

THE EFFECTS OF COVID-19 ON YOUNG ADULTS' OUTDOOR RECREATION HABITS.

A comparison between Sweden and Mexico.



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Abstract

The Covid-19 pandemic, that became a global phenomenon in March 2020, has been causing disruptions globally and across all sectors. And, as nations around the world attempted to contain the spread, lockdowns and strong restriction were set in place, directly affecting peoples' time outdoors. Due to this, studies have surfaced explaining the effects of the pandemic on outdoor recreation habits across most demographic groups and in studies from all parts of the world. However, one demographic group; young adults and their outdoor recreation habits, have been somewhat overlooked by research and recreation experts, both pre- and post-pandemic, consequently creating a knowledge gap on the topic and in available recreation literature.

By applying a series of focus groups and semi structured interviews, this thesis examines and gains knowledge regarding outdoor recreation habits of Swedish and Mexican young adults, and the effects the Covid-19 pandemic has had on their habits. Among other things, the results show a general move towards locally based recreation, changes in socialisation processes, and a series of motivational factors and constraints in young adults' outdoor recreation habits. General implications and suggestions for outdoor recreation management in times of crisis are also identified and explored, with emphasis on themes such as safety, participatory processes, provision of adequate accessible spaces for recreation, and further research suggestions.

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List of Abbreviations

- OR - Outdoor Recreation
- YAs - Young Adults
- SSI/s - Semi Structured Interview/s
- FG/s - Focus Group/s
- SFGs – Swedish Focus Groups
- MFGs – Mexican Focus Groups
- PT - Public Transport
- CDMX – Mexico City

1. Introduction and problem statement

Pandemics are disruptive events and future ones are expected to happen (Gates, 2022). Therefore, reflecting on the impacts Covid-19 has had in different aspects might help us manage future outbreaks, if not better, at least differently.

The outbreak of Covid-19 has caused 6.2 million deaths and over 500 million cases around the world (JHU, 2022). Apart from the health effects that the pandemic has had, physical activity of millions of people around the world was abruptly - and in most countries, compulsorily - interrupted. Closing of universities, remote work and social distancing became the norm. Outdoor recreation (OR) transformed into one of a few safe activities (Kopp, 2021; CDC, 2022). Nevertheless, levels of physical activity decreased by 25% to 60%, and sedentarism saw a big increase (Enríquez et al., 2021).

Knowledge about the development of outdoor activities and habits during the Covid-19 outbreak is demanded by municipalities, governments, and researchers (Hansen et al., 2021), as there have only been five cases of pandemics documented since the 1918 Spanish flu (Liu et al., 2020) and the magnitude of the current pandemic is still undetermined.

As lockdowns have been a major strategy to handle the pandemic worldwide, eliminating or strongly reducing time spent outdoors, studies have surfaced explaining the impacts of Covid-19 on OR of children, teenagers, and population in general (Mateer et al. 2021; Thorpe, 2020; Wagner, 2022). However, a constantly overlooked group have been young adults¹ (18-35 years old, see 4.2), hereafter referred to as YAs, who are often mentioned only as part of a general reports (but rarely have entirely dedicated studies). This tends to be the case for studies published before the pandemic as well.²

Swedes have embraced the right to public access (*allmansrätten*) in relation to the country's outdoors (Stridh, 2020). This freedom to roam, which has remained in effect and unrestricted throughout the pandemic, has been a controversial part of the country's approach to Covid-19, compared to the tougher measures taken by not only the rest of Europe but most of the world. Part of the reason is Sweden's legal system, which does not easily allow for government-imposed lockdowns (Adler, 2020). Even with a lighter approach to the pandemic, according to Kindal and Wiklund (2021), Swedish YAs have been a group particularly affected by the Public Health Agency's recommendations to

¹ The definition of young adult varies between sources, this thesis considered young adults as persons of 18 to 35 years of age based on the explanations of different authors (United Nations Youth, n/d; Levinson, 1986; Erikson, 1958, 1963; Kessler, 2021...). Further explanation can be found on section 4.2

² Further explained in section 3.5. Authors as Hultsman (1992,1993), Raymore et al. (2001), Lovelock et al. (2016), and Ruhakka (2021), have reported lack of available information regarding young adults' outdoor recreation trends.

manage the spread of Covid-19. One reason is that a majority of the Swedish YAs rely on public transport in relation to OR, more than other demographic groups (Hansen et al., 2021), which the Public Health Agency (2020) recommended to avoid and replace with other means of transportation. Consequently, it is possible that their ability to engage in OR has been limited (Kindal & Wiklund, 2021) or at least restricted to a local scale (Hansen et al. 2021).

While the Swedish strategy was assessed (and criticized) closely, other countries were acknowledged for their heavy restrictions. This was the case in Mexico, where several campaigns were set in motion to encourage people to stay home and isolate (Valencia et al., 2020), and which was congratulated by the World Health Organisation for the firm social and public health measures (El Universal, 2020). With universities and “on-the-job training” programmes closing down in March 2020, nearly 6.5 million students (SEP, 2021), of 18 to 29 years old, were sent to their homes. Reports show that confinement led to isolation of the general population, including YAs, from their social groups (Valencia et al., 2020; Bazán & Zolano, 2021) and to the investment of time in sedentary activities, ultimately leading to a lack of physical activity and OR (Zamarripa et al. 2021; Bazán & Zolano, 2021).

