Women Moving and Meeting in the Digital Age: Exploring the Role of Online Physical Activity Classes for Female Refugees and Migrants Offered by a Local Voluntary Sport Club in Germany

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Abstract

Built upon the Capability Approach framework, this thesis explores the role of digital physical activity (PA) courses in enhancing the agency and capabilities of refugee and migrant women in Münster, Germany, focusing on the Voluntary Sport Club (VSC) 'Move and Meet'. Considering the impact of COVID-19 on video conferencing alongside feminized migration of Ukrainian women to Germany, this qualitative explorative study investigates the benefits and challenges of Information and Communication Technologies for women. The central research question examines how the VSC's online courses impact the women's empowerment, aligning with SDG target 5.b. Sub-questions examine how digital PA courses overcome barriers to sport participation (SDG 5.b); the challenges to social inclusion posed by digital PA (SDG 10.2), and the VSC's role as a model for beneficial partnerships (SDG 17.17).

Interviews with the VSC's staff were carried out. Findings indicate that while digital PA can reduce barriers and promote capabilities, technical issues, limited digital resources, and lack of safe spaces can hinder social inclusion. Moreover, partnerships with local organizations are important for promoting social inclusion and empowerment. This study contributes to understanding the integration of ICT-enabled PA in furthering the capabilities of migrant and refugee women and advancing SDGs.

Keywords:
Digital physical activity within Voluntary Sport Clubs; refugee and migrant women and feminized migration; Capability Approach; Information and Communication Technologies (ICTs); Sustainable Development Goals (SDGs)

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List of Abbreviations

CA	Capability Approach
ICTs	Information and Communication Technologies
PA	Physical Activity
SDGs	Sustainable Development Goals
VSC	Voluntary Sport Club

1.   Introduction

1.1   Background

Russia invaded Ukraine just days before the lifting of most coronavirus restrictions in Germany. The implementation of lockdown measures during the pandemic significantly accelerated the process of digitalization across various countries and sectors. As a consequence, numerous digital initiatives that emerged during this period have now become established and will endure beyond the context of lockdowns. This phenomenon underscores the enduring impact of the pandemic on shaping digital practices and highlights the lasting effects of these digital transformations. Meanwhile, the Russian invasion has sparked the fastest-growing refugee crisis since the Second World War. Studies published by the United Nations (UN) have shown that in 2022, nearly one-third of Ukrainians were forced to leave their homes and seek refuge in other countries (UNHCR Global Focus and Report, "Ukraine Situation", 2022). Notably, it is mainly women and children who are currently migrating to Europe, as men aged 18-60 are required to stay and support the war effort (Katsiaficas & Segeš Frelak, 2022). These figures indicate that assistance tailored to the specific needs of refugee women is required in host countries.

Public administration studies for migration policies are concerned with how to integrate and empower refugees in the host countries. Several studies have already established that the use of information and communication technologies (ICTs) can contribute to the social inclusion and empowerment of refugees and are helpful resources in programs that provide settlement services (Diaz Andrade & Doolin, 2016). It has also been researched that specifically sport and ICTs are fundamental tools for "humanitarian response and the achievement of the objectives of the Global Compact on Refugees" (WSIS, 2020). However, no research up to date has examined digital physical activity (PA) programs that cater to the specific needs of refugee and migrant women and how the courses relate to, thus developing an understanding of, empowerment and social inclusion emerging from the framework of the Capability Approach (CA) and the attainment of the Sustainable Development Goals (SDGs).

1.2   Social and Scientific Relevance

By examining a rare instance of a Voluntary Sport Club (VSC) sustaining digital courses for women post-lockdown and amid feminized forced migration (Andrews et al., 2023), this study fills a gap in understanding the role of digitalization in valuing, enhancing and supporting the agency and capabilities of vulnerable populations during times of crisis,

thereby contributing to the broader discourse on ICTs for women refugees. Moreover, the selected VSC is partly subsidized by the Münster local council and the North Rhine Westphalia (NRW) regional government. Thus, the study also contributes to knowledge on how a civil society can partner up with the public realm for the recognition of the specificities of female refugees in their new societies; and on how some of these specificities can be addressed through ICT-enabled PA.

The study's data will be valuable for future research and policymaking in the field of ICTs as a means of improving the conditions of refugee and migrant women[1] in their host countries. It will generate hypotheses on supporting and empowering refugee and migrant women through digital sports participation. Moreover, the thesis addresses the need for inclusive opportunities for participation in PA among refugee and migrant populations, particularly women who often face barriers to participation. It contributes to studies on SDGs, specifically SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the SDGs).

1.3   Research Question and Sub-Questions

This thesis aims to fill a research lacuna in migration studies by investigating the impact of digital PA programs tailored for refugee and migrant women. The **central question** guiding this inquiry is as follows:

In what ways does the provision of online PA by a local VSC in Münster, Germany, impact the empowerment of refugee and migrant women in their new societies, potentially aligning with the objectives of SDG target 5.b?

Sub-Research Question 1:

In complement to the primary research question, the following query delves into the mechanisms through which digital PA courses can help to overcome barriers that prevent refugee and migrant women's engagement in sports activities:

How does the accessibility of online PA address barriers preventing individual refugee and migrant women from participating in sports, aligning with the promotion of empowerment in their new society as articulated in SDG target 5.b?

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[1] Throughout this thesis, the term 'refugees and migrants' will be used, as the UN does to include the causes and character of refugee movements, and to consider the specific obligations owed to refugees under international law (UN DESA, 2016).

Sub-Research Question 2:

Exploring potential challenges to social inclusion posed by digital modes of PA, the following sub-question investigates barriers that may arise in the context of online PA courses for refugee and migrant women, particularly considering SDG target 10.2:

In light of SDG target 10.2, what barriers might be encountered by refugee and migrant women in accessing social inclusion through online PA courses?

Sub-Research Question 3:

Finally, this study examines VSCs as facilitators of integration and empowerment for refugee and migrant women, with a focus on the 'Move and Meet' VSC. The final question considers the role of this VSC as an exemplar of effective partnerships in advancing the SDGs:

In what ways can the 'Move and Meet' VSC be regarded as a model for promoting productive public, public-private, and civil society collaborations, in alignment with SDG target 17.17, to promote partnerships for sustainable development?

1.4   Research Approach

This qualitative exploratory study, framed within the CA, examines the impact of digital PA programs provided by the VSC 'Move and Meet' in Münster. The choice of this case study is motivated by the club's commitment to empowering women with skills that are relevant throughout their lives, and by its emphasis on the agency and capabilities of refugee and migrant women. 'Move and Meet' distinguishes itself by offering both digital and in-person PA courses, a unique feature compared to organizations primarily offering pre-recorded or individual content. Additionally, the club's focus on group courses catering to refugee, migrant, and local women collectively sets it apart. This combination of digital courses and targeted programming for a marginalized and feminized demographic makes the club distinctive within the landscape of volunteer-run associations and sports organizations supporting refugees and migrants.

In order to answer the research questions semi-structured interviews with providers and instructors of online sport will be carried out. The data analysis will offer empirical evidence and insights into the efficacy of these interventions. It is not only important to study a VSC sustaining digital courses for women amid feminized forced migration, but using a CA framework also furthers the notion that digital PA can serve as a mechanism to enable refugee and migrant women to develop their capabilities, ultimately leading to increased agency, well-being, and empowerment.

Furthermore, this thesis applies the paradigm of constructivism, emphasizing that knowledge is actively constructed by individuals based on their experiences and interactions with the world. This perspective is particularly suitable for this thesis as it prioritizes the opinions and experiences of the research subjects. By adopting a constructivist approach, it is acknowledged that meanings are varied, leading researchers to focus on the complexity of views, rather than narrowing meanings into strict categories (Creswell & Creswell, 2018).

2.   Theory

2.1   The Capability Approach (CA)

This study is built upon the Capability Approach (CA), which emphasizes individuals' capacity to achieve meaningful outcomes. It was chosen because there needs to be a shift away from paternalistic notions of 'helping' marginalized groups, and towards empowering individuals to gain skills that serve them throughout their lives. The concept of the 'White Saviour Complex', coined by Nigerian-American author Teju Cole (2012), critiques the tendency of privileged individuals or organizations from the Global North to assume roles of 'heroes' in aiding marginalized groups, at times without regard for their agency or local perspectives. This study seeks to avoid reinforcing such processes by employing CA, which values the agency and capabilities of refugee and migrant women. In this thesis, CA serves as a framework to analyse the role of digital technologies in relation to empowerment, social inclusion, and well-being of refugee and migrant women through virtual PA programs. Theories from CA will be used to analyse the VSC's staffs' assessments of ICTs' impact on PA for these groups.

