided insights into factors that created positive experiences for the vulnerable people participating, it was not able to provide insight into the link between experiences and outcomes, since the vulnerable people participating were not able to reflect on the more broader outcomes (such as skill development) of their participation in the Football Workplace. However, the results of this study do indicate that there might be differences in elements creating positive sports experiences and elements creating positive developmental outcomes. For example, this research has indicated that activities itself are important in creating positive experiences (e.g. because they are fun and are a good way to spend time), while research by Biddle (2006) and Mahoney and Stattin (2000) indicate that a safe climate and social interactions are more important in sports-based programs than the actual activities. It was stated by Mahoney and Stattin (2000) that the context of the activities determines whether sports participation creates positive or negative developmental outcomes instead of the activities itself. Future research into this is needed. This indicates that more research into the link between sports experiences and outcomes and the elements important in both of these aspects is needed.

Since sports participation is so complex and this study has showed a lot of barriers for vulnerable people to participate in sports, the question could be asked what the added value of sport is for this target group. However, although barriers do not completely predict sports participation, many of such barriers are modifiable and removing them could help in improving the health of vulnerable people (Bodde & Seo, 2009; Sallis, Bauman, & Pratt, 1998). This research provided insights in how some resources could be important in tackling barriers experienced by vulnerable people. It is therefore thought by the author of this study that, when these resources are taken into account when developing sports-based programs for vulnerable people, sports participation could still prove valuable for this population. This was also supported by the second part of this study in which the results indicated that participants of sports-based programs have mainly positive experiences relating to their participation. However, whether sports participation will actually have the desired positive results for vulnerable people, such as the development of life skills mainly found in youth research, is beyond the scope of this research and more research into that is needed.

6.3 Strengths and limitations

This research has investigated which barriers vulnerable people experience and how to overcome those barriers. Although it was mentioned that barriers do not completely predict sports participation, identifying these barriers is still found to be important since many of such barriers are modifiable and removing them could help in improving the health of vulnerable people (Bodde & Seo, 2009; Sallis et al., 1998).

For the first part of this research, face-to-face interviews were held with professionals working with vulnerable people. Professionals have a broad view of many different clients and they can therefore represent a large number of people. Furthermore, professionals working with different kinds of vulnerabilities were included to get a good overview of factors influencing the engagement of vulnerable people in sports programs. Broad perspectives were also included by taking into account both organizations already cooperating with a sports-based program (the Sports Workplace) and organizations not cooperating, which is considered a strength by reducing selection bias. Only including professionals that already cooperate with the Sports Workplace could have created selection bias (Collier & Mahoney, 1996; Smith & Noble, 2014), since these professionals are likely to be interested in and positive about sports-based programs. By including professionals working for organizations not cooperating with the Sports Workplace, this selection bias was tried to be overcome (Collier & Mahoney, 1996; Smith & Noble, 2014). However, although the professionals interviewed had reasonable insight into the barriers vulnerable people experience to participate in sports, the majority had no experience with sports programs themselves. The needs of vulnerable people in sports-based programs are therefore mainly based on the knowledge that the professionals have of the target group, without hard evidence the elements will actually work in a sports program. Future research should therefore investigate whether the needs found in this study actually remove barriers for sports participation and improve the engagement of vulnerable people in sports-based programs. In addition, evidence on this topic is still thin and more research on the needs of vulnerable people in sports programs is necessary to provide more input for sports-based interventions for this target group.

The interviews with professionals of the first part were very informative, but although professionals have extensive knowledge about vulnerable people, they are not the ones participating in a sports program. Therefore, in the second part of this research vulnerable people that are actually participating in a sports-based program were interviewed. In this way, their views and experiences were also included in the study. This can be considered a strength since vulnerable people are often excluded in research (Aldridge, 2014; Alexander, 2010; Ramcharan, 2006). Including the experiences of vulnerable people could prove valuable insights for future sports-based interventions.

