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AttrActive Urban Green Space:
Qualities that support active recreation -
A Viennese case study

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Abstract

Insufficient physical activity levels amongst the urban population in conjunction with the risk of quality-decline of urban green spaces due to urbanisation pose challenges that require timely action. To encourage more physical activity amongst urban dwellers, this study analysed the qualities needed in urban green spaces for active recreation. It aimed to gain insight into user preferences to enhance the design of green spaces that attract people to be active.

A photovoice project was carried out, involving eleven active users of different age groups. Research participants were asked to investigate an urban green space in Vienna on its qualities that support their active recreation. In analysing the photovoice interviews, nine categories supporting active recreation were developed. These categories consist of various qualities that urban planners should consider when designing parks to provide spaces that promote healthier lifestyles. Results indicate that not only sports facilities, but also aesthetically pleasing features are important for active recreation. Facilities, such as restaurants, playgrounds, and dog zones were identified as supportive qualities as they provide destinations for walks. Easy access to the park, refreshment opportunities, and wide activity meadows were also identified as supportive features.

Comparing the qualities identified by young adults, adults and the elderly, the findings demonstrate that there is no need for targeting urban green spaces for different age groups. Rather it is a combination of urban green space qualities that entices all age groups, with some features not being utilised by everyone but serving as inspiration for other types of active recreation. Hence, the results suggest that a strategy aiming at providing a mix of qualities can increase active recreation in urban green spaces. Practitioners should consider using photovoice to improve urban green spaces as it involves users in the research process who can provide detailed information about a case study area. Researchers should aim for a larger sample size, which is considered as a limitation of the present study.

Keywords: Photovoice, active recreation, urban green space qualities

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1 Introduction

According to the World Health Organization (WHO) more than one in four adults and more than 80% of adolescents do not meet WHO's recommended levels of physical activity for optimal health (WORLD HEALTH ORGANIZATION 2022). The effect of inadequate physical health became evident during the Covid pandemic, when health systems easily reached their capacities. Increased levels of physical inactivity also hinder economic development and negatively affect the well-being of communities (WORLD HEALTH ORGANIZATION 2018). To address the global problem and to help countries increase physical activity within their populations, the WHO provides guidance in the Global Action Plan on Physical Activity 2018-2030 (GAPPA) (WORLD HEALTH ORGANIZATION 2022). However, it is not as easy as it sounds to get people moving. In fact, physical activity is a construction of many different factors, which are presented in the socio-ecological model for health behaviour, which represents the influence of both objective and perceived neighbourhood factors that may be associated with an individual's health behaviours (CEASAR ET AL. 2020).

While insufficient physical activity places pressure on health systems, urbanisation puts pressure on the environment. A growing population in cities leads to densification, which poses a threat to the quality of urban green spaces. As a consequence, quality degradation due to overuse can negatively impact physical activity levels in urban populations (WEIMANN ET AL. 2019). ARNBERGER (2012) previously mentioned the demand for more public green spaces in urban areas providing high recreation qualities in his publication about urban densification and recreational quality (ARNBERGER 2012).

The challenge that arises from these problems is to ensure the availability of urban green spaces that attract people of all ages to be active, despite the process of urbanisation. Policymakers and stakeholder, including planners & developers, should prioritise maintaining the quality of urban green spaces and provide environments for active recreation. By doing so, cities can proactively tackle future challenges in time and benefit from an active and healthy population.

Some research gaps have been identified regarding this topic. Existing literature primarily focuses on the size, type and proximity of urban green spaces in relation to physical activity (JANSEN ET AL. 2017) (KACZYNSKI ET AL. 2014). The quality of green spaces has been assessed in relation to use in general (STESSENS ET AL.

2020), but the effects of urban green space qualities on active recreation and the correlation between qualities and age are not yet disentangled.

So far, the analysis of areas and their use has mainly involved monitoring green spaces using geographic information systems. Monitoring allows interference about where activities occur, the intensity of use and the spatial preferences of users. However, it does not provide a deeper comprehension of the reasons for these preferences (SANTOS ET AL. 2016). In contrast, qualitative methods have the potential to generate a greater understanding of the health promoting aspects of the green environment (WEIMANN ET AL. 2019). Therefore, a qualitative method is more appropriate to utilise for the purpose of this study. Although there have been qualitative studies centred upon green urban spaces and active recreation, little research has been undertaken using photovoice as a research tool to study urban green spaces. Literature is available on physical activity, analysing entire neighbourhoods using photovoice (GULLÓN ET AL. 2019), but no literature was found utilising photovoice as a research tool to investigate urban green spaces in the context of recreational activity. A gap that this research aims to bridge in order to forward the use of this method in this field.

The objective of this study is to investigate the correlation between the qualities of urban green recreational space and active recreation, and how these may differ across age groups by engaging individuals in the research process. The outcome of the study shall help to advance design of parks that support active recreation for all ages.

Rooted in the identified challenges and due to the evoked gaps in research, these are the research questions the thesis aims to pursue:

Which qualities in urban green space support active recreation?

- What are the qualities that people need for active recreation in urban green space?
- How do these qualities differ between age groups?

The thesis begins with a review on literature about physical activity and urban green space, also looking on methods used to analyse urban green spaces in previous studies. The literature review built the base for this study as gaps were identified in previous research. This literature chapter is followed by a description of the case study area, a formal public park in Vienna that attracts many people for active recreation. In a following chapter the methodological approach is described in detail, explaining the whole process from recruitment of research participants to data collection and data analysis. The results are presented in the next chapter, followed by a discussion and a conclusion.

2 Literature review

Health is a topic that has been much talked about in recent years, as the Covid-19 pandemic has restricted the world's population in their daily lives. Vulnerable people, like elderly or people with diseases were the most threatened, and many families lost relatives due to a virus that was new to the world. Health systems reached their capacities within very short time and people realised that living a healthy lifestyle including regular physical activity is very important to withstand health crises such as pandemics. The World Health Organization's latest data on physical activity shows that levels of physical activity are insufficient for optimal health, with only one in four adults managing to do at least 150 minutes of moderate intensity aerobic physical activity, which is the minimum weekly recommendation. 80 % of adolescents, who are recommended to exercise the same amount of time, do not meet this recommendation. (UN-HABITAT AND WORLD HEALTH ORGANIZATION 2020) (WORLD HEALTH ORGANIZATION 2022) These insufficient physical activity levels cost a lot in health care, and the costs rise with growing inactivity, which impacts health systems, well-being, economic development and so on (WORLD HEALTH ORGANIZATION 2018). To tackle this problem, the WHO calls on policymakers to create supportive environments and provide opportunities for physical activity participation in order to promote sustainable behaviour change. Guidance is provided in the Global Action Plan on Physical Activity 2018-2030 (GAPPA) to reach the goal to reduce physical inactivity with 15% by 2030 (UN-HABITAT AND WORLD HEALTH ORGANIZATION 2020).

Health is also a reason for urbanisation and more and more people moving to urban environments, with access to more health services and better healthcare resources provided. (SHAO ET AL. 2022) Today, more than 55% of the world's population live in cities and it is predicted that this proportion will reach 70% by 2050 (SHAO ET AL. 2022). These growing numbers put even more pressure on existing health care facilities and even more facilities than estimated need to be provided if the world's population becomes even more sedentary. Moreover, the more people move into cities the more pressure is put on the built environment, which threatens the quality of space. Due to the fact that quality degradation due to overuse can negatively impact physical activity levels in urban populations (WEIMANN ET AL. 2019), these two problems - insufficient physical activity levels and the availability of environments for active recreation - are closely connected and build the basis of this thesis. To break these broad topics down, the researcher decided to only review literature that deal with physical activity in urban green spaces.

Physical activity in the purpose of this research is defined as active outdoor recreation, which is leisure time physical activity undertaken outside of structured competitive sport. Active recreation includes physical activity that contributes to health, e.g., walking, running, playing sports, stationary trainings and muscle-strengthening activities. Urban green spaces were chosen as the focus of the research because of their proven positive effects on physical and mental well-being, highlighting their importance.

The aim of the literature review is to find out what is already known about active recreation and urban green space and how other researchers have approached it. The literature review is structured thematically. Firstly, the literature on factors associated with physical activity and neighbourhood perceptions is reviewed. Secondly, literature on urban green spaces and qualities are reviewed, followed by a third section that presents methodologies used to address issues related to urban green spaces and active recreation.

2.1 Physical activity and neighbourhood perceptions

Physical activity is a construction of many different factors, which are presented in the socio-ecological model for health behaviour, that represents the influence of both objective and perceived neighbourhood factors which may be associated with an individual's health behaviours (CEASAR ET AL. 2020). Factors that influence health behaviours, according to the socio-ecological model can be intrapersonal and interpersonal. Intrapersonal factors may include age, sex, race, income, insurance, education, and diseases. On an interpersonal level, culture, social networks, time, and geography constraints can be reasons for health behaviours. Apart from the intrapersonal and interpersonal factors, public policy factors like public health campaigns, hospital resource allocation, clinical guidelines and insurance programs can influence how people use health facilities or what people do to treat their health. Included in the model are also objective neighbourhood factors and perceived neighbourhood factors. Objective factors are socioeconomic characteristics, physical and social environments, safety, and the availability of hospitals in the neighbourhood. Perceived neighbourhood factors include factors like social cohesion, violence, and the perception of physical environment. (CEASAR ET AL. 2020) In the socio-ecological model, the physical environment is the only sub-factor present in both objective and perceived neighbourhood factors that influences health behaviours. Because of this recurrence, the author of this paper considers the understanding of the physical environment to be very important in the study of active behaviours. Following the socio-ecological model, objective environmental characteristics must be related to people and their perceptions of these characteristics in order to understand health behaviour, or in the context of this research, to understand active recreation. In this thesis, environment perception is understood as the perception of the user exercising in the urban green space. GUINAND ET AL. (2021) describe perceived space as a space that people try to appropriate or modify in order to construct a representation and an experience (GUINAND ET AL. 2021).

Research on the perception of the neighbourhood environment exists and confirms its relevance in the analysis of space. For example CEASAR ET AL. (2020) drew on the socio-ecological model to examine the influence of perceptions of the neighbourhood on health care utilisation. Residents who reported unfavourable

neighbourhood environment perceptions were found to use less health care than people with a favourable perception of their neighbourhood. The researchers therefore suggested that solutions should be found to improve neighbourhoods in order to remove barriers to preventive health care. (CEASAR ET AL. 2020) As active recreation is a preventive health care measure, this recent study proves that using the socio-ecological model is a purposeful approach to understand urban green spaces and to figure out which features support active recreation. SALLIS ET AL. (2006) confirmed that ecological models are particularly well suited for the study of physical activity, emphasising that behaviour is influenced not only psychosocial variables, such as personal characteristics, social status, and well-being, but also by environmental and policy variables, aspects which ecological models consider when studying behaviour. And because physical activity takes place in specific places, including the built and natural environment, the physical environment must be analysed in order to understand active behaviours. SALLIS ET AL. (2006) argued that studying the characteristics of places that facilitate or prevent physical activity is a priority, as factors that contribute to sedentary lifestyles can be identified. Both specific access to settings and their specific characteristics are important to consider when analysing behavioural settings, such as settings where physical activity occurs. Moreover, it is important to ensure safe, attractive and comfortable environments when planning spaces for active recreation. (SALLIS ET AL. 2006)

2.2 Urban green space availability and qualities

Urbanisation and an increasing number of people seeking to satisfy their recreational needs exert pressure on recreational environments such as urban green spaces, which have a positive impact on human health and well-being. Urban green space in this thesis is defined as all publicly owned and publicly accessible open spaces that can physically be entered and used. The presence of urban green spaces enhances the active ambience of the neighbourhood surroundings and provides destinations or settings for active recreation (KACZYNSKI ET AL. 2014), which is why their presence and quality should be considered in urban planning. The situation of excessive space usage due to urbanisation may adversely affect the physical activity levels of city dwellers, as emphasised in the study of WEIMANN ET AL. (2019), outlining the importance of guaranteeing enough urban green spaces with high quality recreational opportunities.

Luckily, cities frequently prioritise the provision and accessibility of urban green spaces and the majority of literature on physical activity in urban green space explores proximity and size in relation to active recreation (JANSEN ET AL. 2017) (KACZYNSKI ET AL. 2014) (MYTTON ET AL. 2012). Results indicate that the size of green spaces is linked to levels of physical activity. Larger green spaces are more suitable for walking, jogging and cycling, while smaller sized green spaces are better suited for spatially concentrated physical activity (JANSEN ET AL. 2017). Research on proximity validates that the amount of green spaces is more important than proximity to urban green spaces for active recreation in urban environments (KACZYNSKI ET AL. 2014). Nevertheless, proximity remains a crucial factor, as previous studies have found that the usage frequency of urban green spaces declines with greater distances (COOMBES ET AL. 2010). In general, people residing in proximity to a park have a higher propensity to meet the WHO recommendations for physical activity and are less likely to be overweight or obese, according to COOMBES ET AL. (2010). Other researchers figured out that people living over 600 metres away from an urban green space made use of it more often than those who live adjacent to an urban green space (KACZYNSKI AND HENDERSON 2007). To conclude, these findings suggest that a short distance to urban green spaces, not too far but also not within immediate proximity, effectively promotes physical activity. Not to forget that previous research outlines that the availability of many urban green spaces is more important than the size.

Less literature exists on characteristics of urban green spaces concerning physical activity. Nevertheless, KACZYNSKI ET AL. (2008) highlighted that park features play a more significant role for active recreation than the factors of distance and size, when it comes to the use of urban green spaces for active recreation. Associations between active recreation, features of urban green spaces and how these features are perceived, are seldom investigated, although knowledge of recreation quality indicators could offer valuable insights for managing urban green spaces (ARNBERGER 2012).

Years ago, KACZYNSKI AND HENDERSON (2007) sought to investigate urban green space features and their relation to physical activity. They peer-reviewed journal articles by analysing existing research papers that mentioned variables that are

closely linked with physical activity. The variables frequently linked to physical activity included trails, exercise facilities, sports facilities, and open spaces, among others. The researchers analysed the reporting of variables in the studies and determined whether associations were positive, mixed, or non-significant. For example, the majority of studies indicated a positive relationship trails and physical activity. Consequently, the researchers concluded that access to a trail can enhance levels of walking and running. Furthermore, they found out that the availability of sports facilities in an urban green spaces can contribute to active commuting as people who visit sports facilities chose to walk or cycle in order to reach them. (KACZYNSKI AND HENDERSON 2007)

However, a review of the academic literature on physical activity and features in urban green spaces that are associated with it, shows that information is outdated and superficial. It is not evident which features in urban green spaces specifically support active recreation. Thus, this study aims to address this crucial gap in knowledge. This lack of knowledge and the need to advance research in this area to acquire a greater comprehension of the correlation of more specific characteristics of the environment and physical activity has also been emphasised by other researchers, like JANSEN ET AL. (2017) and WEIMANN ET AL. (2019). If this type of data can be collected, it can yield ideas for better urban planning and development of urban areas, as it can supply policy makers and urban planners with more detailed knowledge concerning the design of urban green spaces (JANSEN ET AL. 2017) (WEIMANN ET AL. 2019). Urban greenspace features or characteristics are in the next chapters also referred to as urban green space qualities. In the context of the threat of quality degradation due to the issues that may emerge from urban densification, it is crucial to investigate how park features are perceived by users and what qualities support active recreation. This will ensure that sufficient urban spaces are available in the future provide high quality recreation opportunities (ARNBERGER 2012).

