social sciences

MDPI

Article

Rethinking the Vulnerability of Groups Targeted in Health-Promoting Sports and Physical Activity Programs

Sine Agergaard * and Verena Lenneis

Department of Health Science and Technology, Aalborg University, 9260 Gistrup, Denmark; vl@hst.aau.dk
* Correspondence: sine@hst.aau.dk

Abstract: Vulnerability and related terms are increasingly used to describe the target groups of health-promoting programs involving sports and physical activity. Yet, such terms are often left undefined, creating an image of vulnerability that reinforces the health inequities the programs seek to counter. This article aims to reconceptualize vulnerability to help researchers and program personnel describe and support individuals and groups in vulnerable positions. To do so, we conceptualize vulnerability as a contentious phenomenon, emphasizing the spectrum between individual and community perspectives on vulnerability, along with between experts' evaluation of (health) risks and lived vulnerability. We illustrate the utility of this elaborate conceptualization of vulnerability through a single case study of a walking program organized by a health promotion unit in a so-called deprived area in Denmark. Interviewing the health professionals, it was not surprising to identify that experts' evaluations of risks are key to the program. However, employing the conceptual framework in its entirety, we also find indications of lived vulnerability and resistance towards their conditions among the program participants. We conclude that it is relevant for both researchers and program employees to consider the complete spectrum of risks and lived vulnerabilities, along with providing support not only to individuals in need but also to their communities.

Keywords: deprivation; community; minority-ethnic; elderly; walking

Citation: Agergaard, Sine, and Verena Lenneis. 2024. Rethinking the Vulnerability of Groups Targeted in Health-Promoting Sports and Physical Activity Programs. *Social Sciences* 13: 6. https://doi.org/10.3390/socsci13010006

Academic Editors: Jesper Andreasson and April Henning

Received: 14 October 2023
Revised: 10 December 2023
Accepted: 18 December 2023
Published: 20 December 2023

1. Introduction

Today, an increasing number of programs are set up with physical activity and sport as key to promoting the health of specific target groups such as people with multiple chronic diseases (Geidne and Van Hoye 2021). In descriptions of such programs, there is a wide use of the concept of vulnerability, along with related terms such as social deprivation, fragility and being in need to describe these target groups. Yet, scholars have pointed out that the vague use of such concepts may reproduce the health inequities that the programs set out to counter (Katz et al. 2020). This article emerges from a growing discomfort with the use of such concepts (including our own) and seeks to contribute to a rethinking of vulnerability in particular.

Programs directed towards supporting the health promotion of groups that are dubbed vulnerable, socially deprived, fragile and in need are widely run in Denmark and elsewhere (Fernández-Gavira et al. 2017; Pilgaard and Rask 2018). Indeed, physical activity and sports are often key to such programs organized often by public institutions in collaboration with civil organizations (Ibsen and Levinsen 2019). Employees and volunteers often feel pressured to deliver high participation numbers and numerous program activities to satisfy the quantitative monitoring of modern self-governing (Agergaard and la Cour 2012). This leaves little time and space for program personnel to reflect on how they conceptualize their target group. Further, with increasing demands for raising external funds, researchers may turn to evaluations of whether the programs have met their measures rather than to the rigid theoretical conceptualization of key concepts such as vulnerability. Altogether, such

developments highlight the current relevance for both researchers and program personnel to engage in a rethinking of the concepts utilized to approach the group in focus.

On the one hand, utilizing the concept of vulnerability may help to attract political focus and to fund programs, while also raising public concern about specific groups and individuals in need of support (Katz et al. 2020). On the other hand, describing program participants as in need and deprived may also reproduce ideas of 'the vulnerable' as a homogeneous group and reinforce distinctions between 'active and healthy selves' and the 'unhealthy others' (Agergaard et al. 2022). Furthermore, utilizing such concepts may also predetermine program participants as inherently vulnerable, leaving little attention to the possible resistance they exert and the conditions that surround them. This is detrimental, since paying attention to the agency of program participants and their surrounding communities may help us provide relevant support to the group in focus.

In that sense, the concept of vulnerability may be deemed too narrow, as it produces an image of a specific group in need, but also too broad, as it draws still more disparate persons and varying social conditions into our perceptions of vulnerability (Levine et al. 2004; Nickel 2006). Thus, there is a need for both researchers and program personnel to develop new ways of conceptualizing vulnerability to support the groups in focus without reproducing the health inequities the programs set out to counter. In fact, critical scholars have argued that the current vague use of the concept of vulnerability conceals the social inequity that has produced this condition (Katz et al. 2020). Such use allows the reader to reproduce their own image of vulnerability and to "... 'fill in the blanks' as to the root causes of the vulnerability." (Katz et al. 2020, p. 606). Thus, without elaborately defining what vulnerability is made of, research (and programs) may leave out the mechanism that generates vulnerability from the equation, obscuring the power dynamics at play.