CA, developed by philosopher and economist Amartya Sen in the 1980s, focuses on well-being beyond mere resources, considering the capacity to convert resources into valuable functionings (Wells, n.d.). Well-being should be understood "in terms of people's capabilities and functionings" (Robeyns & Byskov, 2011). Sen emphasizes individuals' "doings" and "beings," defining capability as the freedom to pursue one's own functions, such as being well-nourished or physically fit.

American philosopher Martha Nussbaum expanded CA, arguing for a comprehensive approach to human powers that transcends mere opportunities for specific functions (Kleist, n.d.). Nussbaum (2000) distinguishes between capabilities (opportunities) and functioning (manifestation of opportunities), aiming to encompass the full range of human capabilities (Spieß, 2018). Applying CA in this thesis, it is expected that virtual PA can support participants in enhancing capabilities such as social interaction, autonomy, and self-expression, leading to increased agency, well-being, and empowerment among refugee and migrant women.

2.1.1 CA, Sports and VSCs

Nussbaum and Sen's approaches focus on the evaluation of well-being, making CA particularly suited for this study as sports participation can be seen as a way to increase well-being. In sport for integration literature, CA is applied by multiple scholars. As Zipp et al. specify (2019), CA offers an "appropriate, meaningful, and effective basis" to understand physical exercise (p. 440). More specifically, analysing virtual PA of refugee and migrant women through CA guides the exploration of the experiences of refugee participants in their new societies. Thus, CA advocates for moving beyond assessing *if* the women undergo personal development through digital sport. Instead, it is concerned with *how* activities are experienced (Zipp et al., 2019). For this thesis, CA is applied by viewing PA as a way for women to reach their capabilities to increase well-being, social inclusion and empowerment.

Studies show that sports can catalyse integration and empowerment, with VSCs providing ways for "building social contacts, intercultural relationships and emotional bonds" (Enhold et al., 2023, p. 2). Applying CA, VSCs can be analysed as tools for converting capabilities into valuable functionings. This perspective will be used to explore sub-question 3, viewing 'Move and Meet' as a model for fostering productive partnerships in alignment with SDG target 17.17.

2.1.2 CA, Migration and Social Inclusion

The concept of capabilities emphasizes individuals' ability to help themselves, relating to empowerment, participation, and social inclusion in migration studies. Social inclusion involves improving opportunities for marginalized groups to participate in society, ensuring they can "enjoy a standard of living that is considered normal in the society in which they live" (Commission of the European Communities, 2003, p. 9). In migration literature, CA describes the capability to access resources that enable movement or staying in one's selected location (Bonfanti, 2014). This perspective will inform the exploration of sub-question 2 on barriers to social inclusion through online PA courses for refugee and migrant women, in light of SDG target 10.2.

2.1.3 SDGs and CA

SDGs are used to investigate the effects of virtual PA on female refugees and migrants. Adopted by all 193 UN member states, the 17 SDGs aim to create an equitable and sustainable global ecosystem, addressing issues like poverty, hunger, gender inequality, and well-being for all.

SDG 5 focuses on gender equality, with target 5.b promoting women's empowerment through ICTs, relevant to RQ1. SDG target 10.2 addresses the social inclusion of all, pertinent to RQ2. At the meso-level, SDG target 17.17 calls for promoting effective partnerships, with 'Move and Meet' serving as an exemplar VSC. Applying CA to the SDGs, the thesis aligns with Hirani and Richter's (2017) view that CA can help achieve the SDGs by assessing and enhancing capabilities to meet primary targets, such as freedom, access to resources, and positive choices for well- being.

2.2 ICTs and CA for the Empowerment of Refugee Women

Several scholars use CA to understand ICTs' implications for well-being and empowerment. CA's strength lies in assessing interventions that improve individuals' capacity to make choices contributing to their well-being (Abubakar & Dasuki, 2018). The framework will be used to study how online PA impacts the empowerment of refugee and migrant women (RQ1), expecting virtual PA to boost their capabilities.

2.2.1 Empowerment of Women

Empowerment involves individuals suffering from inequalities gaining control over their lives by participating in activities that increase their involvement in matters affecting them directly (Bystydzienski, 1992). Considering the CA and women, empowerment strengthens individuals' capacities to achieve meaningful outcomes (Fernández, 2023), enabling women to act upon resources, agency, and capabilities and "to make autonomous life choices" (Mackey & Petrucka, 2021, p.1).

2.2.2 ICTs for Empowerment

ICTs include various multimedia and communication tools used for creating, manipulating, storing, managing, sending, and receiving information (Hussain, 2016). CA and ICTs are linked in addressing global challenges like promoting well-being, eradicating poverty, and empowering marginalized groups, including refugee and

migrant women (Abubakar & Dasuki, 2018). In this context, the concept of capabilities is useful to examine what refugees can do and what they can achieve with ICTs. ICTs enable access to information, public services, and means of participation and expression, serving as instruments for empowerment of marginalized groups.

2.3   Hypotheses

The following hypotheses, based on CA and its implications for social inclusion, ICTs, empowerment, and the SDGs, will be tested through a qualitative case study:

H1: It is hypothesised that online PA programs by VSCs support capabilities' development among refugee and migrant women, fostering social interaction, autonomy, and self-expression, thereby promoting agency, well-being, and empowerment among participants.

H2: It is expected that online PA programs by VSCs pose barriers to social inclusion due to the lack of in-person social interaction, hindering the development of capabilities, because online gatherings cannot adequately replace in-person ones.

H3: The 'Move and Meet' VSC exemplifies effective public-private and civil society collaboration, promoting the conversion of capabilities into valuable functionings through local government sponsorship.

3.   Methodology

3.1   Case Description and Selection – VSC 'Move and Meet'

To determine which VSCs offer and publicly advertise digital courses tailored to the needs of refugee and migrant women, the search engines Bing, Google, and Yahoo were used due to their vast databases and data reliability for quantitative research (Zuze & Weideman, 2013; Thelwall, 2008). A keyword search was preferred over a subject search to retrieve a broader range of results. The keywords included terms such as 'volunteer sport club,' 'sport club,' 'refugee and migrant women,' 'female refugees and migrants,' 'digital courses,' and 'online courses'. The search results were analysed, and relevant information was extracted to confirm that 'Move and Meet', the VSC selected for this study, is indeed unique in offering such specialized courses, including digital classes. Detailed findings are presented in the analysis section.

The idea behind 'Move and Meet' was conceived in 2016 by sport ethnologist Laura Verweyen, following the 2015 refugee wave. The project called 'Integration of Women in Sports' began offering sport activities to women and girls in Münster in 2017 as part of Verweyen's PhD thesis, growing into a non-profit organization by 2021. Supported by Münster's local sport federation since 2022 and the Federal program 'Integration through Sport,' 'Move and Meet' offers most activities free of charge, facilitated by 41 volunteers (Interviewee1). The club provides safe spaces for women, girls, and marginalized groups, focusing on PA, networking, and skill development.

Refugees often live in marginalized areas (Horwood & Jacobsen, 2020, p. 164) and restrained mobility and financial poverty might mean that they cannot fully participate in daily social and labour life. Recognizing the mobility challenges faced by these women, 'Move and Meet' offers courses in the outskirts of Münster, for example assisting to learn to ride a bicycle, actively reaching out to participants. Significantly for this study, this sensitivity to the needs of refugee and migrant women extends to the continuation of digital sports courses post-lockdown.

3.2   Research Design

A qualitative research design was chosen for its suitability in gaining in-depth understanding of a unique situation. A single-case study of the VSC was conducted to assess online PA in relation to empowerment and social inclusion. Case studies are ideal for examining contemporary phenomena within "real-world" contexts (Yin, 2018, p.

45). The advantage of single-case study designs lies in being able to observe "any unexpected aspects of the operation of a particular causal mechanism or help identify what conditions present in a case activate the causal mechanism" (George & Bennett, 2005, p.44), allowing for detailed examination of the mechanisms leading to empowerment and overcoming barriers to participation.

3.3 Method of Data Collection

To understand the dynamics within digital sport courses, interviews with course leaders and an organizer were conducted. Furthermore, one of the founding and board members was interviewed, with the aim to investigate the motivating factors for offering digital courses and to understand the dynamics of public-private and civil society partnerships. In-depth, semi-structured interviews, as chosen method to collect primary data, allowed participants to explain their observations and motivations "in their own words" (Knott et al., 2022, p.1). Four detailed interviews were conducted: two with course instructors (Interviewee2 and Interviewee4, Data Appendix), one with an organizer of courses (Interviewee3, Data Appendix), and one with a founding member (Interviewee1, Data Appendix).

This thesis, as mentioned above, applies constructivist ideas, underlining the importance of open questions, because "the more open-ended the questioning, the better, as the researcher listens carefully to what people say or do in their life settings" (Criswell & Criswell, 2018, p. 8). Thus, some of the interview questions were pre-planned, whereas other ones were open.

