MSC THESIS

THE DIFFERENCES IN OPPORTUNITIES AND BARRIERS BETWEEN INDIVIDUAL SPORTS PROGRAMS AND TEAM SPORTS PROGRAMS REGARDING THE POSITIVE DEVELOPMENT OF SOCIALLY VULNERABLE ADULTS

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MSc Thesis

The differences in opportunities and barriers between individual sports programs and team sports programs regarding the positive development of socially vulnerable adults

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Abstract

Introduction: participation in sports could be an effective vehicle for social inclusion. Sport can improve physical and mental health, provide opportunities for personal development, and contribute to community cohesion. However, participation in sports is not self-evident for socially vulnerable adults. Individual sports programs and team sports programs have been established that are accessible for this target group. However, little research has been done on the differences between individual and team sports programs regarding the development of socially vulnerable adults. The aim of this research is to gain new insights into the opportunities and barriers of individual sports programs and team sports programs regarding the development of socially vulnerable adults. **Methods:** this study included a literature review to identify what is already known about the differences between individual sports programs and team sports programs with regard to the development of socially vulnerable individuals and to people in general. In addition, an expert interview (n = 1) was conducted with the aim of finding out how individual sports programs and team sports programs are structured. Lastly, semi-structured interviews (n = 7) were conducted with the aim of gaining more insights into the experiences of coaches regarding the development of socially vulnerable adults in individual sports programs and team sports programs. **Results:** the data showed that individual sports programs and team sports programs provide sufficient opportunities to promote physical, mental and social development among socially vulnerable adults. No barriers were found when participating in team sports programs and only two barriers, continuation of exercising and developing collaboration skills, were found when participating in individual sports programs. It is of great value if the sports programs are offered in a group, due to the ability to expand the social network. Furthermore, the priority should be on keeping socially vulnerable adults enthusiastic about sporting so that they stay motivated to continue exercising and not have to worry about their physical improvements. In addition, it is important to carefully consider the personal goals and needs of socially vulnerable adults and determine which sports they are most comfortable with so that sports programs can be customized to each individual. **Discussion:** this thesis is the first study that has focused on the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults, which makes this thesis unique. Yet, future research should focus on the effect of group size on the development of socially vulnerable adults, as exercising in a group is considered of great importance as well as personal attention. Furthermore, future research should investigate how socially vulnerable adults experience their personal development during participation in sports programs, which could be an added value in optimizing sports programs.

Key words: socially vulnerable adults, individual sports programs, team sports programs, opportunities, barriers

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1. Introduction

In the Netherlands, social exclusion is a persistent problem. In 2018, four percent of the Dutch population aged 16 years and older were socially excluded (Centraal Bureau voor de Statistiek [CBS], 2020). Social exclusion is a broad concept that can be described as the result of a situation or condition in which people experience a combination of interrelated problems that can exclude them from various processes in society (Bailey, 2007). Examples of these interrelated problems are unemployment, low income, poor health, poor physical and social skills, and poor housing (Bailey, 2007), which is prevalent among risk groups such as ethnic minorities, prisoners, drug users, the homeless and immigrants (Fernández-Gavira et al., 2017). Due to the broad definition, social exclusion can take many forms in society, including a lack of access to power, knowledge, services, facilities, choice, and opportunities (Bailey, 2007) and can involve multiple domains, such as employment, social participation, education, and health (Schaillée et al., 2019). According to Van den Brink et al. (2015), people are considered socially vulnerable and could be socially excluded when "the burden of experienced problems and setbacks is too great for their available carrying capacity" (p.7). These people have difficulty overseeing the perceived imbalance of various problems and setbacks that keep them excluded from society (Van den Brink et al., 2015).

Participation in sport could address multiple aspects of social exclusion, including improving health, providing opportunities for personal development, and contributing to community cohesion (Collins & Kay, 2014). Research has shown that sports programs provide both improved physical and mental health and are of great importance on a social and societal level (Sherry & Strybosch, 2012; Van der Veken et al., 2020b; De Greef et al., 2012; Andersen et al., 2018). Moreover, participating in sports leads to increased self-esteem and self-confidence (Sherry & Strybosch, 2012; Van der Veken et al., 2020b). In addition, sport provides development in effective communication, relationship management and certain skills needed to stay connected to society (Sherry & Strybosch, 2012; De Greef et al., 2012). The effect of sports on the development of people can make people less socially excluded and better participate and function in society (Theeboom, 2011). Participation in sport is, however, not self-evident for socially vulnerable adults. Socially vulnerable adults often find themselves in a downward spiral (Van der Veken et al., 2020a) in which inadequate access to basic resources, such as food and housing, can lead to poor health (Van der Veken et al., 2020a). Poor health, in turn, can make access to sport and preventive health services more difficult (Van der Veken et al., 2020a). In addition, regular sports clubs are less accessible to socially vulnerable adults as they often experience financial, geographical, and socio-cultural barriers which can limit participation in sport (Van der Veken et al., 2020a). In the Netherlands, the Life Goals foundation has been founded to develop and establish accessible and goal-oriented sports programs (Life Goals, n.d.-a). According to the Life Goals foundation, sport is a vehicle to stimulate personal and societal development. The foundation's goal is to inspire socially vulnerable adults towards a positive future with a better grip on their lives (Life Goals, n.d.-a; Life Goals, n.d.-b). It perceives sport and exercise as of great value for personal development, as a source of new energy and as a sense of belonging (Life Goals, n.d.-a).

Within sports programs for socially vulnerable adults different types of programs can be distinguished. The most important differentiation is between individual sports programs and team sports programs. Individual sports programs are sports programs in which a sport is played where no other person is required to compete together (Pluhar, 2019). The opponent is not included. Examples of individual sports are boxing, dancing, and running (Pluhar et al., 2019). On the other hand, team sports programs are sports programs where a sport is played together with at least two other people, such as soccer and basketball (Sociaal en Cultureel Planbureau, 2003). However, it is important to note that individual sports are not always practiced alone. Individual sports can easily be practiced in a group, for example, running in a group or dancing with a group and the instructor (Sociaal en Cultureel Planbueau, 2003).

Current research mostly focuses on the effects of sports program activities regarding the development among target groups, such as adolescents and socially vulnerable youth (Son & Berdychevsky, 2022; Super et al., 2018). However, little research has been done on the differences in outcomes between individual sports programs and team sports programs with regard to socially vulnerable adults. What are differences in opportunities and barriers between individual sports programs and team sports programs for socially vulnerable adults? What are the implications of these differences for the design and implementation of the different sports programs? It can be assumed that the type of sports programs may be of great importance on a difference in development among socially vulnerable adults since the context of individual sports programs and team sports programs could differ. By gaining new insights with this research into the opportunities and barriers of both sports programs, future sports programs can be optimized and the opportunity to stay connected to society can be increased for socially vulnerable adults.

2. Integrative purpose and research questions

The aim of this research is to gain insights into the differences between individual sports programs and team sports programs established for socially vulnerable adults. Besides, the study illuminates where opportunities and barriers lie in both individual sports programs and team sports programs regarding the development of socially vulnerable adults. It investigates which aspects of the different sports programs are perceived as positive and which aspects are perceived as negative in the literature and according to one expert and seven coaches of the Life Goals foundation. With the results, future sports programs can be optimized with the aim of a more optimal inclusion of socially vulnerable adults in society.

The research questions for this study are formulated as follows:

1) What are the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults?
2) What are the implications of the found opportunities and barriers for the design and implementation of sports programs for socially vulnerable adults?

3. Theoretical framework

This research aims to identify the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults. To do so, it is important to understand how a sports setting can influence the development of socially vulnerable adults. Using the settings-based approach to health promotion and the model on social vulnerability, more insight is obtained into the importance of the entire environment of a sports program regarding the development of socially vulnerable adults. In addition, interaction processes in sports programs are discussed.

3.1. The settings-based approach to health promotion

As mentioned in the introduction, participation in sport can be considered as a means of social inclusion for socially vulnerable adults as it contributes to improving physical and mental health, building a broader social network, and improving effective communication and relationship management skills (Collins & Kay, 2014; Sherry & Strybosch, 2012; Andersen et al., 2018). Taking the positive outcomes into account, sports programs can be considered as a setting for health promotion. Health promotion is, according to the World Health Organization [WHO], defined as "the process of enabling people to increase control over, and to improve their health" (Nutbeam & Kickbusch, 1998, p.351). It refers to the promotion of health toward a state of complete physical, mental, and social well-being. However, in order to achieve a state of complete well-being, it is important that as an individual or as a group one is able to identify personal needs and determine how to achieve them, as well as learn to cope with the environment or have the ability to change the environment (WHO, 1986). The settings-based approach to health promotion emphasizes the importance of the whole system of the setting, rather than just individual responsibility, in promoting health (Geidne et al., 2019). According to the WHO (1998), a setting is defined as "the place or social context in which people engage in daily activities in which environmental, organizational and personal factors interact to affect health and well-being" (Nutbeam & Kickbusch, 1998, p.362). Each setting consists of its own complex interactions between personalities, circumstances and coincidences and daily activities, making each setting unique (Poland et al., 2009). The settings-based approach considers the social, physical, and organizational contexts in which people are perceived as objects of an intervention, rather than people defined by that particular setting (Poland et al., 2009). The settings-based approach offers an opportunity to place practice in its social context, improve interventions for specific contextual eventualities, integrate critical factors in the organizational context affecting behaviour, and improve settings themselves to be more health stimulating (Poland et al., 2009).

The present study compared two different sports settings: a sports setting where an individual sports program was offered and a sports setting where a team sports program was offered. The settings-based approach was used to investigate how different sports programs can function as a health promoting setting and how sports programs can give socially vulnerable adults the opportunity to become less vulnerable. Hereby the opportunities and barriers of both sports programs regarding the development of socially vulnerable adults were examined. The settings-based approach can contribute to the reduction of health inequalities and can ensure a fair and inclusive society (Dooris, 2009).

3.2. Model on social vulnerability

The model on social vulnerability elaborates on the importance of the whole system around settings and places settings within the social structures of society (Vettenburg, 1998). The social structures and institutions of society can have a major impact on the social problem of social exclusion. The structures and institutions can function as sources for maintaining exclusionary processes (Haudenhuyse et al., 2012). The model on social vulnerability refers to the disrupted relationships that socially vulnerable people have with the institutions of society (Vettenburg, 1998; Haudenhuyse et al., 2012). Hence, the negative experiences of socially vulnerable people with various institutions of society, including family,

school, labour market, health care, and justice are central to this model (Haudenhuyse et al., 2012). The negative experiences that socially vulnerable people have with institutions can have a negative impact on their lives and result in social disconnectedness and unfavourable prospects for employment and future ambitions (Haudenhuyse et al., 2012; Haudenhuyse et al., 2013). Socially vulnerable people can more easily become excluded from society as a result of stigmatization, sanctioning and self-perception of incompetence due to low ambitions and a lack of success stories throughout the life course (Haudenhuyse et al., 2013).

Originally, the model on social vulnerability was based on the development of socially vulnerable youth in a school setting (Vettenburg, 1998). According to Vettenburg (1998), population groups or individuals are called socially vulnerable if "they derive little benefit from their contacts with social institutions but are mainly and recurrently confronted with the negative effects of these institutions" (p. 194). Vulnerability is an interactional concept in which a group or an individual is always vulnerable to something. Vettenburg (1998) applied the model to youth who are vulnerable to social institutions. The reason why youth are vulnerable to social institutions is that this population group belongs to the lower social class in society (Vettenburg, 1998). The interests and needs of youth cannot be met and it can be difficult for youth to defend themselves against negative stereotypes that surround them (Vettenburg, 1998). Hence, it is important to strengthen the social ties between youth and social institutions. Vettenburg (1998) chose to describe the process of strengthening social ties between youth and institutions through a school setting. A school is an institution that is of great importance in the vulnerability process, due to the developments that youth go through at school. They develop social ties that will connect them with the entire society (Vettenburg, 1998). However, Haudenhuyse et al. (2013) applied the model on social vulnerability to socially vulnerable youth in a sports setting. According to Haudenhuyse et al. (2013), sports programs can be seen as a tool to reduce the broken relationships and to strengthen the social ties between youth and social institutions. Sports has the potential to positively influence factors, such as social perspectives, moral development, and social bonding, which are associated with social vulnerability. Participation in sport can be seen as a positive influence on, for example, active citizenship, diversion from antisocial and criminal activities, moral development, and social development (Haudenhuyse et al., 2013).