However, it is important to take the conditions under which the interviews were conducted into mind. Earlier research has shown that interviews with vulnerable people should be conducted at a safe and familiar place (Kyale, 1996). The football club was considered as a familiar place for the participants. In addition, an intern that was familiar to the participants was present during the interviews. Although a familiar person could help in putting the participants at ease, it might be more difficult to speak about negative experiences, especially since the intern also appeared to provide the training sessions. The results found in this study were mainly positive. In this study, only the people

who showed up at the Football Workplace at the day of the interviews participated in this study. It might be that people having more negative experiences may not have showed up that day or have already left the program earlier, creating a bias (Collier & Mahoney, 1996; Smith & Noble, 2014). Future research could therefore include both vulnerable people still participating in a sports-based program and vulnerable people that stopped participating in such a program. Furthermore, because of time constraints, only a small amount of vulnerable adults could participate in this study. The vulnerable adults that did participate were all relatively young men (aged 18-30 years). Because of this, the results of this study are not representative for all vulnerable adults participating in a sports program and not generalizable to this population (Trotter II, 2012). Therefore, there is a need for more research on the experiences of vulnerable people in sports-based programs. Future research could focus on the elements of a sports program that vulnerable people experience either positively and negatively and how these elements create positive outcomes for vulnerable people.

6.3.1 Reflection on the use of drawing as research method

In this study, it was originally intended to use drawing as a research method in combination with face-to-face interviews. It was intended that participants would make a drawing about their experiences with the Football Workplace and this drawing would be used as a starting point for the interviews. The participants would be asked to describe their image after they finished their drawing and ask questions relating to the things they had drawn. However, only one participant made a drawing and stopped quite quickly. One participant was not able to make a drawing because of a visual impairment and three others indicated they would rather discuss their experiences orally than draw them on paper. Although research has indicated that visual methods like drawing could be very useful when investigating vulnerable people (Literat, 2013) and Guillemin (2004) has suggested it could work for adults, this has not been demonstrated in this study. Three interviewees were willing to answer some questions quickly, but drawing their experiences seemed too much trouble. It was experienced by the author of this study that most participants did not know what to draw. This possibility was taken into account in advance by taking along some self-made drawings to the interviews (sports experiences drawn by the author of this study) and giving examples on what to draw for inspiration. However, this only helped for one participant who was initially enthusiastic about drawing after seeing the examples. He started drawing a football field, but after this did not know what to draw any more. It was experienced by the researcher that most of the vulnerable people interviewed were reasonably able to put their experiences into words, and as a result, they had more difficulty with drawing than with putting their thoughts into words. According to Guillemin (2004) most people are used to express their thoughts and experiences in words rather than images, which may explain the inability or unwillingness to draw. It is thus not surprising that participants preferred to express themselves in words rather than drawings. Furthermore, one interviewee mentioned that he could not draw well and nicely. This insecurity about the quality of drawings might also have played a role in the other participants, although this is not known. Lastly, the participants interviewed belong to a group (the Football Workplace) that has been investigated very often, even in the same week this study took place. It is possible that this has influenced the course of the interviews, because participants might get tired of participating in research every time. However, it is important to note that this is hypothesized and not known for sure.

In future research it might be helpful to use this method in combination with other research methods, so that people can express their experiences in a way that works best for them, either

using words or using visuals. Furthermore, research using drawing as research method for vulnerable adults is still rare, and more research is needed on how this method should be properly used to gather as much relevant information as possible. Such research is especially needed in research investigating the experiences of health promoting interventions for vulnerable people. Most research using adult drawing has focused on chronically ill people to understand the ways in which they experience their conditions (Cheung, Saini, & Smith, 2016; Cross, Kabel, & Lysack, 2006; Guillemin, 2004; Morgan, McInerney, Rumbold, & Liamputtong, 2009). Participants were often asked to draw themselves and what life with their illness is like. In contrast, this study focused on how people experience a sports program, which is something completely different. Therefore, more research is needed on the usefulness and execution of drawing as research method in investigating health promoting interventions.