The focus was on the only two digital sport courses offered by 'Move and Meet': an online Zumba class (currently on hold because the instructor is abroad) and a virtual fitness course for single mothers, in cooperation with Münster's 'Association of Single Parents' ('Verband alleinerziehender Mütter und Väter'). This course specifically addresses single mothers and offers virtual fitness lessons.

The sample was purposive, selecting volunteers offering digital courses for relevant insights. This approach divides the population into specific small groups and interviews are conducted with "the most relevant participants for the research topic" (Knott et al., 2022, p. 2). Specifically, expert sampling was chosen, meaning the sample consists of experts in the field of interest. This is advantageous as it provides deep insights due to

the interviewees' extensive knowledge about the study area (von Soest, 2022). Moreover, Morse (2000) argues that when interviewing experts, fewer participants are needed as more usable data is collected from each interviewee. While the small number of interviewees means that findings are not generalizable to all populations, this study does not aim to gather data applicable to a wider society, but to gather findings that are valuable for understanding the operational dynamics of this specific VSC to contribute to broader implications for similar organizations and policy makers.

Expert sampling is in sum particularly beneficial for this study due to the unique nature of the VSC and its programs for refugee and migrant women. The VSC stands out in its approach to integrating sports as a tool for social inclusion and empowerment within the context of feminized migration. By focusing on interviews with key experts—the founder of the club, two sport instructors, and the person responsible for course organization and scheduling—this study captures nuanced insights into the effectiveness of similar initiatives. Analysing expert perspectives provides a comprehensive understanding of how such initiatives can enhance capabilities and foster social inclusion through online PA, thereby informing future policy directions and interventions in feminized migration contexts.

The qualitative data collected consists of the interviewees' responses. As all interviewees come from a German-speaking background or speak German fluently, the interviews were conducted in German and analysed with English codes, in order to analyse them according to the coding scheme. Translated versions of the transcripts can be found in the data appendix file. To ensure the least possible amount of effort for the interviewees, the ideal place for interviews depends on the feasibility for each interviewee. As one instructor is currently abroad, the interview was carried out online. Two other interviews were also conducted online due to caring responsibilities and time restraints of the interviewees. The other one was conducted in person.

Research involving humans means meeting appropriate ethical standards and ensuring confidentiality to guarantee privacy and the protection of participants. Although some rejected anonymity, anonymization was chosen throughout the thesis to provide a safe space for the participants, who offered their personal positions on sensitive topics such as migration, minority groups and gender-related issues.

The final data presented from interviews with a relatively small group will not necessarily show views that are generalizable to all digital sport courses for women. Despite it being a small-scale qualitative study, this research can be usefully regarded as a case study of online PA offered by a VSC to refugee and migrant women. As many of the issues to be explored are of relevance to refugee women's capabilities linked to online resources and more generally SDG achievement, the study provides insights into engagement in digital sport services offered by VSCs and the data may be seen as an opportunity to generate further hypotheses related to empowerment of refugee and migrant women through digital sports and the role of VSC in helping to achieve SDGs. Reasons for not interviewing participants of courses and hearing their first-hand stories are described in the limitations section.

Before conducting the interviews, a topic guide was established, which supports the designing of the interview questions. Such topic guides include categories and themes that researchers wish to cover during interviews (Knott et al., 2022). Resulting from this topic guide, relevant questions were deducted. The interview questions each relate to one of the three SDGs, guiding the research questions. Thus, the volunteers of 'Move and Meet' are asked about their perception of the participants' experiences and development. The topic and interview guides for this thesis are provided in Appendix B.

3.4   Method of Data Analysis

Interviews were audio-recorded and transcribed. One interviewee (Interviewee2) did not agree to be audio-recorded, thus extensive notes were taken during the interview. The process of transcription from memory was carried out immediately after the interview to ensure validity. An qualitative content analysis was conducted using ATLAS.ti software (version 24), combining deductive and inductive approaches. This allowed for "back-and-forth" analysis between data and theoretical frameworks (Knott et al., 2022, p.6).

Thus, codes for the data analysis were developed abductively, meaning that some were established deductively based on CA and SDGs (Appendix C), while other codes arose during the process of data analysis. This approach aimed to minimize bias and increase result validity by allowing further adjustments and expansion of codes open for a later stage. The final abductively revised coding scheme (Appendix D) includes categories related to capabilities and functionings, such as autonomy, social interaction, and well-being, guided by the sub-questions and theoretical framework. SDG-related codes, like

empowerment through ICTs (SDG 5.b), social inclusion (SDG 10.2), and partnerships (SDG 17.17), were also applied.

The data was analysed according to a thematic analysis, meaning that the transcripts were examined based on specific codes and categories, enabling the identification of patterns and issues, particularly prominent capabilities and functionings. This involves reading and rereading transcribed data to "identify themes that are relevant for [the] research questions" (Fernández, 2023, p. 39). In this process, the frequency of certain codes and the emergence of patterns are important for interpreting the findings. Finally, comparing the interviews, by examining varying codes, is essential for a comprehensive thematic analysis.

4. Analysis

4.1 'Move and Meet' Online: Empowerment and SDG Target 5.b

The first part of the analysis focuses on SDG 5.b and argues that digital PA courses can help to overcome barriers that prevent refugee and migrant women's engagement in PA, consequently supporting their empowerment. Prior to this analysis, special attention is given to the uniqueness of 'Move and Meet' in offering online sports courses for refugee and migrant women. The following sub-question will subsequently be answered:

How does the accessibility of online PA address impediments preventing individual refugee and migrant women from participating in sports, aligning with the promotion of empowerment (in their new society) as articulated in SDG target 5.b?

4.1.1 Rare Case of VSC Focusing on Refugee and Migrant Women

Search engines were used to determine which digital sport programs are advertised online and offered for refugee and migrant women. For this purpose, Bing, Google, and Yahoo were searched using combinations of keywords such as 'sports club,' 'refugee and migrant women,' and 'digital sport courses'.

The internet research revealed a very limited existence of digital PA programs specifically designed for female refugees and migrants. While there are many online courses offered by various sports clubs and organizations, mostly provided via digital apps, these programs primarily consist of on-demand videos. Unlike 'Move and Meet,' these programs focus solely on PA and health, without addressing integration and female empowerment. When searching for digital courses in combination with keywords like 'refugees and migrants,' multiple online classes for both instructors and volunteers training to support refugees and migrants were found. There is also a variety of PA programs aimed at refugees and migrants available online, but none currently offer digital training.

Only two programs specifically addressing refugees and migrants through digital sport offerings were found. Multiple sports organizations under the initiative 'Integration durch Sport' (Integration through Sports), funded by the German Federal Office for Migration and Refugees, provided virtual sport lessons during the pandemic. The sports club from Hamburg, SV Eidelstedt, posted 30-minute workouts on their YouTube channel to support their participants (BAMF, 2020). Furthermore, the International

Sport and Culture Association (ISCA) report mention their Northern Italian partners, 'UISP Trentino' (Italian Union Sports for All) and 'ATAS' (Trentino Association for the Reception of Foreigners). As a result of Italian governmental lockdown restrictions, football players from the local league, which includes mixed teams of Italians, migrants, and refugees, shared videos of themselves teaching football tricks and cooking dishes from their homelands online with the local community in Trento (UNHCR, n.d.). These two initiatives however were only offered during the Covid-19 pandemic, making 'Move and Meet' unique for continuing to provide digital courses post-lockdown. Additionally, none of these programs were specifically designed for women, further emphasizing the uniqueness of 'Move and Meet'.

To conclude, apart from digital PA courses offered for refugees and migrants during Covid-19, the internet research did not reveal other virtual programs with the same goals as 'Move and Meet'. There is a wide range of online PA courses available via apps and on-demand, but none with the specific aims of including the 'meet' component via mixing with local women to the PA element, and thus of supporting also integration and empowerment of female refugees and migrants through volunteer sports work.

4.1.2   Empowerment and Capabilities

According to the CA, (women) empowerment is achieved through the enhancement of various capabilities. At the same time, empowerment also strengthens individuals' capacities to achieve meaningful outcomes, thus fostering the development of capabilities (Fernández, 2023). The interviews revealed several capabilities and conversion factors that advanced the empowerment of refugee and migrant women.

During the coding process, various capabilities became evident and are discussed below. A striking point to specify here is that both digital sport trainers emphasized capabilities related to health, physical fitness, and well-being, while the founder and courses organizer focused predominantly on social interaction, communication, and self-expression.

Firstly, PA courses designed to meet the needs of refugee and migrant women enhance communication and language skills. Interaction with other participants in the sports lessons facilitates learning the host country's language for refugees and migrants. This is one of the main reasons why the female refugees and migrants participating in 'Move

and Meet' sport requested mixed courses with German women (Interviewee1). Thus, PA programs can improve the capacity for communication in the host country, consequently supporting the empowerment and agency of refugee and migrant women.