The aim of this article is to reconceptualize vulnerability to help researchers and program personnel describe and support individuals and groups in vulnerable positions. In so doing, we focus on the spectrum between how vulnerability may be understood in an individual and a community perspective, respectively, along with the range between experts' identification of health risks and lived experiences of vulnerability. Utilizing a single case study of a walking program, we illustrate how an elaborate conceptualization of vulnerability helps encompass the range from the health risks described by the program personnel to the program participants' experiences of vulnerability. Such a conceptualization may also enable us to highlight the significance of identifying the everyday life resistance among the participants that may be supported along with considering vulnerability in a community perspective in particular. Before setting out on this endeavor, it is worth reviewing how vulnerability has been considered within health research and identifying a framework that may help us reach the aim of this article.

2. Health Research on Vulnerability

As observed by Levine et al. (2004), the term vulnerability is widely used in health research and clinical practices, although there is little preoccupation with defining the concept in further details. Originally, the term is thought to have been used to identify specific groups that needed particular protection. However, the term 'vulnerable' is now applied to describe very different groups and situations, often without further definitions of their conditions of vulnerability (Levine et al. 2004). Notwithstanding, studies have demonstrated that using the term 'vulnerable' has consequences for the health care practices that are assigned to the individuals and groups in focus (Clark and Preto 2018).

In alignment with key studies pointing to social and structural conditions as fundamental for health issues such as physical inactivity and smoking (Berkman et al. 2000; Link and Phelan 1995), it has been pointed out that vulnerability cannot simply be understood as an individual phenomenon, but rather is to be comprehended in a community perspective. This involves acknowledging that it is not simply individual behavior that makes some persons more vulnerable than others, but also the conditions and opportunities they are surrounded with (Aday 1994). Thus, when concepts like vulnerability are used to focus on

specific individuals, it may disguise inter-related structural conditions such as historical, political and economic conditions that constrain the individual pathway to health (Berkman et al. 2000).

To be more specific, qualitative health researchers have suggested that there might be three sources of vulnerability, ranging from inherent (existential) vulnerability to situational vulnerability and pathogenic vulnerability (Rogers et al. 2012). In that sense, there is an acknowledgement of not only the range between individual and community dimensions, but also the fact that illnesses can spark vulnerability for any individual and in any community. Furthermore, vulnerability has been defined as a state of being at risk in physical, mental and/or social dimensions, coupled with a decreased capacity to protect yourself from risk (Aday 1994; Kiyimba et al. 2019).

As such, vulnerability may be said to be a contentious concept, which is also reflected in numerous dilemmas in healthcare practices. When health professionals relate to persons in vulnerable positions there are numerous dilemmas involved, such as whether the health system should focus on treating the individual person and/or the context that needs change. Additionally, health professionals often face the challenge of transitioning from a static view of individuals and groups diagnosed as vulnerable to a dynamic perspective on how such conditions may be dealt with and changed (Kiyimba et al. 2019). Furthermore, it has been discussed whether health professionals should approach the issue of vulnerability with a so-called consent-based approach so that the capacity of the health system to deliver care is distributed equally across the population, or whether a fairness-based approach should be used, so that it is the ones that need most help that are provided with most support (Larkin 2009; Nordentoft and Kappel 2011).

A similar range of approaches has been described in relation to sports programs for adolescents, distinguishing between the universal equality approach directed towards promoting sports participation among large groups of adolescents, and the more specific targeted equity approach, which focuses on making sports accessible for the adolescents that need the most help (Hjort and Agergaard 2022). Yet, to our knowledge, no publications have set out to reconceptualize vulnerability to develop encompassing descriptions and adequate support to participants in health-promoting programs that offer physical activity and sport.

3. Conceptualizing Risk and Vulnerability

The concept of risk has long been connected to definitions of vulnerability in health research. Aday (1994) argues that risk is the probability that an individual becomes ill. She points out that everyone is potentially at risk, but the relative risk is higher for some individuals than others due to their exposure to poor health. Furthermore, she suggests that vulnerability can be understood from an individual perspective and a community perspective. In the individual perspective, vulnerability has to do with the availability (or rather lack of) individual resources along with individual health needs that make some individuals more susceptible to harm or neglect than others. In the community perspective, it is the ties between people and resources in the neighborhood that constitute community resources. When these resources are absent, local populations are at risk of not having their community health needs met (Aday 1994).