The present study also applies the model on social vulnerability of Vettenburg (1998) to a sports setting. However, this study focusses on socially vulnerable adults. The model on social vulnerability is also applicable to socially vulnerable adults, as participation in a sports program cannot only have benefits for socially vulnerable youth but can lead to personal change for each individual which, in turn, can result in broader, positive societal effects, such as supporting social inclusion (Sherry, 2010; Sherry & Strybosch, 2012). Socially vulnerable adults also have the need to develop social ties that will connect them to society. Hence, it is important to apply the model on social vulnerability to socially vulnerable adults. The model in Figure 1 provides a schematic representation of the social interaction processes within the context of an organization that develops sports programs for socially vulnerable adults. The model is based on Vettenburg's (1998) model on social vulnerability and it is based on the applied version of Haudenhuyse et al. (2013) to a sports setting. Central to the model are interaction processes between the coach, activities and regulations situated within the context of a sports environment (Haudenhuyse et al., 2013). The sports environment, in turn, is embedded in a broader network of social institutions. The model places adults within a broader social context, namely the household, neighbourhood, and social stratification (Haudenhuyse et al., 2013).

The model on social vulnerability, applied to the development of socially vulnerable adults in a sports setting, can provide a means to investigate the opportunities and barriers of different sports programs regarding the development of socially vulnerable adults. The model makes it possible to look more closely at the activities and interaction processes between socially vulnerable adults, the sports context, and institutions of society. The model emphasis the effect of choice of sports activities and the way they are offered, in an individual sports program or a team sports program, on the

commitment and status of socially vulnerable adults. In addition, the model highlights that the background characteristics of a coach and the way a coach interacts with socially vulnerable adults can play a role in the affection and attachment of socially vulnerable adults (towards the sports program). Moreover, the model shows that organizational rules, for example, arriving on time to a training session or participating sober in a sports program, can affect the development of socially vulnerable adults.
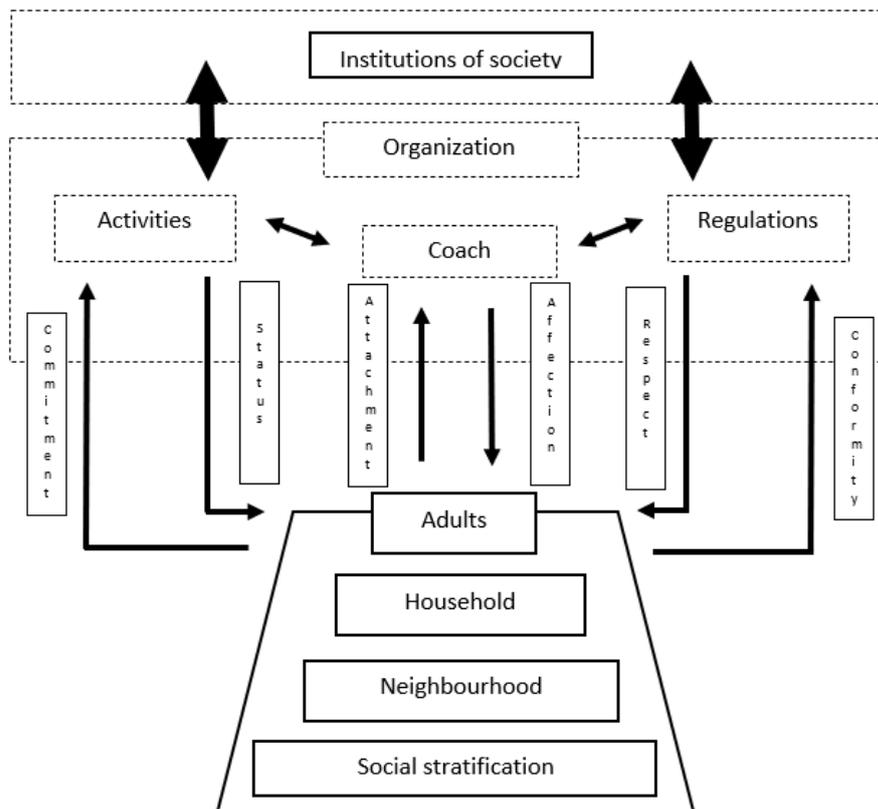
Figure 1. *Model on social vulnerability applied to the development of socially vulnerable adults in a sports setting (Vettenburg, 1998; Haudenhuyse et al., 2013)*

3.3. Interaction processes in sports programs

An important aspect of both approaches is the social context in which sports programs are given. The social context is the environment in which interpersonal relationships can be built (Martin et al., 2013), and is shaped by the interaction processes between socially vulnerable adults and between participant and coach. However, the way interaction processes take place can differ in individual sports programs and team sports programs. Team sports programs are always done together with others, while an individual sports program can either be done alone with a coach or in a group (Pluhar et al., 2019; Sociaal en Cultureel Planbureau, 2003).

The background characteristics of a coach and the way a coach interacts with socially vulnerable adults can play a major part in the social context. According to Drummond et al. (2021), the development of skills and enjoyment of sport are partly attributed to the quality of the coach's guidance. Coaches can keep participants motivated and engaged in sport (Drummond et al., 2021; Sagat et al., 2021). Besides, a supportive and caring environment contributes positively to the experiences of socially vulnerable adults in relation to a sports program and can ensure the development of empathy, control of emotions and encourage them to engage in pro-social behaviours (Haudenhuyse et al., 2013). Sharing decisions, giving responsibility, and offering tailored support can also impact the developmental

process. It is important for coaches to be able to strike a balance between offering support and the degree of authority (Haudenhuyse et al., 2013). So, focussing on individual growth rather than focussing on rules (Haudenhuyse et al., 2013). Besides, coaches should encourage socially vulnerable adults to strive for empowerment, which therefore is not just about following the rules in a sports setting, but looking beyond those rules (Haudenhuyse et al., 2013). Therefore, coaches and regulations can give socially vulnerable adults the opportunity to develop physically, mentally, and socially within the capabilities of the sports programs.

Research also indicates that coaches play an important role in the process of transferring and enhancing life skills (Marsollier et al., 2020; Pierce et al., 2016). Life skills can be defined as "internal personal assets, characteristics and skills such as goal setting, emotional control, self-esteem, and hard work ethic that can be facilitated or developed in sport and are transferred for use in non-sport settings" (Gould & Carson, 2008, p.60). Coaches can develop trusting relationships with their participants and intentionally pursue life skills (Pierce et al., 2016). Therefore, coaches can act as a confidant giving socially vulnerable adults the opportunity to develop physically, mentally, and socially. However, the social context of individual sports programs and team sports programs may differ. Socially vulnerable adults may experience individual sports activities and team sports activities differently, which may result in developmental differences at the physical, mental, and social levels.

4. Research methods

4.1. Research design

Multiple research methods were combined to provide answers to the two formulated research questions. First, a literature review was conducted. In addition, an expert interview with the coordinator of the Life Goals Academy was conducted. Lastly, semi-structured interviews were conducted with seven coaches of the Life Goals foundation. The different methods are described in more detail below.

4.2. Literature review

The aim of the literature review was to find out what is already known about the differences between individual sports programs and team sports programs with regard to positive and negative effects on the development of socially vulnerable groups. The literature review also shed light on the opportunities and barriers of the different types of sports and sports programs on the development of people in general. The literature review was also used to develop a topic list and served as a guide for questions for the semi-structured interviews with coaches of the Life Goals foundation.

For the collection of relevant scientific articles, the databases Scopus and Web of Science were used. Two search terms were used in both databases. The results of all searches were combined in the literature review. Table 1 provides an overview of the two search terms used in these databases:

Table 1*. Search terms used in Scopus and Web of Science*

1.	(("team") AND ("individual") AND ("sport*" OR "physical exercise*" OR "physical activity") AND ("social" OR "skill*" OR "develop*"))
2.	(("team") AND ("individual") AND ("sport*" OR "physical exercise*" OR "physical activity") AND ("vulnerable" OR "disadvantaged" OR "marginalised" OR "mental health"))

The articles found (n = 5358) with these search terms were screened on title and abstract. It is important to note that many duplicate articles were found between the two databases. This resulted in a higher number of found articles than it actually was. This was followed by a full text review if the title and abstract contained relevant information. In addition, relevant articles were found by the snowball approach. The snowball approach involved using the literature lists of relevant articles in order to find other relevant articles for the literature review. No new articles were screened when no more relevant articles came up with the two search terms.

A thematic content analysis was conducted to identify, analyse, and report on themes within the research topic about the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults. These opportunities and barriers were divided into six categories: individual sports activities, team sports activities, individual sports coach, team sports coach, individual sports rules, and team sports rules. These six categories were based on Vettenburg's (1998) model on social vulnerability and the applied version of Haudenhuyse et al. (2013) to a sports environment. The two categories related to the activities of individual sports programs and team sports programs were divided into three subcategories: physical health, mental health, and social health. The codes that were created were divided into the six categories and the three subcategories. These codes were created using the topics that had been covered in the relevant articles. The constructed categories and codes formed the basis for the codebook and analysis of the semi-structured interviews with the coaches of the Life Goals foundation.

4.3. Expert interview

An expert interview with the coordinator of the Life Goals Academy was conducted with the aim of finding out how individual sports programs and team sports programs of the Life Goals foundation are

structured. The Life Goals Academy is the knowledge centre of the Life Goals foundation that offers a wide range of courses with the aim of promoting the level of expertise in the field of sport as a tool (Life Goals, n.d.-c). The expert interview allowed for more insight into the type of sports programs offered by the Life Goals foundation, which type of sports activities are offered and the informed choices behind them, and what they would like to achieve with the different sports programs. In addition, the potential opportunities and barriers of the different sports programs of the Life Goals foundation were explored. The expert interview served as a starting point to develop a topic list and several interview questions for the semi-structured interviews with coaches of the Life Goals foundation. In addition, the expert interview was used to expand the codebook to include codes on topics that were not yet identified in the literature review.

A semi-structured interview was conducted with the coordinator of the Life Goals Academy. The coordinator of the Life Goals Academy was chosen because this expert is involved in developing sports programs for the Life Goals foundation. Therefore, the expert is expected to have a lot of knowledge in terms of the differences in individual sports programs and team sports programs, the reasons behind the sports activities and programs offered, and what the organization would like to achieve with the different sports programs. The expert interview was conducted online via Microsoft Teams and was held in Dutch. The interview questions that were prepared in advance can be found in Appendix I. The interview lasted approximately 45 minutes and was audio recorded, in consultation with the expert.

After the expert interview was conducted, the interview was transcribed verbatim in Microsoft Word. After transcribing, the expert interview was analysed with a focus on the three points mentioned earlier: differences in individual sports programs and team sports programs, reasons behind the sports activities offered, and the goals of the foundation regarding the different sports programs. The topics that had not yet identified in the literature review were converted to a code and added to the codebook. In this way, the codebook for the analysis of the semi-structured interviews with the coaches of the Life Goals foundation was expanded.

4.4. Semi-structured interviews

Semi-structured interviews with seven coaches of the Life Goals foundation were conducted with the aim of gaining more insight into the experiences of the coaches with regard to individual sports programs and team sports programs. What do the coaches consider as opportunities and barriers to the different sports programs? For which kind of individuals would they recommend participation in an individual sport and for whom a team sport, or do they not perceive such differences? Since the coaches experience the development of socially vulnerable adults up close, interviewing them creates an overview of how they perceive the various opportunities and barriers to the individual and team sport programs.

The interviewees were selected by the coordinator of the Life Goals Academy. Contact with the coordinator was accomplished through the supervisors of this study. Thereafter, one-on-one contact with the Life Goals Academy coordinator took place via email. The Life Goals Academy coordinator contacted the coaches to ask if they were willing to participate in this study. If the coaches agreed, contact information was provided to the researcher. The coaches were selected based on three criteria. The first criterion was that coaches who were selected, spoke English or Dutch. The second criterion was that coaches were familiar with the different sports programs offered by the Life Goals foundation. The last criterion was that the coaches who were selected trained socially vulnerable adults in individual sports programs, team sports programs or both types of sports programs. Table 2 provides an overview of the seven coaches who were interviewed and the type of sports programs given by them. The semi-structured interviews were conducted online via Microsoft Teams and were held in Dutch. The interview questions that were prepared in advance can be found in Appendix II. The interviews lasted approximately 45 minutes and were audio recorded, in consultation with the coach.