Secondly, 'Move and Meet' focuses on including the women in the organization of the (digital) courses, taking their wishes and concerns into account. For example, during Covid-19, it was the participants who requested digital courses as they were no longer able to attend in-person courses (Interviewee3). Additionally, the women suggest new sports they would like to see offered and, together with the trainers, decide on the schedules for these activities (Interviewee4). Through this process self-expression is enhanced because the (refugee and migrant) women are deliberately given the space to voice their opinions. This consequently aids the development of individual functionings, particularly agency.

Furthermore, PA offerings can empower (refugee and migrant) women by promoting good habits of being physically active and healthy. This is especially true for digital courses, because they motivate women who are unable to attend in-person sessions for various reasons to participate in sports. One reason relates to the family situation of the participants. Thus, being able to attend PA courses virtually from home empowers women with children but no childcare to become physically active. Additionally, women who prefer not to attend PA courses at mixed-gender gyms are further empowered by 'Move and Meet'. Other reasons for preferring digital courses over in-person activities will be elaborated on in the following section.

Taking all these capabilities into account, it can be stated that the (digital) PA courses offered by 'Move and Meet' support skills such as physical fitness, communication abilities, and self-expression, which ultimately facilitate empowerment processes of refugee and migrant women.

In this context of investigating the role of VSCs in empowering women through the provision of PA courses, it is crucial to mention the importance of volunteering. The interviews revealed that there is a link between the empowerment of refugee and migrant women and volunteer work. Offering (digital) courses voluntarily and not receiving any financial compensation means that the trainers and providers are fully

motivated. As they do not receive money for their time and efforts, they need other motives. The founder describes this motivation aspect as follows:

> *I must have the time to be able to offer something to this club without financial compensation. In other words, I have to derive some other benefit from it, something has to come out of it for me - simply confirmation; the feeling that I'm in the right place; that I'm meeting great people; that I really have the feeling that my work makes some kind of sense, that I'm making a difference.*[2] (Interviewee1)

Consequently, for the volunteers, it is about seeing their participants progress and become empowered, independent, and skilled. Moreover, course participants are encouraged to carry out volunteer work within the club themselves, such as babysitting (Interviewee1). Applying this to CA, volunteering is a valuable conversion factor that underscores capabilities like autonomy and consequently fosters the development of functionings, including agency and empowerment. In this respect, the founder of the club underlines that in order to appropriately represent refugee and migrant women, the courses must also be given by female (refugee and migrant) trainers. This is crucial to ensure a safe and welcoming atmosphere within PA courses and support empowerment (Interviewee1).

4.1.3 Online Empowerment and Capabilities

In the previous section, the key capabilities identified in the interviews were elaborated upon. As mentioned, most of these relate to digital PA courses as they underline the potential of ICTs to empower refugee and migrant women. Besides empowering these women to engage in sports, become physically fit, and improve communication and language skills, digital PA is particularly advantageous for overcoming barriers present in non-digital courses. One of the most frequently mentioned challenges of in-person PA courses is the inflexibility faced by participants and trainers. Especially women with children and other (caring) constraints are often unable to go out in the evenings to participate in sports. For them, having the option of being active from home while also attending to their children is a significant benefit.

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[2] Italics are used here and for all following quotes (both short and block ones) taken from interviews for emphasis to draw attention to words of interviewees.

Additionally, even without children, the need to travel to in-person courses can be burdensome. The founder of the club explains this as follows:

> *I have to get there, I have to walk there, I have to cycle there, take the bus, take the car, it might not be on my doorstep, so that stops me. Some of our programs have childcare - but by no means all of them. If I have a child and there's no childcare, that's it for me.* (Interviewee1)

Digital courses, on the other hand, are convenient and require minimal effort when it particularly comes to transportation. Accordingly, the course organizer observed positive responses and enjoyment: "*It was a nice feeling for the women because they could be completely comfortable and safe in their own home. And that made them feel good because they didn't have to adapt*" (Interviewee3).

Digital courses can thus overcome inflexibility and particularly empower women who are hindered from participating in in-person PA due to their family and living situations.

Another barrier to non-digital courses, which is also related to inflexibility, is the lack of volunteers to offer in-person PA lessons. Although all providers interviewed prefer non-digital sports over online courses, some are unable to give lessons personally. For instance, one trainer does not live in Münster, while another has two young children, making it impossible for them to provide in-person PA courses. One trainer described her situation as follows: "*I can't manage that in addition to my job. I did fitness in person back then, but not this year. I don't have the time, because of my children*" (Interviewee2).

Furthermore, the VSC faces financial and space issues when offering non-digital courses. For a volunteer club that is non-profit and does not generate its own assets, it is particularly challenging to rent gyms. As the founder emphasizes, the challenge lies in finding PA facilities at times convenient for participants (Interviewee1). Offering sport courses digitally can overcome this barrier, as no extra costs and spaces are needed. Thus, one can say that online offerings are a helpful alternative for non-profit clubs.

Finally, one trainer mentioned weather conditions in Germany, particularly during winter, as a barrier to in-person PA courses. Many women feel uncomfortable going out

in dark evenings, often leading them to stay at home. However, participating in PA from the comfort of one's home is facilitated:

> *Many women, for example – I'm thinking of winter - are afraid to go out because it's dark and because it's extremely cold for them. They are not used to the cold in Germany. And then they do very little exercise. But if there's something online, you are motivated to move in the warmth. You don't have to go out in the dark, but still exercise in winter.* (Interviewee3)

All the challenges mentioned above highlight the problems associated with in-person PA courses. Applying ICTs and offering lessons digitally can overcome such barriers and empower women to be active. As highlighted, these challenges hinder (refugee and migrant) women from participating in 'Move and Meet' courses and from being physically active. PA is consequently seen as a conversion factor for achieving personal functionings, including empowerment, and not having access to sports offerings has crucial implications for the strengthening of capabilities. Women cannot enhance capabilities such as health, self-expression, and autonomy, which consequently impedes their empowerment. In this context, ICTs can support bringing PA closer to (refugee and migrant) women and can be particularly beneficial for those with children or those who live far from available offerings.

4.1.4   Discussion: SDG Target 5.b

SDG 5.b calls for the enhancement of "the use of enabling technology, in particular information and communications technology, to promote the empowerment of women" (United Nations, n.d.). The analysis above highlights that ICTs, in the form of digital PA courses, can indeed promote the empowerment of women by presenting an alternative to in-person sports programs. Digital PA is effective in overcoming barriers present in traditional (non-online) sports courses, such as inflexibility, adverse weather conditions, and financial constraints. The analysis strikingly reveals that ICTs, within the context of PA courses, are more likely to empower women who are unable to participate in in-person sports. This suggests that women who have the choice tend to prefer in-person activities over online lessons.

Furthermore, the findings reveal that empowerment through ICTs is more closely connected to enabling refugee and migrant women to be physically active rather than

empowering them to become politically and economically autonomous and integrated into the host society. While digital courses can improve language and communication skills and enhance agency, they mostly impact physical fitness. The capabilities enhanced through ICTs are more related to health and well-being than to social interaction and trust. Additionally, the majority of feedback from participants of online PA courses focuses on the benefits linked to sports. Many women emphasized that ICTs enabled them to be more active and engage in physical activities.

The current body of research highlights the importance of ICTs for empowerment. Extensive literature on the effects of ICTs on the integration and empowerment of female refugees, migrants, and women in general emphasizes the potential of digital technologies. For example, Abubakar and Dasuki (2018) examined the use of WhatsApp by women in a small Nigerian community, while Mackey and Petrucka (2021) reviewed literature on "women's empowerment and utilized technologies as interventions" (p. 1). Schelenz (2023) describes ICTs as a means for women to enhance social and economic development, improve health and well-being, and increase participation and advocacy within society. The UN Department of Economic and Social Affairs (2005) further emphasizes the advantages of ICTs such as empowerment in the context of violence against women, emancipation of rural women, and improving sex-disaggregated data. Ghorashi (2010), on the other hand, argues that the increased visibility of migrants and refugees due to ICTs can lead to isolation and suppression rather than emancipation. Case studies of several integration projects in the Netherlands suggest that the visibility of female migrants and refugees within Dutch discourse contributes to "the othering component of the discourse rather than creating space for their voices and experiences" (Ghorashi, 2010, p. 87).

Adding to discussion in this context and in response to sub-question 1, it can be concluded that online PA programs offered by a VSC such as 'Move and Meet' are effective in addressing barriers that prevent individual refugee and migrant women from participating in sports by overcoming challenges associated with in-person sports, such as inflexibility and discomfort. Women who face constraints due to family and living conditions are particularly empowered to engage in sports digitally. As hypothesized, virtual PA facilitates the development of capabilities among refugee and migrant women, such as self-expression and health, thereby promoting functionings including empowerment.