Bearing on Aday's conceptualization, Spiers (2000) argues that we should distinguish between vulnerability as relative risk, that is, the probability of becoming ill on the one hand and lived experiences of vulnerability on the other hand. This involves a distinction between understandings of 1. risk as an epidemiological and objective condition that can be quantitatively measured and is perceived as a deficient functioning that needs to be evaluated by experts, and 2. vulnerability as a subjective lived experience that is multidimensional and varied as well as it is interactional with other people and the environment that influence the individual's capacity of coping with conditions of vulnerability.

This is also described by Spiers and colleagues as a distinction between an etic view from outside on the objective risk of developing bad health, and an emic view from inside

on vulnerability as 'a quality of experience which evokes different responses' (Spiers 2000, p. 720). Further, it is pointed out that even if described as an objective risk, the etic view is also linked with normative values. These are values that are used to evaluate who are less capable of functioning adequately in socially desirable ways, making it necessary for society to intervene so the endangerment or threat of objective harm on these individuals and groups can be changed. Thus, certain groups in society (such as health professionals) are specially sanctioned to determine who needs interventions based on knowledge about those at-risk and ideas about normative social functioning. In this perspective, vulnerability is assumed to be the relative risk of potential or actual harm based on external judgements of functional capacity, and socially sanctioned interventions are put in place to minimize such risks (Spiers 2000).

According to Spiers, this contrasts with an emic view on vulnerability that is based on the person experiencing challenges (among others, health-related issues). This view starts from the assumption that vulnerability is a universal and lived phenomenon. Thus, contrary to the belief that health experts and health professionals can predict risk and intervene accordingly, " . . .vulnerability pertains to the whole experience rather than to a priori determinants based on population norms, many other forms of vulnerability may emerge." (Spiers 2000, p. 719). From this perspective, vulnerability is a complex whole and a dynamic phenomenon that evolves with lived experiences and the surrounding conditions. The consequence of such a view is that vulnerability can only be fully determined from the perspective of those experiencing it. Furthermore, Spiers argues that 'the emic view provides a framework for understanding how people integrate and manage multiple challenges in their daily experience' (Spiers 2000, p. 720).

Thus, the conceptual framework of Spiers encourages studies of the span from health professionals' view on risks and ideas about the necessity of intervening accordingly, to studies of lived experiences of vulnerability including ways of handling challenging life conditions. Paying attention to such variety is important when seeking a more comprehensive understanding of the vulnerability at play in programs utilizing physical activity and sport to promote health. Further, by incorporating attention not only to individual experiences of and resistance towards their vulnerable positions, but also understanding vulnerability in a community perspective, researchers and practitioners may develop their options for providing adequate and comprehensive support to the groups in focus.

4. Methods and Material

Studying the issue of vulnerability is a truly challenging methodological endeavor (Aldridge 2014; Larkin 2009; Nordentoft and Kappel 2011). Considering our initial description of the fallacies of reproducing images of a homogeneous group of inherently vulnerable people, this article seeks to be attentive to the variety not only between but also within a group of program employees and a (target) group of program participants. Thus, we seek to not presuppose vulnerability but explore it among the individuals involved in our qualitative study while also considering the structural context involved.

To illustrate the utility of an elaborate conceptualization of vulnerability, we will draw on an embedded single case study (Yin 2018). That is, we will focus on a walking program in particular, but also study the wider context of the program, which was organized by a health promotion unit funded by a municipality in Denmark. This unit is responsible for rehabilitation programs for people with various kinds of chronic diseases living in an area officially designated as deprived by the Danish government. The area is inhabited by minority-ethnic populations in particular, and there is a high percentage of the population as a whole who do not hold a formally recognized education and are outside the job market. Additionally, socioeconomic resources are limited among residents in this area. The residents who participate in the programs run by the health promotion unit often have multiple chronic diseases, such as type2 diabetes, osteoarthritis and mental health issues, and are typically middle-aged or elderly people, with the majority being women. The health promotion unit appears to us as a particularly interesting case to study due to the fact

that they do not only organize standard interventions combatting the risks following with chronic diseases, but also have community-embedded programs such as walking in the local area. Thus, this embedded single case study may provide us with a view into health professionals' perspectives on the risks facing their target group along with the participants' everyday lives and ways of relating to the vulnerable conditions that surround them.

As for the methods, we will draw on semi-structured interviewing in the tradition of Brinkmann and Kvale (2014). Interviews were made with 12 health professionals (i.e., dieticians, nurses, physiotherapists and occupational therapists) employed in the health promotion unit, and each interview had a duration of around 60 min length. A majority of the interviewees were women in the age range 30–60 years, but also men were among the employees, and several interviewees had minority-ethnic backgrounds themselves. In the interviews the health professionals were asked to describe their work and the target group/participants in their programs, along with reflecting on the challenges and dilemmas they encounter.