Understanding how the Covid-19 pandemic has affected YAs’ lives and, in particular, OR habits, can help experts and outdoor managers plan new strategies that consider integral approaches, truly inclusive of all demographic groups. It is important to understand how this group, overlooked by the available research, handles its relations with the environment to comprehend how it was affected during a pandemic, and what can be done to reduce negative impacts of future crisis on this group.

Within the development of this thesis, through a series of online focus groups and interviews with YAs from Mexico and Sweden, age 18 to 35 (see section 4.2), it was possible to identify not only OR habits pre and during Covid-19 but also, unintentionally, constraints that keep YAs from participating in outdoor activities. Said findings are presented with a thematic analysis based mostly on experiences and opinions from the participants of the focus groups and interviews. The collection of data was made in two stages: firstly, the Swedish focus groups were held during the spring of 2021, as part of the course “Sustainable development: A case study approach”, from the Master’s in Geography at the University of Gothenburg. This set up the intention to expand on the topic. Secondly, the Mexican focus groups and interviews with YAs were held during the spring of 2022 (see section 4.1).

The thesis should be considered a qualitative and exploratory study, as it looks to answer questions related to a topic that has not been broadly researched, and focuses on understanding the opinions, comments, and motivations of the participants of the targeted focus groups.

1.1 Aim and Research Questions

Due to the reported impacts the Covid-19 pandemic has had on YAs' ability to practice outdoor recreation in a conventional manner, the aim of this thesis is to make a comparison between outdoor recreation patterns of young adults (age 18-35) in Sweden and Mexico, before and during the Covid-19 pandemic; while exploring possible implications these findings could have for future pandemic management policies regarding this specific demographic group. Specifically, the following research questions are raised:

- How were young adults' outdoor recreation habits before the Covid-19 pandemic in Mexico and in Sweden, and how were these habits affected by the pandemic?
- Which are the main discrepancies in outdoor recreation patterns between Mexico and Sweden, and what similarities between the two countries can be identified?
- What are the possible repercussions of said potential new habits for future pandemic management policies?

These research questions are implicitly answered during the presentation of the results (see section 5), and in-depth answers are presented during the discussion in section 6.

1.2 Delimitations

There are two spatial delimitations for this thesis: Mexico and Sweden. Both countries are considered in a uniform way. The thesis will not present generalised results applicable to a regional or country wide level, but only general trends from the population sample (see 4.2), and a comparison between them.

The selection of Sweden as a spatial delimitation was clear from the start. It's unique approach to the pandemic, as the only European country with no imposed lockdown (Davies & Roeber, 2021), together with its strong OR heritage (Stridh, 2020), made it an especially interesting case to compare other countries with.

The selection of Mexico had to do with personal experiences of the author. Many other countries could have been chosen for comparison with Sweden, as numerous countries around the world imposed similar restrictions as Mexico (Bjorklund & Ewing, 2020). However, the author being a Mexican living in Sweden had a stronger connection and interest for this comparison.

The time delimitation of this work refers to the period related to the Covid-19 pandemic. To clarify this time frame, and based on the dates on which Mexico and Sweden recognised the outbreak as a risk to society, it was decided to consider the time period to be from March 2020 to March 2022, two years in total.

The population of interest were YAs aged 18-35. This delimitation came, firstly, from the author's personal experiences, as she forms part of that population. Further, the little research available on OR of this group, despite it being, reportedly, largely affected by the Covid-19 pandemic (Kindal & Wiklund, 2021, Guzman, 2020), created an incentive to focus on it. A broadened explanation of the selection of the population of interest can be found in the methodology (see section 4.2).

1.3 Relevance to Human Geography

This thesis is relevant to Human Geography since it examines how two societies, Swedish and Mexican, faced the same global phenomenon and worked on adapting to the new context of their environment, using their own resources.

It analyses how a global event reshaped the OR practices of each of the two societies. Specifically, it examines how YAs from two different countries, and due to the Covid-19 pandemic, modified not only their relationships between people but also their human-nature relations. Said relations are understood, for the purpose of this thesis as “our adaptive synergy with nature as well as our long-lasting actions and experiences that connect us to nature” (Seymour, 2016:4).

The thesis points out how, in some cases, the perception of YAs' surrounding space changed, depending on their local environment and the new realities caused by this global event. It describes potential reconciliation between the YAs and their surrounding environment, as well as their expectations for future OR.

By comparing Sweden and Mexico, two countries with very opposing approaches to the pandemic, this thesis can potentially assist further research on OR patterns of YAs in crisis scenarios by providing insights to different experiences, motivations, and requirements to be in the outdoors. Furthermore, it demonstrates that it is possible to learn from experiences from both geographic contexts to improve the general approach to OR management, in the event of a future pandemics.

1.4 Structure of the thesis

This thesis is divided into seven sections. The background, with more detailed information about the spatial and temporal context of the thesis, forms section 2. Afterwards, in section 3, the theory is presented. This section contains a short literature review to define OR, general Covid-19 OR reports from different countries, specific literature regarding OR during the pandemic in the Swedish and Mexican geographic contexts, and an assessment of the knowledge gap on OR of YAs observed during the literature review itself. The methodology is presented in section 4, with subsections dedicated to each one of the qualitative methods used during the investigation: semi structured interviews and

the main method of focus groups. It also includes critical reflections, and strategies on the avoidance of bias.