Table 2. *Type of sports programs (individual in a group or team sport) and type of sports given by the interviewees*

Interviewee	Individual in a group or team sport	Type of sports
1	Both	Sports and game activities program, for example bootcamp, badminton, tennis, soccer. Interviewee does not structurally offer one sport in this program.
2	Both	Bootcamp program and sports and game activities program, for example hockey, archery, diskgolf, soccer, table tennis, mountain biking, rollerblading, kayaking, canoeing. Interviewee does not structurally offer one sport in this last program.
3	Both	Soccer, hiking, fitness, mountain biking, padel. Interviewee indicated that 95% of the participants' demand can be met. Interviewee does not structurally offer one sport.
4	Both	Soccer program, fitness program and sports and game activities program. Interviewee does not structurally offer one sport in this last program.
5	Both	Soccer program and sports and game activities program, for example korfball, noughts and crosses. Interviewee does not structurally offer one sport in this last program.
6	Individual	Kickboxing program, fitness program, yoga program and bootcamp program.
7	Both	Bootcamp program, different ball sports, for example volleyball, soccer, and camping sports, for example badminton, frisbee. In addition, cycling lessons and swimming lessons are also offered. Interviewee does not structurally offer one sport.

Once the data were collected, the interviews were transcribed verbatim. After transcribing, relevant information was extracted from the transcript by coding. A codebook was created in advance with codes that were expected to be relevant to this study, or in other words, coding was done in a deductive manner. The literature review and the expert interview were used as a basis for the codebook. Besides, coding was also done in an inductive manner which means that during the analysis of the transcripts, new codes were added to the codebook if that particular code was still missing. The new codes were indicated by an * in the codebook. Coding was done in the program Atlas.ti.

5. Results section

5.1. Literature review

The literature review looked at the positive and negative effects of sports programs developed for socially vulnerable groups. Moreover, it examined the opportunities and barriers of the different types of sports and sports programs on the development of people in general. This literature review included eight empirical studies. An overview of the characteristics of each study is provided in Table 3. Thereafter, several advantages and disadvantages of both individual sports programs and team sports programs are discussed that were identified in the literature. This is followed by a discussion of opportunities and barriers that emerged from the findings of the literature review.

Table 3. *Characteristics of the included articles in the literature review*

Authors, publication year	Study design	Study population	Study aim	Type of sports	Outcomes
Kovalenko et al., 2020	Case-control study	198 participants between the ages of 18 and 22.	To investigate the influence of physical activity on students' psychological well-being.	The specific types of sports were not mentioned.	Students who periodically engaged in physical activity had the highest psychological well-being. In addition, students who participated in a team sport scored higher than students who preferred individual forms of physical activity.
Laborde et al., 2016	Cross-sectional study	1200 participants between the ages of 18 and 25. Of these 1200 participants, 600 were non-athletes and 600 were athletes. Both groups included 300 men and 300 women.	To investigate the differences on positive PTLID (i.e., perseverance, positivity, resilience, self-esteem, and self-efficacy) between athletes and non-athletes and between athletes from individual and team sports.	Individual sports: archery, athletics, badminton, boxing, canary wrestling, cycling, fencing, judo, jump swimming, golf, gymnastics, karate, padel, rhythmic gymnastics, sailing, surf, swimming, table tennis, taekwondo, tennis, triathlon, weight-lifting and windsurfing. Team sports: basketball, beach-volley, indoor soccer, field hockey, soccer, handball, roller hockey, volleyball, synchronized swimming, rugby, and water polo.	Participants scored higher on positive PTLID than non-athletes. In addition, among athletes, participants who participated in individual sports scored higher than those who participated in team sports.

Mohammadi, 2011	Cohort study	1300 participants who were studying in the city of Khoramdareh during the period of 2006-2007.	To investigate the effect of participating in a team sports or individual sports on depression among high school students.	Individual sports: table tennis and badminton. Team sports: soccer and volleyball.	Both participation in an individual sport and a team sport led to a reduction in depressive symptoms among participants. However, the effect of team sports on reducing depressive symptoms was greater than the effect of individual sports.
Nia & Besharat, 2010	Case-control study	134 participants from different sports studies. Of these 134 participants, 88 were men and 46 were women.	To investigate athletes' personality characteristics in individual sports and team sports.	Individual sports: track and field, swimming, wrestling, fitness, and boxing. Team sports: volleyball, basketball, football, handball, and water polo.	Individual sport athletes scored higher on conscientiousness and autonomy, while team sport athletes scored higher on agreeableness and sociotropy
Nielsen et al., 2014	Case-control study	46 participants between the ages of 39 and 71. All of them were male.	To investigate how and why participants in structured exercise intervention programs continue or stop exercising after the program is finished.	Individual sports: spinning and crossfit. Team sports: football.	Team sports activities seemed to be intrinsically motivating to the participants through positive social interaction and play. Therefore, participants who participated in a team sport were more likely to continue exercising than those who participated in activities that rely on better health.
Ottesen et al., 2010	Cohort study	50 participants between the ages 19 and 47. All of them were female.	To investigate the influence of participation in soccer or running training on the formation of social capital in physically inactive women.	Individual sports: running. Team sports: football.	Both participation in soccer and running training led to positive development of social capital. However, team sports have advantages in the development of social capital than individual sports.
Sabiston et al., 2016	Longitudinal cohort study	860 participants with an average age of 20.4 years old. Both men and women participated.	To investigate the association between number of years of team sport and individual sport participation during	Individual sports: swimming, track and field, gymnastics, dance, wrestling, judo, and cross-country ski. Team sports: football, basketball, volleyball, soccer, hockey, softball, baseball, and rugby.	Adolescents who participated in more years (average of 2.4 years) of team sports during secondary school reported lower depressive symptoms in early adulthood than adolescents who participated in more years (average of 1.7

			adolescence and depressive symptoms during early adulthood.		years) of individual sports.
Sagat et al., 2021	Cohort study	80 participants between the ages 18 and 26. All of them were male.	To investigate and compare the levels of self-esteem and self-confidence of athletes practicing individual and team sports.	Individual sports: alpine skiing, cross-country skiing, biathlon skiing, contact sports, tennis, and athletics. Team sports: soccer, basketball, handball, volleyball, and hockey.	Both participation in an individual sport and in a team sport led to increased levels of self-esteem. However, the participants who participated in an individual sport presented higher levels of self-esteem.

5.1.1. Difference in continuation between individual and team sports programs

Continuing a sports program is not easy for everyone. Dropout rates are high, especially if people have to exercise alone after participating in an intervention (Nielsen et al., 2014). The follow-up study by Nielsen et al. (2014) focused on the continuity of exercise after participation in an intervention. The participants in this study were elderly men who were previously involved in an intervention study that investigated the difference in health effects between participating in individual sports programs and team sports programs. Participants were randomly assigned to either an individual sports program, the spinning and crossfit intervention group, or a team sports program, the soccer intervention group. Focus group interviews were conducted to identify why elderly men continued or stopped exercising after the sports program was finished. The result of the focus group interviews showed that the participants of both the spinning and crossfit intervention group and the soccer intervention group felt healthier after participating in the intervention, which was a motivation to continue exercising (Nielsen et al., 2014). Participants referred to an improved physical functioning that is important in daily activities such as grocery shopping and climbing stairs. The participants also mentioned that they could walk more easily and had better control of their breathing (Nielsen et al., 2014). Despite the fact that extrinsic motives such as getting healthier was a very important motivation for both groups to participate in the intervention, the group who participated in the spinning/crossfit sports program did not manage to continue exercising after the intervention, while the participants who participated in soccer did continue exercising. This was related to social interaction and enjoyment of the different sports, which is further explained in section 5.1.3. (Nielsen et al., 2014).

5.1.2. Differences between individual sports programs and team sports programs in terms of mental health

5.1.2.1. Difference in increased self-esteem

Numerous studies have examined the effect of physical activity on the development of self-esteem. One of these studies is the study by Sagat et al. (2021) in which individual sports programs were compared to team sports programs with the aim of examining the extent to which the type of sport influenced the level of self-esteem. Eighty male participants between the ages 18 and 26 participated in this study. The participants had practiced a variety of sports, both individually and as a team, for 10 to 15 years. Throughout the study, participants reported their level of self-esteem at two timepoints. A correlation was found between the level of self-esteem and the type of sport: those who participated in an individual sport reported significantly higher levels of self-esteem than participants who participated in a team sport (Sagat et al., 2021). A possible explanation could be that the participants have been practicing their sport for a long time and that the successes achieved, in addition to the support of a coach, were entirely attributable to the hard work of the individual (Sagat et al., 2021). However, sometimes failures also occur during exercise, which can cause participants to feel less

confident about themselves (Sagat et al., 2021). In addition, the study by Laborde et al. (2016) also revealed a significant difference between the level of self-esteem and the type of sport. In this study, based on a large cross-sectional sample of men and women between the ages of 18 and 25, participants who participated in an individual sports program reported significantly higher perseverance, positivity, resilience, self-efficacy, and self-esteem than participants who participated in a team sports program (Laborde et al., 2016). According to Laborde et al. (2016), this result can be attributed to the fact that a participant participating in an individual sport can pursue personal performance goals without taking on responsibilities to a team. Independence, self-discipline, perseverance, and self-control allow a participant to progress at their own pace (Laborde et al., 2016). However, the causality of the results cannot be guaranteed by the authors, due to the cross-sectional design of this study and the non-random assignment of participants to sports (Laborde et al., 2016).

5.1.2.2. Difference in reduction of depressive symptoms

Studies have also examined the correlation between depressive symptoms and participation in individual sports programs and team sports programs. One study that has examined this correlation is the study by Sabiston et al. (2016). This study was designed to examine the longitudinal association between the number of years of participation in an individual sports program or a team sports program during adolescence and depressive symptoms during early adulthood. This study involved 860 adolescents who had chosen their own sport of choice. The participants reported their state of mind at different timepoints. The study showed that participants who consistently participated in a team sports program during high school had a lower risk of developing depressive symptoms in early adulthood compared to participants who participated in an individual sports program (Sabiston et al., 2016). In addition, the study by Mohammadi (2011) compared the team sports of soccer and volleyball to the individual sports of table tennis and badminton on reducing depressive symptoms in high school students. The study was conducted using a pretest, posttest, and a control group. Participants were randomly assigned to one of the four types of sports and reported their state of mind at the two timepoints. The results showed that there was a significantly greater effect on reducing depressive symptoms in team sports than in individual sports (Mohammadi, 2011). An explanation of a lower risk of developing depressive symptoms when participating in a team sports program could be the social nature of teams (Sabiston et al., 2016). The social nature contributes to higher positive psychological outcomes, such as lower depressive symptoms, compared to participating in an individual sports program (Sabiston et al., 2016). However, according to Pharr et al. (2019), the level of anxiety and depression is related to the character of the sport. According to them, the competitive nature and intensity of a sports, rather than whether it is a team or individual sports, can cause one to experience higher levels of anxiety and depression when the challenge of the sport does not match the skills a participant has (Pharr et al., 2019).

5.1.2.3. Difference in sports program preferences

The study by Kovalenko et al. (2020) examined the difference in psychological well-being between participation in an individual sports program and a team sports program. The study involved 198 participants between the ages of 18 and 22 who were divided into three groups based on their level of physical activity: no physical activity, periodic physical activity, or systematic physical activity. Several questionnaires were completed by the participants showing that participants who preferred team-based physical activity felt more comfortable in their relationships with family and friends than participants who preferred individual sports (Kovalenko et al., 2020). This difference may be due to the personality traits of participants who participate in different types of sports (Kovalenko et al., 2020). The study by Nia and Besharat (2010) examined 134 students to determine what personality traits were present in participants who participated in an individual sports program and who participated in a team sports program. Participants completed multiple questionnaires. The result showed that the participants who participated in an individual sports program scored significantly higher on conscientiousness and autonomy and that the participants who participated in a team sports

program scored significantly higher on agreeableness and sociotropy, placing strong value on relationships over personal independence (Nia & Besharat, 2010). Therefore, it may be that participants who participate in a team sports program feel more comfortable in their relationships with family and friends because they are more engaged in interpersonal relationships.