Out of curiosity, the researcher of this thesis also sought to find out whether age affects how urban green space qualities are perceived, and whether the requirements for active recreation differ by age. A general finding is that age, health and education are significantly associated with physical activity (KACZYNSKI ET AL.

2014). However, previous literature on the quality of urban green spaces did not offer any comparison across age groups. In this respect, WEIMANN ET AL. (2019) suggested that a variety of different types of green spaces are likely to be required to meet the needs of children, adults and elderly, and that this variety is threatened by urban planning that focuses on densifying cities. However, this statement that diverse urban green spaces are necessary, is merely an assumption, and requires further analysis. No other relevant literature was discovered by the researcher to date, addressing this need. Thus, this research aims to address the gap in literature by exploring whether individuals from varying age groups require different urban green spaces to be physically active.

2.3 Methods for urban green space analysis

To investigate the size of parks and individuals' proximity to urban green spaces, the use of geographic information systems is the most suitable method. This digital tool allows researchers to monitor the occurrence of activities, intensity of usage or preferences, among various other analyses. However, as SANTOS ET AL. (2016) stated in their research, it fails to provide a comprehensive understanding of user preferences. When assessing the quality of green spaces in urban areas, qualitative methods have the potential to provide a better understanding of the health-enhancing aspects of green environments in cities (WEIMANN ET AL. 2019). Thus, qualitative methods are more appropriate to use when studying urban green spaces.

Methods used to analyse park features in urban green space and how they are perceived in the context of active recreation, primarily entail surveys (KACZYNSKI ET AL. 2014) (SCHIPPERIJN ET AL. 2013) (STESSENS ET AL. 2020) and face-to-face interviews combined with observations (COHEN ET AL. 2007). However, little research has been carried out using photovoice as a research tool to study urban green spaces. The photovoice method allows informants, typically the residents living in an area, to express their thoughts and convey their perspectives through photography. The methodology section of this thesis provides a thorough description of the photovoice process. In most previous studies examining the urban environment, photovoice is used to analyse residents' perceptions of entire neighbourhoods. For instance, HANNAY ET AL. (2013) and GULLÓN ET AL. (2019) applied the method to investigate entire neighbourhoods to examine physical activity

in urban settings. BELON ET AL. (2014) qualitatively explored how people's experiences and perceptions of their community environments affect their abilities to engage in physical activity, using photovoice. These are just a few examples of researchers who used photovoice to study entire neighbourhoods in the context of preventive health care, of which physical activity is a central element. Less research use photovoice to analyse specific areas, such as urban green spaces. SEITZ ET AL. (2014) employed photovoice to identify and improve green spaces on a college campus, aiming to identify features that reduce stress. (SEITZ ET AL. 2014) However, no study has yet been found using photovoice to identify qualities that support active recreation in urban green spaces.

The literature review revealed research gaps, such as the absence of investigation on the correlation between urban green space qualities and active recreation. Also, there is missing knowledge whether there are differences in perceptions of green space qualities across age groups, that may necessitate a variety of urban green spaces to satisfy all active users. Additionally, the use of photovoice as a methodological approach is rarely used in the context of urban green space analysis. However, it is believed to be a useful method to fill these research gaps by including research participants in the process, which is the reason for the choice of this qualitative method for the purpose of the study.

3 Description of the study area

This chapter presents the case study area, a formal public park which is situated in the 19th district of Vienna, Austria.

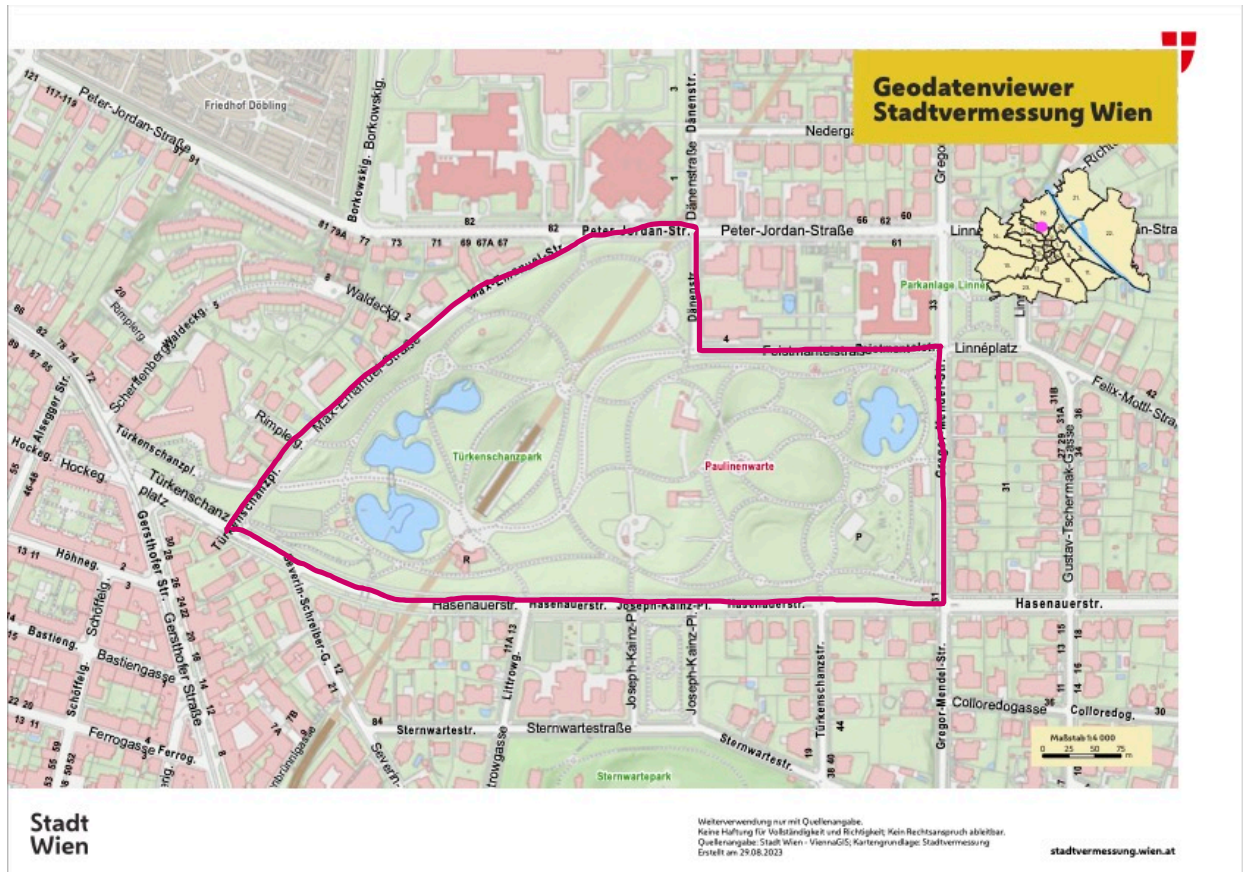


Figure 1: Map of Türkenschanzpark and its location in Vienna

(Source: Stadt Wien - Vienna GIS, Base map: Stadtvermessung Wien)

The Türkenschanzpark was created in two stages. The first redesign of the area began 1885. Despite originally being a private initiative, the Türkenschanzpark project received financial support from multiple sources. The park association received private support through collaborations, donations, advertising campaigns, corporations. Moreover, financial support came from the city expansion fund, the district municipalities and the cottage association. Additionally, Pauline von Metternich, a famous Austrian socialite, generously donated exotic plants from her own possessions. In appreciation for her contribution, a viewpoint located in the centre of the park was named after her, known as the Paulinenwarte. The intention was to finish constructing the park in time for the 40th anniversary of Emperor Franz Joseph's reign in 1888. The goal was achieved when he himself declared the park

as opened in September 1888. Back then the park area covered 50.000 square metres. Due to the city's expansion and the lack of public green spaces, the park area was enlarged to its current size of 150 square metres in 1908. The mayor of Vienna declared the park open in 1910 once it was completed. Until 1918, the Türkenschanzpark was Vienna's largest urban park. (DALLINGER AND GOLLNER 2023)

Nowadays, the Türkenschanzpark is a very popular place for active recreation, relaxation, and social activities. The location near the University of Natural Resources and Life Sciences and its adjacent location to retirement homes contributes to a mixed user structure by age. The fenced park with 13 gates is accessible 24/7. Due to its proximity to bus and tram stops, the park can be reached from distant places. An express train runs through the area but does not stop in the park. The park is characterised by many meadows, paths, sports infrastructure, ponds and a varied vegetation with plants from all over the world.

The Türkenschanzpark was selected as a case study due to its popularity for active recreation. By using it as a best practice example, the researcher hopes to reveal information about features that encourage active recreation. The identified qualities in the research area, can then be implemented in other urban green spaces, or considered when planning or redeveloping urban green spaces.

4 Methodological approach

Based on the fact that individuals do not meet the WHO recommendations for physical activity, coupled with the threat of overuse of urban green spaces due to urbanisation, research gaps have been identified in existing literature. There is very little literature on the qualities in urban green spaces that support active recreation, and when there is literature on this topic, the correlation between age and qualities has yet not been investigated. It also appears that no previous studies have used photovoice as a research tool to investigate recreational activity in urban green spaces. These are gaps that the research aimed to fill by using photovoice as a methodology. In doing so, the researcher expected to gain a deeper understanding of individuals' recreational use of an existing park, and to assess which specific qualities in a park facilitate active recreation. A comparison between age groups

should provide useful information on whether different types of parks are needed for the age groups to be active. To achieve the research objectives, qualitative primary data was gathered. Relevant photovoice literature was reviewed to ensure that the project met all the requirements for valuable research.

Firstly, this chapter presents an overview of the methodology to address the research questions, followed by a description of the target groups. Later, the data collection procedure is outlined, followed by the data analysis and the evaluation of the methodological choice.

4.1 Photovoice interview

To identify opportunities and barriers in the field of health, community-based participatory research methods (CBPR) are commonly being used for health promotion research (NYKIFORUK ET AL. 2011). The CBPR methodologies bring together the community needs by engaging a variety of stakeholders in research ownership (KATAPALLY 2019). Through involving various stakeholders, participants become active in the research process, offering their expertise in the research field. In this manner, the participants are involved in the research, planning and the decision-making procedure (NYKIFORUK ET AL. 2011).

The so called photovoice method is one of several CBPR methodologies. It is a method that previously has been used to explore community health and social issues, to enhance comprehension of the relationship between health and place, and to identify residents' perceptions of place, which may promote or inhibit healthy lifestyle choices. Today this method is being increasingly used for research on community built and social environments, though it is still in its initial phase. (NYKIFORUK ET AL. 2011)

Using photovoice, participants can identify, represent, and enhance their community by capturing images of their own communities. They thereby have the potential to act as catalysts for change within their communities. (BURRIS AND WANG 1997)

The primary aim of photovoice, as outlined by BURRIS AND WANG (1997), are as follows: (1) to enable people to record and reflect on strengths and concerns of their communities, (2) to foster communication and understanding of community issues

via photo-based discussions, and (3) to reach policymakers. (BURRIS AND WANG 1997)

So, what is the grounded concept of photovoice and how is it implemented in practice? Upon analysing research papers that have used photovoice as a methodology, it appears that photovoice does not seem to rely on strict rules on how to conduct a photovoice interview, which is why the approach differs from literature to literature. This flexibility allows the method to be adapted to meet the purpose of the research. However, the prevailing method is to allow research participants to gather data using photography. The photos they take are later described and discussed either on an individual basis or in group sessions during which participants can share personal insights and experiences concerning issues. (AMOS ET AL. 2012)

For researchers, the use of photographs is expected to stimulate discourse among participants regarding their views on topics being discussed. The visual representation combined with narrative shall enhance the ability of researchers to accurately capture the significance of an issue from the participant's perspective. Additionally, more ideas and issues can arise than from solely conducting an interview. For example, participants often identify innovative solutions to problems that would not be recognised by decisionmakers. The emerging photo series also simplifies transferring content to the scientific community because the visualisation makes it is easier to understand the content. The use of this method can inform appropriate intervention or action on health and social problems. (NYKIFORUK ET AL. 2011)

Using photographs in conjunction with narration, this qualitative approach is considered a valuable means of comprehending people's perceptions and aspirations concerning their physical and social environment (NYKIFORUK ET AL. 2011). Consequently, the method aligns perfectly with the purpose of this study. Looking back, the combination of narratives and a visual medium to investigate community issues was first referred to as photovoice in the early 1990s by BURRIS AND WANG (1997). (NYKIFORUK ET AL. 2011) The expression 'a picture is worth a thousand words' is a phrase used in multiple languages, suggesting that a single

image can speak more effectively than a verbal expression. The photovoice method kind of builds up on this expression and adds even more information through a verbal description to the picture. Through the verbal description of photographs, important information can emerge, and participants become integral members of the research team through their active engagement.

4.2 Target groups

In the initial stage of the photovoice project, the researcher determined the target groups by considering individuals who are best equipped to address the research question concerning the factors that facilitate active recreation. Given the likelihood of possessing insights into qualities that support active recreation, individuals who are already engaged in active recreation in the park were included in the research.

To ascertain whether the qualities that support active recreation vary across age groups, it was important to solicit responses from diverse age groups. Given ethical considerations, minors were not included in the study. The study compared the age groups of younger adults (18-25), adults (25-60) and older adults (60+). These three groups were selected as they were expected to provide varied perspectives due to diverse life experiences. All participants were well acquainted with the interviewer, ensuring trust, and enabling them to express themselves freely.

4.3 Data collection

The aim was to have a similar representation of each group, and a minimum of ten participants overall. Methods used to reach out to active people were face-to-face requests, phone calls and social media text messages. Fifteen potential participants representing three different age groups were contacted and targeted for the research comparison. In the beginning of June, potential participants were sent a document containing information about the research and what was expected from them. Participants were required to express their agreement with the research objectives and data collection process. Recruitment resulted in twelve agreements of whom eleven completed all the necessary steps to participate. One person intended to participate but failed to complete the timeframe, ultimately leading to the exclusion from the research. The remaining three persons never responded to the

invitation. The photovoice project was conducted over a two-month period during the summer (June - July). This period is believed to be a very appropriate time of the year to address the research questions. Summer is a time when many people spend time outside, but being active can be very exhausting due to high temperatures. The project entailed participant recruitment, a photo-walk by the participants, individual follow-up meetings with every participant, and data analysis following the data collection.