Results, discussion, and conclusion are presented in sections 5, 6 and 7, respectively. The results are presented following a thematic analysis emphasizing seven different topics: general trends pre and during the pandemic, enabling factors for OR, constraints for OR, consideration of safety, motivation requirements, reaction towards the effects of the pandemic, and expectations for OR post pandemic. The discussion connects the results and the theory to ultimately be summarised in the conclusion.

2. Background

This section outlines the spatial and temporal context of the thesis, and introduces Sweden's and Mexico's approach to the Covid-19 pandemic.

2.1 Spatial context

Two countries delimit the spatial context of this thesis: Sweden and Mexico. The two countries have different approaches to OR and they also dealt with the pandemic differently, as already indicated.

Figure 1. Location of Sweden and Mexico - spatial delimitations



Source: Made with vector shape from naturalearthdata.com, edition by Jessica J. Marin R., 2022

The value of spending time outdoors is broadly accepted in Sweden (Savage, 2021), with *allmansrätten* (the right of public access) being a fundamental right that allows people to roam freely in Swedish nature (Naturvårdsverket, n/d). Important is also that the Swedish Government decided in 2012 on ten objectives (appendix 1.1) for OR (folkhälsomyndigheten 2018) with the intention to “promote opportunities to be outdoors in nature and enjoy OR” (Naturvårdsverket, n/d). Out of the ten objectives, five are especially relevant for this thesis: Accessible nature for everyone; access to nature for OR, strong commitment, and collaboration for OR; attractive urban nature, and good knowledge about OR (Naturvårdsverket, n/d). The first three generally concern ensuring access to nature and encouragement of people to take part in OR. Attractive urban nature talks about giving access to green urban spaces and landscape with outdoor values. Lastly, good knowledge about OR promotes investigations, such as this thesis.

In 2017, Mexico announced a National Physical Activation Strategy, with the intention of promoting physical activity among citizens aged 4 to 65 years. The policy includes four specific modalities (appendix 1.2) that promote physical activity and OR at school, work, the immediate community and in a countrywide network. In this context, the most relevant modality is the one focused on communities and designed for the general public: “Your zone, get moving.” It looks to promote the use of public spaces to practise physical activity and recreation regularly and aims at family and social integration (CONADE, 2017). Out of the four modalities, this is the only one that mentions OR.

The differences in the two countries’ approaches to the Covid-19 pandemic (sections 2.3 and 2.4) and their policies on OR were crucial when selecting the spatial limits.

2.2 Temporal context

According to the World Health Organisation (WHO), the coronavirus disease (Covid-19) caused by the SARS-CoV-2 virus was first identified on 31 December 2019 (WHO, 2021). In March 2020, the WHO designated Covid-19 as a pandemic and advised countries to implement social distancing and quarantining. (WHO, 2020). This is the first temporal limit of this thesis. Given that the pandemic is considered an on-going situation (UN News, 2022), the second temporal limit is March 2022, as it was the month in which the last of the focus groups of this study was conducted.

2.3 Cultural context

In Sweden, the Right of Public Access (Allemansrätten) gives people the right to visit Swedish nature to practice recreation. This law allows people to actively enjoy the countryside with the limitations of “do not disturb, do not destroy”(Naturvårdsverket, N/D). The country has almost 4000 natural reserves, 30 national parks, very few private trails and beaches and two thirds of the territory covered in forest (Savage, 2021), all of which is accessible to the population due to Allemansrätten. Sweden also has 25 non-profit associations attached to OR (friluftsliv), with 1.7 million members across nine thousand local and regional clubs (Savage, 2017). Accordingly, the latest report from Statistikmyndigheten (SCB, 2022) mentions that 85% of the population aged 16 and older participates in OR at least once a month while 52% engages in outdoor activities every week.

In contrast, Mexico has 64 national parks accessible to the population for specific OR activities, and 182 natural reserves which require a special permit in order to be accessed (Mexican Government, n/d a). The National Institute of Statistics and Geography (INEGI, 2019) reported in 2021 a ratio of 10.4 physical and recreational activity facilities per hundred thousand inhabitants, with around 33% of the population aged 12 and older using their free time to participate in any type of outdoor recreation activities, trend that seems

to have worsen since the previous 2014 report. It is due to this, that the National Commission for Physical Culture and Sports (CONADE) “looks to contribute to reducing sedentary lifestyles through the massification of physical activity and the correct use of public spaces, while generating options for the appropriate use of free time” with its previously mentioned National Physical Activation Strategy (CONADE, 2017).

2.4 Sweden’s approach to Covid-19

On 31 January 2020, the first positive case of Covid-19 was identified in Jönköping, Sweden. A day later, on 1 February 2020, following a request by the Public Health Agency, the Government categorised the new coronavirus as an infection threatening to society (MSB, 2020). Throughout Covid-19 in Sweden, the Swedish government presented different recommendations, with the idea of “taking the right measures at the right time” (SI, 2022). This approach was heavily criticised by experts and international press (Olofssons & Vilhelmsson, 2021; Adler, 2020). Instead of enforcing a national lockdown, authorities shared a series of recommendations (SI, 2022) and specific guidelines were set in place for public gatherings and restaurants (Public Health Agency of Sweden, 2020). This made the outdoors a place for continued physical activity and sports, while guidelines on indoor activities became stricter (Hedenborg et al. 2021 as quoted in Hansen et al., 2021b). Among the measures promoted by the Swedish government was switching high schools, vocational and university level institutions to distance-based learning (Ludvigsson et al., 2021 as cited in Beery et al., 2021). Of the few recommendations that were announced, none were explicitly imposed in nature/recreational areas (Hansen et al., 2021b).