5.1.3. Differences between individual sports programs and team sports programs in terms of social health

5.1.3.1. Difference in social interaction and enjoyment

Multiple studies have investigated the difference in social aspects between individual sports programs and team sports programs. One of these studies is the follow-up study by Nielsen et al. (2014), previously highlighted in section 5.1.1. The result of this study shows that social interaction can take place more easily during practicing a team sport than practicing an individual sport. According to the participants who participated in the spinning and crossfit intervention group, there was little time for socializing during exercise, as they believe the sport is inherently individual in nature and it is physically demanding (Nielsen et al., 2014). Since the spinning and crossfit classes did take place in a group, social interaction occurred primarily before and after exercise. However, the participants who participated in the soccer intervention group perceived social interaction in the group as a major contributor to the enjoyment they experienced. According to the participants, social interaction took place both during the game, such as the physical interactions and the verbal comments with the related jokes, as well as outside of sports, such as in the changing rooms (Nielsen et al., 2014). In addition, it was indicated that the participants derived enjoyment from playing soccer because they enjoy the game, which was an important reason to continue with the sport (Nielsen et al., 2014). Furthermore, the study by Nielsen et al. (2014) revealed that social contacts gained in team sports programs continued to develop through the activities organized with the group outside the sports program. Participants who participated in the soccer intervention group regularly had drinks after exercise and celebrated birthdays and Christmas together, which happened to a lesser extent in the spinning and crossfit intervention group who met twice a year for a Christmas- and summer lunch. These additional social interactions outside the sports program were considered by both participants who participated in the soccer intervention group and participated in the spinning and crossfit intervention group as contributing to their quality of life in the social domain (Nielsen et al., 2014). It was seen by participants as one of the key benefits of exercising and as motivation to continue the program. Despite the positive effect of social relationships, Nielsen et al. (2014) suggest that the need for relatedness was provided to a lesser extent for participants in the spinning and crossfit intervention group compared to participants in the soccer intervention group. The participants of the soccer intervention group mentioned the word 'friendship' and 'making new friends' throughout the interviews, which did not come up in the interviews with the participants of the spinning and crossfit intervention group (Nielsen et al., 2014).

5.1.3.2. Difference in building social capital

The study by Ottesen et al. (2010) also examined the difference in social aspect between individual sports programs and team sports programs. This study focused on the development of social capital through participation in different types of sport. Participants in this study were physically inactive, healthy women between the ages of 18 and 47 who followed a 16-week program of either recreational soccer or continuous running training. Participants were randomly assigned to one of the two intervention groups. During the study, the participants were observed, focus group interviews were conducted with the participants and the participants reported their social capital through a questionnaire. The result showed that team sports programs had a significant advantage in the development of social capital compared to individual sports programs (Ottesen et al., 2010). The participants who participated in the soccer intervention group created social bonds, internal bonding, and networking to a greater extent than the participants in the running intervention group (Ottesen et al., 2010).

5.1.4. Opportunities and barriers of individual sports programs and team sports programs

Based on the differences between individual sports programs and team sports programs identified in the literature, a tentative statement can be made about the opportunities and barriers of both sports programs. Both participation in an individual sports program and participation in a team sports program can provide improved physical health (Nielsen et al., 2014). It would not matter which sports program a person would participate in if the personal goal is to become fitter, for example. However, if one would like to maintain exercise more easily, even after finishing a sports program, then it would be recommended to participate in a team sports program (Nielsen et al., 2014). In terms of mental health, it would be better to participate in an individual sports program if one has a low level of self-esteem. Both participation in an individual sports program and a team sports program provides a higher level of self-esteem, however, in an individual sports program the level of self-esteem becomes higher (Laborde et al., 2016; Sagat et al., 2021). Moreover, an individual sports program provides perseverance, positivity, resilience, and self-efficacy (Laborde et al., 2016). If the aim is to reduce depressive symptoms, then it would be recommended to participate in a team sports program. Both sports programs reduce depressive symptoms, but the effect is greater with a team sports program (Mohammadi, 2011; Sabiston et al., 2016). Therefore, if someone is prone to depression, this individual would be better off participating in a team sports program. However, personalities also tend to play a part in the preference for participation in a particular type of sports program (Nia & Beharat, 2010). This may cause participants who participate in a team sports program to feel more comfortable in their relationships with family and friends than participants who participate in an individual sports program (Kovalenko, 2020). If the social aspect of both sports programs is considered, a tentative conclusion can be drawn that team sports programs have a benefit on the development of social capital compared to individual sports programs (Ottesen et al., 2010). In addition, social interaction and making new social contacts would be easier in a team sports program (Nielsen et al., 2020). Hence, participating in a team sports program is beneficial to combat loneliness and to increase one's social network.

5.2. Semi-structured interviews

The following section describes the results of the semi-structured interviews with coaches from the Life Goals foundation. The results are divided into themes that were derived from the interviews. The code frequency per interview for individual sports programs is presented in Table 4 and the code frequency for team sports programs is presented in Table 5. Below, the results of the analysis for each theme are elaborated through quotes of interest.

Table 4. *Code frequency per interview for individual sports programs*

	Interview 1	Interview 2	Interview 3	Interview 4	Interview 5	Interview 6	Interview 7	Total
INDIVIDUAL SPORTS - ACTIVITIES								
Fit	1	2	0	0	2	10	2	17
Commitment (physically)	1	1	0	0	0	0	1	3
Low-threshold	9	1	4	3	1	6	7	31
Challenging	2	1	0	1	0	3	3	10
Stamina	1	0	0	0	2	1	1	5
Discipline	0	1	0	1	0	5	0	7
Perseverance	1	0	0	0	0	3	0	4
Self-esteem	0	1	1	0	0	1	2	5
Emotional control	0	3	0	0	0	2	0	5
Relaxation	0	0	4	1	0	0	0	5
Personal	4	4	7	2	4	7	2	30
Enjoyment	5	1	1	3	1	9	3	23
Status	0	1	1	0	0	0	2	4
Compare	1	0	0	0	0	3	2	6
Trust	1	0	2	0	1	1	0	5
Self-management	0	0	0	0	0	2	0	2
Self-confidence	4	1	3	0	0	8	1	17
Concerns problems	2	0	3	0	0	3	2	10

Engagement	3	1	1	0	0	1	0	6
External activities	1	0	0	0	1	1	0	3
Commitment (socially)	1	1	0	0	0	2	0	4
Network	0	0	0	0	1	0	0	1
Collaboration	1	0	1	0	0	4	0	6
Social cohesion	1	0	0	0	0	0	0	1
Social contacts	1	4	2	3	1	2	0	13
Social interaction	2	4	8	6	3	12	3	38
Language	1	0	0	0	1	1	1	4
Bonding	1	0	0	1	0	4	0	6
INDIVIDUAL SPORTS - COACH								
Engagement	2	0	2	0	4	2	1	11
Emotional control	1	0	0	0	0	0	0	1
Equality	1	0	1	0	0	4	0	6
Commitment	1	0	0	0	0	0	0	1
Quality	2	2	1	4	0	8	0	17
Motivation	2	4	3	0	0	1	2	12
Personal attention	1	0	6	1	2	7	3	20
Personal goals	0	0	3	0	1	1	2	7
Enjoyment	1	1	1	1	0	0	0	4
Challenging	3	0	0	0	0	2	0	5
Bonding	2	0	0	0	0	2	0	4
Trust	6	2	4	1	4	3	0	20
Self-confidence	0	0	0	0	0	0	1	1
INDIVIDUAL SPORTS - RULES								
Authority	1	0	2	0	1	2	1	7
Engagement	3	0	0	0	1	3	0	7
Equality	1	0	0	0	0	0	1	2
Respect	1	3	3	0	1	3	1	12
Structure	4	2	1	3	0	6	0	16
Language	0	0	0	0	0	0	1	1
Time management	3	3	3	1	1	0	1	12
Safety	0	3	9	1	2	2	0	17

Table 5. *Code frequency per interview for team sports programs*

	Interview 1	Interview 2	Interview 3	Interview 4	Interview 5	Interview 6	Interview 7	Total
TEAM SPORTS - ACTIVITIES								
Fit	1	1	0	1	2	0	0	5
Commitment (physically)	1	1	0	0	0	0	0	2
Low-threshold	7	1	0	0	1	0	1	10
Challenging	3	1	0	1	0	0	4	9
Stamina	0	0	0	0	2	0	0	2
Discipline	0	0	0	1	0	0	0	1
Perseverance	2	0	0	0	0	0	0	2
Self-esteem	1	0	1	0	0	0	0	2
Emotional control	0	3	0	0	0	0	0	3
Relaxation	0	0	2	1	0	0	0	3
Personal	4	4	6	2	3	0	3	22
Enjoyment	7	1	2	3	1	2	4	20
Status	1	1	1	0	0	0	0	3
Compare	0	0	0	1	0	0	1	2
Trust	4	0	1	1	2	1	0	9
Self-confidence	2	1	3	0	2	0	3	11
Concerns problems	4	0	0	0	0	0	3	7
Engagement	3	1	1	0	0	0	0	5
External activities	1	0	0	0	1	0	0	2
Commitment (socially)	0	1	0	0	0	1	0	2
Network	1	0	0	0	1	0	0	2
Collaboration	4	1	1	1	3	2	1	13
Social cohesion	2	0	0	0	0	0	0	2
Social contacts	3	6	4	1	0	1	1	16
Social interaction	2	3	3	3	3	1	7	22
Game element	2	0	0	0	0	0	0	2
Language	1	0	0	0	1	0	1	3
Bonding	2	1	1	2	0	0	1	7
TEAM SPORTS - COACH								

Engagement	3	0	3	0	4	0	1	11
Emotional control	1	0	0	0	0	0	0	1
Equality	1	0	0	0	0	0	0	1
Commitment	1	0	1	0	0	0	1	3
Quality	2	2	1	4	0	0	0	9
Motivation	2	2	4	0	0	0	1	9
Personal attention	0	0	4	0	2	0	2	8
Personal goals	0	0	2	0	2	0	1	5
Enjoyment	1	1	1	1	0	0	0	4
Challenging	2	0	0	0	0	0	1	3
Bonding	1	0	0	0	0	0	0	1
Trust	7	2	4	1	4	0	0	18
Self-confidence	0	0	0	0	0	0	1	1
TEAM SPORTS – RULES								
Authority	1	0	2	0	1	0	1	5
Engagement	3	0	1	0	1	0	0	5
Equality	1	0	0	0	0	0	1	2
Respect	1	2	4	1	2	0	1	11
Structure	4	1	2	3	0	0	0	10
Language	0	0	0	0	0	0	1	1
Time management	3	3	3	1	1	0	1	12
Safety	0	3	9	1	2	0	0	15

5.2.1. Low-threshold sports programs in terms of physical and sport skills

All interviewees considered it of great importance that the sports programs offered to socially vulnerable adults are designed in a physically accessible manner that requires few sports skills. Three interviewees (5, 6 and 7) indicated that it does not matter whether socially vulnerable adults participate in an individual sports program or in a team sports program, because both sports programs can be given in a physically accessible way. One interviewee (6) explained this as follows:

"I think the format we have [from the Life Goals foundation], is that that threshold is already lowered. I don't know if it is the sport [what makes a sports program approachable]." (Interviewee 6)

According to another interviewee (7), simple camping sports such as frisbee, volleyball and badminton are considered as sports that are generally quickly picked up by socially vulnerable adults despite having no experience with the sports. Besides that, it is important to keep people in the sports program and this can be done by the physical approachability and accessibility of the sports program. According to an interviewee (5), it is mainly about activation and the courage to take the step towards society. Sports in general are considered as an accessible way to lower the threshold towards society.

However, some interviewees (1, 3, 4 and 7) indicated that sometimes it is better for socially vulnerable adults to start with low-threshold individual sports programs and then move on to team sports programs. One interviewee (7) mentioned it as follows:

"For the people who are still really feeling down, I think individual [sports activity] is still the better solution." (Interviewee 7)

One interviewee (1) indicated that socially vulnerable adults often do not yet have the motoric skills to play a challenging and difficult team sport at the beginning of the program. Despite participants indicating that they would like to play a game, it is important to start with the basics. This is not always experienced as fun by the participants, but is sometimes necessary, according to the interviewee, in order to first gain new skills and then be able to move on to more challenging team sports programs. Therefore, the interviewee sometimes chooses to perform the sport in a mini variant, such as pawn soccer. According to two other interviewees (3 and 4), walking and playing sports in the gym is a good low-threshold activity for a bit of physical activation. Few skills are needed, socially vulnerable adults can talk easily during these sports and they are more likely to discuss their issues because the sport is

physically accessible. Another interviewee (4) sees that especially people with a mental health indication have difficulty participating in sports and game activities. Moreover, some socially vulnerable adults, for example status holders, are not at all familiar with some sports that are practiced in the Netherlands. Therefore, one interviewee (1) chooses to start with low-threshold sports such as badminton, tennis, or the game kubb with status holders. Interviewee (7) indicated that they had even started a program for socially vulnerable adults to learn how to cycle and swim. They had arranged for an adult bicycle with training wheels and they made sure that people could get their swimming certificate.