The literature review and the analysis underscore the potential of ICTs for empowerment. However, it is important to point out that online PA can fill in some of the gaps of in-person courses, but it also crucially presents its own set of challenges and should therefore, in this context, be offered alongside in-person courses. These issues will be addressed in the following sections of the analysis.

4.2   'Move and Meet' Online: Barriers and SDG Target 10.2

Throughout the interviews, several barriers hindering the enhancement of capabilities, including social interaction and self-expression, became evident. This section will elaborate on such barriers in digital PA courses while connecting them to SDG 10.2 (social inclusion). The following sub-question guides this analysis:

In light of SDG target 10.2, what barriers might be encountered by refugee and migrant women in accessing social inclusion through online PA courses?

4.2.1   Description of Barriers

As hypothesized based on the CA, the interview results revealed that online PA programs indeed pose significant barriers to social inclusion due to the lack of in-person interactions. Participants reported difficulties in communication through computers, often increased by technological issues. Both the founder and instructor highlighted feedback from participants indicating digital issues, particularly with Zoom, underscoring access and functionality of digital devices as common barriers.

Moreover, the trainer noted a lack of time to offer digital courses, a challenge caused by her childcare responsibilities, which is shared by many participants. This scheduling difficulty impedes consistent participation (Interviewee2). Additionally, there is a shortage of volunteers willing to conduct digital PA courses, as most trainers prefer in-person interactions. Consequently, digital formats are often chosen out of necessity rather than preference, with one trainer abroad and another managing childcare responsibilities.

An inductively added code, 'inconsistency', emerged from the data, highlighting another barrier: irregular participation and offerings. The instructor and founder observed that women who join courses later or rarely participate are less likely to feel

included and actively engage. This inconsistency is also related to the type of sport offered digitally, with feedback indicating a preference for relatively easy sports. Complex exercises deter consistent participation, as illustrated by the challenges new participants faced in online Zumba lessons, where established choreography was difficult to follow (Interviewee1). Consistency in programs and offerings is crucial for social inclusion. This is evidenced by the digital course 'fitness for single mothers', which maintains high and consistent participation, and where continuity at the trainer level maintains long-term engagement (Interviewee1).

The interviews also demonstrated that these barriers particularly hinder refugee and migrant women. While digital issues like malfunctioning Zoom and Wi-Fi difficulties affect all participants, certain barriers uniquely challenge refugees and migrants.

Women in refugee accommodations face near-impossible conditions for participating in Zoom PA courses. The founder emphasized several issues: unstable Wi-Fi, cramped living spaces unsuitable for PA, and the difficulty of finding a 'safe space' for uninterrupted participation (Interviewee1). This concept of a safe space is critical for capability development and will be further elaborated in the following section.

Additionally, expecting refugees and migrants to have laptops or computers is unrealistic. Participation via mobile phones is nearly impossible due to the small screen size, which hinders visibility of the trainer and other participants. Beyond digital issues, psychological stress and trauma also impede participation, as women may frequently forget appointments due to high psychological strain. These barriers not only complicate participation in digital PA programs but also obstruct the enhancement of capabilities, thereby impeding social inclusion.

4.2.2   Meeting to Hinder Barriers

As previously mentioned, a substantial barrier to online sports courses is the lack of personal contact. The VSC's name itself underscores the club's goal to foster social interaction through 'moving and meeting'. However, as the analysed barriers indicate, virtual sports offerings without in-person interaction can hinder personal contact and inclusion, neglecting the 'meet' component. Nevertheless, the VSC founder highlighted ways to address 'meeting' in digital PA.

The founder differentiates between "presence-online-courses" and on-demand video lessons. In the former, participants gather digitally, fostering group interaction, whereas the latter can be viewed alone, lacking social interaction (Interviewee1). While both formats promote PA, only the former facilitates social inclusion. During the pandemic, 'Move and Meet' offered both formats, and feedback indicated that both were appreciated. Short films, for instance, helped maintain a sense of connection and well-being during isolation. Post-lockdown, only Zoom lessons continued.

Focusing on the 'meet' component in digital courses can mitigate certain online PA barriers, according to the instructor and founder. Effective 'meeting' involves more than just sports; it includes moments of exchange, both related and unrelated to PA. Trainers open Zoom meetings early for personal discussions and chats, and each session includes feedback rounds and time for participant suggestions (Interviewee2). Thus, while not meeting in person, incorporating 'meeting' elements in online PA can enhance social interaction, particularly for women unable to attend non-digital courses.

The significance of knowing each other personally before virtual courses is notable, as emphasized by the founder and instructor. Seeing familiar faces both in-person and digitally can foster a sense of belonging and connectedness. The founder described this dynamic:

> *If people already know each other from other contexts, they might not see each other on the screen for the only time in the week, but it's still an additional factor: 'Oh, Sarah's here too. Hey Sarah, you weren't here last week. Nice to see you.' Sometimes it's enough to exchange a sentence or simply wave to each other and just know that the others are sitting just like me and have decided to spend this hour together.* (Interviewee1)

Therefore, to make virtual 'moving and meeting' effective for the social inclusion of refugee and migrant women, it is essential to also foster in-person contacts.

4.2.3   Online Barrier: A Lack of Safe Spaces for Women

Despite the positive potential of virtual 'meeting' to enhance social inclusion, another critical issue emerged from the interviews. According to the club founder, digital sports programs have not been well received by refugee and migrant women. While online PA

can overcome barriers present in non-digital lessons, such as family constraints and time issues, it fails to reach its target audience: refugee and migrant women. The founder noted that only about 10% of online participants are refugees or migrants, compared to 80-90% in non-digital lessons (Interviewee1). The VSC has not investigated the reasons for this disparity, but the founder and instructors offered theories for low participation rates.

In addition to previously mentioned barriers like limited access to digital devices, lack of resources, and psychological stress, another significant shortcoming of digital lessons is the absence of 'safe spaces.' Dictionary.com defines a safe space as "a place that provides a physically and emotionally safe environment where people can freely express themselves without fear of prejudice or negative judgment" (n.d.). 'Move and Meet' prioritizes creating such environments, ensuring that no men are present during lessons so that, for example, Muslim women can feel comfortable removing their hijabs.

In digital courses, however, this safe space cannot always be guaranteed. Even if participants keep their cameras on, there may still be undetected observers. The founder of 'Move and Meet' emphasized that trust is crucial for maintaining a safe space in digital contexts. Instructors regularly remind participants to respect the safe space and ensure no one else is present during lessons. Trust is significantly higher when participants know each other outside the virtual world. The founder noted: "*If you know each other, the security is greater, and you know this 'safe space' will be respected*" (Interviewee1).

A related issue is the dilemma of turning cameras on during lessons. The instructor mentioned that women are required to show their faces at the beginning of each course to confirm their presence and ensure no men are in the room. Afterward, many women choose to turn off their webcams, which can enhance feelings of security and comfort, particularly for those uncomfortable with being watched. This underscores an advantage of digital offerings, facilitating access to sports for women who prefer privacy. One trainer described this positively: "*Then you can do sport undisturbed, but still be in a community with other motivated participants. This also makes you feel safer and more comfortable*" (Interviewee2).

However, turning off cameras also means that safe spaces cannot be guaranteed, and there is no control over who is present. Additionally, instructors cannot ensure correct

exercise performance, which is crucial for maintaining health and well-being. The instructor expressed concern about her ability to provide personal advice and check exercise accuracy when cameras are off, viewing this as a barrier to health and well-being. Thus, ensuring a safe space in digital environments is essential for including refugee and migrant women. However, barriers to providing safe spaces also impede their participation in online PA courses, as reflected in the participation numbers.

4.2.4   Discussion: SDG Target 10.2

The extent to which sports clubs can produce favourable results for social inclusion has been investigated by Flensner et al. (2021) through interviews with participants of a non-profit sports club in Sweden, and by Taylor and Toohey (1998), who explored the perspectives of women from Italian, Lebanese, and Vietnamese backgrounds through a case study of sport initiatives in Australia. Verweyen (2023) discusses an "integration ideology" prevalent in many sports clubs that promote the advantages of PA programs (p. 225). While migration studies generally agree on the positive outcomes of sport for integration, the analysis has revealed that online PA can pose significant barriers, particularly in the context of SDG 10.2, which aims to empower and promote the social, economic, and political inclusion of all. The analysis highlighted several shortcomings in digital PA courses, specifically missing digital resources, inconsistency, and lack of safe spaces for refugee and migrant women (for further discussion on safes spaces in sports for refugee and migrant women see Verweyen, 2023, p. 379). These barriers can be understood as missing conversion factors within the CA, which are crucial for transforming capabilities into valuable functionings. This discussion aligns with the hypothesis presented at the beginning of the study, which posited that online PA programs by VSCs pose barriers to social inclusion due to the lack of in-person social interaction. The absence of in-person gatherings, which digital platforms cannot adequately replace, hinders the development of capabilities among refugee and migrant women seeking inclusion through sports.