On 10 January 2021, a temporary pandemic law was put in effect, giving the government the possibility to take extra measures to limit the spread of the pandemic. With this implementation it became possible to introduce limits to visitors and opening times in certain, often popular areas and destinations, such as national park visitor centres. This law was set to remain in effect until 31 May 2022, however, on 9 February 2022 all of the pandemic restrictions and most the general recommendations, were lifted (SI, 2022).

2.5 Mexico’s approach to Covid 19

The first case of Covid-19 in Mexico was registered on 27 February 2020 (UNAM, 2020). By 30 March 2020, the General Health Council declared the Covid-19 pandemic a sanitary national emergency. All non-essential activities were suspended in all public sectors (Health Secretariat, 2020), and the Mexican Government presented general guidelines to manage public spaces during the pandemic, calling for “the committed participation of the entire population to limit its spread” (Mexican Government, 2020b:2). One of the main guidelines was social distancing. A healthy distance of 1.5 to 2.25 metres between

individuals in all public spaces was recommended. Citizens that intended to enter sport facilities had to go through a supervision filter that included filling in a health questionnaire, cleaning hands with alcohol gel and having their body temperature taken (Mexican Government, 2020a). The restrictions for recreational spaces included limiting access by 50% to 100%, and the suspension of street food sales. For beaches, any activity that would gather non-related people was prohibited. For parks, all areas would close down in case of an outbreak (Mexican Government, 2020b).

Stronger guidelines designed for a “worst-case scenario” included limiting social activities outside of the house, suspending school activities, and rescheduling events with large concentrations of people (Mexican Government, 2020a). These restrictions stayed in effect for the majority of the pandemic’s duration (Rodríguez & Mercado, 2021).

3. Theory

The theory section consists of a short literature review to define OR followed by an exploration of selected worldwide reports regarding effects of Covid-19 on OR. Hereafter, specific reports on trends in OR during the pandemic from Sweden and Mexico are examined. Finally, an identification and assessment of studies examining YAs' recreational activities and behaviour during the pandemic are presented.

3.1 Outdoor recreation

According to Phipps (1991), OR includes activities that occur outdoors in an urban and man-made environment as well as those activities traditionally associated with the natural (physical) environment. Salazar (2007) describes OR as a set of pleasant activities that produce enjoyment, carried out during leisure time and that promote the integral development of people.

Alternatively, OR may refer to activities that people undertake outdoors in places where they can access nature or green areas, both in urban or rural environments, mainly as part of their daily or weekend routines (McCullough et al., 2018).

Specific to Swedish culture, OR originates from the term 'friluftsliv', and refers to "stays in the outdoors in the natural and cultural landscape to gain well-being and nature experiences without an involvement of competition" (Swedish Government 2010, as cited in Hansen, 2016).

This thesis follows the definition of OR given by Phipps (1991) and the Swedish Government, as it is broader compared to those given by other authors and allows to discuss activities taking place in nature, including urban parks.

3.2 General reports

During the Covid-19 pandemic a lot of challenges and disruptions were faced by people all over the world. To learn more about the implications and the different trends on recreation, a number of studies have been made, with results varying by country and region. A short selection of international reports, relevant to the topic of this thesis, is presented below in order to acquire general knowledge regarding the global effect of Covid-19 on OR before focusing on the specific cases of Sweden and Mexico. Said studies do not always disclose a specific population of interest and only report general trends observed.

According to Mateer et al. (2021) individuals may engage in OR to buffer the negative health impacts of the pandemic. Certain forms of OR may be less affected by the restrictions put in place, thus leading people to actively participate more, in the hopes to alleviate feelings of isolation caused by quarantine (Mateer, 2021)

In Scotland, for example, (NatureScot, 2020) it has been reported that visits to urban green areas increased substantially during the Covid-19 pandemic. With cases such as that of Fernbrae Meadows in South Lanarkshire, where the number of visitors increased from 14,947 in June 2019 to 95,697 in July 2020 - an increase of 640%.

During New Zealand's initial four-week lockdown in 2020, all parks, sports facilities, and back-country walking trails were closed. This situation was especially hard considering that New Zealanders tend to have high participation rates in outdoor sports (Thorpe, 2020). Due to this, the Ministry of Health decided people should enjoy outdoor activities within walking distance from their homes (Thorpe, 2020).

Venter et al. (2020) also found that OR in urban parks increased drastically in Oslo, Norway. The study showed a 291% increase in recreational activity, over greener and more remote areas, from 13 March 2020 onward. The report shows cycling as one of the dominant activities as well as preferred over pedestrian activities, which might reflect the avoidance of public transport during lockdown. It is also mentioned that, as indoor training facilities closed down, the access to open spaces might have functioned as a substitute of indoor workouts and sports, as well as a refuge from stress for a large part of the population (Venter et al., 2020, p.5).

Wagner (2022) indicated that nearly half of all adults across the United States are now participating in OR on, at least, a monthly basis. Only 13% of Americans stopped doing OR during the pandemic and around 20% started practising OR during the same time. The percentage of people that stopped participating tended to reside in more urban environments (Wagner, 2022).