In addition, several interviewees (1, 2 and 6) believed that an individual sport can easily be performed at different levels of skill. For example, the coach may tell one participant to run three laps, while another may be asked to sprint two laps. A participant can be pushed to his or her limits in order to develop physically in this way. The other participants can then continue to exercise at their own level without having to take a step back themselves. An individual sport then can more easily remain challenging for each participant. Interviewee 2 considered bootcamp to be a good example of a sport that can be practiced at various levels. The interviewee mentioned it as follows:

“Bootcamp is a lot of fun because everyone can participate easily at their own level. The moment you cannot do it physically or conditionally, you can take a step back.” (Interviewee 2)

However, one interviewee (7) indicated that within a team sport there can also be enough challenge per person. Within a team, groups can be made and if part of a lesson is done in groups then a team sport can remain challenging enough for everyone. In addition, in the other part of the lesson, the participants who are a little less good at a sport can learn from the participants who have already gained enough skills in that sport.

5.2.2. Personalized sports programs

All interviewees indicated that the effects of individual sports programs and team sports programs are different for each participant. Therefore, it is important to identify what the participant feels comfortable with, and which sports he or she likes in order to make an informed choice about which sports program to participate in. One interviewee (2) stated this as follows:

“We would like them to feel comfortable, to come to the sports activity from their own motivation.” (Interviewee 2)

The same interviewee (2) indicated that one participant feels more comfortable with an individual sport, while another prefers to seek out social contacts, as that person has no point of contact and social network outside of the sports program. Three other interviewees (3, 6 and 7) added that as a coach, you have to provide customization with each participant. The coach considers where the needs of the participants lie and what is needed to activate these people. The personal goals of participants are diverse. Some would like to participate in a sports program to lose weight, while others come to relax, to build up social contacts or to clear their minds. One interviewee (7) mentioned:

“We try to align ourselves with them, to what they want rather than what we think is good for them.” (Interviewee 7)

According to interviewee 4, the background of the participants also determines the choice, which the participant and coach make together, to participate in a group sport or not. People with a mental health indication, for example, need more time to participate in a group and to blossom there, while people from the street are often communicative and can easily talk in a group. Another interviewee

(5) added that status holders experience fighting sports as less enjoyable, due to traumatic experiences in the past.

5.2.3. Self-confidence

Creating self-confidence is an important aspect of the sports programs offered to socially vulnerable adults according to the interviewees. Six of the seven interviewees (1, 2, 3, 5, 6 and 7) mentioned that increasing self-confidence can happen in different ways and in both sports programs. Three interviewees (1, 2 and 7) indicated that receiving compliments increases participants' self-confidence. These compliments could be, for example, that a participant performed an exercise well or that a coach is proud because the participant has been coming to training for several weeks and is improving conditionally from the beginning of the program. Both compliments from the coach and from fellow participants are experienced as positive by socially vulnerable adults. In addition, according to two interviewees (3 and 6), it is important that a participant can see his or her own growth. What is difficult in the beginning of the program, goes a lot better after a few weeks. Participants can see their improvement throughout the sports program, which gives one self-confidence. The choice of sport also plays a part. One interviewee (1) named this as follows:

"If they individually choose something, which they also think they are good at, it gives them a little self-confidence." (Interviewee 1)

An interviewee (3) gave an example of a success story where a woman had low self-esteem, but through playing soccer has developed more self-confidence and even dared to play soccer together with the men. However, sports programs not always have a positive effect on increasing self-confidence of socially vulnerable adults. Two interviewees (1 and 6) indicated that participants are sometimes watched by other people during exercise. One interviewee (1) mentioned it as follows:

"Being watched in a park where a lot of people are just sitting outside, that can be very unpleasant for someone, causing them not to exercise." (Interviewee 1)

The unpleasant feeling can affect the self-confidence of socially vulnerable adults, making them prefer not to participate in sports. Furthermore, developing less self-confidence can also happen within the group. Sometimes the level of skills within a group is different, causing someone to doubt their ability. According to one interviewee (5), comparing yourself to another, especially in the beginning, is a disadvantage of sports programs given in a group. A participant may look up to others' skills or feel uncomfortable with the dominance of others in the group. Here the interviewee did not literally mention the participant's self-confidence, but it may be indirectly related to it.

5.2.4. Enjoyment

All interviewees mentioned that participating in a sports program should be enjoyable for socially vulnerable adults. As one interviewee (4) mentioned:

"It is not about winning, participating is the most important thing! It just makes it even more fun that everyone participates with their own background." (Interviewee 4)

Two other interviewees (3 and 5) also indicated that the participants are not obligated to participate in every exercise. The most important thing is that they feel relaxed and that they enjoy coming to the sports program. One interviewee (5) mentioned the following:

"Often, I indicate that if something is wrong, if they are not feeling well, then they should indicate their limits. Nothing is compulsory." (Interviewee 5)

Two other interviewees (6 and 7) stated that socially vulnerable adults always appreciate a variety of sports in order to keep the sports programs fun. Three interviewees (2, 4 and 6) indicated that sports cause the production of endorphins in the body, which make participants go home with a happy feeling. According to interviewee 1, a game element in a sport is a good strategy to make participating in sport more fun for socially vulnerable adults. A game element makes participants not realize they are exercising at all, because they are having so much fun. If the focus is more on physical progress or they do not experience success during exercise, participants are less happy and less motivated to continue exercising.

5.2.5. Social interaction, connection, and collaboration in sports programs

All interviewees indicated that both individual sports programs and team sports programs provide the opportunity for social interaction. What is important to note, is that six of the seven interviewees (1, 2, 3, 4, 5 and 6) especially saw a difference in social interaction between one-on-one sports programs and sports programs given in a group, which could be either an individual sport or a team sport. These interviewees indicated that a disadvantage of one-on-one sports programs is that the contact is limited to one person. In group sports programs, socially vulnerable adults receive signals, both verbal and nonverbal communication, from multiple people during the sports activities that need to be responded to. This social interaction happens in a safe way according to interviewee 2. The participant learns how to interact with others and can then apply these experiences in a different context. In addition, one interviewee (3) indicated that social interaction can occur more easily if the sport is not too challenging. As the interviewee (3) mentioned:

"During running, the participant often has a higher respiratory rate and then it is harder to talk concretely. The same goes for mountain biking and cycling." (Interviewee 3)

Social interaction enables socially vulnerable adults to build new social contacts and broaden their social network. In both individual sports programs and team sports programs, socially vulnerable adults can gain social contacts, provided the sport is played in a group. All interviewees indicated that for the majority of this target group, group sports are the best fit. Most socially vulnerable adults participate in sports programs with the goal of gaining social contacts and building a broader network. As one interviewee (1) mentioned:

"I think a lot of people look forward to that [making social contacts], it is not even the sport that they come for." (Interviewee 1)

Another interviewee (6) gave a clear example of how social contacts can be gained in a kickboxing class. The strategy is to have the participants spar opposite a different person each time. Through the pass-through system, participants are always sparring with a different person, which allows contact to be made with multiple participants in the program.

All interviewees mentioned that working together is an important part of sports programs. There can be cooperation during individual sports programs as well as team sports programs. As mentioned above, kickboxing is an example of an individual sport where working together with another person is possible. Another interviewee (1) gave an example of a circuit, where participants had to help each other perform the exercises. However, cooperation is somewhat easier to create in team sports programs, since the sport cannot be played alone. One interviewee (5) mentioned that socially vulnerable adults often feel anxious about working together in the beginning, because they do not know each other well yet, but that this changes after a few weeks. Another interviewee (3) mentioned that it is nice to see that the more active participants often help the less active ones. According to another interviewee (7), participants can pull themselves up to each other when exercising together

in a group. Therefore, by exercising in a group, it can motivate other participants to reach the same level in sports.

5.2.6. Influence of community or social sports coaches

All interviewees indicated that the coach plays a significant role in the developmental process of socially vulnerable adults. Four interviewees (1, 2, 4 and 6) mentioned that a coach can be seen as a confidant for the participants. As one interviewee (4) mentioned:

"I feel like a father figure." (Interviewee 4)

According to interviewee 4, socially vulnerable adults regularly ask for a variety of advice. This can be regarding their problems and situation that they are worried about, but also smaller things, such as where to find the shoemaker in the village. According to interviewee 1, socially vulnerable adults have a great need for a professional coach who is always there. A familiar face is experienced as pleasant by the participants and this interviewee (1) notices that there are more cancellations when someone else comes to give the training, because it is unfamiliar to them.

Personal attention and conversations are very important for a trusting relationship between coach and participant. All interviewees mentioned that in an individual sports program it is easier to give personal attention and encourage one to persevere. Therefore, a trusting relationship can be established more quickly between coach and participant when participating in an individual sports program. One interviewee (3) had given an example about a strategy to connect with a participant within an individual sport in a group:

"What I do is consciously walk next to one or two people and start the conversation there. You take them out of the group for a moment and they can continue." (Interviewee 3)

According to two other interviewees (5 and 6), staying in touch and having those personal conversations is important to keep people involved in the sports program. Personal conversations can also be carried out in team sports programs. However, two interviewees (5 and 7) indicated that personal conversations during a team sports program can be done less often, because the attention has to be spread over the whole group.

In addition, enthusiasm from the coach and compliments to the participants were considered by three interviewees (1, 2 and 3) to have a positive effect on the involvement and commitment of socially vulnerable adults. In this way, participants get excited about going to the sports programs.

5.2.7. Rules of sports programs

The interviewees did not make a distinction in rules between individual sports programs and team sports programs. Rules and agreements are considered by all interviewees to be of great importance in ensuring that a sports program takes place in a respectful, structural and safe manner.

An important rule for all interviewees is to participate sober in a sports program. However, the target group includes some who are regularly under influence of alcohol or drugs or they are addicted to smoking. However, this is not accepted during the sports programs. As one interviewee (2) mentioned:

"Sure, it can happen once that someone has just smoked weed before going there [the sports program], because he felt miserable. Then I think you should be able to address someone about that [that someone cannot participate in the sports program that day]." (Interviewee 2)

If the interviewee (2) realizes that someone is under the influence and has checked with the person in question, the participant is not allowed to participate in the sports program for that day. To ensure safety, another interviewee (3) gives sports programs both to a group with only men and to a group with only women. If participants do not feel safe in a mixed group, they can go to one of these groups. The sense of safety is very important according to this interviewee (3), because if safety is compromised, then participants will not show up. Socially vulnerable adults can more easily feel less safe in sports programs that are given in a group. The reason according to this interviewee (3) is that socially vulnerable adults have to deal with the standards and values within a group and have to respect each other. If the standards and values are not ensured by some participants, then participants may feel less safe in a group. Feeling safe is an aspiration of interviewee (3), but unfortunately it does not always succeed.

Another rule is to arrive on time to a training session or to sign out of a training session on time. Socially vulnerable adults sometimes still have difficulty following this rule. One interviewee (5) mentioned:

   "Showing up on time is a rule that is very difficult to implement in the beginning." (Interviewee 5)

According to this interviewee (5), socially vulnerable adults follow the rule better the more often they are reminded of it. Structure in life and a day and night rhythm is something that socially vulnerable adults often lack, but which is difficult to change. The more emphasis that is placed on arriving on time to a training session, the more a participant learns to have some structure in life.

5.2.8. General consideration; preference for individual sports programs or team sports programs

In general, all interviewees agree that it hardly matters whether a participant participates in an individual sports program or in a team sports program as long as the sport is performed in a group setting. Social interaction, social contacts, and being able to increase a social network are aspects that all interviewees believe are of great importance for the development of socially vulnerable adults. These aspects can be more easily achieved if the sport is given in a group. In addition, it depends on the personal goals of the participant which sports program to participate in. One participant may find an individual sport more enjoyable to practice and another may be more interested in a team sport. According to the interviewees, it does not matter which sport is chosen, as long as participants can be active, relax and not have to worry about their problems.