Furthermore, we draw on participant observation conducted by both of us over a one-year period (November 2020–November 2021, with COVID-19-related interruptions) following the weekly walking program (a 2–2 ½ hour session involving walking and drinking coffee and tea together). Our observations were rather unstructured and focused particularly on the women's walking practices and ways of walking as well as the women's interactions with each other and with employees of the health promotion unit (Thorpe and Olive 2019). Additionally, participant observation also provided us with opportunities of having informal conversations with the participants about their daily lives (in particular with the ones who spoke considerable Danish since we did not have proficiency in the first languages of the participants).

In our analysis of the transcribed interviews and notes from participant observation we have worked rather deductively drawing partly on the theoretical distinction between risk and vulnerability (Spiers 2000), partly on the conceptualization of vulnerability as not only an individual condition but as a phenomenon that is linked to the surrounding community (Aday 1994). This means that we examined the health professionals' descriptions of the risks of the target group and the perceived needs of intervening to reduce such risks. On the other hand, we also delved into the experiences of the participants in the walking program while considering their surrounding conditions. Drawing on symbolic interactionism, a specific focus during participant observation has not only been interactions among participants as well as between participants and program employees, but also the meaning that material objects may have in such interactions. During the field work, we developed a keen interest in the shoes worn by participants in the walking program. This focus was further substantiated when one of the professionals from the health promotion unit applied for funds to provide hiking shoes for the participants.

Thus, the analysis below is partly a result of condensing the interview material (Brinkmann and Kvale 2014) to extract the perspectives on health risks expressed by health professionals. In addition, we have condensed the excerpts of notes from the participant observation that highlighted the significance of the shoes worn by the research participants and the interactions revolving around them. Furthermore, taking an interactive approach to vulnerability also involves reflecting on our own experiences. We will include some of these reflections below.

5. Results

The following analysis will be divided so that the first part is based on interviews with employees from the health promotion unit, and the second part on participant observation of the walking program in particular.

5.1. Risks and Interventions

Talking to the health professionals about the target group for their programs, it was not surprising to us that they described the group as at-risk, utilizing initially medical

terms to describe their vulnerability. Below, we apply the conceptual framework of Spiers and point out that the employees highlighted the multiple risks for the participants, and we argue for the relevance of intervening accordingly.

To be more specific, when the health professionals were asked to describe the group that participated in their activities, they depicted the target group as people with diabetes and/or other types of chronic diseases, along with mental health issues, such as PTSD, depression, and stress. Further, several of the health professionals also referred to the multiple risks of their target group:

> *. . ..because they really have many other challenges. We have many PTSD citizens, almost all of them have psychological problems, depression or stress. . .. They really have a lot of stuff. For many of them diabetes is nothing. (Faiza)*

In that sense, the health professionals alerted attention to the complexity of challenges that influence the participants' physical, mental and social well-being.

Further, the interviewed professionals described that the health promotion unit is in charge of running standardized programs, which target citizens with different medical diagnoses:

> *. . . there is a clearly described program, where there are some very clear goals for what the citizens must do. Not what they should achieve, but what they have to go through, i.e., descriptions of what the program should contain.... And now I can't quite remember them off the top of my head, but it's something like you have to know what diabetes type 2 is, what effect it has on the body, what low blood sugar means, how to work with your blood sugar and things like that. (Irene)*

As such, the health professionals pointed out that there existed a systematic framework for assessing the vulnerability of the targeted population defined as objective risks of developing sequelae from, e.g., type 2 diabetes. In the words of Spiers, the work of the health promotion unit is based on expert evaluations and what are indeed socially sanctioned interventions with specific program content and following measurements for the effects on objective risks (such as blood sugar).

Yet, in our discussions with the health professionals, it became evident that they tailored the programs to the specific needs of the many different people they met.

> *In other words, when they come in for a meeting... it's initially about where they are and what their biggest problem is, and where should we start. And if it turns out that it would be a good idea to enroll them in one of our programs and that they are ready for it now, then they will... then they will be introduced to what we have. (Lone)*

Besides adapting programs to every new individual, the specific health promotion unit puts in extra efforts such as employing bilingual professionals to improve their options for communicating (and interacting) with the group in focus.