After recruiting participants, the task for the participants was to take ten photographs of objects that either supported or prevented their physical activity in the park, over the course of a month. This limit of photographs shall encourage participants to carefully consider what they want to capture during the photo walk already prior to the walk, resulting in more valuable content. Moreover, limiting the amount of photographs also makes the content analysis more manageable (AMOS ET AL. 2012). Participants were free to choose the format of the photographs, but the presentation of the object in its best possible way was encouraged. To uphold ethical standards, participants were explicitly instructed not to capture any photographs that show individuals' faces. The research objective is to determine factors that promote active recreation, but participants were also permitted to take photographs of objects that they perceive as an obstacle to active recreation. The reason for allowing participants to photograph obstacles was to foster their analytical skills during the photo-walk and encourage them to generate suggestions for improvement. The majority of participants opted for their mobile phone camera, while a minority chose to use a digital camera.

After the photo walk, the participants were asked to inform the researcher to arrange a date for the photovoice interview. Before the interview, participants had to upload their photographs onto a self-selected online platform allowing access for the researcher, who subsequently downloaded and printed the photographs. The photovoice interviews took place individually in different settings according to the interviewee's preferences. Safe environments are crucial in photovoice interviews, as they facilitate participants' exploration and enable them to share their voice through photography (AMOS ET AL. 2012). Some interviews were conducted in the park where the photo walk took place, some interviewees invited the researcher to

their homes, and a few interviews took place in different outdoor settings near the participants' homes. This process was seamless and self-sufficient, with only the eldest participant seeking assistance in uploading the photographs. The decision to conduct individual interviews with each participant was made with the aim of obtaining more comprehensive and detailed data on personal perceptions of the park and its qualities, compared to a group discussion where not all participants would know each other and hence they probably would feel restricted to share personal experiences. Though time-consuming, this approach produced high-quality results.

At the individual meetings, the participants had to sign the informed consent form, which they had received during the recruitment phase. At the meeting it was explicitly stated that the photographs will be used for the purpose of the research and published in the thesis. Each participant was informed about the structure of the photovoice interview prior to recording the photovoice interview. Before the interview, the participants received a map of the park, where they should map all their photo spots. This was done to identify whether there are locations in the park that are more attractive than others.

Afterwards, participants were enabled to arrange their photographs in the order they wanted to present them. Some individuals opted to categorise the photographs thematically, others preferred to present them chronologically, while some alternated between images throughout the interview.

During the audio-recorded interviews, the participants were asked to describe each photograph and explain the reason for taking the picture. They were given the time needed for describing the photos they had taken. In case of any ambiguity, or if the interviewer sought further information, questions regarding the photograph were asked. The interviews lasted between 20 to 30 minutes. The interview concluded with some questions about the participant's definition of physical activity and whether they would describe themselves as a physically active. The participants were also asked to reflect on their thoughts about the photo walk experience. Lastly, the participants were asked to describe their perceived mood during the photo walk. The latter task was based on recommendations from previous researchers, as mood

at the time of data collection can influence the result due to the participants' subjective experiences at the time of data collection (NYKIFORUK ET AL. 2011).

After the interview, the recording was stopped, and the participants were instructed to compose brief captions or descriptions for the photographs. This was an important project step for the following data analysis, making it easier to sort the interview transcript sections to the photographs. Additionally, the captions may enhance the audience's comprehension of the photographs when they are presented to others.

4.4 Data analysis

The following table illustrates data concerning the eleven research participants. Appendix 2 presents detailed information about the age of participants and dates of interviews.

Table 1: Target group characteristics (Source: Author)

Research participants		Number of participants
Gender	Male	5
	Female	6
Age	18 - 25	4
	25 - 60	4
	60 +	3
Physically active	Yes	11
	No	0
Times per week	1 - 2	3
	3 - 4	4
	4 - 5	1
	6 - 7	3

A range of data was produced using the photovoice methodology. The data collected included participant's photographs, the locations of the photographs, verbal descriptions, reflections on the pictures, brief captions, and some background information about the participants. The subsequent stage of the photovoice project was to analyse the data collected. Given the absence of literature on the research

topic, and for the aim of this study to be explorative, an inductive approach was used. For the data analysis of the interview content, MAYRINGS' (2021) guidelines for interview analysis were implemented to identify common codes and themes in the interview transcripts.

The method of inductive category formation is considered to be very fruitful and facilitates the answering of research questions that are explorative or descriptive, which was the case in this study. The guidelines stated in the book by MAYRING (2021) explain eight process steps in developing categories directly out of the collected material:

1. Research Question
2. Category definition and level of abstraction
3. Coding the text
4. Revision
5. Final Coding
6. Main categories
7. Intra-/intercoder check
8. Results

After assessing whether the research is exploratory so that an inductive approach could be beneficial (1), the remaining steps (2-8) could be carried out.

In the second stage, the category definition and the level of abstraction was defined (2). The category served as a selection criterion to determine the relevant material from the interview transcripts (Appendix 3). For this study, the category definition was specified as any statement containing qualities that support or inhibit active recreation. The level of abstraction was chosen to be divided into three phases. The initial reduction consisted of a full phrase, the second reduction of three words and the final reduction being a single-word category.

After defining the category and level of abstraction, the interview transcripts were coded (3). When reading the transcripts line-by-line, all materials that related to the category definition were highlighted and paraphrased. Following the paraphrasing of the selected parts, each text passage was reduced according to the level of abstraction that was defined prior to coding. A category was created for the first text

passage. After coding the first paraphrased text passage, the next text passage was abstracted. Following the initial coding, the text passage could either be incorporated to the first established category, or a new category had to be created.

In a next step, MAYRING (2021) recommends a revision (4) of the category system. This was carried out after working through roughly 30 % of the data. In this step, it was checked if the category system aligned with the research question, which was the case. Additionally, the number of categories developed was examined, resulting in a total of 35 categories, which was more than anticipated. A few categories were eliminated by merging them with another existing category. The revision of the category system meant that the analysis had to start from the beginning, allocating some text passages to new categories.

As final coding (5) MAYRING (2021) describes the process of going through the remaining material using the same principles, including category definition and the same level of abstraction. It was a process that became quicker and quicker the more interviews were paraphrased as some statements were found to be repetitive and the researcher became more familiar with the method.

At the end (6), the list consisted of thirty categories/qualities, which were then grouped into main categories. For instance, all sports facilities enabling sporting activities were classified under the category 'sports infrastructure'. Ponds were also categorised based on their purpose, which means they either fell into the main category 'refreshment' or 'aesthetics'.

For the intracoder and intercoder check (7), each main category that developed out of each text passage was compared with the original text to determine if the category accurately corresponded to the content of the text passage. The intercoder check compares two or more people's coding to verify the reliability of code assignments (MAYRING 2022). Unfortunately, this step could not be carried out as only one person was responsible for this research.

The result (8) of this inductive approach was a list of nine main categories consisting of thirty subcategories which are the output and the result of this study, determining the qualities that people need for active recreation in urban green spaces.

To address the second research question of this research, whether these qualities differ across age groups, the frequency of the category occurrences between age groups was examined. Specifically, the instances of subcategories within each age group were calculated. Disparities were identified in some categories with qualities being absent in one age group but present in the other.

4.5 Method implementation and evaluation of methodological choice

The aim of the study was to explore the correlation between the qualities of urban green recreational spaces and active recreation, and to identify whether these qualities differ across age groups, by engaging individuals in the research process. The research aimed to identify qualities that attract individuals to be active in a park and help advance the design of parks that encourage physical activity. To determine the qualities that facilitate active recreation, the photovoice method proved to be highly effective.

Sending out the information letter, a very positive response was received from those interested in participating. The majority of participants completed the photo walk within two weeks and successfully uploaded their photographs onto a sharing platform. The researcher then proceeded to download the photographs for printing. However, the eldest participant required two separate meetings because the person was not able to upload the photographs himself. One meeting for transferring the photographs and another meeting for the photovoice interview had to be scheduled.

The meetings lasted an average time of thirty minutes, incorporating the procedure of signing the consent form, marking the photo spots on a map, conducting the photovoice interview, which was recorded and included personal questions, queries regarding the methodology, and the participants' mood during the photovoice interview. At the end of the meeting the participants had to write brief captions on their photographs.

The interview itself was very comfortable and the more relaxed the participants became during the interview, the more information they shared about their personal experiences in the park. If they identified boundaries to active recreation, they were willing to share suggestions for improvement. Participants emphasised that they felt they could contribute to change. It achieved the objective of photovoice outlined by

BURRIS AND WANG (1997), which is to enable people to record and reflect on strengths and concerns of their communities and promote a dialogue and awareness about community issues through discussion of photographs with the hope to reach policymakers.

While all participants described themselves as physically active, the level of physical activity differed among individuals. On average, the participants are active three times a week. Also, the understanding of physical activity varied among participants, ranging from walking to running or doing stationary workouts.

According to NYKIFORUK ET AL. (2011), capturing the mood of individuals during data collection is important as it may impact the perception of space and subsequently affect the result. Thus, participants were asked about their mood during the photo walk. Words such as curious, relaxed, nice, good, joyful, pleasant, and positive were used to describe their mood.

The method itself was described as interesting by most participants. Some individuals found it difficult to identify ten suitable objects for photography, whereas others took more photos than needed and later had to select the most representative photographs from their camera roll. The participants stated that they gained a new perspective on the park and were more attentive to their surroundings than usually. Some also mentioned that they appreciate being part of the research and to give feedback on issues they are concerned about or where they see potential for improvement.

The researcher herself found it very interesting to meet the participants and to hear the stories behind each photograph, noticing different and shared perspectives on various topics. One significant benefit of this method, compared to other qualitative approaches, is that the interview content is more comprehensible for the interviewer when accompanied by images.

While the collection of photographs and interview content was relatively straightforward, the analysis of the data proved to be challenging. The content required sorting and careful analysis, which was a time-consuming process. Using MAYRINGS' (2021) data analysis approach to inductive categorisation, the researcher followed the eight process steps in developing categories out of the collected material. Due to the flexibility that this approach allows, the categorisation is up to

the researcher and therefore very subjective. This is seen as a limitation of the study. Implementing the intercoder check, like proposed by MAYRING (2021), might have resulted in more valuable results. The intercoder check, when categories are not decided by a single person alone, is recommended for further inductive research. Despite this limitation, the qualities identified by the researcher with the help of active research participants across various age groups have helped address the research question and to bridge knowledge gaps.

Overall, this empirical part of the study can be evaluated as very interesting for both the researcher and the research participants. To summarise, a drawback of the method is that it is very time-consuming approach, requiring individual meetings with each participant, transcription of interviews and data analysis. Another disadvantage is that elderly may need help to upload photographs and, as mentioned above, that the categorisation is very subjective. Nevertheless, the qualitative and distinctive way to understand individuals' perception of a space overweighs the disadvantages of this approach, as the results presented in the next chapter show. Other researchers who have used photovoice, also outline the positive aspects using this method. For instance MAHMOOD ET AL. (2012) highlighted that photovoice increase the participants' awareness of their environment and that compliance and engagement of participants indicates that participants find the process enjoyable and meaningful. These positive aspects of photovoice can also be confirmed in this study. BELON ET AL. (2014) explained that photovoice allows community members to guide researchers' eyes to the things and places most significant to them, which makes issues easier to understand for individuals not directly involved or connected to a space.

5 Results

In total, 115 photographs were taken in the case study area of Türkenschanzpark in Vienna, representing qualities that either support or prevent active recreation in urban green spaces. While a few participants encountered challenges in identifying ten qualities, others struggled to comply with the limit and had a few more photographs, resulting in the total sum of 115 photographs. For a better overview, each photograph was assigned a number and the complete collection of photographs is attached to this thesis (see Appendix 1).

At the individual meetings, the participants had to mark their photo spots on an orienteering map. This was done to identify any specific areas of the park that may be more appealing for recreational activities than others. The photo spots were distributed over the entire park, showing that participants explored the entire urban green space on recreational features with some spots being more appealing than others according to the purple circles that mark the photo spots.

Photo spots in Türkenschanzpark 1:3 000

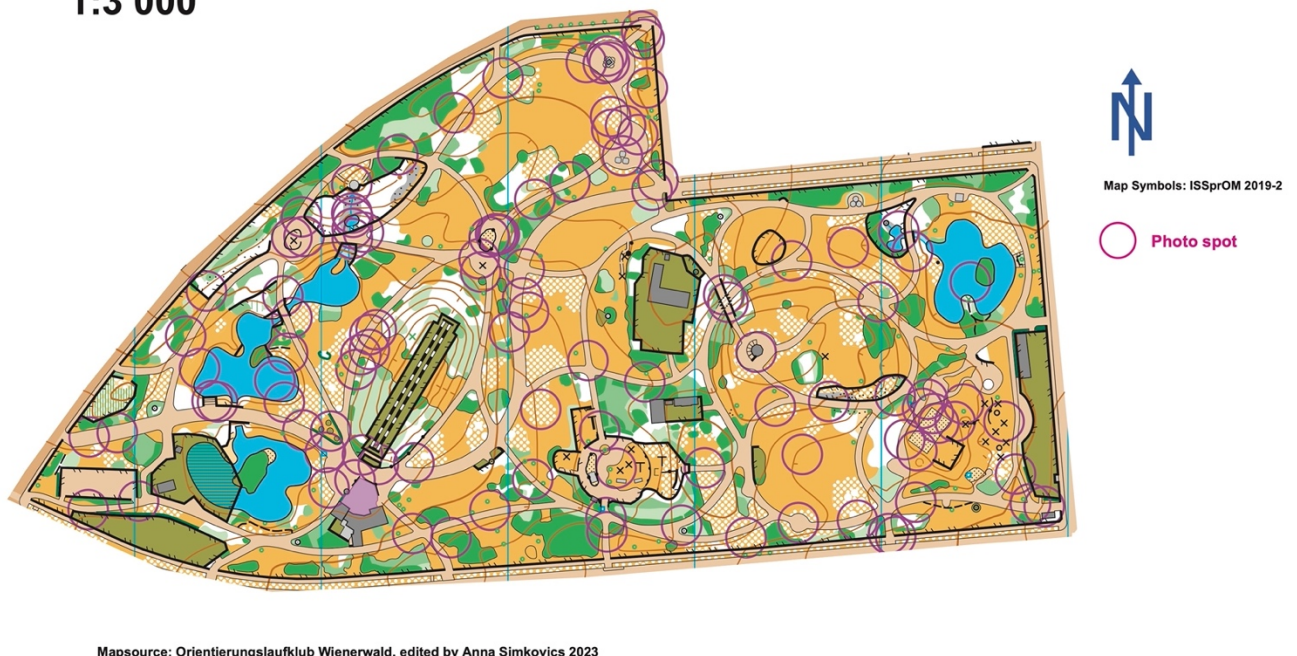


Figure 2: Map of photo spots

(Source: Orienteering Club Wienerwald, edited by author 2023)

The interview data was transcribed and analysed. Using the interview data analysis approach proposed by MAYRING (2021), nine main categories emerged. These categories represent the qualities support active recreation and depict the result of this study. Besides the qualities that support active recreation, a few obstacles to physical activity in urban green spaces were discussed in the interviews. Both supportive and preventive qualities are presented in the following subchapters.