6. Discussion

To fill the knowledge gap on the differences between individual sports programs and team sports programs regarding the development of socially vulnerable adults, this research aims to gain new insights into the opportunities and barriers of both sports programs and how these are related to the development of socially vulnerable adults. To date, no research has been done on the differences in sports programs specifically regarding the development of socially vulnerable adults. In addition, it will look at what the implications of the found opportunities and barriers are for the design and implementation of sports programs for socially vulnerable adults.

6.1. Main results

In general, whether socially vulnerable adults participate in an individual sports program or a team program hardly matters for their development. Both sports programs have sufficient opportunities for socially vulnerable adults to develop in different areas with the goal of staying connected to society. In both sports programs, socially vulnerable adults can develop physically and mentally. In addition, they can develop their social skills through the social interaction and social contacts that are gained. However, it is important that the individual sports programs are given in a group, just as in team sports programs, in order to be able to increase participants' social network. In addition, it is important that socially vulnerable adults enjoy participating in the sports programs, so they keep coming to the sports programs with enthusiasm. Furthermore, it is important to carefully consider the personal goals and needs of socially vulnerable adults and to determine which sports program they feel most comfortable with, so that sports programs are customized to fit each individual. Overall, it can be concluded that individual sports programs and team sports programs have sufficient opportunities that could promote the development of socially vulnerable adults in different areas.

6.1.1. First research question: what are the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults?

The data suggests that there are differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults. In Table 6 an overview is given of the opportunities and barriers that were obtained from the literature review and the analysis of the semi-structured interviews with coaches of the Life Goals foundation. What is striking is that the differences in opportunities and barriers do not differ greatly. No barriers were found when participating in team sports programs and only two barriers were found when participating in individual sports programs. One reason could be that participation in sports in general improves both physical and mental health and is of great importance on social and societal level (Sherry & Strybosch, 2012; Van der Veken et al., 2020b; De Greef et al., 2012). Therefore, participation in any sports program, individual or team, will always have some positive effect and will not give great differences.

Table 6. *Opportunities and barriers of individual sports programs and team sports programs*

	Individual sports program	Team sports program
Physical functioning	O	O
Stamina	O	O
Continuation of exercising	B	O
Low-threshold activities	O (++)	O (+)
Self-esteem	O (++)	O (+)
Self-confidence	O	O
Reducing depressive symptoms	O (+)	O (++)
Enjoyment in life	O	O
Social interaction	O (+)	O (++)
Social contacts	O (+)	O (++)
Collaboration skills	B	O

Trusting relationship with coach	O (++)	O (+)
Personal attention	O (++)	O (+)
Structure in life	O	O

* O = Opportunity and B = Barrier
* The (+) and (++) indicate that the outcomes occur in both sports programs, however, in the sports program with a (++) the development of that outcome is greater.

A first barrier found in the results is that when participating in an individual sports program, socially vulnerable adults are less likely to continue exercising than when participating in a team sports program. The way social interaction takes place in different sports programs could be a reason for this (Nielsen et al., 2014; Andersen et al., 2018). As shown in Table 6, social interaction can take place in both individual sports programs and team sports programs. It is important to note that these are individual sports programs given in a group. According to McAuley (2000), more social interaction can take place in a group compared to an individual sports program given one-on-one. However, in team sports programs, collaboration during sports plays a significant role, which is less applicable in an individual sports program because those sports can be performed alone. Through collaboration, more social interaction can occur, and fun situations can be created, which is what drives socially vulnerable adults to participate in team sports programs and continue to show up and participate as well. Continuing to play sports can ensure that socially vulnerable adults can continue to develop physically, mentally, and socially, which in turn can lead to the development of even more skills.

A second barrier found in individual sports programs regarding the development of socially vulnerable adults is that little collaboration takes place during individual sports. Research indicates that the development of skills is related to the structuring of the sports environment (Jones & Lavallee, 2008). This means that the requirements of a sports context will reflect the skills that people learn. For example, socially vulnerable adults who participate in team sports such as soccer will be required to learn teamwork skills, because this is needed to play the game (Jones & Lavallee, 2008). In individual sports programs, collaboration skills are less important because individual sports can be performed alone. However, in everyday life multiple situations occur where people need to collaborate, so it would be beneficial for socially vulnerable adults to learn these skills. Besides, collaboration can ensure that new social contacts can be made more easily, which can expand the social network of socially vulnerable adults. The collaboration skills and the social network that can be more easily expanded are opportunities of team sports programs to eventually become more included in society.

In terms of mental health, differences were also found in opportunities between individual sports programs and team sports programs (Table 6). Both sports programs can improve the mental health of socially vulnerable adults, however, each program may have different mental health outcomes. Participating in team sports programs provides a lower risk of developing depressive symptoms than participating in individual sports programs. One probable reason could be the social nature of teams (Sabiston et al., 2016). However, research has shown that people with high reported depression symptoms are less likely to participate in team sports programs compared to people with low stable depression symptoms (Sabiston et al, 2013). Therefore, it is important to consider the personal needs of participants before participating in a sports program, as not all socially vulnerable adults with a depression indication would like to participate in a team sports program, due to its social nature. On the other hand, individual sports programs do result in a higher level of self-esteem because successes are entirely attributable to the hard work of the individual in contrast with group sports successes being a team effort (Laborde et al., 2016; Sagat et al., 2021). For both groups it is important to realize that not everything works for everyone. It is quite difficult to determine someone's exact level of depression and what results in more self-esteem for someone might actually lead to a decreased self-esteem for someone else.

The interaction processes between coach and socially vulnerable adults can also bring about different opportunities for the development of socially vulnerable adults in individual sports programs in

comparison with team sports programs. As shown in Table 6, it is easier for socially vulnerable adults to build a trusting relationship with the coach when participating in an individual sports program than when participating in a team sports program. One reason for this may be that there is more time in individual sports programs for personal conversations and attention. In an individual sports program, the attention does not have to be divided over a whole team and a conversation can easily be started with a participant, because the sport is performed alone. The personal attention that is more easily given in an individual sports program could create an opportunity to focus on one's own personal goals and achievements whereas individual goals might get lost in team sport groups.

The provision of low-threshold sports activities is a final opportunity found in the results in which individual sports programs and team sports programs may differ from each other. Since sports activities for socially vulnerable adults are not given at a high level and are not competitive in nature (Van der Veken et al., 2020b), both sports programs can be offered in a low-threshold manner, making the sports setting a good fit for socially vulnerable adults. However, according to some interviewees, an individual sports program is easier to keep accessible and at the same time challenging, as everyone can participate at his or her own level, while not hindering others. Hence, socially vulnerable adults who participate in an individual sports program may be able to develop more effectively in the physical area, due to the individual nature of individual sports. In addition, at the beginning of a sports program, socially vulnerable adults may not have the motoric skills to play a challenging and difficult team sport. Therefore, the degree of difficulty of some team sports could be a barrier for socially vulnerable adults to participate in a team sports program.

6.1.2. Second research question: what are the implications of the found opportunities and barriers for the design and implementation of sports programs for socially vulnerable adults?

The found opportunities and barriers can influence the design and implementation of sports programs for socially vulnerable adults. The found opportunities and barriers suggest that it is important to offer physically, mentally, and socially accessible sports programs to socially vulnerable adults. However, some interviewees indicated that individual sports programs could sometimes be offered in a more accessible manner than team sports programs. One reason for this is that some socially vulnerable adults do not yet have the motoric skills needed to play a team sport. In addition, an individual sport can easily be performed at different levels of skill and can more easily remain challenging for everyone. Additionally, some socially vulnerable adults with mental health indications may find the social aspect of sports programs difficult to cope with. Therefore, in the implementation of sports programs it is important to make sure that the programs target the personal goals, needs and motoric and social skills of individuals in order to provide customized programs that fit the individual. As mentioned in the main results, providing the sports programs in a group is of great value for the development of socially vulnerable adults, however the personal challenge of the individual and the social skills one has must be taken into account. In the design of the sports programs there should be sufficient time for personal conversations between coach and participant to keep the personal goals in mind. The coach can keep socially vulnerable adults involved in the sports programs and can ensure that the sports programs are customized.

A second implication for the design of sports programs for socially vulnerable adults is that the priority should be on keeping socially vulnerable adults enthusiastic about sporting. As enjoyment is considered as an opportunity for both sports programs, it is important to identify how enjoyment could be optimized. To create a more enjoyable experience for socially vulnerable adults, it is recommended to add a game element to each sport. Socially vulnerable adults will then be less aware of the fact that they are exercising and will not be worried about their physical improvements. Furthermore, socially vulnerable adults are more likely to be motivated to continue participating in a sports program if they enjoy it.

Finally, it is important to identify opportunities for collaboration in individual sports programs, as social interaction takes place during collaboration, and it is important to develop collaboration skills. Although an individual sport can be played alone, there may be opportunities for participants to help each other with an exercise, for example, assisting with the handstand during gymnastics. In addition, attention could be paid to collaboration outside of participating in sports. For example, a schedule can be made of who is coming to help clean up where collaboration skills can be developed.

6.2. Strengths and limitations

To date, no research has been done on the differences in opportunities and barriers between individual sports programs and team sports programs regarding the development of socially vulnerable adults. Most research has been done on the effects of sports programs with respect to the development of socially vulnerable youth or has examined differences in development between individual sports programs and team sports programs in other population groups. Therefore, this thesis is the first study that has focused on both the differences in opportunities and barriers between individual sports programs and team sports programs and the target group of socially vulnerable adults, which makes this thesis unique.

Nevertheless, the results of this study should be interpreted with caution and a number of limitations should be taken into account. First of all, a limitation of this study could be that the selection of interviewees is biased. The coordinator of the Life Goals Academy approached coaches to participate in this study after the inclusion criteria were discussed. The coordinator determined which coaches were selected and whose opinions and views were included in this study and whose opinions and views were excluded. This may have had effect on the results of this study (Diefenbach, 2008). By approaching the coaches and asking them to join on voluntary base, there may be a risk that the coaches who were willing to participate in the study might have primarily recognized the positive aspects of sports programs due to their enthusiasm about the concept of sports programs established for socially vulnerable adults. As a result, there is a possibility that the barriers of individual sports programs and team sports programs may not be captured as well. However, an attempt was made to select the coaches on a number of criteria. These criteria will have prevented a selection bias as far as possible.

Secondly, a limitation of this study could be researcher bias. Researcher bias may have occurred during the conduct of interviews with the coordinator of the Life Goals Academy and the coaches of the Life Goals foundation. Despite the fact that semi-structured interviews were conducted, and the interview questions were prepared in advance, the questions and the order of the questions may have changed during the conduct of the interviews. One question may influence the answers to the subsequent questions, and questions may have been formulated in such a way that a particular answer could be expected. Therefore, the results should be interpreted with caution. Besides, researcher bias can also occur when interpreting and processing interviewees' responses (Kumar, 2014; Diefenbach, 2008). It is possible that while analyzing and interpreting the interviews, relevant data was excluded because it was thought that this information was not relevant to answering the research question. To minimize this, the codebook, based on the results of the theoretical framework and the literature review, was used as a guide. However, it is important to note that the codebook was not discussed with a second researcher to reach consensus. Moreover, the processing of the results can be considered subjective. Table 6 summarizes various opportunities and barriers of individual sports programs and team sports programs. However, these results are based on the interpretation of the researcher. Therefore, the table should be interpreted with caution. Hence, researcher bias cannot be ruled out in qualitative research because it relies on the judgement of the researcher.

Lastly, due to the Covid-19 pandemic and the measures in place at the time, including working from home, no face-to-face interviews were conducted with the coordinator of the Life Goals Academy and

the seven coaches of the Life Goals foundation. Therefore, the interviews were conducted online. Previous research has shown that online interviews are as useful as interviews conducted face-to-face (Hensen et al., 2021). In addition, remote data collection offers the opportunity to collect data more efficiently because conducting interviews online is less expensive and time consuming (Hensen et al., 2021). However, there are also some risks associated with conducting interviews online. The study by Davis et al. (2004) showed that online interviews may contain ambiguities due to technical limitations. Besides, when interviews are conducted online, it is difficult to observe the body language of the interviewees. The body language of an interviewee can indicate how an answer should be interpreted. These risks could be reduced because the interviews were recorded and the recordings could be reviewed multiple times. The recordings also allowed the interviews to be transcribed verbatim, which also avoided differences in interpretation (Davis et al., 2004).