Still, when analyzing the health professionals' descriptions of their target group through the lens of Spiers, we recognize the etic perspective on the deficits of the group that needs intervention. This is evident in the following description of the group:

> *I find that there is a group of women in particular who are extremely unaccustomed to exercise, who have never tried to get their heart rate up or move, and who may not have always understood the purpose of it either. (Merete)*

It is worth noticing that this health professional did not only point to deficit approaches to physical activity among the participants, but also outlined a lack of experience with exercising as well as inadequate translation of the meaning of exercise to the women in focus here. Thus, the health professionals appeared to run the programs not merely to remove deficits but also to change the participants' experiences, making use of bilingual employees to explain physiological reactions as a consequence of physical activity such as palpitations and shortness of breath.

Notwithstanding the dominant focus on risk and the need to intervene to remove deficits, one of the health professionals described her main concern as supporting the group

in accessing and navigating the programs available to them. Like others in the health promotion unit, this employee also explained how intersecting dimensions shaped the vulnerability of the group in focus. Furthermore, she also pointed out that the health promotion unit made use of different terms to describe their target groups, among other things, because they were dependent on continuous political support. As political discourses change, there may be instances where they need to refrain from mentioning some dimensions (e.g., the ethnicity and/or religion of the major part of the group). In contrast, at other points in time, they would describe the mental health issues of their target group rather than pointing to their physical health challenges. Still, in their work with the group, they remained conscious that the group may be exposed to various challenges at the same time:

> *. . . it is really about many different kinds of vulnerabilities and exposures, right. When we articulate it here and frame it, it is not all the elements we describe rather they are exposed citizens with general vulnerabilities. (Susanne).*

Thus, while the health professionals evidently pointed out the multiple risks for the group in focus, they did so in ways that demonstrate their consciousness about the terms used to describe their target group. Despite having to follow standardized programs, the health professionals adapted the programs intended for groups with specific medical diagnosis to every individual (and their multiple challenges) and to the variety within the target groups. In so doing, the employees also strongly related to an understanding of vulnerability as lived experiences that will be described in further detail below.

5.2. Lived Vulnerability and Resistance

To illustrate the significance of also analyzing vulnerability as lived experiences, we will draw on our conversations and observations from regularly participating in the walking program. It became soon evident for us that the participants dealt with multiple challenges in their everyday lives. Furthermore, moving with and talking to the women as part of the walking program gave us some insight into how the participants lived with, but also sought to cope with their conditions.

When we first arrived to participate in the walking program in the cold weather of November, we were equipped with either sports shoes or hiking boots, along with weatherproof pants and jackets. We immediately noticed that such clothing was uncommon in the context in which we had arrived. Contrary to us, many of the women wore dresses, skirts and long scarfs. Further, since walking took place in the nearby green area all year round, our attention was drawn to the participants' footwear, as highlighted in this extract from our fieldnotes:

> *I am intrigued by the shoes that the participants wear; not only for the function they have since none of them have shoes for walking and/or rubber boots, but also for the symbolic meaning. A few of the women have sports shoes, while most have open shoes which are not supportive to walking, especially at this time of the year when it is very muddy and slippery. Fadda nearly fell several times during our trip, while Sana shuffles around in loose boots.* (24 November 2020, Sine).

As described, the shoes of the participants did not appear to us as beneficial for participating in the walking activities. In fact, slips and falls happened often, and posed a risk for the participants, since several of the participants had cartilage damage in their knees and hips. Notwithstanding such incidents, the women would arrive again wearing the same shoes the next time, and would continue walking, even if challenged. Initially, the continuous wearing of such footwear seemed to us linked to the women lacking socioeconomic resources. However, it became apparent to us that since the women also suffered from multiple health-related challenges such as type2 diabetes, loose and spacy shoes were possibly the most suitable option for them.

Turning our attention towards the lived experiences of the participants provided us with insight into how socioeconomic and/or health-related vulnerabilities may materialize in the shoes of the women walking on steep and muddy surfaces. Yet, we also observed

some diversity in the shoes worn. While one of the women had a pair of sneakers, on which her 14-year-old son had written 'NIKE' with a permanent marker, another woman wore slippers on the 1 ½-hour walking trail. Furthermore, we noticed that there was a considerable variety in the ways in which the women approached the walking program. Some walked in ways that suggested they were in considerable pain, while others engaged in brisk walking and opted for the steeper routes. While a program employee sought to motivate and inspire the women to take novel tracks every time and included stretching and/or other activities along the route, the women often opted for each other's company and took their usual route.

Thus, inquiring into the experiences of the women also provided us with an insight into their agency and how they engaged with their daily surroundings. While the women, who were often also mothers, seemed to like getting away from their homes (and duties there) and enjoyed walking in the nearby green area as a recreational activity, it also became clear to us that there were boundaries for the women's space of movement.