In contrast, Larson et al. (2021) showed that, in the United States, as young people's outdoor activity participation decreased during the pandemic, their connection to nature decreased as well. By contacting 1,280 students at four large public universities, they found that 54% of the participants reduced their use of parks and about two-thirds reduced all of their outdoor activities. The students that showed more concern regarding the pandemic were more prone to avoid OR (Larson et al., 2021).

Similar to Larson et al. (2021) in the United States, UNICEF (2021) in Latin America invited young people from 13 to 29 years, to share their experiences on nutrition and physical activity during the pandemic. Over 12,000 YAs participated in the study and Mexico was among the top-participating countries. The survey shows that physical activity decreased significantly during the pandemic, with more than half of the participants reportedly being less active than before Covid-19. This percentage increased to 65% in participants of 25 to 29 years (UNICEF, 2021).

This sample of reports indicates, generally, a big global trend towards increased OR participation in order to replace other type of activities during Covid-19: from working out

outdoors, as in the case of New Zealand (Thorpe, 2020), to cycling instead of taking public transport, as it was the case in Oslo (Venter et al., 2020). However there seem to be exceptions, as shown in the UNICEF report (2021) and in the study by Larson et al. (2021). In both cases, YAs tend to report lower levels of participation due to the pandemic, and did not follow the trends reported in other studies. This particular point supports the importance of examining YAs' OR patterns.

3.3 Reports on the Swedish situation

Barton et al. (2020) found in a study performed in February and March 2020, that Stockholm residents had compensated for mobility restrictions, and limited access to urban services, by increasing their time doing OR in parks, streets, and forests nearby their homes, by up to 24% compared to cities such as New York, Berlin, and Oslo. The city's outdoor gyms, particularly, saw a substantial increase in usage.

Samuelsson et al. (2020) argued that ensuring access to nature, as in the Swedish case, should be a fundamental strategy in any crisis. It was also argued that the softer measures that Sweden implemented in relation to the pandemic, turned people towards nature with the intentions of finding well-being benefits as well as continuing social relationships while following the new norms of social distance (Samuelsson et al. 2020).

Hedenborg et al. (2021) mentions that, in general, cancelled activities resulted in a decrease in sport practices during the pandemic. With many sports being transformed from indoors to outdoors, or replaced by other types of physical activities (Hedenborg et al., 2021). The study by Hedenborg et al. (2021) also looked at the impacts of Covid-19 on outdoor life. It reports that open-air activities were on the rise, especially amongst people that were less active before the pandemic. The trend observed in this report is that OR generally became more local, with only a few distant places being saturated (Hedenborg et al., 2021).

Hansen et al. (2021) found that in western Sweden, outdoor activities saw a significant intensification during the Covid-19 pandemic. Their results show that local or near-residential areas have had an important role in OR, giving urban areas a vital significance partially due to the recommendations of limiting travel distances during the pandemic. On this topic, it is reported that most people across all age groups either walked to or took the car to nature/recreational areas, but that YAs used public transport (PT) significantly more, compared to other age groups. The results of the survey explain that nature has been given a special social role, with people using it to socialize. Hansen et al. (2021) also report that all age groups changed their patterns, with the age groups of 26-40 years and 41-65 years becoming particularly active in nature during the pandemic. Another commonality between all age groups was the feeling of nature and outdoor life as a safer

way to meet with their social groups, and the expectation to continue their new outdoor habits once the outbreak is under control (Hansen et al., 2021).

Berry et al. (2021) found, through a series of interviews with outdoor management professionals, a reported increment of OR sites' use, and public participation. Although considered positive, the situation revealed management challenges, especially when it came to quickly providing services to new recreationists (Berry et al., 2021).

Eklund et al. (2022) from the University of Uppsala, found that being physically active and engaging in OR has been helpful in promoting well-being for the Swedish population during the time of the pandemic. By sending daily text messages to 693 people over the age of 18, Eklund et al., were able to identify recreation activities, being outdoors and traveling as helpful activities to deal with the pandemic. In this report, participating in recreation was described as an "everyday life facilitator of well-being during the pandemic" (Eklund et al., 2022:6).

The latest report from SCB shows a strong 20% to 40% increase of OR participation among young people aged 16 to 24. This is an increase of double, compared to the period of 2018 to 2019. The second most active group was that of older people aged 85 years and above. In both cases, people reported being out in nature at least once per week, and the increase was higher for women than men (SCB, 2022).

So sum up, Swedish reports point towards an increase in OR participation, in all demographic groups. Activities that require active participation in nature show an increase not only among recreationists that already were active before the pandemic, but also among new recreationists and first comers in nature. According to the reports, this increment of OR can be seen as a reaction to certain mobility limitations that pushed the population to take advantage of local green outdoor spaces (Barton et al. 2020; Hedenborg et al., 2021; Hansen et al. 2021).

3.4 Reports about the Mexican situation

In March 2020, the Mexican General Health Council recognised the Covid-19 pandemic as grave. With this decision, a lot of preventive measures and national campaigns such as *Quédate en casa* (Stay at home) and *Sana Distancia* (Healthy Distance) were set in motion (Valencia et al., 2020). Mexican authorities closed schools, restaurants, workplaces, and OR facilities and spaces. People stayed home in a long confinement, becoming less active and forced to change their general lifestyles (Rodríguez & Mercado, 2021).