6.4 Recommendations

Based on the results of this study, various recommendations were made for future development of sports programs for vulnerable people.

#1 Performing a needs assessment

First, every professional interviewed mentioned the fact that everyone is different, has its own story, its own obstacles, interests and wishes. Furthermore, regarding sports activities, the results showed that the types of activities people enjoy can vary greatly and it is important to ask the participants themselves about their interests. It is therefore recommended to perform a needs assessment prior to implementing a sports-based program. This needs assessment should be performed with the intended participants in the area the program will be implemented. The importance to assess the needs and preferences prior to health promotion programs for vulnerable people and incorporate this knowledge into the program is also supported by earlier research on sport (Skinner et al., 2008), physical activity (Taylor et al., 1998), and worksite wellness (Thompson, Smith, & Bybee, 2005).

#2 Health professional as sports coach

Secondly, the results of this study indicated that the sports coach plays a very important role in sports-based programs for vulnerable people (which is in line with Coalter, 2007; Fraser-Thomas et al., 2005; Haudenhuyse et al., 2014) both in reducing barriers and in creating positive experiences for participants. It is recommended that a sports-based program should have a health care professional with some sort of sports experience as coach. The results of this study showed that such a coach creates a different kind of energy appealing to vulnerable people and feels more familiar, which may make people less anxious and put them more at ease. Earlier research on sports programs for vulnerable youth is related to this. Haudenhuyse et al. (2014) found that an intensive, in-depth relationship with the staff is a critical success factor in such programs. In such a relationship, vulnerable young people find it important that coaches understand the living situations and life problems they are facing (Haudenhuyse et al., 2014). Healthcare professionals having experience with vulnerable groups may be better able to understand the problems vulnerable people are facing.

#3 Allowing participants to take someone with them and arranging a buddy network

Third, the results of this study indicated that multiple personal and social barriers for sports participation for vulnerable could be reduced when they go together with an acquaintance (e.g. friend, neighbor, care counselor). It is therefore recommended to allow participants to do this and

arrange a buddy network for the ones lacking a social network or for refugees that need help with integration, communication, and involvement. Earlier research on vulnerable groups (Withall et al., 2011) and the general population (Wendel-Vos, Droomers, Kremers, Brug, & Van Lenthe, 2007) has shown that having a companion is positively associated with engaging in physical activity.

#4 Low-level activities

Fourth, it is recommended to offer activities on low levels and adjust the level of the activities in consultation with the participants. The results of this study indicated that low-level activities make it easier for people to come for the first time, and give them confidence they can do it. The results further showed that adjusting the level in consultation makes sure everyone (including people lacking skills, having an impairment or energy shortage) is able to do something at his/her own level and pace. This recommendation is also supported by earlier research. Earlier research has shown that for sports programs involving vulnerable people to be effective, it is important to create a climate in which participants have a high chance to experience feelings of success (Haudenhuyse et al., 2014), which could be created by modifying the rules of sports activities (Spaaij, 2012) and tailoring the activities to participants' needs (Chamberlain, 2013).

#5 Small sports groups

Lastly, it is recommended that participants in sports-based programs are divided in small sports groups (maximum 10-12 people). The results of this study indicated that small groups may reduce multiple barriers for vulnerable people and make it easier to make sure people get the attention they need. Earlier research has shown that exercising in small groups enables a sports coach to adjust the activities to the needs of the participants and provide a context in which it is easier to work on different goals (Andrews & Andrews, 2003; Coalter, 2003).

7. Conclusion

Vulnerable people experience multiple personal, social/cultural, and environmental barriers to sports participation. Different factors were shown to play a role in overcoming these barriers: the sports coach, a safe sports climate, sports groups, sports activities, and accessibility. Taking these factors in mind when developing sports-based programs could be helpful in engaging vulnerable people in such programs. Furthermore, experiences of vulnerable people participating in a sports-based program were mainly positive. The positive experiences related to a good, supporting, and relaxing sports climate (including peers, sports coaches, and the physical environment), and the activities in the sports program (as a good way to spend time, providing work, and contributing to well-being). These factors creating positive experiences could be useful in understanding how sports participation creates positive outcomes, and eventually on how sports programs can be most effective.