5.1 Qualities that support active recreation



Figure 3: Graphical representation of the categories consisting of various qualities that support active recreation. (Source: Author)

Out of the 115 photographs, 27 photographs represent **sports infrastructure** (1-27), 25 photos were assigned to **aesthetics** (28-52), 17 photographs treat topics concerning **roads and paths** (53-68), 14 photographs highlight the importance of **refreshment** opportunities (69-82), 9 photographs represent issues about **reachability** (83-91), 8 photographs represent **activity meadows** (92-99), 7 photographs highlight the importance of **playgrounds** (100-106), 4 photographs represent the importance of **dog zones** (107-110) and 4 photographs depict the availability of **catering** (111-115) as a supportive aspect for active recreation. Within these nine categories various qualities support active recreation in urban green spaces, presented in the following table.

Table 2: Qualities that support active recreation in urban green spaces (Source: Author)

Categories	Subcategories
Sports infrastructure 	Sports courts (basketball, volleyball) Table tennis tables Skatepark Calisthenics Toilets Learning facilities (e.g., labelled trees) Chess tables Canopies Benches
Aesthetics 	Water features (ponds, fountains, waterfalls) Biodiversity Old trees Monuments Greenery
Roads and paths 	Variation (many routes with hills and turns) Lights Bridges Mix of roads and paths
Refreshment 	Drinking fountains Water fountains Shady trees
Reachability 	Accessible (24/7) Public transport connection Location (e.g., near university, retirement home)
Activity meadows 	Wide and open Mowed grass
Playgrounds 	Fenced play areas Challenging playgrounds
Dog zones 	Fenced dog areas
Catering 	Restaurants

5.1.1 Identified recreational qualities

Sports infrastructure



Table tennis tables



Sports courts



Benches



Chess tables



Skatepark



Calisthenics



Canopies



Toilets



Learning facilities
(Labelled trees)

Figure 4: Photos that captured sports infrastructure. Photos #2,7,12,15,17,18,20,23,21 (Source: Participants)

According to the outcome of the photovoice interviews and the photos taken by the participants, sports infrastructure is important for people to be active in urban green spaces. The presence of specific facilities such as table tennis tables, volleyball courts, basketball courts, and a skatepark, as well as callisthenic equipment, is viewed as important. However, most participants noted that they personally do not use the sports facilities. Nonetheless, the availability of specific sport amenities serves as an incentive for other types of activity in a way that it reminds the park users to be active. One participant noted the significance of an ‘activity corner’ – a designated multisport area within a park for sports. While there are facilities intended

for sports, other facilities also contribute to physical activity. For instance, a few research participants use benches for stationary exercise. Additionally, chess tables that were found in the research area are another important sports infrastructure to mention. Participants indicated that the chess tables may not encourage physical activity, but rather serve as a destination with physical activity done on the way there by e.g., walking to the destination to play games. Some participants expressed a desire for additional canopies in the case study area, as these allow stationary workouts during all-weather conditions.

Apart from sports infrastructure that is directly related to sports, or facilities that are used for doing sports, there are a few other infrastructure facilities that contribute to being active in a park, and therefore these features were also assigned to the category of sports infrastructure. For instance, the availability of toilets was mentioned to be very important. Knowing that there is a toilet in the area is a reason for some to choose a space to engage in physical activity:

“So now we're on to my more intense movement training, running. It happens that I urgently need to go to the toilet and then it's good that you can find a public toilet in an urban area. Oh, it has saved me from despair a few times.” (Interviewee, 25-60 years, Photo #22)

Moreover, the trees are labelled in the research area, which is something almost all participants noticed. When asking how labelled trees are connected to physical activity, the participants stated that it is nice to learn something on the run or walk. It makes the exercise more enjoyable and sometimes it serves as an incentive to stop and take a short break.

Aesthetics



Water features (ponds, fountains, waterfalls)



Biodiversity



Greenery



Old trees



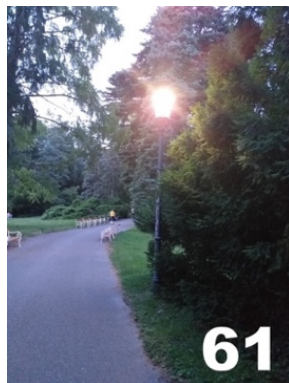
Monuments

Figure 5: Photos that captured aesthetical features. Photos #30,35,48,46,41
(Source: Participants)

In a park, aesthetics plays a vital role for the research participants as it appeals to various senses. The aesthetical features associated with sight, sound, and smell were described as important. The water features, such as ponds, fountains, and waterfalls, were considered particularly attractive. In addition to their visual appeal, the sound that emanates from these features was described as charming by many research participants. Moreover, the present biodiversity was mentioned connected to the water features. The variety of plants that grow near the ponds were described as beautiful and the animals seen in or near the water were perceived as positive as well. The participants noticed birds, turtles, fish in or in the vicinity of the ponds, and correlated the existence of animals with the feeling of being in real nature. In addition, the park boasts fragrant flowerbeds and a diverse range of trees, the older of which drew particular attention from the participants. A fountain monument in the

park, which also functions as a drinking fountain, was described as an attractive aesthetical feature. One participant stated that the fountain (photo #41) represents all other monuments in the park, contributing to its beauty. The overall layout of the park with lots of greenery was also described as attractive.

Roads and paths



Lights



Mix of roads and official paths



Bridges



Variation (many routes with hills and turns)

Figure 6: Figure 3: Photos that captured roads & paths. Photos #61,56,59,64,49,62, (Source: Participants)

The roads & paths category was developed following feedback and recommendations from research participants, who identified several issues that needed improvement. Generally, the park's road system was described as excellent, providing visitors with a multitude of options when it came to walking or running. The landscape's undulating terrain and numerous twists and turns made for a diverse and varied road network. Additionally, the bridge received particularly high praise. "A bridge serves as a means for passing; it is meant to be walked over." was one participant's objective description. Trails featuring hills, climbs, and winding

paths were deemed particularly exciting. It was also noted that the park's roads are well illuminated, allowing for safe use regardless of the time of the day or season. Disagreements among research participants were found regarding the surface and the width of the roads in the park. Some people described the fact that all roads are concrete as good because they feel safe when walking or running on them. Some mentioned that they feel fast when running on asphalt, preferring this type of surface ahead of some softer ground. Participants also described that the asphalt surface is inclusive, allowing people with wheelchairs, strollers, or rolling walkers to navigate easily in the park. Others critiqued the asphalt roads as too wide, too many or bad for the feet. A consequence of the many paved roads is that some paths are created next to them, which was described as a positive situation by one interviewee:

“On the one hand you can see the asphalt path and on the other hand there is also a path where many people have already walked. I was one of the first to tread this path and luckily more and more people are now running. It's just a lot more comfortable to run when you have a softer surface. I've always had problems with my heel and so on and had to make sure that I run as much as possible on the meadow, and if there are paths where you can walk well without asphalt, I think that's very beneficial for the health of people running.” (Interviewee, 25-60 years, Photo #56)

Contrary to this statement another participant said that it is not appealing to see these trodden paths next to the roads and that he prefers to run on the paved roads because it is pleasant to run on them. A solution suggested by a few participants was to create a better mixture of roads and paths in the park. Many participants said that not all roads need to be paved, and especially not that wide. It was proposed to convert certain roads entirely to gravel paths or convert half of the roads to gravel paths instead of leaving everything asphalt. When it comes to paths, some mentioned that it would be nice to have an official trail in the park. This was described to solve the problem of unwanted paths along the roads. Runners looking for a softer surface would have the option to use a designated trail instead of meadows where paths are created that are not meant to be there.

Refreshment



Drinking fountains



Water fountains



Shady trees

Figure 7: Photos that captured refreshing features. Photos #74,70,71

(Source: Participants)

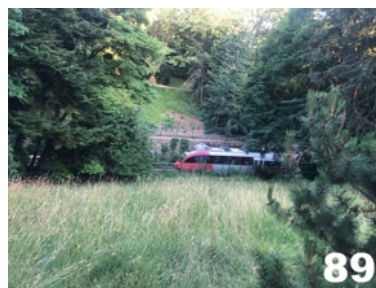
In terms of refreshment, 8 photographs were taken of drinking fountains. The provision of drinking water in Vienna in general is highly appreciated by the participants, as it was described to facilitate physical activity.

Some photographs represent the water fountain in the pond, which was also described as refreshing for its cooling effect when being near the pond. In addition to the water features, the tree coverage in the park was also noted as being an important factor in the provision of refreshment. The mature trees in the park were described to provide effective shading for outdoor activities during hot summer days.

Reachability



Accessible (24/7)



Public transport
connection



Location
(e.g., near university)

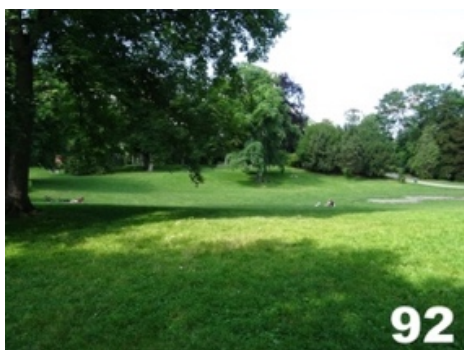
Figure 8: Photos that captured reachability. Photos #84,89,87

(Source: Participants)

Reachability is another important aspect for active recreation, as highlighted by the participants. The park should be easily accessible from several sides so that there are many places to enter and leave the urban green space. One participant mentioned that it would be even better if the park was not surrounded by a fence so that it could be accessed from anywhere. However, a few other participants argued that having a fence around the park instils a sense of security. The site adjacent to a retirement home and a university makes it attractive to a mixed age range who can take a leisurely walk or participate in physical exercise. In addition, good public transportation links are significant for people who live far away from the park and wish to access it easily. One interviewee in the research area suggested improvements in this regard:

“This is the photo of the train. I think it would be great to improve the connection. I just run to the park because it's not that far for me. But for example, my wife, when she runs over, that's it. She's already finished and then she must walk back. For people who can't run that far, it would be nicer if they could quickly get on the train, get off here and run a lap in the park instead of not running at all.” (Interviewee, 25-60 years, Photo #89)

Activity meadows



Wide & open



Mowed grass

Figure 9: Photos that captured meadows. Photos #92 and 98

(Source: Participants)

All the research participants identified the meadows in the park as a crucial feature for active recreation. The fields were referred to as ‘the adult's playground’ and ‘the second living room’, promoting joy. Descriptive words for the meadows included

‘open’, ‘wide’, and ‘expansive’. The fields serve multiple functions, with children using them for sledging in winter, and adults using them for sports and exercise throughout the rest of the year. According to some interviewees, mowing park meadows is crucial to reduce grass tickling and the risk of tick bites, which is of significant importance to some. One participant recommended dividing the meadows into designated areas based on their intended use due to their heavy usage on certain days. These areas may consist of zones for relaxation, sports and social events.

Playgrounds



Fenced playground for small children



Challenging playground for older children

Figure 10: Photos that captured playgrounds. Photos #103 and 106

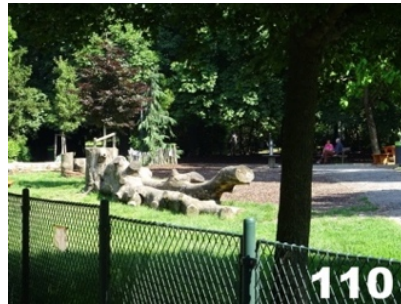
(Source: Participants)

“Here you can see the children's sports field, with all the activities they can do there. From the bars, from the slide, from the stones for the balance exercises here to the rotating wheel. I've already tried a lot of things with my own grandchildren. It can be referred as an extremely active part of the park, not only for children.” (Interviewee, 60 years +, Photo #106)

According to the photovoice interviews, the availability of playgrounds for different age groups is important. One participant in the research study described playgrounds as the 'sport fields for children'. These play areas must cater to diverse age groups, featuring exciting and demanding equipment for climbing and balancing. Parents and grandparents regard playgrounds as valuable areas for their children and grandchildren to engage in physical activity, in addition to spending time with them outdoors. According to a parent who was interviewed, it is important that playgrounds for young children are enclosed with a fence to ensure a sense of

safety when allowing children to play. Furthermore, playgrounds were identified as a social gathering place for parents and their children, and a destination for walks.

Dog zones



Fenced dog areas

Figure 11: One of four photos that captured dogs or dog zones. Photo #110
(Source: Participant)

Dogs' ought to be kept on a leash while in Türkenschanzpark. Nevertheless, many participants expressed concerns regarding off-leashed dogs. Some individuals experience anxiety when encountering unleashed dogs, particularly during physical activity. All participants emphasised the significance of having fenced dog zones within the park to facilitate worry-free exercise.

"It's good that there are dog areas as it is a demarcated area where dogs can run around and not be a nuisance." (Interviewee, 18-25 years, Photo #110)

One of the participants was a dog owner, who had the same view on this topic. The dog owner referred these fenced areas as 'playgrounds for dogs'. Apart from a space where dogs can move freely, dogs are also described as motivators for their owners to be physically active, because owners are forced to walk there with their dogs.

Catering



Restaurants

Figure 12: One of four photos that captured catering opportunities. Photo #114
(Source: Participant)

Like dogs that motivate people to move, catering can also be a reason for physical activity. Restaurants can serve as a destination and thereby encourage active recreation. One participant highlighted the availability of ice cream as a post-workout treat or a justification for taking a break.

“Sometimes we’ve even eaten ice cream in October. I’m not much of an ice cream eater, but it’s nice when you have something like that in a park where you can strengthen yourself a bit after exercise and replenish the calories that you might have just used up.” (Interviewee, 25-60 years, Photo #113)

However, restaurants situated within a park mainly promote low-intensity recreational activities, such as walking, rather than high-intensity workouts, according to the interview content.