> *We make it to the top (of the hill). Fatima and Nadja are exhausted, Nadja tells me that her heart is beating fast, using her hand clapping on her heart to express herself. We sit on a piece of concrete and enjoy the view all over the city. It makes me think about the women's radius of movement, which seems to be limited to [name of the residential area] and the very close surroundings. I ask Fatima and Nadja and they confirm that they don't go downtown.* (18 May 2021, Verena).

As such, walking with the women in their close surroundings provided a glimpse into their everyday lives: where they lived, who they were related with and how these relationships unfolded. This also highlighted the delimitation of their surroundings, for instance, how they refrained from moving into the city center, in which they were a visible minority.

During our fieldwork, however, one of the program employees applied for funding to purchase hiking shoes for the participants, which encouraged them to visit an outdoor shop in the city center to try on shoes and cash in their voucher. The whole situation developed our insight into not only the lived challenges of the women but also the variety of coping strategies enacted by the women. During the period when the program employee handed out vouchers for free walking shoes, attendance rates grew. Women also came to the health promotion unit to ask about the opportunity of having hiking shoes. Furthermore, some key participants (themselves in vulnerable positions) helped others in accessing a voucher by advocating for them as regular attendees, if not currently, then previously.

> *Nadja talks to a woman who says that she often came to the walks before Covid-19, but that she didn't make it this time so she could get shoes. Nadja confirms to the woman that she is one of those who usually come and suggests that she can tell (the program employee) who usually comes*. (25 May 2021, Sine)

Such debate about who qualifies as regular participants in the program also led to discussions about the origin of the walking activities. The woman referred to above, along with several other participants, pointed out that she/they had been attending the walking activities long before the program employee and before the health unit supported these activities. Thus, to us, such incidents showcase the importance of not only focusing on the health risks of program participants but also paying attention to the lived experiences of vulnerability, in line with our conceptual framework. In so doing, we got to observe how individuals in vulnerable positions may support each other and negotiate their position, even if the program employee is in the position to 'sanction' (to use a term from Spiers) who is given a voucher in this case.

Other acts of resistance became evident to us when we discovered that many of the women travelled to the outdoor shop in the city center in small groups to try on and obtain the shoes they wanted. Yet, additional insights arose when we realized that few participants actually wore the shoes and, if they did, it seemed that they only wore the shoes as brand new and then put them aside. Despite trying to ask the women and the program employee,

it remains unclear to us whether the women disliked wearing brand new shoes or if the shoes did not fit well, e.g., due to their conditions such as type 2 diabetes. Among our reflections (bearing on our view to the socioeconomic vulnerability of the women) are also the considerations that the shoes might have been resold to provide the women (and their family) with financial resources. While reading such acts as a testimony to the complex vulnerable positions of the women, observing the interactions around the hiking shoes also made us aware of the diversity of approaches taken by the women.

Studying the lived experiences of health-related and socioeconomic vulnerabilities (and the women's way of coping which such conditions) through the perspective of Spiers, we are also reminded about the significance of understanding vulnerability in a community perspective. When moving with and talking to the women, it became clear to us that they prioritized the needs of their family members higher than using time and resources on caring for their own well-being. This was also affirmed by some of the health professionals, who described that the women did not cater first but last for their own well-being. As such, the women may possibly refrain from using the expensive shoes (if not simply due to the fact that the shoes did not fit them) to align with community needs and values.

A similar focus on collective and intragenerational well-being rather than individual health has been observed in other studies with non-Western women in particular (Agergaard et al. 2022). In fact, through the above-mentioned study, the first author was reminded of her own community values seeking to care for her elderly parents and children while also being highly engaged in her work as well as exercising to take care of her own health in middle-age. Indeed, when the first author started to reflect on her difficulties in balancing her family, individual health and work, she began to perceive a sense of vulnerability as a lived and universal experience (Spiers 2000).

While such an emic view on vulnerability may help us approach an understanding of how vulnerability is felt, the first author's experiences also remind us to utilize our conceptual framework in its entirety. The first author may experience the challenges of promoting her own and her family's health equally as strongly as some of the women frequenting the health promotion unit, yet their conditions are surely different. While the first author may not have the time some of the women in focus have for caring for their families, her socioeconomic conditions provide her with other options. In the words of Aday (1994), it is relevant to also consider the community resources and health needs.

In sum, through our empirical analysis, we have illustrated the relevance of considering vulnerability not only from an individual but also from a community perspective, taking in the complete spectrum of risks, including challenging medical and socioeconomic conditions, along with lived experiences of vulnerability. Such an understanding may help researchers and program personnel not only in describing but also supporting individuals and groups in vulnerable positions, through—among other things—building on their acts of resistance along with developing community resources to provide support.