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Appendix A Interview guide interviews healthcare professionals

<u>Introductie</u>
Hartelijk dank dat u mee wilt werken aan mijn onderzoek. Ik ben een student aan de Wageningen Universiteit en doe in opdracht van de Sportwerkplaats onderzoek naar het betrekken van kwetsbare mensen in sportprogramma's. Met dit onderzoek wil ik inzicht krijgen in welke factoren een rol spelen bij het al dan niet deelnemen aan een sportprogramma. Het doel is om sportprogramma's zo in te richten dat ze aansluiten bij de behoeften van een kwetsbare doelgroep.

Het interview zal ongeveer een 45 minuten duren. Alles wat u vertelt zal vertrouwelijk en anoniem worden behandeld. Er zullen geen namen in het rapport worden genoemd en de data zal niet terug te linken zijn aan u als persoon. Wanneer in de verslaglegging van dit onderzoek citaten worden gebruikt, zal dit altijd anoniem gebeuren. Mocht u gedurende het interview geen antwoord willen geven op een vraag, dan is dit geen probleem. U bepaalt zelf welke vragen u wel of niet wenst te beantwoorden. U hebt het recht om te stoppen met dit interview zodra u wilt. Tot slot heb ik nog de vraag of ik dit interview op mag nemen. Hierdoor zullen er geen gegevens verloren gaan, en kan ik het gesprek nog een keer terugluisteren om alle informatie goed te kunnen verwerken. De opnames zullen uitsluitend gebruikt worden om de informatie te analyseren en zullen daarna verwijderd worden. Geeft u toestemming voor het opnemen van het interview?

<u>Vragenlijst</u>

Algemeen en doelgroep
Ten eerste zou ik graag wat vragen willen stellen over uw functie en de organisatie waar u voor werkt.

1. Wat houdt uw functie precies in?
2. Wat doet uw organisatie voor werk?
3. Met wat voor soort mensen werken jullie? In welke mate ervaren zij kwetsbaarheid?

Huidige sport- en beweeggedrag
Mijn onderzoek richt zich op sportprogramma's voor kwetsbare mensen. Ik ben daarom erg geïnteresseerd in het huidige sport- en beweeggedrag van uw cliënten.

4. Vindt u het belangrijk dat uw cliënten lichamelijk actief zijn? Zo ja, welke toegevoegde waarde heeft sport en bewegen voor uw cliënten volgens u? (bijv. alleen het fysieke aspect of ook positieve invloeden op mentale gezondheid, beperking van de cliënt, sociale contacten etc.)
5. Zijn uw cliënten lichamelijk actief? Zo ja, op welke manier? Hoe vaak per week?
6. Worden er op dit moment vanuit uw organisatie activiteiten georganiseerd qua beweging en sport voor de cliënten? Zo ja, welke motieven hebben jullie als organisatie om beweegactiviteiten te organiseren? (bijv. als dagbesteding of echt als doel om gezondheid te bevorderen)
7. Zijn er naar uw mening voldoende mogelijkheden voor uw cliënten om te sporten/bewegen?
8. Hoe komt u aan informatie over de mogelijkheden voor sporten en bewegen voor uw cliënten? Is deze informatie volgens u voldoende? (bijv. aanwezigheid Sportservice Wageningen en buurtsportcoach)