Limited access to digital devices and technical issues obstruct the development of agency, empowerment, and social inclusion by failing to support social interaction and self-expression. The absence of safe spaces further impedes active participation and the development of agency. Trust among participants, a critical conversion factor, is more likely when women know each other personally outside the virtual course. Refugee and

migrant women unfamiliar with VSC members struggle to develop the necessary trust, highlighting another missing conversion factor.

A significant issue identified is the low participation rate of refugee and migrant women in digital courses. This issue is partly due to the familiarity of participants. Most women engaging in virtual courses have previously participated in non-digital courses and have existing social connections. These women, already socially included, enhance social interaction in digital courses through pre-existing relationships. However, refugee and migrant women without such inclusion face difficulties engaging in these courses. Not reaching the target audience represents another missing conversion factor and barrier to social inclusion.

To address sub-question 2, barriers encountered by refugee and migrant women in accessing social inclusion through online PA courses include technical issues, limited digital resources, struggles with Zoom, psychological stress, missing safe spaces, and inconsistency. In the context of SDG 10.2, these missing conversion factors hinder the transformation of capabilities into social inclusion. For instance, limited space in refugee accommodations restricts women's ability to participate virtually, thereby impeding the development of social contacts and inclusion.

The analysis also revealed ways to enhance conversion factors and support social inclusion, such as integrating 'meeting' components into virtual lessons. The importance of pre-existing relationships to establish trust and enhance social inclusion and empowerment cannot be overlooked.

4.3   VSC as Partnership for Sustainable Development, SDG Target 17.17

The interview with the founder of the VSC provided valuable insights into the structuring of 'Move and Meet', including motivating factors, networks, cooperation with other organizations, and relationships with local and regional governments. This section analyses the advancement of SDGs through public, public-private, and civil society collaborations, in alignment with SDG target 17.17. It examines VSCs as facilitators of integration and empowerment for (female) refugees and migrants, addressing sub-question 3:

In what ways can the 'Move and Meet' VSC be regarded as a model for fostering

productive public, public-private, and civil society collaborations, in alignment with SDG target 17.17, to promote partnerships for sustainable development?

4.3.1   Partnerships with Community-Based Support Associations

The founder of the VSC emphasized the importance of network cooperation as an effective means to represent the needs of refugee and migrant women and to discuss public issues (Interviewee1). Locally, 'Move and Meet' participates in working groups on topics ranging from women's support to sport and well-being. For instance, in the local working group 'Gewalt gegen Frauen' (Violence Against Women), the VSC engages regularly and plans cooperative initiatives. This partnership allows VSC instructors and staff to collaborate with women's counselling centres and shelters, demonstrating a high level of trust in the VSC's competence.

Another notable partnership is with refugee accommodation facilities, where the VSC offers sports courses. This cooperation indicates trust in the VSC's effectiveness. Additionally, the VSC is part of networks such as the 'Netzwerk für geschlechtliche und sexuelle Vielfalt' (Network for Gender and Sexual Diversity), the working group 'Rassismuskritik' (Criticizing Racism), and 'Berg Fidel Sport und Bewegung' (Berg Fidel Sports and Movement), reflecting the diverse topics addressed through these partnerships.

Regionally, the VSC is a member of the LGBTIQ* sports team of the NRW Sports Association. Nationally, 'Move and Meet's' bicycle courses and trainer workshops are part of the 'Bike Bridge' initiative, promoting intercultural contact through bicycle classes. These course are particularly crucial in a town like Münster, where bicycles are used as means of transportation. These collaborations integrate diverse topics such as social inclusion, health, and women's support, underscoring the VSC's extensive network.

The VSC's partnerships extend to organizations like the 'Marokkaner Verein für Integrative Arbeit und Dialog' (Moroccan Association for Integrative Work and Dialogue) and 'Refugio,' a centre for psychosocial aid for refugees. The collaboration with Münster's 'Association of Single Mothers and Fathers Münster' for online fitness lessons highlights the necessity of civil society cooperation for women's empowerment through ICTs, aligning with SDG 5.b. As the instructor giving this digital lesson stated

in the interview, this collaboration was requested by 'Move and Meet''s partner because of the limited number of trainers available to give online courses (Interviewee2). Consequently, partnership is needed to provide the women with digital courses. Applying the CA, these partnerships and networks serve as conversion factors, enabling empowerment and social inclusion through digital sport courses.

4.3.2   VSC and Its Private and Governmental Partnerships

'Move and Meet' is partially funded by the local government of Münster and collaborates closely with public institutions to conduct their physical activity lessons. The founder highlighted the fruitful relationship with the local government since the club's foundation, including funding for one part-time job and one mini-job at the VSC (Interviewee1). The Office for Gender Equality, the social welfare office, and the public health department also provide important support, financing courses and facilitating contact with refugee accommodations.

These partnerships with multiple local authorities underscore the VSC's advocacy across various fields. Applying the CA, these collaborations promote diverse capabilities such as women's empowerment, autonomy, well-being, and physical fitness. The VSC's partnership with the local police to provide bike lessons and road safety education for refugee and migrant women further exemplifies this trust.

Moreover, 'Move and Meet' contributes to the development and revision of local government action plans, such as the LGBTIQ* action plan and the Istanbul Convention action plan, bringing the perspective of refugee and migrant women to the forefront. This involvement reinforces the trust and respect the VSC has garnered from both public and private institutions.

4.3.3   Discussion: 'Move and Meet' and SDG Target 17.17

The VSC 'Move and Meet' strategically selects its partners, networks, and public collaborations based on specific goals and aims. Two primary themes for partnership selection are female empowerment and the integration of refugees and migrants.

The founder of the club highlighted in the interview that their objective is to bridge these two fields by partnering with organizations focused on integration, such as

'Refugio' and 'GGUA' (non-profit organizations for the support of asylum-seekers), while simultaneously collaborating with women's counselling centres and shelters. Consequently, 'Move and Meet' participates in a diverse range of networks, from the local working group 'Violence against Women' to cooperative sports courses with the 'Moroccan Association for Integrative Work and Dialogue'.

These varied networks and collaborations enhance different capabilities, including women's empowerment and social inclusion. This indicates that public-private and civil society partnerships (SDG 17.17) can contribute to strengthening sustainable development goals, such as SDG 10.2 (social inclusion) and SDG 5 (gender equality). It is essential to highlight here that these partnerships and cooperative initiatives must be tailored to the specific and individual needs of the target group. As Seiberth and Thiel (2007) underline, it is wrong to simply assume that sports clubs can foster integration without any effort. There are barriers to PA programs, such as lack of experience within the context of sport clubs, too little thought invested in the individual lifestyles of people with migration and flight backgrounds, and organizational and institutional barriers (Seiberth & Thiel, 2007). In this regard, they suggest that sport clubs must actively create spaces for tolerance and pay attention to personal barriers.

Furthermore, Guerin et al. (2003) present language issues and religious and cultural factors as the most common barriers to participation. For them, the "provision of culturally and religiously appropriate PA opportunities" can significantly increase the engagement of refugees and migrants in sport courses (Guerin et al., p. 97). In line with this thinking, the case of 'Move and Meet' demonstrates significant attention to the concerns of the refugee and migrant women who participate in sports courses. Courses held in outskirt areas, awareness for best times for courses for women with care tasks, and online courses, are only a few of the examples that demonstrate how the staff of 'Move and Meet' have paid attention to some of the barriers specifically faced by refugee and migrant women, and women in general.

However, mere participation in a partnership or network to maintain an appearance of activity and representation is insufficient. These platforms must be utilized for 'advocacy work', as emphasized by the founder of the club. Effective public-private and civil society collaboration requires more than 'being part' of a network; it necessitates explicitly representing the concerns and desires of the people for whom one advocates.

This involves understanding the public dialogue and incorporating these insights into organizational actions. The founder of 'Move and Meet' describes advocacy work in public-private partnerships and networks as follows:

> *For us, it's very much about getting a message out to the outside world, but at the same time also finding out what issues are currently present in society so that we can reflect these within the organization. It is two-sided.* (Interviewee1)

Advocacy work is a critical mechanism through which SDGs can be advanced. By representing refugee and migrant women in networks and local and regional government initiatives, as 'Move and Meet' does, social inclusion and women's empowerment are promoted. This underscores that effective public-private partnerships, characterized by advocacy work, support specific SDG targets.

To address sub-question 3, the 'Move and Meet' VSC exemplifies effective public-private and civil society collaboration, promoting the conversion of capabilities into valuable functionings through local government sponsorship. The analysis has demonstrated that the VSC not only participates in a variety of networks and partnerships but also actively represents the voices of refugee and migrant women, thereby promoting social and political inclusion and empowerment.