6.3. Recommendations for future research

The results of this study have led to two recommendations for future research. First of all, research is recommended on the impact of group size regarding the development of socially vulnerable adults. The interviewees indicated that it is important for the target group to offer sports programs in a group, due to the opportunity for social interaction, building new social contacts and thereby being able to increase their social network. On the other hand, this study has shown that the interaction processes between coach and participant are also very important for the development of socially vulnerable adults. Through personal conversations and attention, socially vulnerable adults can build a trusting relationship with their coach. Additionally, due to personal attention the focus can be placed on the personal goals and achievements of an individual. However, personal goals might get lost if a sports program consists of a large group. Therefore, it is important to identify the perfect group size for the development of socially vulnerable adults. From what group size is the quality of sports programs reduced? What group sizes do socially vulnerable adults experience as positive and what group size do they feel less comfortable with? These are questions that can affect the development of socially vulnerable adults and are therefore important to explore.

Furthermore, future research should investigate how socially vulnerable adults experience their own development during participation in the sports programs. This study was focused on the development of socially vulnerable adults from the perspective of coaches. Coaches experience the development of socially vulnerable adults up close. In addition, they can keep track on the development of socially vulnerable adults through a monitor, which identifies the areas in which a participant is developing. However, how socially vulnerable adults experience the sports programs is also of great importance. What do socially vulnerable adults experience as strengths from sports programs and where do they see improvement? In-depth interviews with socially vulnerable adults could be an added value in optimizing the sports programs.

7. Bibliography

Andersen, M.H., Ottesen, L., & Thing, L.F. (2018). The social and psychological health outcomes of team sport participation in adults: an integrative review of research. *Scandinavian Journal of Public Health*, 47(8), 832-850.

Bailey, R. (2007). Evaluating the relationship between physical education, sport, and social inclusion. *Educational Review, 57*(1), 71-90.

Centraal Bureau voor de Statistiek. (2020, December 16th). *Sociale uitsluiting in Nederland: wie staat aan de kant?* https://www.cbs.nl/nl-nl/longread/statistische-trends/2020/sociale-uitsluiting-in-nederland-wie-staat-aan-de-kant-?onepage=true

Collins, M. & Kay, T. (2014). *Sport and social exclusion.* London: Routledge.

Davis, M., Bolding, G., Hart, G., Sherr, L., & Elford, J. (2004). Reflecting on the experience of interviewing online: perspectives from the internet and HIV study in London. *AIDS care, 16*(8), 944-952.

De Greef, M., Segers, M., & Verté, D. (2012). Understanding the effects of training programs for vulnerable adults on social inclusion as part of continuing education. *Studies in Continuing Education, 34*(3), 357-380.

Diefenbach, T. (2008). Are case studies more than sophisticated storytelling?: Methodological problems of qualitative empirical research mainly based on semi-structured interviews. *Quality & Quantity, 43*, 875-894.

Dooris, M. (2009) Holistic and sustainable health improvement: the contribution of the settings-based approach to health promotion. *SAGE Journals, 129*(1), 29-36.

Drummond, M., Drummond, C., Elliott, S., Prichard, I., Pennesi, J., Lewis, L.K., Bailey, C., & Bevan, N. (2021). Girls and young women in community sport: a South Australian perspective. *Frontiers in Sports and Active Living, 3*.

Fernández-Gavira, J., Huete-García, Á., & Velez-Colón, L. (2017). Vulnerable groups at risk for sport and social exclusion. *Journal of Physical Education and Sport, 17*(1), 312-326.

Geidne, S. Kokko, S., Lane, A., Ooms, L., Vuillemin, A., Seghers, J., Koski, P., Kudlacek, M., Johnson, S., & Van Hoye, A. (2019). Health promotion interventions in sports clubs: can we talk about a setting-based approach? A systematic mapping review. *SAGE Journals, 46*(4), 592-601.

Haudenhuyse, R.P., Theeboom, M., & Coalter, F. (2012). The potential of sports-based social interventions for vulnerable youth: implications for sport coaches and youth workers. Journal of Youth Studies, 15(4), 437-454.

Haudenhuyse, R.P., Theeboom, M., & Skille, E.A. (2013). Towards understanding the potential of sports-based practices for socially vulnerable youth. *Sport in Society, 17*(2), 139-156.

Hensen, B., Mackworth-Young, C.R.S., Simwinga, M., Abdelmagid, N., Banda, J., Mavodza, C., Doyle, A.M., Bonell, C., & Weiss, H.A. (2021). Remote data collection for public health research in a Covid-19 era: ethical implications, challenges, and opportunities. *Health Policy and Planning, 36*(3), 350-368.

Jones, M.I., & Lavallee, D. (2008). Exploring perceived life skills development and participation in sport. *Qualitative Research in Sport and Exercise, 1*(1), 36-50.

Kovalenko, A., Grishchuk, E., Rogal, N., Potop, V., Korobeynikov, G., Glazyrin, I., Glayrina, V., Gorascenco, A., Korobeynikova, L., & Dudnyk, O. (2020). The influence of physical activity on students' psychological well-being. *Revista Romaneasa pentru Educatie Multidimensionala, 12*(2), 86-96.

Kumar, R. (2014). Research Methodology: a step-by-step guide for beginners (4th ed.). SAGE Publications Ltd.

Laborde, S., Guillén, F., & Mosley, E. (2016). Positive personality-trait-like individual differences in athletes from individual- and team sports and in non-athletes. *Psychology of Sport and Exercise, 26*, 9-13.

Life Goals. (n.d.-a). Home: Sport, een doeltreffend middel voor nieuw perspectief. Retrieved from https://stichtinglifegoals.nl/

Life Goals. (n.d.-b). Over ons: Stichting Life Goals Nederland ziet sport als een doeltreffend middel voor nieuw perspectief. Retrieved from https://stichtinglifegoals.nl/over-ons/

Life Goals. (n.d.-c). Life Goals Academie: Een breed aanbod aan opleidingen. Retrieved from https://stichtinglifegoals.nl/academie/

Life Goals Academie. (n.d.). Factsheet Life Goals Monitor. Retrieved from file:///C:/Users/Mijn%20Lenovo/Downloads/LGA-Factsheet-LifeGoalsMonitor.pdf

Marsollier, E., Trottier, C., & Falcão, W.R. (2020). Development and transfer of life skills in figure skating: Experiences of athletes and their coaches. *Qualitative Research in Sport, Exercise and Health, 12*(5), 664-682. DOI: 10.1080/2159676X.2019.1659392

Martin, L., Bruner, M., Eys, M., & Spink, K. (2013). The social environment in sport: selected topics. *International Review of Sport and Exercise Psychology, 7*(1), 87-105.

McAuley, E., Blissmer, B., Marquez, D.X., Jerome, G.J., Kramer, A.F., & Katula, J. (2000). Social relations, physical activity, and well-being in older adults. Preventive Medicine, 31, 608-617.

Mohammadi, M. (2011). A study and comparison of the effect of team sports (soccer and volleyball) and individual sports (table tennis and badminton) on depression among high school students. *Australian Journal of Basic and Applied Sciences, 5*(12), 1005-1011.

Nia, M.E., & Besharat, M.A. (2010). Comparison of athletes' personality characteristics in individual and team sports. *Elsevier, 5,* 808-812.

Nielsen, G., Wikman, J.M., Jensen, C.J., Schmidt, J.F., Gliemann, L., & Andersen, T.R. (2014). Health promotion: the impact of beliefs of health benefits, social relations, and enjoyment on exercise continuation. *Scandinavian Journal of Medicine & Science in Sports, 24*(1), 66-75.

Nutbeam, D. & Kickbusch, I. (1998). Health promotion glossary. Health Promotion International, 13(4), 349-364.

Ottesen, L., Jeppesen, R.S., & Krustrup, B.R. (2010). The development of social capital through football and running: studying an intervention program for inactive women. *Scandinavian Journal of Medicine & Science in Sports, 20*(1), 118-131.

Pharr, J.R., Lough, N.L., & Terencio, M.A. (2019). Health and sociodemographic differences between individual and team sport participants. *Sports 2019, 7*(6), 150.

Pierce, S., Gould, D., & Camiré, M. (2016). Definition and model of life skills transfer. *International Review of Sport and Exercise Psychology, 10*(1), 186-211.

Pluhar, E., McCracken, C., Griffith, K.L., Christino, M.A., Sugimoto, D., & Meehan, W.P. (2019). Team sport athletes may be less likely to suffer anxiety or depression than individual sport athletes. *Journal of Sports Science and Medicine, 18*(3), 490-496.

Poland, B., Krupa, G., & McCall, D. (2009). Settings for health promotion: an analytic framework to guide intervention design and implementation. *Health Promotion Practice, 10*(4), 505-516.

Sabiston, C.M., O'Loughlin, E., Brunet, J., Chaiton, M., Low, N.C., Barnett, T., & O'Loughlin, J. (2013). Linking depression symptom trajectories in adolescence to physical activity and team sports participation in young adults. *Elsevier, 56*(2), 95-98.

Sabiston, C.M., Jewett, R., Ashdown-Franks, G., Belanger, M., Brunet, J., O'Loughlin, E., & O'Loughlin, J. (2016). Number of years of team and individual sport participation during adolescence and depressive symptoms in early adulthood. *Journal of Sport & Exercise Psychology, 38*, 105-110.

Sagat, P., Bartik, P., Lazic, A., Tohanean, D.I., Koronas, V., Turcu, I., Knjaz, D., Alexe, C.I., & Curitianu, I.M. (2021). Self-esteem, individual versus team sports. *International Journal of Environmental Research and Public Health, 18*(24).

Schaillée, H., Haudenhuyse, R., & Bradt, L. (2019). Community sport and social inclusion: international perspectives. *Sport in Society, 22*(6), 885-896.

Sherry, E. (2010). (Re)engaging marginalized groups through sport: the homeless world cup. *International Review for the Sociology of Sport, 45*(1), 59-71.

Sherry, E., & Strybosch, V. (2012). A kick in the right direction: longitudinal outcomes of the Australian community street soccer program. Soccer & Society, 13(4), 495-509.

Sociaal en Cultureel Planbureau. (2003, April). *Rapportage sport 2003.* https://www.yumpu.com/nl/document/read/19813030/rapportage-sport-2003-nrit-digidoc

Son, H., & Berdychevsky, L. (2022). Social-ecological analysis of the sport and recreation programs' impacts on positive development of youth from socially vulnerable backgrounds. *Leisure Studies*, DOI: 10.1080/02614367.2022.2037151

Super, S., Hermens, N., Verkooijen, K., & Koelen, M. (2018). Examining the relationship between sports participation and youth developmental outcomes for socially vulnerable youth. *BMC Public Health, 18*(1).

Theeboom, M. (2011). De sociale waarde van sport. Alternatieven voor kansgroepen op lokaal vlak. *Momenten*, 10-16.

Van den Brink, C., Smulders, G., Wolf, J., Van Oers, H., & Van de Goor, I. (2015). Monitor sociaal kwetsbare groepen. Vereniging van Nederlandse Gemeenten. Retrieved from https://vng.nl/files/vng/publicatie_bijlagen/2015/20150522-e-book-monitor-sociaal-kwetsbare-groepen.pdf?utm_source=e-mailnieuwsbrief&utm_medium=email&utm_campaign=Woon-+en+Leefomgeving

Van der Veken, K., Lauwerier, E., & Willems, S. (2020a). "To mean something to someone": sport-for-development as a lever for social inclusion. *International Journal for Equity in Health, 19*(11).

Van der Veken, K., Lauwerier, E., & Willems, S. (2020b). How community sport programs may improve the health of vulnerable population groups: a program theory. *International Journal for Equity in Health, 19*(74).

Vettenburg, N. (1998). Junevile delinquency and the cultural characteristics of the family. International Journal of Adolescent Medicine and Health, 10(3), 193-209.