In January 2021, Forbes reported that in 2020 only 39% of the adult Mexican population (18 years and older) practised any type of physical activities, which marked a decrease of 3% compared to 2019. The main reported reasons were lack of time, tiredness due to workload, and general health issues. The report also showed that a big factor promoting

OR participation is the level of education, as people that are physically more active tend to have a higher education level (Garduño, 2021).

Valencia et al. (2020) presented a study regarding the impact of Covid-19 on recreation among Mexican youths. The population of interest included children and teenagers aged 10 to 17. The study which focused on indoor recreation and had a descriptive focus, asked 444 children and teenagers (255 girls, 189 boys) about themselves, their knowledge of the pandemic, the restrictions, and the emotions these made them feel. They also applied a questionnaire with a focus on leisure and free time (Valencia et al., 2020). The study showed that over 88% of the children had at least one hour of free time to do recreational activities and used this time to practice mostly sedentary activities. Further, the children were asked which activities they did or would like to do outdoors, with the main results being hiking, camping, participation in rural tourism, doing bonfires and reforestation, visiting lagoons, beaches, and rivers, amongst others (Valencia et al., 2020).

In August 2021, a descriptive study was presented on junk food consumption and physical activity with over 1000 adolescents and YAs (aged 16-24) from the state of Nayarit, Mexico. The survey was open for six months, from February to August 2020. The study found that before the pandemic, the participants used to practice different sports to exercise in a regular way. However, due to the pandemic and the confinement, sedentary activities increased with things such as watching movies or TV shows, with reading and even sleeping longer becoming dominant pastime options (Rodríguez & Mercado, 2021).

Through a quantitative / descriptive-correlational study on Mexican adults (ages 18-37), Zamarripa et al. (2021) found that general levels of physical activity³ and time dedicated to OR decreased significantly during confinement. The study also shows a heavy increase in sedentary activities, aligning with the paper from Rodríguez and Mercado. Zamarripa et al. (2021), also mentions that both social distancing and not being able to move around have caused an increment of time spent on social media, as people used different social media apps to read news, keep in touch and simply pass the time. However, the silver lining of this has been people using their smartphones, tablets, and computers to follow training tutorials, thus maintaining some level of activity.

The National Institute of Statistics and Geography (INEGI) reported in their 2021 annual sports practice and physical exercise module that the most active group in Mexico was composed of adults between 18 and 24 of age, while the least active group was that of 45 to 54 years of age. However, the average time spent doing exercise or OR was only 5:30

³ In Zamarripa et al. (2021), physical activity is any activity done at gyms, aquatic centres, sports centres, parks, or any other outdoor space where people exercise or practice any type of sport. For this reason, their findings are considered as a general trend of people's levels of activity and recreation and not specifically results related to outdoor recreation.

hrs per week. The module also reports that males were more active, generally, than women (INEGI, 2021).

In addition to the literature, interviews with experts on the topic of OR in Mexico were performed (see also section 4.3). Regarding OR practices before the pandemic, Professor Gilberto Mercado (GM) commented how:

“before the pandemic, OR was noticeable because in most of the parks there were people doing some sort of physical activity. One would find people in outdoor clubs, swimming centres or doing team training. Mostly during the early morning (6 to 9 am) or evenings (6 to 9 pm).”

On the same note, Professor Jorge Zamarripa (JZ) commented that: “a very small proportion of the inhabitants performed physical exercise that met the minimum criteria of frequency, duration and intensity established by the WHO”. According to their expertise “OR has decreased. During the pandemic we saw a notorious dispossession of outdoor activities, empty parks, there was nothing going on. It all got replaced by gatherings with friends and family at home” (GM) and “the period of confinement as a strategy to prevent the spread of COVID-19 in Mexico affected people's level of physical exercise, since light, moderate and strenuous physical activities decreased during that period.” (JZ). With these comments, the experts point out how the pandemic had negative effects on OR practices in general. However, when expanding on the situation for YAs, GM mentioned that “we are starting to notice that people go out during the mornings or around sunset, to run, do aerobics, go for walks, we see more people at the squares”.

The Mexican reports and interview statements on OR during the pandemic seem to agree on a general decrease of OR and physical activities, and an increase of sedentary behaviours. These studies directly associate confinement, due to the Covid-19 pandemic, with a decreasing level of physical activity among the general population.

3.5 A knowledge gap

The role of nature in YAs' daily life is not well known (Puhakka, 2021) and comments from young people on whether or not, and how, urban nature supports their mental health is generally an understudied topic (Birch et al., 2020). Hansen et al. (2020) mention a lack of representation of YAs and youths in OR surveys and data collection while Raymore et al. (2001) point out that there is not a lot of information in regard to OR throughout the later stage of adolescence⁴ and early adulthood, nor about the constraints that affect leisure behaviour during this period of transition (Raymore et al., 2001).

⁴ Raymore et al. (2020) do not specify what they mean by adolescents or early adulthood, the age group is thus not clearly defined.

Lovelock et al. (2016) point out “a number of gaps in our knowledge regarding how leisure experiences in the period of childhood to emerging adulthood may contribute to enduring participation in outdoor leisure” (Lovelock et al., 2016:6) This report also explains that the available information concerning constraints for youth and younger adults is narrow, with the significant exception of Hultsman (1992, 1993), who pinpoints restrictions within this group such as lack of transport, activity costs, perceived lack of adequate skills and the influence of others. While relevant, the studies by Hultsman (1992, 1993) are somewhat dated. Hence, their significance might not be as pertinent. It is, consequently, important to address both issues: the lack of representation of YAs in general OR studies and statistics, and the understanding of their recreational activities and behaviour - specifically for this thesis, during the Covid-19 pandemic.