5.1.2 Qualities that support active recreation by age group

Looking at all age groups collectively, the interviews revealed that the most frequently discussed topics were issues, concerns and suggestions regarding the roads and paths, closely followed by the importance of aesthetics and the availability of sports infrastructure. These main topics were followed by the significance of refreshment opportunities, the accessibility to activity meadows, dog zones, playgrounds, reachability, and catering, in that consecutive order.

In the age range of 18-25, the most crucial attribute frequently mentioned was the availability of different routes and paths, followed by aesthetic appeal. This age group put emphasis on strength facilities for activities such as calisthenics as a vital infrastructure for active recreation. Unlike the group with an age of 25 years and older, this young age cohort regarded toilets and canopies as insignificant infrastructure.

In the 25-60 age category, meadows, paths and roads were frequently discussed, as were illumination, trees and drinking water fountains. Unlike other age groups, this cohort did not deem the bridge or the water fountains in the ponds as essential features for active recreation.

For individuals aged over 60, aesthetic appeal was found to be the primary factor for active recreation, followed by playgrounds, paths and roads. Benches were not referenced by this group. They rather put emphasises on chess tables which were noted solely by the age group over 60 as an important feature for active recreation.

5.2 Obstacles to active recreation

Although the research participants had more positive attitudes towards the park and therefore identified more qualities that support active recreation, a few hindrances were identified as well. For a better understanding, the following visualisation provides an overview of the identified obstacles together with brief captions of the participants.



“Too much asphalt”



”Dog - Rules for good coexistence”



”High grass = ticks”



“Ugly pile in the middle of the road”



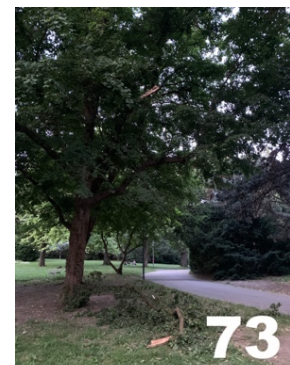
“Be considerate: everyone understands relaxation and physical activity differently.”



“Water on the road”



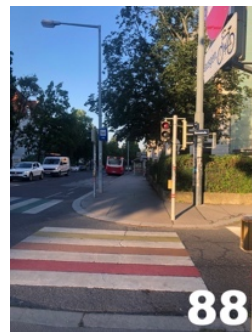
“Advertising sign is in the way”



“Beware of storms – beware of danger!”



“Sign indicating a ban of bicycles”



“Suboptimal public transport connection”



“Unnecessary signs destroy the view”

Figure 13: Photos that captured obstacles for active recreation. Photos #62,108,98,50,27,85,81,57,73,26,52 (Source: Participants)

In general, research participants noted that there is a lot of asphalt in the research area and suggested to convert a few asphalt roads into gravel roads or paths, as already mentioned in the ‘roads & paths’ section of this thesis.

Participants also noted that a lot of dogs were not on the leash during their photo walk even though there is a rule to have them on the leash. Having dogs that run freely arises anxiety in a few people, especially during sports exercise. Moreover,

high grass was not very welcomed by active users, as it raises the risks for tick bites, and it restricts using meadows for stationary exercise because of tickling grass.

Two participants pictured a bark mulch heap that was spread out on a road in the park. The heap was described as annoying by the research participants, and they did not find a reason for it to be there.

Another participant observed that the area for table tennis was utilised as an area for a celebration, with the table tennis tables themselves not being used for its purpose. This annoyed the participant, who proposed creating more designated areas within the park for various purposes to better meet the needs of all park users. According to a few participants the public transport connection could be better in the case study area. Easing the access to the park, could support more people to be active within the park. One participant was annoyed by water that flew over the road and a sign that acted as a barrier, making people to walk around this barrier and thereby create unofficial paths. Moreover, even though all participants mentioned the old trees as beautiful, there was one concern about a branch that had fallen in a storm, an aspect to be aware of in park planning. Also signs of prohibitions can restrict movement. In the case study area, a sign prohibits cycling in the park. Interview content revealed that there are divergent views on whether cycling should be allowed in the park or not. One participant noted red signs that forbid stepping on a meadow. According to the interviewee the intense red colour and the number of signs spread out in a relatively small and fenced area are not necessary. In case of restrictions, it was suggested that small barriers that do not disrupt the scenery would be sufficient.

6 Discussion

The objective of the study was to enhance understanding of reasons for engaging in active recreation in urban green spaces by identifying the qualities that support active recreation, so that more parks can be designed in a way that they attract people to be physically active. A case study area, the Türkenschanzpark, a formal urban green space which the researcher perceives to be very successful in attracting people of various ages to be active, was analysed on its features that support active recreation. The results of the study were generated by research participants, who interacted with the case study area and critically analysed the environment. Eleven participants photographed objects or places in the park, that they perceive as motivating aspects for their active recreation. Based on the suggestion by SALLIS ET AL. (2006), participants were also animated to picture objects and areas that hinder them to be active in the park, as these may be factors that may contribute to sedentary lifestyles.

Moreover, it was a goal to determine whether these qualities vary between age groups, in order to examine whether different park designs must be implemented to attract specific age groups or if one single park design, including identified qualities, can attract all age groups for active recreation.

Additionally, this study sought to determine the feasibility of using photovoice as a method in the analysis of green spaces, and whether it is a method to consider when planning or redesigning parks that support recreational activity.

6.1 Interpretation of results

6.1.1 The identified qualities

Based on the need suggested by various researchers, that it is important to find out why urban green spaces are being used for physical activity (AKPINAR 2016), research was conducted. Various qualities were identified by the research participants to be reasons for their active recreation in the research area. Findings show that it is not a single quality but rather a mixture of qualities that is needed to fulfil the needs of active users in urban green spaces. However, some qualities may

overweigh other when it comes to importance. The facilities most associated with active park use were sports infrastructures, including facilities that are not directly designed for sports but can be used for sports, such as benches and canopies, or features that are a supportive amenity for doing sports, such as the availability of toilets in a park. The function of the canopies is to provide protection for all weather conditions, enabling people to have a place to do a workout also on rainy days. For its functional purposes the availability of benches and canopies should be made sure in urban green spaces. This finding confirms research, which indicated that individuals try to modify their space in order to construct an experience and that influences how people perceive their space (GUINAND ET AL. 2021). In this case, individuals use park features which originally were not intended for active recreation, to create a place for their physical activity, using benches and canopies as workout facilities.

The availability of specific sports amenities, such as playgrounds, skateparks, sports courts and calisthenics stations, seems to play an important role for all research participants, also for individuals not using them. This resulted in a key finding of the study. Sports infrastructure influences active behaviours in a way that they motivate individuals to be active, despite not being used by research participants themselves. After conducting research, literature was found, examining qualities that correspond with the identified categories of this study. KACZYNSKI ET AL. (2014) revealed that playgrounds, skateparks, fitness stations, are particularly important for promoting active recreation in a park, corresponding with the results of this research.

A bit more unexpected, and not mentioned in any previous study, was the fact that many of the participants were aware of trees in the park that are labelled. According to the participants it serves as motivation during active recreation to also learn something while exercising. For this reason, it may be good to implement more running or walking loops in future urban green space planning, making it possible to learn about different topics. Alliteratively, some other types of innovative educational loops could be created. There is already a consensus in studies that there is positive relationship between trails and physical activity and that trails can enhance levels of walking (KACZYNSKI AND HENDERSON 2007). Adding some tasks to these running or walking loops can make these trails even more attractive for active recreation.

Trails were also identified as a key feature that supports active recreation in the current study. However, these trails are missing in the case study area, an aspect that animated a lot of discussion from the participants point of view. Many participants came up with the idea to create official trails in the park, as this is a missing quality in the case study area. The importance of trails is also highlighted in previous research (KACZYNSKI ET AL. 2008). Currently all roads in the case study area are wide and concrete, with some paths created by users, but they are not officially part of the park design. There were different opinions on the surface of the roads and accordingly there is potential in the research area to improve it. The network of roads in the case study area, with its many route options, partly hilly, partly flat, and curvy roads, is good and the variety is something that can be implemented in more parks to make them more interesting for the user. When it comes to the surface of the roads in Türkenschanzpark, there is potential for improvement. On the one hand, paved roads are seen as inclusive, which is why they should exist. They are accessible for wheelchairs, walkers, strollers, and elderly people who have difficulties walking off road. On the other hand, many runners try to avoid them because of the hard surface and thus unofficial paths are created by these people mostly along the paved roads, which some users do not like because of aesthetical reasons. Based on all suggestion by the research participants a solution to the different requirements is to keep asphalt roads in a park narrow, so that disabled people can use the paved roads. In addition to the paved roads an official running trail should be created. Preferably illuminated as participants wished them to be so that those who want can exercise during all day times and seasons. A solution that may fulfil the various personal preferences.

A vital role for active recreation is the aesthetical appeal and features that correlate with senses of people. Everything that is perceived beautiful, sounds nice or smells good, attracts people to be active. As half of the photographs connected to aesthetics represent water features such as ponds, water fountains and waterfalls, water features are the most appealing features for active recreation. A bit unexpected is the fact that it is not only what people see, but also what people hear that higher the attractiveness of a park. According to the findings, a water fountain in a pond is more appealing than a pond without a water fountain, with the argument that it is nice to hear the rippling of the water. The water features in combination with

greenery seems to be very attracting, as there were many photographs taken of green features, mostly in combination with water. The importance of aesthetics as an attribute that supports physical activity was already mentioned in the research by KOOHSARI ET AL. (2015) and is validated in the current study.

Water is not only important because of its aesthetics, but also because of its refreshing and cooling function, which attracts active people. As expected, many drinking fountains were captured as a supportive feature for active recreation. Thus, water is a very important element in park design. Shady trees and drinking fountains not to be forgotten. However, the refreshing aspect of water became very dominant, and the result may be affected by the warm weather during the photo walks which took place in June with temperatures around 30 degrees. It is questionable if this refreshing aspect, which was so dominant at the time of data collection, may be of less importance during other times of the year, bringing up the need to conduct further research during different seasons.

The reachability of the park was also discussed by the participants. It is seen as important that the location is central to other amenities, such as schools, universities, residential homes, and that there is a public transport connection that eases the access to urban green spaces. However, as mentioned by KACZYNSKI ET AL. (2014), it is also important to be aware of aspects that can contribute to crowding. A train station within the park, eases the access drastically which with high probability would contribute to a higher number of recreational users and might create a conflict and affect urban green space quality. In terms of this thesis, the goal is to create more urban green spaces that attract people to be active, and the more attractive spaces there are, the less important the public transport connection to these urban green spaces will become, as most people should have an urban green space in the near surrounding that consists of qualities identified in this study. Therefore, the desire of one of the research participants may not be a future aspect needed to take into account when planning urban green spaces, depending on the goal of the urban planners. Despite this argument, a nearby public transport connection should still be considered to ease the access to urban green spaces.

Activity meadows should be expansive so that there is enough space for exercise and several groups of people pursuing their sport. Participants suggested meadows for different purposes, so that those who want to relax can have a quiet zone and those who want to be active can use the designated meadow. However, this may be complicated to implement as it is not sure if people would stick to the rules. Often social and physical activities are combined making the realisation of this suggestion difficult.

The availability of the three remaining qualities, the playgrounds, dog zones and catering facilities, are indirectly connected to physical activity. These qualities attract people to be active in a park because they are destinations. These destinations act as motivation for active recreation, as people have a purpose to walk and reach this destination. This was another key finding of this research, presenting the need of destinations in a park.

Overall, most identified qualities were no surprises. They are rather a confirmation of features that are needed to attract people to be active. Finding literature that found same qualities that are important for active recreation (KOOHSARI ET AL. 2015) (KACZYNSKI ET AL. 2008) (KOOHSARI ET AL. 2015) (SCHIPPERIJN ET AL. 2013) after conducting this research, proves that the results of this study can be evaluated as valid. However, a gap in previous study was that, apart from SCHIPPERIJN ET AL. (2013), most literature only presented the main categories but did not get into detail into which qualities these categories consist of, a gap that this research addressed. The only studies found getting a bit more into detail were those conducted by SCHIPPERIJN ET AL. (2013) and AKPINAR (2016).

SCHIPPERIJN ET AL. (2013) stated that physical activity in urban green space is stimulated by providing features, such as walking routes, wooded areas, water features, lights, pleasant views, bike rack and a parking lot in the urban green space. From these qualities, only the bike rack and parking lot did not seem to be of importance for the research participants of this current study. However, it is closely connected to the result of this study that indicates that reachability plays an important role for active recreation in urban green spaces.

The wooded areas, water features, pleasant views that were mentioned in the research of SCHIPPERIJN ET AL. (2013) correspond with the identified qualities within this study that were assigned to the category 'aesthetics'. The remaining two qualities identified in the research by SCHIPPERIJN ET AL. (2013) are lights and walking routes, which correlate with the identified qualities within the category 'roads and paths'.

AKPINAR (2016) revealed positive associations between physical activity and paved trails, sports fields, water features, playgrounds, lights, walking paths, shade, drinking fountains and aesthetics. All these features in urban green space are found in the results of this current study as well. The comparison with the two latter studies indicated that previous studies have come to the same conclusion, identifying same or similar features that support active recreation. However, in this current study a few more qualities were found that are perceived to support active recreation by the research participants. The applied photovoice method, which is a very qualitative method might be a reason for a more detailed result.

The researcher is aware that the study was conducted in a rather big park and other types of parks e.g., linear parks may contribute to different findings. With respect to the relationship between park size and physical activity, Kaczynski et al. (2008) did not find park size to be a significant predictor of physical activity while in the study of BROWN ET AL. (2014) park size was significantly related to the number of physical activities mapped. However, the analysis of park size and its correlation with green space qualities is not in the scope of this study, the reason why no further investigation about this correlation took place.

6.1.2 Comparison of age groups

Contrary to the analysis of WEIMANN ET AL. (2019), who stated that a variety of different types of green areas is needed to meet the various needs of different age groups, this study indicates that a good variety of qualities in a urban green spaces can generally meet the needs of all age groups. There were a few minor differences between age groups, for example concerning the availability of toilets, which was not mentioned by the youngest age group but seem to be very important for the other two older age groups. As most qualities were mentioned by all age groups and therefore the result of this study indicates that there is no need for different types of

parks when it comes to active recreation. However, there is surely a need to guarantee that there are enough urban green spaces that contain qualities that support active recreation. This availability of urban green spaces is threatened by urban planning that focuses on densifying cities. The results of this study shall aid urban green space planners, so that existing spaces can be upgraded to the needs of people to be active. If possible, a mix of the identified qualities should be provided to support active recreation, with the most important qualities like a variation in roads and paths, the availability of water features for aesthetical but also for refreshing reasons, and the availability of sports infrastructure as the main categories to implement in park design, followed by the remaining qualities.