Barrières om te gaan sporten of bewegen

9. Wat zijn redenen voor uw cliënten om op dit moment wel of niet aan sport of bewegen te doen?
10. Ervaren uw cliënten belemmeringen om te kunnen sporten en bewegen? Zo ja, welke? (voorbeelden: kosten, vervoer, toegankelijkheid, begeleiding, lichamelijke beperking et cetera) Hoe kunnen deze belemmeringen worden verminderd?
11. Heeft de kwetsbaarheid van uw cliënten invloed op hun sportgedrag? Zo ja, kunt u uitleggen op welke manier?
12. Welke factoren kunnen eraan bijdragen dat uw cliënten gaan sporten? Wat zijn stimulerende of motiverende factoren? Wat is daarvoor nodig? (bijv. in de fysieke omgeving of qua sociale contacten)
13. Wat is volgens u de houding van de sociale omgeving van de cliënten tegenover hun sport- en beweeggedrag? Worden zij bijvoorbeeld gestimuleerd om te sporten of juist geremd? Zo ja, op welke manier?

De Sportwerkplaats

Zoals u misschien weet wordt er binnenkort in Wageningen gestart met het project De Sportwerkplaats, waarbij het de bedoeling is dat kwetsbare mensen sporttrainingen kunnen volgen. Om het programma zo goed mogelijk vorm te kunnen geven zou ik u graag een paar vragen willen stellen over de behoeften en interesses van uw cliënten op dit gebied.

14. Hoe ziet de ideale sport en sportomgeving er volgens u voor uw cliënten uit? (bijv. met begeleiding, qua toegankelijkheid, integratie met andere mensen etc.)
15. Welke beweegactiviteiten vinden uw cliënten leuk om te doen? Waar liggen hun interesses?
16. In welk verband zouden uw cliënten graag willen sporten? (team/solo, recreatie/competitie) Met hoeveel mensen en wat is de ideale groepssamenstelling? (vaste groep of team, wisselende groep)
17. Op welk niveau moeten de activiteiten zich bevinden?
18. Wat is ervoor nodig om uw cliënten daadwerkelijk aan een sportprogramma zoals de Sportwerkplaats deel te laten nemen?
19. Is er behoefte aan bepaalde aanpassingen om te kunnen sporten of bewegen? (bijvoorbeeld de toegankelijkheid, accommodatie, speciaal vervoer, hulp)
20. Hoe kunnen de juiste condities worden gecreëerd voor uw cliënten, zodat zij zich veilig en op hun gemak voelen? Welke elementen zijn daarvoor belangrijk?
21. Welke rol moet een sportcoach vervullen om het sportprogramma zo goed mogelijk te laten verlopen?
22. Welke wensen ten aanzien van sport en bewegen heeft u nog meer voor uw cliënten?

Afsluiting

We zijn aan het einde gekomen van het interview.

23. Heb ik zaken gemist die u belangrijk vindt voor het onderwerp? Heeft u nog toevoegingen?

Bedankt voor uw medewerking aan het onderzoek. Het interview zal worden uitgeschreven en geanalyseerd. Als u wilt kun u hier een uitwerking van ontvangen om te controleren of uw informatie op de juiste manier is geïnterpreteerd. Mocht u in het onderzoek geïnteresseerd zijn dan kan ik u ook het uiteindelijke verslag opsturen. Als u verder nog vragen heeft kunt u mij mailen.

Appendix B Interview guide interviews vulnerable people

<u>Introductie</u>
Ik ben heel erg blij dat je met mij in gesprek wilt gaan over de Voetbalwerkplaats. Ik doe een opdracht voor school en ben heel benieuwd wat jij van de Voetbalwerkplaats vindt. Jouw verhaal en ervaringen over de Voetbalwerkplaats zijn heel belangrijk. Jouw antwoorden kunnen bijdragen aan het verbeteren van het project. Jij mag mij zo vertellen wat je van de Voetbalwerkplaats vindt en om dat wat leuker te maken mag je er ook tekeningen bij maken als je niet weet hoe je iets moet zeggen. Ik zal vooral naar jou luisteren. Dit gesprek is anoniem, dat wil zeggen dat jouw persoonlijke gegevens niet gebruikt of genoemd zullen worden. Daarnaast zullen de dingen die je mij vertelt en de informatie die jij mij geeft alleen voor deze opdracht gebruikt worden. Mocht je een vraag niet willen beantwoorden of iets niet wilt doen, dan is dit geen probleem. Als je tijdens het gesprek besluit dat je niet meer verder wilt gaan, dan mag je dat altijd aangeven. We zullen dan stoppen met het gesprek. Begrijp je dit? Kun je in eigen woorden herhalen wat ik zojuist heb verteld?