Sustainable development partnerships are fostered through deliberate collaborations with organizations and clubs addressing issues advocated by the VSC. Consistent with its goal to unite and empower women and girls through sports, 'Move and Meet' collaborates with networks and governmental institutions related to women, integration, and sports. Furthermore, these collaborations, essential for advocacy, also facilitate the conversion of capabilities gained through tailored sports courses into valuable functionings, such as well-being, empowerment, and agency, thus validating the hypothesis that effective collaboration enhances the conversion of capabilities into functionings in the context of feminized migration.

To conclude, among the diverse range of partnerships and networks 'Move and Meet' engages with, collaborations with community-based support organizations emerge as particularly significant. These organizations, such as 'Refugio' and 'GGUA', possess unparalleled expertise and first-hand knowledge in supporting asylum-seekers and

refugees. Their involvement not only enriches the VSC's initiatives but also ensures that programs are tailored precisely to meet the unique needs and challenges faced by refugee and migrant women. Unlike private companies or governmental institutions, community-based organizations offer deep understanding and culturally sensitive approaches that are crucial within the communities they serve. This study underscores that such targeted collaborations are instrumental in effectively promoting social inclusion and empowerment, aligning closely with SDG 10.2 goals. By prioritizing partnerships with these organizations, 'Move and Meet' not only enhances its capacity to convert capabilities into valuable functionings but also sets a benchmark for future public-private and civil society collaborations aimed at advancing sustainable development.

5. Conclusion

5.1 Answers and Key Insights

This thesis examined digital in-person PA courses offered by the VSC 'Move and Meet' from three perspectives, each based on a sub-question that was linked to a specific SDG target. These three examinations ultimately guided the investigation of the main research question: In what ways does the provision of online PA by a local VSC in Münster, Germany, impact the empowerment of refugee and migrant women in their new societies, potentially aligning with the objectives of SDG target 5.b?

Concerning SDG 5.b (women's empowerment through ICTs), it was revealed that ICTs can indeed foster the empowerment of (refugee and migrant) women, as exemplified by virtual PA courses. Digital programs present an effective alternative to in-person sports because they overcome barriers that hinder women from being active. The analysis revealed several challenges of non-online courses that digital PA can address, including family constraints, inflexibility of trainers and participants, weather conditions, financial restraints, and a lack of volunteers. Applying this to CA, all these burdens hinder the enhancement of capabilities, ultimately blocking the development of functionings, including empowerment.

In contrast to this, digital PA, by addressing these gaps, furthers certain capabilities, such as communication and language skills, self-expression, and health and fitness. In alignment with SDG 5.b, these capabilities ultimately support functionings, like the empowerment and increased agency among the participating (refugee and migrant) women. Here, the analysis revealed that volunteering is a crucial conversion factor in supporting the empowerment of refugee and migrant women.

Regarding SDG 10.2 (social inclusion), barriers of digital PA, hindering social interaction and inclusion of refugee and migrant women, were examined. The analysis revealed a significant challenge mentioned by all interviewees: limited participation of refugee and migrant women. Reasons for not reaching the target audience and barriers of online PA include limited access to ICTs, inconsistent participation, challenging sports course, lack of volunteers, and limited spaces for women living in refugee housing. The most striking barrier that was revealed in the interviews is the limited ability to ensure safe spaces. Missing conversion factors, such as trust, hinder the transformation of capabilities into social inclusion. A way to overcome barriers and

provide conversion factors is 'meeting' in digital courses. This includes leaving time for women to voice their concerns and provide platforms for interaction between participants and trainers, besides merely being physically active. However, the analysis revealed the importance of knowing each other prior to digital courses, to build trust and foster inclusion, showing that digital PA courses can only effectively address women who already have access to social contacts within the VSC.

Finally, concerning SDG 17.17 (effective public, public-private, and civil society partnerships), the findings revealed that 'Move and Meet' cooperates with a wide range of public and private organizations and is part of several networks. The VSC selects partnerships based on specific focal points, most notably refugee and migrant support and women's work. Each cooperation relates to certain capabilities, fostering functionings such as women's empowerment and social inclusion, highlighting the partnerships' crucial role as conversion factors. Additionally, each network relates to the different SDGs discussed above. Besides the importance of networks and partnerships with community-based support associations, the results also emphasized the need for active advocacy work within such cooperations, rather than merely being part of them. This is key to articulating the opinions and needs of refugee and migrant women, thus increasing empowerment and agency.

To address the main question guiding this thesis, it became evident that there are several ways in which the VSC 'Move and Meet' effectively empowers refugee and migrant women through digital PA offerings. The main modes identified as a result of the analysis include collaboration with other organizations to provide such courses and creating spaces for women to become physically fit and meet others in the comfort of one's home. Additionally, the VSC empowers refugee and migrant women by offering digital courses that overcome barriers, such as discomfort and inflexibility. VSCs have strikingly shown to be particularly effective in the context of public - private - civil society partnerships, serving as crucial conversion factors.

However, the findings have shown that digital courses fail to sufficiently address refugee and migrant women due to several factors, including the lack of safe spaces and access to digital technologies. Furthermore, the refugee and migrant women participating in digital PA are empowered physically rather than politically and economically in their host society. In order to successfully include female refugees and

migrants politically and socially, VSCs must collaborate in networks and public-private partnerships where the concerns and wishes of refugee and migrant women are voiced and advocacy work takes place.

Therefore, to conclude, digital PA courses alone cannot adequately promote the empowerment and social inclusion of refugee and migrant women in their new societies, as additional efforts that extend beyond virtual programs are necessary. To sustainably foster empowerment, VSCs must ensure safe spaces in digital courses, stimulate social interaction before and outside online lessons, and actively pursue partnerships with community-based support associations and governmental institutions.

5.2   Strengths and Limitations

Regarding strengths, it is crucial to position this thesis within the context of existing research. The CA employed in this thesis is also adopted by several scholars to investigate the outcomes of integration and empowerment initiatives. Abubakar and Dasuki (2018) conceptualize CA in their research on the impacts of WhatsApp on the empowerment of women in a small community in Nigeria. Fernández (2023) bases research on the CA framework to explore the factors influencing ICT usage among refugees and asylum seekers in Costa Rica. However, a review of the literature reveals a significant gap: no studies to date have dealt with the intersection of ICTs and sport programs for integration and empowerment purposes for women. Existing research has either focused on sport programs for integration or on ICTs for the empowerment and inclusion of (female) refugees and migrants. The combination of PA programs and ICTs for the integration of (women) is notably absent in the literature. Consequently, this thesis addresses a research gap in migration studies and emphasizes the underrepresentation of refugee and migrant women in sport clubs, highlighting the need for PA initiatives tailored to their specific needs.

Furthermore, this thesis demonstrates the potential benefits and challenges of digital PA and what must be considered to sufficiently address the specific needs of refugee and migrant women. This is novel, as no previous research has examined the dynamics of such digital PA courses. Additionally, this study contributes to migration studies by uncovering the reasons why female refugees and migrants rarely participate in online PA offerings.

Concerning limitations, the personal experiences and voices of the female participants were not included in this research. Due to current challenging life situations of participants in new settings, language barriers, and the time required to participate in interviews, the response rate of PA participants was low. Consequently, data collection was limited to volunteers of the VSC. However, this is considered a valid method to answer the research questions, as the instructors can present their perceptions of the group as a whole and provide insights into the dynamics and development of the refugee women from an external perspective and as experts of the VSC.

While the instructors may not be able to speak directly for the women participating in courses themselves and it is vital as a researcher to keep this in mind, sports instructors can offer valuable perspectives based on their observations, interactions, and experiences facilitating these programs. Some ways in which talking to sports instructors and course organizers can provide insights into refugee women's empowerment and social inclusion include program design and curriculum, participant engagement and feedback, impact on physical and mental well-being, empowerment through skill development, and barriers and challenges. Finally in this respect, limiting the research subject to the volunteers of the VSC also helps circumvent ethical issues that might arise when interviewing women with migration and flight experiences (Dempsey, 2018).

5.3   Discussion and Suggestions for Future Research

Concerning the above mentioned limitations of this study, future research could explore the specific reasons why (female) refugee and migrants scarcely participate in virtual PA by speaking directly with participants and conducting field research within the context of such courses. Additionally, the research findings can be valuable for policymaking in the field of ICTs as a means of improving the conditions of refugee and migrant women in their host countries. Thus, the study emphasizes the need for state institutions to actively promote and cooperate with VSCs and community-based support associations. Furthermore, volunteer work should be further encouraged by means of higher societal recognition and admiration. 'Move and Meet's' collaborations with community-based support organizations have proven to be particularly pivotal. These partner organizations possess expertise and first-hand knowledge regarding the challenges faced by migrants, refugees, and women. A VSC operates more effectively

in collaboration rather than in isolation, and this notion also applies to digital PA courses.