6.1.3 The use of Photovoice

Findings show that the case study area is generally perceived as positive when it comes to the identified qualities, with more photographs taken of supportive features than of obstacles. Some participants even argued that they found it hard to find something negative about the park. The fact that all participants described their mood during their photo walk as relaxed and curious might have influenced this rather positive attitude. The mood is according to NYKIFORUK ET AL. (2011) an influencing factor which should be considered when looking at the results. Also, the fact that participants can freely choose the day of data collection might therefore have an influence on the result. Participants may naturally choose a day for data collection when they feel that they have free time, and the weather is good, and the photos indicate that the weather was good on all photo walks. Scheduling a fixed date and time for the photo walk may influence the results because participants would perhaps feel stressed and the weather not being a motivating factor for the photo walk. Therefore, an analysis, using this approach would be interesting in further research, to examine whether mood and weather influences the identified qualities.

Overall, findings show that involving participants in the research is very fruitful, as participants become active members of the research process and feel able to express their satisfaction or contribute to change by discussing issues that are important to them. Through a critical examination of their environment, participants offered valuable suggestions for improving urban green spaces. The pictorial

content shared through the photovoice approach constitutes a visual form of communication that is transferable to policy makers and planners of urban environments.

Findings also show that the results using this method corresponds with previous research in this field where other methods were used. In the study of AKPINAR (2016) the data was collected through a questionnaire, interviewing active users that were on site in various urban green spaces in a city. SCHIPPERIJN ET AL. (2013) also used a questionnaire and interviewees were asked to rank pre-given urban green space quality aspects. However, using photovoice the result turned out to be more detailed than in the previous studies, providing more identified qualities.

6.2 Implications of research

The study contributes to the knowledge that there are common qualities that people need to be active in a park. Knowing that these qualities do not significantly differ between age groups makes it easier to design parks that attract all people for active recreation.

The comparison with similar studies in this research fields proves that the results are valid, as findings fit with existing knowledge. However, using the qualitative method by including research participants and conducting photovoice interview seems to be more fruitful than other methods used in this field, resulting in more identified qualities than in previous studies (AKPINAR 2016) (SCHIPPERIJN ET AL. 2013) and therefore providing more detailed information for the design of parks.

Research was conducted and research questions were answered in this study. However, some limitations were identified. For instance, the warm weather during the photo walks may have influenced the result, with many research participants mentioning the drinking fountains as very important features in the case study area. The importance of various qualities may differ during the year. For example, water may be less important during winter, but this assumption would need to be confirmed by conducting the same study during wintertime. Also, there are no significant differences between age groups. It is therefore questionable if the age group samples were too small for a valid comparison. Based on the limitations, it is recommended that future research considers longitudinal studies with larger age samples to understand the impacts of different seasons on perceived qualities.

7 Conclusion

The research aimed to identify the qualities in urban green spaces that support active recreation. Using the qualitative photovoice method, active users of the park were involved in the research process by providing valuable information about their perceptions of the park and what motivates them to be active. The results suggest that a strategy aiming at providing a mix of several qualities can be an effective strategy to increase active recreation in urban green spaces. Insufficient activity levels among the urban population can thereby be addressed.

Among the identified qualities, an interesting variety of roads and paths of different surfaces and aesthetically pleasing elements that address all human senses, with water being a vital element in park design. Water and trees do also have an important cooling effect, with drinking fountains being the most pictured feature during summer when the photo walks were taken. The availability of sports facilities inspires people to be physically active, and their functionality appeals to individuals of all ages. However, not all facilities need to be created solely for sports. Benches and canopies can also support active recreation, providing places for physical activity. Furthermore, it is important that urban green spaces are well connected to the public transport system and easily accessible throughout the day. In addition, it is vital that people have a destination to walk to in the park. Hence, the presence of restaurants, playgrounds and dog zones are considered as essential qualities in a park that support active recreation. Playgrounds can also be used by adults, if they offer equipment, such as calisthenic racks, that appeals to them. Apart from being a destination, fenced dog zones are essential to ensure that park users can exercise without fear. The gained knowledge about what qualities people need in a park to be active, can enhance urban planners to advance design in existing parks to provide more spaces that attract people to be active. Providing more urban green spaces with the identified qualities can help alleviate the issue of quality degradation resulting from urban density.

Furthermore, the study aimed to address a gap in literature, with no literature reviewed comparing age groups in terms of qualities in urban green spaces that support active recreation, and a suggestion that a variety of different types of green spaces are required to meet the needs of children, adults and the elderly (WEIMANN

ET AL. 2019). Based on this assumption, the researcher sought to determine whether there are differences in the qualities that motivate physical activity among different age groups. The study involved eleven research participants across three age groups: young adults 18-25 years, adults 25-60 years and older adults over 60. While no significant differences were observed, tendencies indicate that certain qualities are more important for specific age groups. Based on these findings, distinct types of urban green spaces for different age groups are not necessary in terms of active recreation. However, further research with a larger sample size in each age group must be conducted to validate this finding.

The photovoice methodology, which had not previously been used to analyse reasons for active recreation in specific areas, proved to be effective for the objective of this study. It encouraged engagement of park users, who shared their perspectives through images and accompanying narratives. The recommendations for improvement that arose from the perceptions, personal experiences and the critical view of the research participants on their surroundings, implies that the use of this method is particularly recommended for the redesign of specific areas. For instance, numerous recommendations for the enhancement of the case study area Türkenschanzpark were proposed; recommendations that may be applicable solely to this area.

The validity of comparing groups through this technique is uncertain, as the frequency of categories using MAYRINGS' (2021) content analysis method, may be up to the course of photovoice interview and the interpretation of the data. To ensure accurate results when creating categories from collected data, the researcher recommends conducting an intercoder check in future studies, as proposed by MAYRING (2021).

To sum up, the insights gained from the use of this method, implies that the method is very valuable. Hence, practitioners should consider using photovoice for the improvement of specific environments by involving the community in the research process. The strength and weaknesses identified in a specific area, can generate change and thereby affect people's behaviours. Nevertheless, implementing these findings will require a dedicated effort and financial investment. In the end, the willingness of stakeholders to change or to improve environments is required to face existing and future challenges regarding urban health and the quality of urban green spaces.

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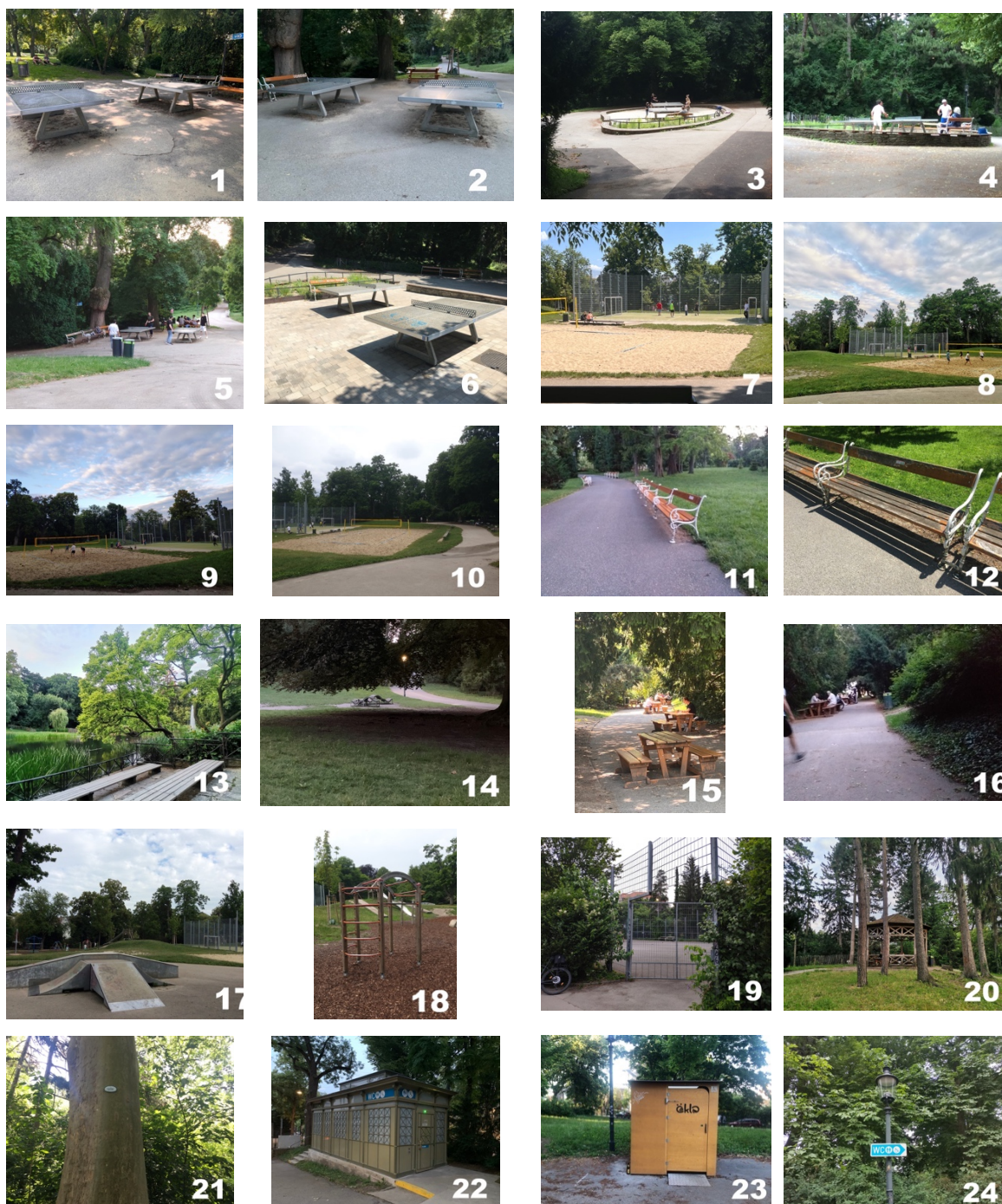
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9 Appendices

Appendix 1: 115 photographs

Photos that depict features that support or hinder active recreation Source:
Participants





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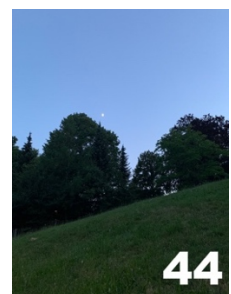
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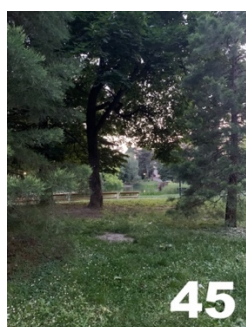
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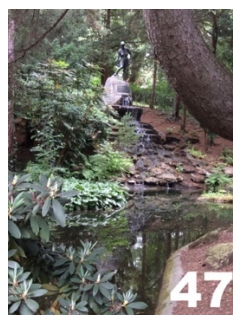
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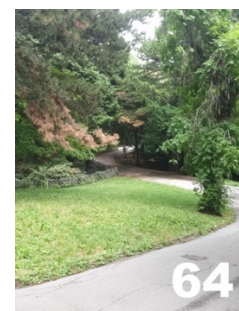
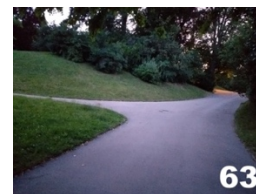
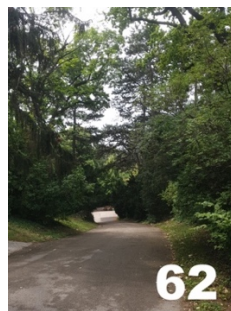
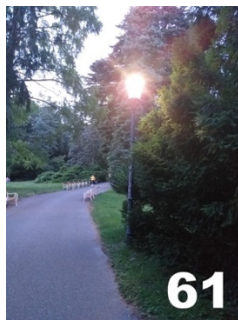
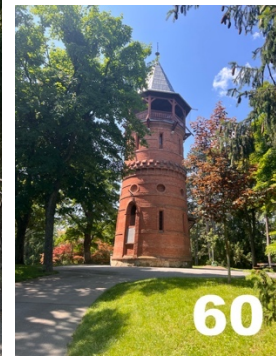
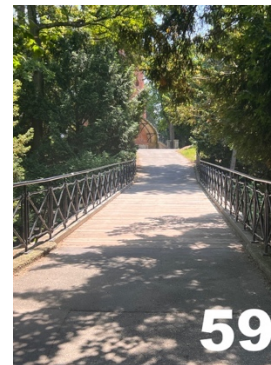
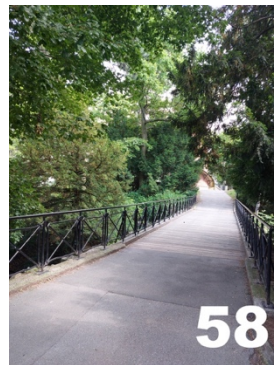
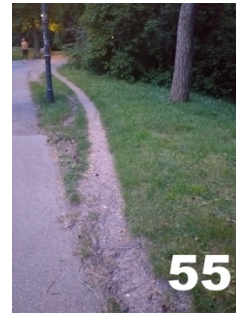
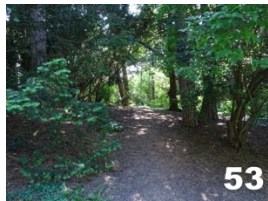
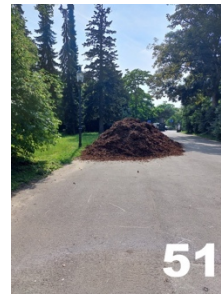
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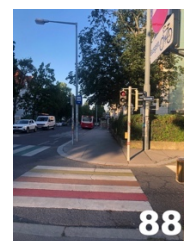
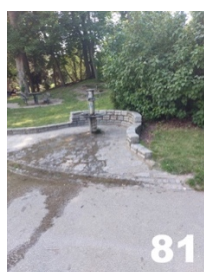
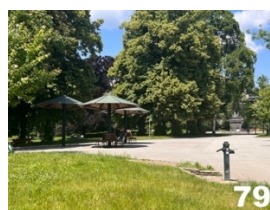
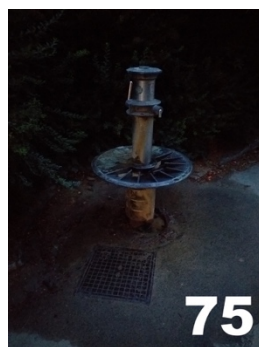
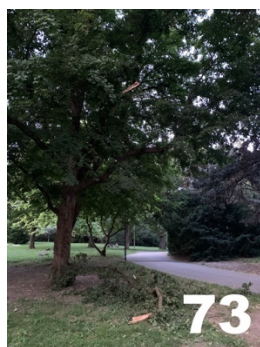
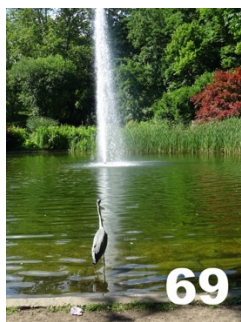


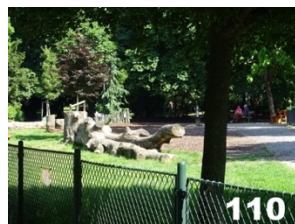
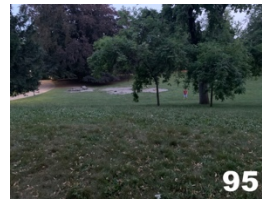
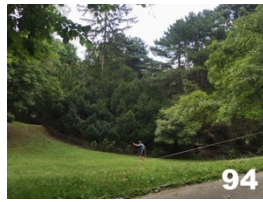
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Appendix 2: Research participants

11 Interviews were conducted in the period June-July 2023. The tables illustrate information about the participants and dates of interviews.