6. Concluding Discussion

In response to the widespread and often undefined use of the concept of vulnerability in health-promoting sports and physical activity programs, we set out in this article to re-conceptualize vulnerability. This has involved not only conceptual (theoretical) considerations but also operationalizing and illustrating the utility of such ideas through an embedded single case study of a walking program organized by a health promotion unit.

As for the theoretical development, we have integrated Aday's understanding of vulnerability as not only an inherently individual phenomenon but also as community resources and needs, along with Spier's distinction between experts' evaluation of health risk and lived vulnerability. When focusing on risks, we acknowledge the challenging (and often complex) medical and socioeconomic conditions surrounding target groups in health-promoting sports and physical activity programs, and the fact that interventions directed towards such risks are socially sanctioned. The running of programs is not objectively determined, but rather defined by experts and other people in a position of power to

categorize what should count as risks and how society should intervene in relation to such risks. Applying this approach in our study, we have identified that the design of health-promoting sport and physical activity programs are often based on expert evaluations but may be adapted to the individuals in focus by the program employees.

Further, when focusing on vulnerability as lived experiences, we turn our attention to how individuals may experience their challenges and cope with complex medical and socioeconomic conditions. Such a conceptualization points to the relevance of exploring everyday life experiences of participants targeted in health-promoting sport and physical activity programs, while also paying attention to the variety within the group. Altogether, we argue against simply using the concept of vulnerability as an empty signifier, but to define it in further details and explore how the program participants experience their challenges in order to better understand and support them.

Furthermore, we have sought to contribute to methodological development. While a multiplicity of methods may be employed in studies of at-risk conditions and lived vulnerability, in this article, we described the utility of observing material objects (i.e., shoes) and the interactions around them. With such attention and an interactionist methodology, we suggest that researchers and program employees can find ways to approach a lived sense of vulnerability. In so doing, we also encourage reflections on how researchers' (and program employees') own experiences interact with their interpretations.

Still, there are several limitations in this article that may guide us in drawing perspectives for future research. First of all, our analysis of the interviews with the health professionals reveals that although they are very well aware of the complexity in the conditions that influence the target group, they refrain from describing some of these conditions (such as their minority religion that may be politically debated). As such, future research could draw greater attention to the possible experiences of vulnerability among health professionals. In line with descriptions of the dilemmas of street-level bureaucrats (Lipsky 1980), the health professionals in our study appear to face a cross-pressure between supporting the individuals and groups in focus on the one hand, and following changing political regulations and public discourses that shape how they can describe and design the programs on the other hand.

Another perspective that could have been developed further is the researchers' own positionalities and experiences of vulnerability. In this article, we suggest that reflections on our own experiences may help approach a lived sense of vulnerability, while also pointing to the clear limitations in the researcher not sharing conditions with the program participants. Yet, much more could be carried out with these reflections, as well as considering the ethical, emotional and professional vulnerability of researchers (Nordentoft and Kappel 2011; Sikic Micanovic et al. 2019). As described in this article, there are numerous dilemmas involved in conducting programs and research with individuals and groups in vulnerable positions that call for much more attention.

Author Contributions: Conceptualization, S.A.; methodology, S.A. and V.L.; validation, S.A. and V.L.; analysis, S.A.; writing—original draft preparation, S.A.; writing—review and editing, S.A. and V.L. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical approval was not provided by the authors' home institution at the point of study. Instead institutional guidelines for sound research practices have been followed.

Informed Consent Statement: Informed consent was obtained from all subjects and organizations involved in the study.

Data Availability Statement: Data are unavailable due to privacy or ethical restrictions.

Acknowledgments: Thanks very much to members of the Sport and Social Issues group at Aalborg University for feedback on an earlier draft of this article.

Conflicts of Interest: The authors declare no conflicts of interest.

References

Aday, Lu Ann. 1994. Health status of vulnerable populations. *Annual Review of Public Health* 15: 487–509. [CrossRef] [PubMed]

Agergaard, Sine, and Anette Michelsen la Cour. 2012. Governing integration through sports: A case study of civil society involvement in welfare policy. *Nordic Journal of Migration Research* 2: 26–34. [CrossRef]

Agergaard, Sine, Anne Bønning Jakobsen, Liva Lyngholm Mortensen, and Knud Eske Ryom. 2022. The quest for health and the unhealthy 'others'. A critical case study of Syrian women newcomers' meeting with health promotion and civic integration discourses upon arrival in Denmark. *Critical Public Health* 32: 725–36. [CrossRef]

Aldridge, Jo. 2014. Working with vulnerable groups in social research: Dilemmas by default and design. *Qualitative Research* 14: 112–30. [CrossRef]

Berkman, Lisa F., Thomas Glass, Ian Brissette, and Teresa E. Seeman. 2000. From social integration to health: Durkheim in the new millennium. *Social Science & Medicine* 51: 843–57. [CrossRef]

Brinkmann, Svend, and Steinar Kvale. 2014. *InterViews. Learning the Craft of Qualitative Research Interviewing*. London: Sage.