Barriers that hinder PA participation for both participants and sport trainers include child care responsibilities, extreme weather conditions, and transportation issues. Moreover, in the context of an ICT study, it is important to acknowledge that not everyone has adequate access to the internet and necessary devices. This thesis began amid two concurrent events: the end of lockdown restrictions in Germany and the onset of the Russian attack of Ukraine. Against this backdrop, it is crucial to highlight that in times of crisis, such as wars and pandemics, marginalized groups are more likely to face increased vulnerabilities and challenges. During the lockdown, the existing digital divide deepened, and interviews with course providers have shown that not all digital PA participants were satisfied with online courses due to poor internet access, inadequate screen sizes, and, most critically, a lack of safe spaces for women.

'Move and Meet' strengthens its impact through partnerships with other community-based associations and by listening to the voices of migrant, refugee, and local women. Likewise, digital PA courses should not function in isolation. They should be integrated with in-person courses. This finding is valuable for VSCs and governmental institutions planning future online courses tailored for migrant and refugee women, such as compulsory language courses required for obtaining residency permits. While online courses can address some barriers faced by women in host countries, they cannot replace the essential 'meeting' element, which is vital for achieving well-being and capabilities in new communities.

In conclusion, the unique collaboration between local and migrant and refugee women in 'Move and Meet' is noteworthy. The club listens to the voices of all participants, staff, and partners to maintain effective operations; and it encourages participants to engage in voluntary work within the club. This underscores the significance of collaboration in ensuring that marginalized groups can develop long-term capabilities, especially in times of crisis and highlights that in the realm of governance - of public, voluntary and private organizations - the element of collaboration is crucial. To overcome contemporary challenges and govern successfully at all levels, rather than working in isolation, we must communicate and collaborate across borders.

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Appendices

Appendix A – Data Appendix List

The following data has been uploaded in a separate file called Data Appendix in Canvas

Content	Note
A) Audio transcript 1 (in German)	(referred to as Interviewee1)
B) Translation into English of audio transcript 1	
C) Audio transcript 2 (in German)	(referred to as Interviewee2)
D) Translation into English of audio transcript 2	
E) Audio transcript 3 (in German)	(referred to as Interviewee3)
F) Translation into English of audio transcript 3	
G) Audio transcript 4 (in German)	(referred to as Interviewee4)
H) Translation into English of audio transcript 4	

Appendix B – Topic and Interview Guide

Topics and sub-topics	Questions	Who?
Topic 1: SDG 5.b – empowerment of women through ICTs	"How do you feel the digital sport program offered by 'Move and Meet' has helped the refugee and migrant women participate be overall more autonomous and self-determined?" "Have you noticed a development in the overall personal development of the participants?"	Providers
Sub-topic 1: Digital sport vs. non-digital forms	"What differences do you notice in the women's engagement in digital sports compared to your non-digital courses?" "What differences does it make for you giving lessons digitally?" "How does participation in digital courses differ compared to non-digital courses?" (e.g. number and frequency of participation)	Providers
Sub-topic 2: Motivation towards digital forms of sport courses	"What motivated you and your team to develop virtual sports courses?" "Would you offer more digital courses in the future? Why/ Why not?"	Providers
Sub-topic 3: Empowerment in sports	"How do you feel the digital sport program has helped the refugee and migrant women participate in sport?" "Can you share any success stories or testimonials from refugee women who have participated in your digital sports classes? What feedback have you received from participants about their experiences?"	Providers
Topic 2: SDG 10.2 – Social inclusion	"How do you feel the digital sport program has helped the refugee and migrant women gain access to community engagement and social contact?" "How would you describe the participants' social interactions?"	Providers
Sub-topic 1: Socially integrated relationships	"To what extent do you see that friendships/ social relationships establish outside the virtual sport courses?" "Do the participants engage with each other virtually? In what ways?"	Providers
Sub-topic 2: Inclusion outside of sport	"How do you feel 'Move and Meet' can also help include participants politically and economically, besides just socially?" "What resources or support do you provide to refugee women outside of the digital sports	Providers

	classes to further support their empowerment and integration into their new communities?"	
Topic 3: SDG 17.17 - Promotion of effective public, public-private and civil society partnerships to achieve SDGs	"How do you evaluate the partnership with the local and regional governments?" "In what ways do you think that the partnership with the local and regional governments is efficient?"	Providers
Sub-topic 1: Volunteer work	"Why would you consider volunteer work an effective way to support refugee and migrant women?"	Providers
Sub-topic 2: Promotion of SDGs	"In what ways has the partnership between 'Move and Meet' and the regional and local governments enabled empowerment and social inclusion for refugee and migrant women?"	Providers
Topic 4: Barriers to development of individual capabilities	"In what ways did the digital sport course meet your expectations or not meet your expectations?" "Compared to the non-digital courses, what shortcomings do you recognize in virtual programs?" "Have any participants ever voiced critique and proposal for changes?"	Providers
Sub-topic 1: Barriers to social inclusion and empowerment	"To what extent do you think that digital forms of sports have hindered the participants from gaining access to social contacts?" "How do you mitigate feelings of isolation or disconnection that refugee women may experience in virtual environments?"	Providers
Sub-topic 2: Barriers of digital modes of sports	"Can you discuss any limitations or drawbacks associated with delivering digital sports classes?" (e.g. technological barriers, internet connectivity issues, access to suitable devices) "Are there any concerns about the long-term sustainability of digital sports programs for refugee women?"	Providers

Appendix C − Exported Data from ATLAS.ti: Deductive Coding Table

Topic/ Category	Codes
Capabilities	Social interaction, Autonomy, Self-expression, Well-being
Barriers	Negatively connoted experience, Feelings of discomfort
Personal information	Migration background, Family situation
SDG 5.b related criteria	Women empowerment, Empowerment through ICTs, Increased agency/ autonomy
SDG 10.2 related criteria	Social inclusion, Political inclusion, Economic inclusion, Promotion of integration
SDG 17.17 related criteria	(Effective) volunteer work, (Successful) partnership with regional and local governments

Appendix D – Exported Data from ATLAS.ti: Abductively Revised Coding Table

Topic/ Category	Codes
Capabilities	social interaction, autonomy, self-expression, communication/ language, contact, health, positive responses, trust
Barriers to digital courses	negatively connoted experience, feelings of discomfort, mental stress, missing personal contact, missing resources, no consistency, limited access to digital devices, missing 'safe space', unable to reach target audience, challenging sport, missing time
Barriers to non-digital courses	family situation, financial issues, inflexibility, lack of space, lack of volunteers, weather
Personal information	migration background, family situation, location
SDG 5.b related criteria	women empowerment, empowerment through ICTs, increased agency
SDG 10.2 related criteria	social inclusion, political inclusion, economic inclusion, promotion of integration
SDG 17.17 related criteria	volunteer work, partnership with regional and local governments, advocacy work
Organization	including women in the process, participants, familiarity of participants, type of courses, type of networks, reasons for developing digital courses

Appendix E – Consent Form Used for Interviews

Consent Form for Interview
YOU WILL BE GIVEN A COPY OF THIS INFORMED CONSENT FORM

Please tick the appropriate boxes	**Yes**	**No**
Taking part in the study		
I have read and understood the study information dated 14.06.24, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	□	□
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	□	□
I understand that taking part in the study involves answering interview questions. The interview is audio-recorded and notes are taken. The audio recordings will be transcribed into text and will later be deleted after the submission in July 2024.	□	□
Use of the information in the study		
I understand that information I provide will be used for a Bachelor thesis that will be published on the website of the University of Twente.	□	□
I agree that my information can be quoted in research outputs.	□	□
I agree that my real name can be used for quotes.	□	□
I agree to joint copyright of the interview data to Olivia Schulz for the purpose of her thesis.	□	□
I agree to be audio-recorded.	□	□
Future use and reuse of the information by others		
I give permission for the interview data (transcripts) that I provide to be archived on the website of the University of Twente so it can be used for future research and learning.	□	□
I agree that my information may be shared with other researchers for future research studies that may be similar to this study.	□	□
I give the researcher permission to keep my contact information and to contact me for future research projects.	□	□

Signatures

_____   _____ _____
Name of participant

                                     Signature   Date

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

_____   _____   _____

Researcher name   Signature   Date

Study contact details for further information:
Olivia Schulz,

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss (at) utwente.nl

Appendix F – Declaration of Academic Integrity and of the Usage of AI

I hereby confirm that this thesis is solely my own work and that I have used no sources or aids other that the ones stated. During the preparation of this work, the author (Olivia Schulz) used CHAT GPT in the writing process solely to improve readability and English language of the work, and not to replace any key authoring tasks. After using this tool the author reviewed and edited the content again as needed and takes full responsibility for the content of the work. Additionally, search engines (Bing, Google, and Yahoo) were used for research and their use and purpose are explained in section 4.1.1.