Age group 18-25			
Code	Gender	Age	Interviewed on
BA	M	22	22.6.
CB	F	18	27.6.
FA	M	23	30.6.
FG	M	21	1.7.

Age group 25-60			
Code	Gender	Age	Interviewed on
BI	M	33	24.6.
HS	M	33	29.6.
SA	F	52	29.6.
GE	F	34	30.6.

Age group 60+			
Code	Gender	Age	Interviewed on
HC	M	84	23.6
RA	M	61	29.6.
KB	F	69	13.7.

Appendix 3: Interview transcripts

Due to the length of the interview transcripts, only one of 11 transcripts is attached to the thesis. Remaining transcripts can be viewed upon request. All photovoice interviews were conducted in German language.

Participant: GE

Age group: 25 - 60

Interviewed: 30.06.2023 in Türkenschanzpark

Interviewer: Das erste Foto, was stellt es dar und warum hast du es aufgenommen?

Interviewee: **Photo #76** Genau das erste Foto stellt einen Wasserhahn dar. Also eine, eine Wasserstelle, einen Brunnen. Genau, einen Brunnen und eine Lampe. Und ich habe beide...und auch ein Kaffeehaus im Hintergrund - die Meierei. Ich habe das deswegen aufgenommen, weil erstens für die sportliche Aktivität ist für mich sehr wichtig, dass ich eine Möglichkeit für Trinkwasser habe. Gerade im Sommer, und das macht einen Park auch attraktiv. So würde ich zum Beispiel auch einen Park für ein Training auswählen. Okay, da weiß ich, im Sommer ist da eine Wasserstelle. Das ist sehr sinnvoll. Was auch wichtig ist, ist eine... vor allem im Winter, wenn es dunkel ist schon am Abend, ist eine Beleuchtung. Und das wollte ich darstellen mit dem Foto der Lampe. Das macht...würde für mich auch, für das Outdoor-Training vor allem, einen Park attraktiv machen im Winter. Vor allem in der Jahreszeit wo es früher finster wird, dort meine Aktivität zu machen. Genau und was ich so allgemein jetzt nicht mehr für mich unbedingt persönlich, aber was ich doch auch attraktiv finde in Parks ist, wenn es irgendeine Möglichkeit gibt, wo man etwas konsumieren kann. Das macht einen Park auch attraktiv. Kann Vor- und Nachteile haben, aber ich glaube für Menschen, die physische Aktivität machen, auch nur spazieren oder so, kann das ein Punkt sein, ein Treffpunkt auch wo man vorher einen Spaziergang macht, und dann geht man dort rein oder so in die Richtung. Genau das war das erste Foto.

Interviewer: Zum Trinkbrunnen, gibt es da mehrere im Türkenschanzpark?

Interviewee: Ja gibt es Viele, ja. Habe ich auch Viele gesehen und das ist schon eine sehr positive Sache auch an Wien Allgemein in den Parks gibt es eigentlich immer Trinkmöglichkeiten oder auch in der Stadt sehr viele Trinkmöglichkeiten. Vor allem wenn man auf vielleicht so Verschiedene läuft...verschiedenen Distanzen und immer wieder Parks dazwischen hat, ist das sehr toll. Vor allem im Sommer, wenn

man dazwischen immer trinken kann und nicht so viel mitnehmen muss, ja.

Interviewer: Du leitest wie gesagt Outdoor-Trainings. Suchst du dann die Plätze, wo du das Training machst, so aus, dass du in der Nähe von einem Trinkbrunnen bist?

Interviewee: Aktuell sind diese Stellen, wo wir die Trainings machen, vorgegeben. Das war schon vorher festgelegt, aber an und für sich, ja würde ich das schon noch in Betracht ziehen. Das wäre ein Kriterium für mich sicher das so auszuwählen, nachdem...wo ein Trinkbrunnen vorhanden ist oder nicht. Also wir haben schon auch Stellen, wo kein Trinkbrunnen vorhanden ist. Finde ich schon auch gerade im Sommer nicht so attraktiv.

Interviewer: Und machst du sonst noch andere Aktivitäten im Türkenschanzpark?

Interviewee: Ja, also im Türkenschanzpark sind wir eigentlich...also entweder wir machen stationär auf einem Punkt ein Training oder wir laufen von Punkt zu Punkt. Weil es dieser Park auch die bietet...die super Sache, dass auch Höhenmeter dabei sind. Also bisschen Berg, Hügel - Intervalle machen oder es gibt eben auch sehr viele kleine so Wege. Da habe ich noch ein anderes Foto, wo man auch auf nicht auf Asphalt laufen könnte. Aber ansonsten jetzt abgesehen vom Training, wird der Türkenschanzpark schon von mir genutzt für Spaziergänge oder für Treffen mit einem Spaziergang in Kombination und auch dieses Lokal habe ich eigentlich schon öfters besucht, ja.

Interviewer: Nutzt du den Park auch am Abend, weil du eben die Beleuchtung angesprochen hast?

Interviewee: Genau. Ja, und das ist eher...hätte ich eher als vielleicht noch verbesserungswürdigen Punkt gesehen, weil gerade in den Wintermonaten ist die Beleuchtung jetzt nicht so super finde ich, vor allem da oben bei diesem... da habe ich ein Foto gemacht. Bei diesem Pavillon, genau. Da ist nämlich keine Beleuchtung. Und da wir halt die Outdoor-Trainings machen und es oft im Winter vielleicht auch regnet oder so...und das ist eine überdachte Stelle, aber nicht beleuchtet. Ich habe vorhin gesehen, da sind auch noch überdachte Stellen da hinten. (zeigt auf Überdachungen) Wie die Beleuchtung sind, weiß ich aktuell nicht. Aber doch, das ist auch zum Beispiel ein Punkt für mich. Steinhofgründe wäre auch ein Park, der gut zu nützen wäre, aber da ist keine Beleuchtung.

Interviewer: Du hast diese Pavillons oder Überdachungen angesprochen. Ist das für dich wichtig, dass es sowas gibt?

Interviewee: Ahm...also es kommt natürlich darauf an, was jetzt mein Ziel ist in dem Park. Ich würde sagen, ja. Weil, man kann den Park noch besser nutzen, auch bei Schlechtwetter. Ahm... weil du hast ja trotzdem den offenen Raum. Ja, also verschlossen sollte nicht sein. Aber du hast eine Unterstellmöglichkeit und das ist sicher attraktiv jetzt auch nicht nur fürs Training oder so, sondern auch für Spaziergänge oder wenn es doch warm ist, und man kann sich irgendwo hinsetzen oder halt stehen unter Dach, wenn es regnet. Zum Beispiel beim Kongresspark ist diese alte Milchtrinkhalle, das ist auch so ein großer überdachter Raum. Leider ist es dort immer sehr dreckig, weil die Leute immer den Dreck dort lassen. Aber das wäre auch super, weil dann kann man im Winter auch gut Trainings eigentlich drinnen machen weil das ist wirklich, da haben sicher 10 Menschen Platz darunter...könntest dort auch Trainings machen.

Photo #108 Nächstes Foto. Ein problematischer Punkt. Also die Hunde. Ich, soweit ich jetzt das weiß, das weißt du aber vielleicht besser...Hunde sind ja hier nicht verboten, aber sie müssen angeleint sein außerhalb der Hundezone. Ja, und hier bin ich einem Hund begegnet, ohne Leine. Der war zwar hier sehr brav, dieses Exemplar, aber ich bin auch schon Hunden begegnet, die nicht brav waren. Ja und Hunde, die dann da herumgeschwommen sind in dem Teich und das war zum Beispiel schon einmal ein kritischer Punkt, weil wir haben da unten ein Training gemacht. Und da war ein Hund, der war nicht angeleint und ist herumgelaufen und ein Teilnehmer hat sich beschwert über den Hund und hat auch die Besitzer angesprochen, dass er eigentlich angeleint gehört oder in die Hundezone. Und da ist halt eine ungute Situation entstanden. Also das finde ich immer wieder problematisch mit Hundebesitzern, die sich nicht an die vorgegebenen Regeln halten. Also ich denke mir, da gibt es unterschiedliche Ansichten und ich finde, wenn es Hundezonen gibt...dort können die Hunde freilaufen, aber im Park selbst sollte der Hund angeleint sein und...Der Hundekot ist auch immer wieder ein Thema, aber hier ist Gott sei Dank doch nix, ist mir noch nichts aufgefallen. Aber das ist eine Sache die Parks schon noch unattraktiv macht, wenn Hundedreck ist und es stinkt dann und du willst ein Training machen draußen und das ist grausig irgendwie in der Wiese, ja. Aber das ist mir hier noch nicht... ist hier noch nicht vorgekommen.

Interviewer: **Findest du es gut, dass es Hundezonen gibt in Parks?**

Interviewee: Ja, an und für sich schon. Weil ich bin doch dafür, dass es ein Miteinander gibt und dass jeder die Möglichkeit hat in diesem Grünräumen das zu machen, was er gerne möchte. Also finde ich es schon sinnvoll, dass es Hundezonen gibt und dass die auch

eingezäunt sind. Dort können sich die Leute treffen und ich glaube es gibt hier ja eh... da unten ist Eine, da oben ist noch Eine. (zeigt in die Richtungen) Ja, es ist halt...ein Hundebesitzer würde da sicher anders reden, dass es zu wenig Hundezonen sind wahrscheinlich. Ahm...ich weiß nicht, ob man das verbessern könnte, dass die Leute dann wirklich mehr in diese Hundezonen gehen. Ja, aber finde ich schon, finde ich schon sinnvoll, dass das auch eingegliedert ist. Aber ich bin sonst eher Hunden gegenüber kritisch eingestellt und würde mir wünschen, die Leute würden sich an die Vorschriften halten, ja. Aber ich habe hier noch kein schlechtes Erlebnis, bis auf dieses Eine mit diesem Hund, der da freigelassen ist, habe ich da jetzt noch kein schlechtes Erlebnis gehabt. Aber ich habe an dem Tag wo ich war mehrere Leute gesehen mit den Hunden ohne Leine. Ich konnte die Leute nicht so fotografieren. Ja, im Hintergrund, was man da noch sieht, ist eine große Wiese. Eine große Fläche, das ist auch sehr schön an diesem Park und was ich sonst auch schätze in anderen Parks, wenn es große Grünflächen gibt, wo man auch eine schöne Aussicht hat und dann immer hohe Bäume irgendwie so am Rand. Und ja, da sieht man eh auch Leute, die da irgendein Spiel spielen, was ich vorher noch nicht gekannt habe, aber das war mit so Stöcken und so Bällen, keine Ahnung. Ja, genau das war es eigentlich.

Photo #24 Ja, dann nächstes Bild, ist ein Schild, ein Schild für ein WC. Das ist für mich auch ein wichtiger Punkt und ein Kriterium, das in Grünflächen, in Parks, ein WC, ein öffentliches WC vorhanden ist. Und das könnten da ruhig auch noch mehr sein, glaube ich. Also es gibt wieder dieses ÖKlo oben und dann gibt es da auch welche, da vorne auch. Aber das bringt natürlich auch den Vorteil, dass die Leute dann wirklich diese WCs hoffentlich benutzen und nicht irgendwo in den Wald oder so gehen. Ja, also das wäre für mich auch, ist für mich auch ein wichtiges Kriterium. Und die sind eigentlich hier auch recht sauber, soweit ich das beurteilen kann.

Photo #8 Ja, das nächste Bild zeigt einen Sportplatz mit einem Fußballfeld eingezäunt in einem Käfig und einen Volleyballplatz. Finde ich auch sehr wichtig. Ist auch sehr gut, dass es da oben eine Möglichkeit gibt. Da gibt es nämlich sehr viele Sachen. So ein kleines Trampolin habe ich entdeckt, das habe ich vorher noch nie gesehen, werde ich eh gleich ausprobieren. Ja finde ich, wenn der Park groß genug ist und es die Möglichkeit gibt, ist das eine super Sache, wenn man das frei nutzen kann. Ich hab's noch nicht benutzt, also kann jetzt keine Erfahrungen schildern, wie viele

Leute, wie lange du warten musst oder ob es da Streitigkeiten gibt oder so oder wie man sich da abspricht. Aber finde ich sehr positiv.

Photo #13 Dann habe ich das Bild hier gewählt beim Teich mit einer Art Tribüne, wo eben so kleine Holzbänke sind und Stufen. Wenn in Parks, Wasser oder Gewässer vorhanden sind, macht das den Park nochmal attraktiver und bietet auch eine zusätzliche Abkühlung. Halt also nicht, dass man baden kann aber einfach...die Luft ist dort kühler oder bietet im Sommer halt einfach auch einen guten Erholungsraum. Und dann hat man diesen Springbrunnen, da hört man auch das Wasser rauschen. Das finde ich immer super, denn das zeigt einfach irgendwie so ein Bild der Natur, ja. Du bist mitten in der Stadt, aber hast hier das Wasser und die Bäume und...und da sind auch sehr viele Tiere drinnen. Ja, was ich auch...was mir jetzt auch bei diesem Spaziergang eigentlich aufgefallen ist...es gibt das vorne so ein ökologisches Zentrum. Ein bisschen, wo sie so beschreiben welche Tiere da drinnen sind. Und auch ein bisschen so erklären, eben diesen in der Stadt so ein Naturbiotop. Sind sehr viele Fische glaube ich und Schildkröten. Der Reiher ist auch der Große. Es ist schon toll, was es da doch gibt, auch Tierarten und Pflanzenarten in dem Park. Genau und warum ich das mit der Tribüne ausgewählt habe...das ist natürlich für unser Outdoor-Training auch interessant, weil man diese Strukturen, die so ein Park bietet wie Parkbänke oder Stufen oder so Tribünen auch nutzen kann für diverse Übungen. Da braucht man dann keine Geräte, ja.

Interviewer: Du hast gemeint, dass du den Teich nicht zum Baden verwendest?

Interviewee: Ja, nein darf man ja nicht zum Baden verwenden, ja.