Clark, Beth, and Nina Preto. 2018. Exploring the concept of vulnerability in health care. *CMAJ: Canadian Medical Association Journal* 190: E308–E309. [CrossRef] [PubMed]

Fernández-Gavira, Jesùs, Ángeles Huete-García, and Luisa Velez-Colón. 2017. Vulnerable groups at risk for sport and social exclusion. *Journal of Physical Education and Sport* 17: 312–26.

Geidne, Susanna, and Aurélie Van Hoye. 2021. Health Promotion in Sport, through Sport, as an Outcome of Sport, or Health-Promoting Sport-What Is the Difference? *International Journal of Environmental Research and Public Health* 18: 9045. [CrossRef]

Hjort, Rikke Lambertz-Nilssen, and Sine Agergaard. 2022. Sustaining Equality and Equity. A Scoping Review of Interventions Directed towards Promoting Access to Leisure Time Physical Activity for Children and Youth. *International Journal of Environmental Research and Public Health* 19: 1235. [CrossRef]

Ibsen, Bjarne, and Klaus Levinsen. 2019. Collaboration between sports clubs and public institutions. *European Journal for Sport and Society* 16: 187–204. [CrossRef]

Katz, Amy S., Billie-Jo Hardy, Michelle Firestone, Aisha Lofters, and Melody E. Morton-Ninomiyam. 2020. Vagueness, power and public health: Use of 'vulnerable' in public health literature. *Critical Public Health* 30: 601–11. [CrossRef]

Kiyimba, Nikki, Jessica Nina Lester, and Michelle O'Reilly. 2019. Including vulnerable groups in health research. In *Using Naturally Occurring Data in Qualitative Health Research*. Edited by Nikki Kiyimba, Jessica Nina Lester and Michelle O'Reilly. Cham: Springer, pp. 205–27.

Larkin, Mary. 2009. *Vulnerable Groups in Health and Social Care*. London: Sage Publications.

Levine, Carol, Ruth Fadden, Christine Grady, Dale Hammerschmidt, Lisa Eckenwiler, Jeremy Sugarman, and Consortium to Examine Clinical Research Ethics. 2004. The limitations of 'vulnerability' as a protection for human research participants. *American Journal of Bioethics* 4: 44–49. [CrossRef]

Link, Bruce G., and Jo Phelan. 1995. Social Conditions As Fundamental Causes of Disease. *Journal of Health and Social Behavior. Extra Issue: Forty Years of Medical Sociology. The State of the Art and Directions for the Future*, 80–94. [CrossRef]

Lipsky, Michael. 1980. *Street Level Bureaucracy. Dilemmas of the Individual in Public Services*. Manhattan: Russell Sage Foundation.

Nickel, Philip J. 2006. Vulnerable populations in research. The case of the seriously ill. *Theoretical Medicine and Bioethics* 27: 245–64. [CrossRef] [PubMed]

Nordentoft, Helle Merete, and Nanna Kappel. 2011. Vulnerable participants in health research: Methodological and ethical challenges. *Journal of Social Work Practice* 25: 365–76. [CrossRef]

Pilgaard, Maja, and Steffen Rask. 2018. *Socialt udsatte i idrætten. Definitioner og eksisterende viden*. Aarhus: Idrættens Analyseinstitut.

Rogers, Wendy, Catriona Mackenzie, and Susan Dodds. 2012. Why bioethics needs a concept of vulnerability. *International Journal of Fem Approaches Bioethics* 5: 11–38. [CrossRef]

Sikic Micanovic, Lynette, Stephanie Stelko, and Suzana Sakic. 2019. Who else Needs Protection? Reflecting on Researcher Vulnerability in Sensitive Research. *Societies* 10: 3. [CrossRef]

Spiers, Judith. 2000. New perspectives on vulnerability using emic and etic approaches. *Journal of Advanced Nursing* 31: 715–21. [CrossRef] [PubMed]

Thorpe, Holly, and Rebecca Olive. 2019. Conducting observations in sport and exercise settings. In *Qualitative Research in Sport and Exercise*. Edited by Brett Smith and Andrew Sparkes. London and New York: Routledge, pp. 124–38.

Yin, Robert K. 2018. *Case Study Research and Applications*. London: Sage.