World Health Organization. (1986). Ottawa Charter for health promotion. Retrieved from https://www.who.int/teams/health-promotion/enhanced-wellbeing/first-global-conference

Appendix I. Interview format and interview questions expert interview

Interview format - Expert		
1.	**Samenvatting van het onderzoek**	Het doel van dit onderzoek is om meer inzicht te krijgen in de verschillen in kansen en belemmeringen tussen individuele- en teamsportprogramma's op de ontwikkeling van sociaal kwetsbare volwassenen. Daarnaast wordt er onderzocht wat de gevolgen zijn van de gevonden kansen en belemmeringen voor het ontwerp en de uitvoering van sportprogramma's voor sociaal kwetsbare volwassenen.
2.	**Maak duidelijk waar deelnemers extra informatie kunnen vinden over het onderzoek**	Gedurende het onderzoek zullen er geen tussentijdse resultaten worden gepubliceerd. In overleg is het mogelijk om inzicht te krijgen in de getranscribeerde tekst. Na afloop van het onderzoek kan het eindrapport worden opgevraagd aan de onderzoeker.
3.	**Verklaar wat er gaat gebeuren met de resultaten van het interview**	De antwoorden van het expertinterview worden gebruikt voor het opstellen van relevante interviewvragen die gesteld gaan worden tijdens de interviews met de coaches van Stichting Life Goals. Daarnaast zullen de antwoorden gebruikt worden voor het ontwikkelen van een codeboek en kunnen antwoorden verwerkt worden in het eindrapport.
4.	**Vraag of het interview mag worden opgenomen**	Opnames zullen worden gebruikt voor de analyse van het interview.
5.	**Verklaar wat er gaat gebeuren met de opnames**	Alle opnames zullen worden verwijderd, nadat het onderzoek is afgerond.
6.	**Geef een indicatie van de duur van het interview**	Het interview zal worden afgenomen via Microsoft Teams vanwege Covid-19 en zal ongeveer 45 minuten in beslag nemen.
7.	**Geef aan dat deelnemer ten alle tijden vragen kunnen stellen over het onderzoek**	De deelnemer is vrij om voor, tijdens en na het interview vragen te stellen met betrekking tot het onderzoek.
8.	**Geef aan dat de deelnemer op ieder moment zich mag terugtrekken van het interview**	De deelnemer is vrij om op ieder moment te stoppen met het interview.

Interview vragen – Expert

Biografie
1. Hoe bent u in aanraking gekomen met Stichting Life Goals?
2. Wat is de reden waarom u bij Stichting Life Goals bent gaan werken?
   a. Wat is uw persoonlijke doel binnen Stichting Life Goals?
3. Wat is uw functie binnen Stichting Life Goals?
   a. Wat zijn uw werkzaamheden binnen Stichting Life Goals?

Stichting Life Goals sportprogramma's: individueel vs. teamsport
Op de website van Stichting Life Goals wordt aangegeven dat het doel van de stichting is om sociaal kwetsbare mensen te inspireren om aangesloten te blijven bij de maatschappij door middel van het deelnemen aan een sportprogramma.
4. Welke sporten worden er beoefend in de aangeboden sportprogramma's?
5. Zijn er weloverwogen keuzes gemaakt met betrekking tot het aanbieden van een sport?
   a. Waarom zijn bepaalde sporten wel meegenomen in een sportprogramma en andere sporten niet?
6. Zijn er sporten die uit ervaring beter aansluiten op de ontwikkeling van sociaal kwetsbare volwassenen?

     a. Zo ja, welke sporten zijn volgens u het meest geschikt? En welke sporten zijn volgens u het minst geschikt?

7. Wat voor soort sportprogramma's worden opgezet voor sociaal kwetsbare volwassenen?
     a. Worden er individuele sportprogramma's opgezet?
          i. Worden sportprogramma's waarin een individuele sport wordt beoefend zowel gegeven in een groep als individueel?
          ii. Is er bewust gekozen voor het geven van individuele sporten in een groep?
               1. Zo ja, waarom?
     b. Worden er teamsportprogramma's opgezet?
8. Welke weloverwogen keuzes worden er gemaakt met betrekking tot het aanbieden van een sportprogramma?
9. Wordt er stilgestaan bij het onderscheid tussen individuele sportprogramma's en teamsportprogramma's?

Door middel van het opzetten van doelgerichte sportprogramma's kunnen sociaal kwetsbare mensen een kans krijgen om nieuwe (sociale) vaardigheden en contacten op te doen die zij in een andere context kunnen gebruiken.

10. Op welke manier verschillen individuele sportprogramma's ten opzichte van teamsportprogramma's?
     a. In doel.
     b. In aanpak.
     c. In structuur.
     d. In coaches.
     e. In uitkomsten/ontwikkeling.
     f. In uitstroom; bijvoorbeeld vrijwilligerswerk, betaald werk, lidmaatschap bij een sportvereniging of een opleiding volgen.

Theoretisch model

11. Hebben de sportactiviteiten van een individueel sportprogramma, naar uw mening, een andere invloed op de ontwikkeling van sociaal kwetsbare mensen dan de activiteiten van een teamsportprogramma?
12. Hebben de coaches van een individueel sportprogramma, naar uw mening, een andere invloed op de ontwikkeling van sociaal kwetsbare mensen dan de coaches van een teamsportprogramma?
     a. Is er een verschil in persoonlijke aandacht van de coach tussen een individueel sportprogramma en een teamsportprogramma?
13. Hangt er aan individuele sportprogramma's, naar uw mening, een ander reglement dan aan teamsportprogramma's?

Ervaring met sportprogramma's expert

14. Wat zijn naar uw inzien kansen van individuele sportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
15. Wat zijn naar uw inzien barrières van individuele sportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
16. Wat zijn naar uw inzien kansen van teamsportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
17. Wat zijn naar uw inzien barrières van teamsportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?

Toekomst Stichting Life Goals met betrekking tot sportprogramma's

18. Op welke vlakken zouden individuele sportprogramma's geoptimaliseerd kunnen worden om de ontwikkeling van sociaal kwetsbare mensen te vergroten?
19. Op welke vlakken zouden teamsportprogramma's geoptimaliseerd kunnen worden om de ontwikkeling van sociaal kwetsbare mensen te vergroten?

Appendix II. Interview format and interview questions semi-structured interviews with coaches

Interview format - Coaches		
1. **Samenvatting van het onderzoek**		Het doel van dit onderzoek is om meer inzicht te krijgen in de verschillen tussen individuele sportprogramma's (inclusief het beoefenen van een individuele sport in een groep) en teamsportprogramma's met betrekking tot de ontwikkeling van sociaal kwetsbare volwassenen. Hierbij wordt er gekeken naar de kansen en belemmeringen van verschillende sportprogramma's op de ontwikkeling van sociaal kwetsbare volwassenen.
2. **Maak duidelijk waar deelnemers extra informatie kunnen vinden over het onderzoek**		Gedurende het onderzoek zullen er geen tussentijdse resultaten worden gepubliceerd. Na afloop van het onderzoek kan het eindrapport worden opgevraagd aan de onderzoeker.
3. **Verklaar wat er gaat gebeuren met de resultaten van het interview**		De antwoorden van het interview worden verwerkt in het eindrapport met als doel om meer inzicht te krijgen in de verschillen tussen individuele sportprogramma's en teamsportprogramma's vanuit het perspectief van de coach. De antwoorden zullen niet terug te herleiden zijn en worden anoniem verwerkt.
4. **Vraag of het interview mag worden opgenomen**		Opnames zullen worden gebruikt voor de analyse van het interview.
5. **Verklaar wat er gaat gebeuren met de opnames**		Alle opnames zullen worden verwijderd, nadat het onderzoek is afgerond.
6. **Geef een indicatie van de duur van het interview**		Het interview zal worden afgenomen via Microsoft Teams vanwege Covid-19 en zal ongeveer 45 minuten in beslag nemen.
7. **Geef aan dat deelnemer ten alle tijden vragen kunnen stellen over het onderzoek**		De deelnemer is vrij om voor, tijdens en na het interview vragen te stellen met betrekking tot het onderzoek.
8. **Geef aan dat de deelnemer op ieder moment zich mag terugtrekken van het interview**		De deelnemer is vrij om op ieder moment te stoppen met het interview.

Interview vragen – Coaches

Biografie
Via Dico, de coördinator van de Life Goals Academie, ben ik in contact gekomen met verschillende coaches die sportprogramma's geven/aanbieden aan sociaal kwetsbare volwassenen.
1. Wat houdt de functie als (sport/buurt)coach voor u precies in?
2. Wat is de reden waarom u (sport/buurt)coach bent geworden voor sociaal kwetsbare volwassenen?
3. Aan welke doelgroep geeft u sportprogramma's? (bijvoorbeeld specifiek gericht op daklozen, verslaafden, leeftijdscategorie, etc.)
4. Wat voor soort sportprogramma's geeft u aan sociaal kwetsbare volwassenen?
    a. Individuele sportprogramma's, teamsportprogramma's of beiden?

Individuele sportprogramma's vs. teamsportprogramma's
5. Welke sport(en) worden er in het aangeboden programma / de aangeboden programma's beoefend?
6. Zijn er weloverwogen keuzes gemaakt met betrekking tot het aanbieden van een sport?
    a. Waarom zijn bepaalde sporten wel meegenomen in een sportprogramma en andere sporten niet?

7. Zijn er sporten die uit ervaring beter aansluiten op de ontwikkeling van sociaal kwetsbare volwassenen?
    a. Zo ja, welke sporten zijn volgens u het meest geschikt? En welke sporten zijn volgens u het minst geschikt?
    b. Zou u voor bepaalde doelgroepen een individuele sport aanraden en voor andere doelgroepen eerder een teamsport?
    c. Ziet u een verschil in ontwikkeling op fysiek gebied tussen individuele sporten en teamsporten?
    d. Ziet u een verschil in ontwikkeling op mentaal gebied tussen individuele sporten en teamsporten?
    e. Ziet u een verschil in ontwikkeling op sociaal gebied tussen individuele sporten en teamsporten?

U gaf aan dat u … *individuele sportprogramma's, teamsportprogramma's, beide sportprogramma's*
… geeft aan sociaal kwetsbare volwassenen.

8. Welke weloverwogen keuzes zijn er gemaakt met betrekking tot het aanbieden van dit sportprogramma / deze sportprogramma's?
    a. *Als er individuele sportprogramma's worden gegeven*: Wordt/worden de individuele sport(en) zowel gegeven in een groep als individueel?
        i. Is er bewust gekozen voor het geven van een individuele sport in een groep?
            1. Zo ja, waarom?
9. Wordt er stilgestaan bij het onderscheid tussen individuele sportprogramma's en teamsportprogramma's?

Theoretisch model (gebaseerd op het sportprogramma wat de coach geeft)
10. Wat voor invloed denkt u dat de keuze van de specifieke sportactiviteiten en de manier waarop ze worden aangeboden hebben op de betrokkenheid van sociaal kwetsbare volwassenen?
11. Wat voor invloed denkt u dat de keuze van de specifieke sportactiviteiten en de manier waarop ze worden aangeboden hebben op de status van sociaal kwetsbare volwassenen?
12. Zijn er sportactiviteiten waarbij de betrokkenheid en status hoger ogen ten opzichte van andere sportactiviteiten? (hierbij kunt u denken aan individuele sport vs. teamsport of twee teamsporten vergelijken).
    a. Waarom denkt u dat juist bij die sportactiviteiten de betrokkenheid en status hoog is?
13. Wat voor invloed denkt u dat u als coach heeft op de ontwikkeling van sociaal kwetsbare volwassenen?
    a. Denkt u dat er een verschil in invloed is tussen een coach die een individueel sportprogramma geeft en een coach die een teamsportprogramma geeft? (denk aan individuele sport, meer persoonlijke aandacht).
    b. Denkt u dat een coach een grote rol speelt in het vormen van genegenheid (warm/prettig gevoel) en verbondenheid? (zowel naar andere mensen en de coach als naar het sportprogramma zelf).
14. Wat voor invloed denkt u dat de regels en structuur omtrent de aangeboden sportprogramma's hebben op de ontwikkeling van sociaal kwetsbare volwassenen?
    a. Door wie en op welke manier zijn de regels van het sportprogramma opgesteld?
    b. Denkt u dat regels en structuur zorgen voor respect en gelijkheid/gelijkwaardigheid?
15. In hoeverre denkt u dat de organisatorische sportomgeving van invloed is op de ontwikkeling van sociaal kwetsbare volwassenen?
16. In hoeverre denkt u dat de achtergrondkenmerken (bijv. huishouden, buurt, sociale stratificatie) van de deelnemers van invloed zijn op de ontwikkeling van sociaal kwetsbare volwassenen?

Ervaring met sportprogramma's coaches

17. Wat zijn naar uw inzien kansen van individuele sportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
18. Wat zijn naar uw inzien barrières van individuele sportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
19. Wat zijn naar uw inzien kansen van teamsportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?
20. Wat zijn naar uw inzien barrières van teamsportprogramma's op de ontwikkeling van sociaal kwetsbare mensen?