Interviewer: Würdest du dir wünschen, dass es eine Möglichkeit gibt, sich irgendwo abzukühlen?

Interviewee: Schwierig. An und für sich, wenn der Park die Größe bietet und auch die Größe des Gewässers ausgerichtet ist für eine Großstadt, dass die Leute dort baden, dann ja, aber hier speziell nein. Also würde ich es nicht, würde ich das nicht gut finden, weil einfach diese Fläche zu klein ist und ich glaube einfach das Wasser...dass die Wasserqualität nicht gegeben ist. Und ja, weil natürlich... je mehr Leute das dann auch irgendwie nutzen das dann mehr verschmutzt ist und dann würde dann die Artenvielfalt wahrscheinlich auch nicht so super aussehen, ja. Aber ansonsten natürlich ja, wenn das ein großflächiges, so wie jetzt an der Donau oder so, wenn das die Möglichkeit hergibt, ist das natürlich super. Oder wenn man da irgendwie sowie im Tullner Aubad, ist auch so

ein großer Teich von der Donau abge(...). Wenn es sowas gibt, aber nein, ich find auch im Brunnen sollte man eigentlich auch nicht baden, ja. Es wäre natürlich für die Füße zum Abkühlen nicht schlecht, aber ich weiß nicht, ob man das realisieren könnte. Ich meine, sowas wäre sicher, wenn man die Füße, so eine Kneippanlage oder so könnte man schon irgendwo hinstellen, ja.

Photo #20 Genau, dann habe ich diesen Pavillon fotografiert, der sehr schön ist, auch so umgeben von hohen Bäumen. Leider ist der oft...weil das sind halt oft auch Leute drinnen, die ihren Schmutz hinterlassen. Also den habe ich nie so wirklich sauber vorgefunden, fand den aber immer spannend, weils eben eine überdachte Möglichkeit ist und man dort vielleicht ein bisschen Training auch bei Regen oder so machen könnte. Aber das habe ich eh vorhin schon gesagt, das ist nicht beleuchtet und ja.

Photo #27 Ja, dann habe ich da noch eine Gruppe an Jugendlichen fotografiert. Das ist natürlich ein schwieriges Thema. Der Park sollte eigentlich offen sein für alle Leute, aber wenn dann große Partys gefeiert werden und viel Dreck hinterlassen wird... Ich konnte das nicht so genau fotografieren, weil die Leute halt drauf waren. Der Mistkübel war schon überquollen und ich weiß nicht wie es am Tag danach ausgesehen hat. Es war auch sehr laute Musik. Find ich natürlich... ist teilweise okay, ja. Wenn das aber, das war wirklich zu hören, bis auf die Hinterseite des Parkes. Ja, ist halt eine Frage wie gut dann ein anderer sich da erholen kann oder seine Aktivitäten ausüben kann. Also ist es wichtig immer Rücksicht zu nehmen. Ich mein es war Tageszeit es war 19:00 Uhr oder so, also ja.

Photo #35 Ja, dann habe ich da den blühenden Lindenbaum fotografiert, der sehr gut gerochen hat. Das ist für mich auch ein Kriterium für ein positives Erlebnis in einem Park, wenn da sehr viele unterschiedliche Pflanzen sind, auch blühende und dann verschiedene Sinne angesprochen werden. Unter anderem auch der Geruch und jetzt wo die Linden blühen, das ist halt schon auch so ein Erholungsfaktor. Also das merkt man auch und das ist positiv. Und der Türkenschanzpark hat auch sehr viele verschiedene Bäume und die sind auch teilweise beschriftet mit Namen und das finde ich sehr positiv.

Photo #54 Ja, dann habe ich da noch ein Foto, wo ich ein Stück Waldweg fotografiert habe. Weil also doch in den Parks in Wien ist es doch durchaus möglich, dass du da gar nicht so viel am Asphalt laufen musst, wenn du willst. Du könntest deine Runden auch auf den Wiesen drehen und auf Waldwegen und das ist eigentlich auch

eine super Möglichkeit, dass man in der Stadt wirklich den Naturraum auf unterschiedliche Art und Weise nutzen kann, ja.

Interviewer: Aber kommt es auch vor im Türkenschanzpark, dass man da irgendwo auf kleinen Pfaden laufen kann?

Interviewee: Nein, also man sieht ja auch kaum Leute glaube ich die das machen aber ja, bei mir zum Beispiel, unsere Intervalltrainings...kann mich erinnern, wie wir da einmal gestartet sind rauf. Da haben wir immer geschaut, dass wir eigentlich immer nur die Asphaltflächen queren und dass man auf kleinen Wegen...oder auch beim Charity Run sind wir ja auch immer... also da läuft man ja am Asphalt aber der Henrik ist immer also am Weg, also am Rand außen auf der Wiese gelaufen. Bietet eine Abwechslung, ja. Also wenn du ein Training machst, dass du nicht immer am Asphalt deine Runden drehen musst, sondern da auch ausweichen kannst auf einen anderen Untergrund. Ist gut.

Interviewer: Aber im Türkenschanzpark sind eigentlich viele Wege asphaltiert. Was hältst du davon?

Interviewee: Ja, im Prinzip...also ich meine, da muss man immer schauen... natürlich für ältere Leute, auch mit Rollatoren, für Kinderwagen oder auch für Rollstuhlfahrer oder da kann man scheinbar auch Inlineskaten mit Kindern oder Radfahren oder so mit so kleinen Dings halt fahren...ist es natürlich asphaltiert immer besser. Ich weiß jetzt nicht, wie das im Winter so ist mit Schneeräumung oder so, ob das da einen Vorteil hat, aber ansonsten würde ich auch präferieren, wenn die Wege nicht asphaltiert wären. Wenn du zum Beispiel in den Sternwartepark schaust, da ist glaube ich nichts asphaltiert. Also ich meine, das ist jetzt nicht so ein typischer Park... oder auch Steinhofgründe ist jetzt auch nicht asphaltiert eigentlich.

Interviewer: Fändest du es gut, wenn es einen offiziellen Pfad gäbe?

Interviewee: Ja, das fände ich nicht so eine schlechte Idee. Also so ist ein offizieller Trail quasi. Ja wäre gut, weil dann würde man nicht... ja diese Pfade sind meistens entstanden, wenn die Leute irgendwo reingehen aufs Klo oder irgendeinen Mist weghauen, ja. Aber ja, das wäre zum Beispiel eine gute Möglichkeit, dass man sowas einführt in einem Park der groß genug ist, dass man so einen offiziellen Trail macht, wo die Leute wirklich nur dortbleiben und die anderen Flächen sind geschützt. Also ja das wäre eine gute Idee.

Photo #94 Genau das letzte Foto, das ahm... habe ich da eigentlich auch...Also da ist ein Mann drauf, der gerade eine Slackline über eine sehr große Länge gespannt hat und darüber balanciert ist, was sehr beeindruckend ausgesehen hat. Und

eigentlich mit dem Foto wollte ich da auch nochmal zeigen, dass dieser Park speziell eigentlich sehr schöne Grünflächen bildet und auch immer wieder umrandet von wirklich doch alten Bäume, hohen Bäumen und dass diese großen offenen Flächen aber eben eine gute Möglichkeit bieten für alle Arten von Sportausübung, ja.

Interviewer: Wie schaut's aus mit den Wiesen? Darf man alle betreten im Türkenschanzpark?

Interviewee: Ja, ich denke, also diese Blumenbeete und so, da ist oft so ein Schild dabei oder sie sind mit so Hecken umzäunt und ...also soweit ich jetzt weiß, die großen Wiesen wo nichts angeschrieben ist, würde ich jetzt betreten. Ob es jetzt erlaubt ist oder nicht, weiß ich nicht genau. Also bei der Wiese ist auf der Seite dieses runde Ding, das eingezäunt ist. Ich glaube, da steht dabei, das darf man nicht betreten. Und ich glaube, das da steht auch dabei, dass man das nicht betreten soll. Dann ist hier, das ist auch schön, weil das ist so...da haben sie was angepflanzt. Das sieht man auch, also wirklich, Artenvielfalt mäßig nicht schlecht... aber das ist eh eingezäunt. Da darf man glaube ich auch nicht rein.

Interviewer: Also im Park ist eigentlich so geregelt, dass dort, wo man nicht hineindarf, ist ein Zaun?

Interviewee: Ich glaube ja. Also so würde ich das jetzt mal sehen. Aber das ist auch...da darf man auch nicht hin, aber das ist ja...Also ich hätte jetzt noch nicht Unsicherheiten gehabt bezüglich, ob ich da etwas betreten darf oder nicht, weil es meiner Meinung nach ausreichend die (...) ist. Und Blumenbeete oder so, ich glaube das versteht sich von selbst. Das würde ich jetzt nicht betreten, Blumenbeete. Weil da ist bei diesen Statuen...ich weiß nicht, ob das extra beschriftet ist, da habe ich nicht so genau geschaut. Also das weiß ich.

Interviewer: Ja, dann noch ein paar Fragen zu dir als Person. Wie oft besuchst du den Park?

Interviewee: Ja, eigentlich, da ich diese Trainings auch mache, also schon eigentlich durchschnittlich einmal in der Woche.

Interviewer: Und würdest du dich als physisch aktiv bezeichnen? Was verstehst du unter physischer Aktivität? Und wie oft bist du aktiv?

Interviewee: Ja, also ich würde mich schon als physisch aktive Person bezeichnen, wobei ich aber wirklich unterschiedliche Sachen darunter verstehe. Das kann sowohl einerseits einen Spaziergang sein oder dann wirklich ein Training und ich nutze den Türkenschanzpark auch für beide Sachen. Also wenn ich diese Trainings, die ich quasi beruflich da jetzt mache, sind das ca. dreimal pro Woche. Und selber ja, mach ich, es kommt drauf an...aber durchschnittlich zweimal die Woche ein Training.

Interviewer: Und noch zur Methode. Wie war das durch den Park zu spazieren und Fotos zu einem bestimmten Thema zu machen?

Interviewee: Ja, das habe ich sehr positiv empfunden, weil man dann erstens jetzt nicht mehr einfach planlos geht, sondern man hat ein Ziel quasi und man schaut halt auf Dinge, auf die man sonst vielleicht jetzt nicht schauen würde. Und es fallen einem auch Dinge auf, die man sonst vielleicht nicht so wahrnehmen würde. Und ja, und es inspiriert Einen auch wieder irgendwas Neues zu machen. Also ich fand das eigentlich positiv. Man hat mehr darüber nachgedacht, warum man eigentlich geht und auch mehr wahrgenommen, warum es sehr positiv ist, dass es das gibt, den Park. Und genau und schon noch gemerkt okay, was man vielleicht anders machen könnte oder was noch besser gemacht werden könnte oder einen vielleicht stört, ja.

Interviewer: Wie war denn die Stimmung während des Spaziergangs?

Interviewee: Ja war positiv, war schon spät am Abend und das Wetter war auch nicht so gut. Also es war kühl und ich bin mit dem Rad hergefahren. War aber positiv. Also war jetzt nicht, nicht negativ, die Stimmung.

Interviewer: OK, ja dann bedanke ich mich für das Interview.

Interviewee: Gerne.

Zusammenfassung

Eine aktuell unzureichende körperliche Aktivität der städtischen Bevölkerung verbunden mit der Gefahr einer Verschlechterung der Qualität städtischer Grünflächen infolge der Urbanisierung, stellt eine Herausforderung dar und erfordert zeitnahes Handeln. Um die physische Aktivität in der städtischen Bevölkerung zu steigern, beschäftigt sich diese Studie mit den Qualitäten, die städtische Grünflächen aufweisen sollten, um aktive Erholung attraktiver zu gestalten. Das Ziel bestand darin, Erkenntnisse über die Präferenzen der Nutzer*innen zu gewinnen, um zur Gestaltung von Grünflächen beizutragen und zukünftig Räume zu schaffen, die Menschen dazu anregen körperlich aktiv zu sein.

Um Erkenntnisse zu gewinnen, wurde ein Photovoice Projekt durchgeführt, an dem 11 aktive Parknutzer*innen unterschiedlicher Altersgruppen teilnahmen. Die Forschungsteilnehmer*innen wurden gebeten, einen städtischen Grünraum in Wien auf dessen Qualitäten zur Unterstützung ihrer aktiven Erholung zu untersuchen.

Bei der Analyse der Photovoice Interviews wurden induktiv neun Kategorien entwickelt, die zur aktiven Erholung beitragen sollen. Diese Kategorien beinhalten verschiedene Eigenschaften, welche die aktive Erholung fördern und somit zu einem gesünderen Lebensstil der städtischen Bevölkerung beitragen können. Die Ergebnisse zeigen, dass nicht nur Sportanlagen von Bedeutung sind, sondern auch ästhetisch ansprechende Aspekte eine wichtige Rolle für die aktive Erholung spielen. Ebenso wurden Einrichtungen wie Restaurants, Spielplätze und Hundezonen als unterstützende Qualitäten identifiziert, da sie wichtige Ausflugsziele darstellen. Zudem wurden als unterstützende Faktoren eine leicht zugängliche Lage des Parks, die Möglichkeit zur Abkühlung und großzügige Aktivitätswiesen genannt.

In der Studie wurden weiteres drei Altersgruppen - junge Erwachsene (18-25), Erwachsene (25-60) und ältere Menschen (60+) - hinsichtlich ihrer Präferenzen bezüglich der Gestaltung von Parks verglichen, um zu untersuchen, ob das Alter bei der Planung von städtischen Grünflächen berücksichtigt werden sollte. Die Ergebnisse deuten darauf hin, dass keine Notwendigkeit besteht, Parks speziell auf

verschiedene Altersgruppen auszurichten. Eine Kombination von verschiedenen Qualitäten städtischer Grünräume wirkt attraktiv, denn obwohl nicht alle Einrichtungen von allen Altersgruppen genutzt werden, dienen sie als Inspiration für andere Formen der aktiven Erholung. Basierend auf den Ergebnissen zeigt sich, dass ein Mix aus verschiedenen Qualitäten anziehend wirkt und zur aktiven Erholung beiträgt. Die Methode „Photovoice“ erwies sich als gute Möglichkeit Nutzer*innen aktiv in den Forschungsprozess miteinzubeziehen und somit wertvolle Informationen zu einem Untersuchungsgebiet zu sammeln. Die Methode sollte aufgrund der zielführenden Ergebnisse zukünftig bei der Gestaltung von Grünräumen in Betracht gezogen werden. Es wird jedoch empfohlen, eine größere Stichprobe beim Vergleichen zwischen Nutzergruppen herzunehmen, da die kleine Stichprobe dieser Studie aufgrund der geringen Aussagekraft als Einschränkung angesehen wurde.

Schlagwörter: Photovoice, aktive Erholung, Grünraumqualitäten