Outside of academia, on 14 February 2021, Elinor Carucci, an American photographer, presented a series of photographs of New York teenagers, and short descriptions of their Covid-19 isolation experiences. The series, shown in *The New Yorker* magazine, gives an insider’s perspective on teenagers’ (of average 18 years) routines and their feelings regarding the pandemic, with comments such as: “I did not come downstairs unless I had to go to the kitchen to eat”, “...eventually I found myself talking to anyone, just being in my room the whole day. For some reason, talking to people on FaceTime or Zoom, you are even lonelier”, “I realised I kind of forgot how to socialise with new people” or “going outside was scary. I began spending more time in my room alone”. As such, the article points out the situation in which millions of YAs found themselves during the pandemic (Mead, 2022).

Moreover, there are various reports that mention YAs as either part of the group that became more active during Covid-19 (Hansen et al., 2020; INEGI 2021), or the group that was more affected and became more sedentary (UNICEF, 2021; Hedenborg et al., 2021; Zamarripa et al., 2021). These inconsistencies, and the reported lack of knowledge of YAs’ OR habits (Raymore et al. 2001; Lovelock et al., 2016), make it pertinent to look further into the topic.

4. Methodology

This thesis was written as a qualitative and explorative study. As it relied on first hand observations and data from focus groups and semi structured interviews (Bandhari, 2020), and it intended to investigate a topic of interest that had not been previously reviewed in-depth (George, 2021): how YAs experienced OR, how it changed during the pandemic and what it means for future OR management policies in both crisis and ordinary times. Due to its nature, the thesis did not intend to find conclusive results for the entire Swedish or Mexican young adult population. It focused only on the population sample and in having a better understanding of their OR habits and the effect the Covid-19 had on them.

4.1 Methodology stages

The thesis was composed of two stages with the same main qualitative method as a base: focus groups (FGs). Alongside this work, semi-structured interviews (SSIs) complementing the literature were also conducted. The first stage of the thesis was done during spring 2021. FGs with YAs were performed in Gothenburg, Sweden, as part of a report made during the course “Sustainable development: A case study approach”, from the Master’s in Geography at the University of Gothenburg. The intention to expand this first report was present from the beginning, but due to time limitations of the course, it was not possible to do a full comparison between two country contexts. The results of this report were thus used as a foundation to further develop the topic of OR of YAs in a context different to that of Sweden.

A year later, in February and March 2021, following up with the interest in the topic, the initial FGs were duplicated in Mexico, with slight adjustments due to the different geographical and cultural context. To complement the Mexican FGs, SSIs with individuals of the population of interest were conducted. The results obtained from these SSIs were considered with the same level of importance and validity as those of the FGs. No distinction was therefore made when analysing the data from the Mexican context.

Performing FGs allowed to collect qualitative data in a very efficient way by having conversations with several people at the same time, and using a very flexible set up (Robson & McCartan, 2016). In this case, the set up refers to online meetings using Zoom. Given that the population of interest were YAs, and time limitations did not allow to perform a large number of singular interviews, performing FGs seemed like the most appropriate approach, allowing conversations with 2-6 participants at the same time. It’s mix of characteristic between discussion and interview, enabled for a group dynamic where the participants were able to make comments in their own words while commenting and reflecting on the comments of others, thus encouraging deeper contributions while keeping their attention on the main topics (Robson & McCartan, 2016). The type of FGs

that were executed and the recruitment process is explained further down (see section 4.4).

Due to the Covid-19 restrictions it was not possible to visit Mexico and do field work in person. Therefore, in order to have a richer discussion based not only on comparisons to the scarce literature available, SSIs with Mexican experts were also conducted. The purpose of these interviews was to gain a general perspective of the Mexican situation, and any findings obtained from them are purely complementary to the findings of the literature review. Therefore, the findings from experts' SSIs are shown in section 3.4 as part of the theory. The decision of not doing SSIs with Swedish experts was based on the availability and sufficiency of a few but significant academic papers that provided insight into the Swedish situation.

4.2 Selection of population of interest

The population of interest was outlined as YAs, due to the interest in helping to fill in the previously identified knowledge gap (see section 3.5), and intention to help to understand how the Covid-19 pandemic has affected young adult's OR experiences.

The definition of young adult varies between sources and is not always constant within different departments of the same organisation. For example, in statistics, the United Nations uses the terms youth and young people interchangeably. It defines 'youth' as persons between the ages of 15 and 24 years, while other entities use different definitions, such as the UN Habitat, which defines youth as people from 15-34 years old (United Nations Youth, n/d)

According to the Cambridge English Dictionary, a young adult is "a person who is in his or her late teenage years or early twenties" (Cambridge Dictionary, n/d). On the other hand, the Collins dictionary defines a YAs as an age group that includes people from about 12 to 18 years old (Collins Dictionary, n/d).

While in Psychology and according to Erik Erikson's stages of human development, a young adult is a person between the ages of 20 and 39 (Erikson, 1958, 1963, as cited in McLeod, 2018). Levinson (1986) explains that early adulthood would include everyone aged 17 to 45 years old, with years 20 to 39 being "the peak years". (Levinson, 1986). Similarly, in demography, Franssen et al. (2020) determined the limits of young adulthood as 19 to 34 years old.