Verder heb ik nog de vraag of ik dit gesprek zou mogen opnemen. Zo kan ik het gesprek nog een keer terugluisteren zodat niks belangrijks van wat je hebt verteld verloren gaat. De opnames zullen alleen worden gebruikt voor mijn opdracht en zullen daarna verwijderd worden. Geef je hiervoor toestemming?

<u>Tekenen en interview</u>
uitdelen van groot vel papier en pennen, stiften, potloden
Ik heb een paar vragen voor je. Als je niet zo goed weet hoe je ze moet beantwoorden of wat je moet zeggen, mag je ze ook tekenen of stickers plakken of woorden opschrijven. Ik kan er zelf ook woorden bij schrijven. Samen tekenen en woorden erbij zetten.

1. Wie ben jij? Hoe oud ben jij?
2. Kun je iets over jezelf vertellen?
3. Wat doe je in het dagelijkse leven?

----

4. Waarom ben je mee gaan doen aan / begonnen bij de Voetbalwerkplaats?
5. Kom je hier al lang? Doe je vaker aan sport?
6. Wat vind je van de Voetbalwerkplaats?
7. Waarom ga je er graag naartoe?
8. Wat doen jullie daar allemaal?

⇨ Zou je dat misschien kunnen tekenen? Alles wat je tekent is goed. Ik heb hier genoeg papier liggen voor als je liever opnieuw begint.
----

* participant laten tekenen*

1. Kun je uitleggen wat je hebt getekend?

Overige vragen over de tekening die gebruikt zouden kunnen worden:
2. Waarom heb je dit getekend?
3. Waar sta jij zelf in de tekening?
4. Waarom heb je deze kleur gebruikt?
5. Wat bedoel je hiermee? Kun je dat uitleggen?

Alhoewel de vragen voornamelijk gericht zullen zijn op wat de participanten hebben getekend, is er een vragenlijst opgesteld om vragen achter de hand te hebben mocht het gesprek zich niet vanzelf ontwikkelen.

1. Kun je beschrijven hoe een training eruit ziet? Wat doen jullie allemaal tijdens een training? *tekenen*
2. Vind je dat leuk? Waarom wel of niet?
3. Wat vind je minder leuk? Waarom?

4. Kun je beschrijven wat jullie nog meer allemaal voor klusjes doen?
5. Vind je dat leuk? Waarom wel of niet?
6. Wat vind je minder leuk?

7. Vertel eens over jou coach?
8. Vertel eens hoe hij training geeft?
9. Helpt hij jullie ook?
10. Luistert hij naar jullie?
11. Geeft hij complimenten?

12. Vertel eens over jouw teamgenoten?
13. Is het gezellig met hun?

14. Hoe is de sfeer bij de Voetbalwerkplaats?
15. Hoe voel je je als je hier aan het sporten bent?
16. Voel je je hier thuis?
17. Hoe voel jij je als bij de Voetbalwerkplaats bent geweest?

18. Wat vind je leuk aan de Voetbalwerkplaats? Waarom?
19. Wat vind je minder leuk? Waarom?
20. Hoe denk jij dat de Voetbalwerkplaats nog leuker zou kunnen worden? Wat zou je willen veranderen?

Afsluiting
Ik heb alles gevraagd wat ik wilde vragen. Vond je het een leuk gesprek? Wil jij zelf nog iets toevoegen?

Bedankt voor je tijd en alle informatie die je mij hebt verteld. Zou ik de tekening die je hebt gemaakt mee mogen nemen of wil je deze graag zelf houden?