Due to the lack of clarity on the definition of YAs as well as not having a consensus on what the defining age group is, this thesis defines YAs as persons 18 to 35 years of age.

In order to consider the group as consistent, the sample of population needed to include participants with similar backgrounds. This meant being part of the defined age group, living in either Mexico or Sweden, and having spent the pandemic in one of the two

countries. For the Swedish part of the study, the participants also needed to be able to speak English to facilitate communication with the moderator. Gender, occupation, relationship status, socioeconomic level, political associations, and religious beliefs were not taken into consideration in either of the countries. Further, having a pre-pandemic interest in outdoor recreation or being an experienced recreationist were not requirements to participate in the study.

In Mexico, an initial online survey helped outline the population sample, by having an age and location filter. The Mexican sample consisted of 22 people between 18 and 35 years of age. In Sweden, the sample consisted of 17 individuals between 23 and 30 of age. Coincidentally, all participants lived in urban areas.

4.3 Semi structured Interviews

Conducted with one person at a time, SSIs are commonly used in qualitative studies (Turner, 2016), and consist of a mix of closed- and open-ended questions often followed by a request for further explanation (why or how) (Adams, 2015).

During the SSI with Mexican experts it was important for the questions to be open ended to avoid yes or no answers, as well as to allow the experts to share their knowledge on the effect of the Covid-19 pandemic on OR in a more extensive way. The questions were phrased to be non-leading to avoid pushing the participants to any type of bias or prejudged interpretations (Turner, 2016).

Four Mexican experts were contacted via email. Three answered positively and, after deciding available times, only two SSIs were conducted with researchers from two universities. The tool used to carry out the SSIs was Zoom. The interviews were conducted with the following experts:

- Dr. Gilberto Mercado from the Universidad Autónoma de Ciudad Juárez. Researcher in Food Sciences with experience in physical activity and eating habits.
- Dr. Jorge Zamarripa from the Universidad Autónoma de Nuevo León. Researcher in Physical - sporting activities and quality of life.

The interview guide (Appendix 3) was designed to be flexible and adaptive to the interactions with the experts when needed, and it was divided into two sections: the first one asked questions regarding general Mexican OR patterns, while the second one focused on observations made during the Covid-19 pandemic; the second section also asked a couple of questions regarding the management strategies that the Mexican government set in place to handle the pandemic. In both of these sections, questions regarding trends particular to YAs were also asked.

As the data obtained from these SSIs is presented in section 3.4, as it is complementary to the theory. The full transcripts can be found in appendix 3.1 and 3.2.

4.4 Focus groups

A FG has been defined as a “carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment” (Krueger & Casey, 2000:5). FGs provide insights into how people think, and a deeper understanding of the theme being studied (Nagle & Williams, n/d:1) by enabling relaxed conversations that allow participants to feel comfortable, respected, and unrestricted to share their opinions (Krueger & Casey, 2000).

Normally, in a focus group, there is a moderator, i.e. a person in charge of running the focus group (Robson & McCartan, 2016:301) and a second researcher, who takes notes and documents non-verbal interactions (Robson & McCartan, 2016: 302). In the Swedish FGs (SFGs), there was both a moderator and a second researcher, however during the Mexican FGs (MFGs), and given that this is a thesis written individually, the roles fused. Thus the collection of data was made with recordings of the sessions. All participants were informed about this beforehand.

A focus group guide (Appendix 2) was made in order to facilitate the work of the moderator and to keep the participants on track of the topic of interest. The original version of the guide was used in the Swedish FGs (SFGs). A second version, with slight changes, was applied to the Mexican FGs (MFGs) (Appendix 2.2). Both versions of the guide contain the same base questions, so a direct comparison was possible.

4.4.1 Internet – based focus groups

Internet-based FGs have grown in popularity due to expansion of the internet, both in terms of technical capacity and number of users; as well as the improvement of communication software, such as Zoom, Microsoft teams or Skype (Collard & Van Teijlingen, 2016). There are two variants of internet-based FG: a) written chat and; b) audio/video conference (Collard & Van Teijlingen, 2016:1). The one selected, and considered more appropriate for this case, was audio/video conference focus group.

In audio/video conferences, the participants do not have to be in the same room as the moderator and second researcher, which is suitable for studies with large geographical areas or with samples where people have busy schedules (Collard & Van Teijlingen, 2016). The main benefit is being able to communicate in a conversation – reacting, commenting, or questioning other’s comments - without the need to travel (Collard & Van Teijlingen, 2016). As some FGs were planned with users from Mexico, where not only distance but time differences play a role, this was the only available option for the FG discussions. For the FGs done in Sweden in 2021, in order to maintain social distance and (at the time) follow restrictions, internet FGs were the better alternative. The selected communication channel for both cases was Zoom due to having the most reliable recording and sharing tools.

4.4.2 Swedish focus groups

In April 2021, three FGs with YAs were conducted. These FGs and their results worked both as motivation to develop the topic further and as a base for this thesis.

The initial recruiting process of participants in Sweden was made with the help of an online form (Appendix 2.1) made with the online tool Google forms. This form included questions designed to obtain basic information of the participants: name, age, occupation, and contact information. The participants were also able to select the time slot they wished to participate in. The distribution of the recruiting form was made via paid advertisement on Instagram and by sharing a post on different Facebook groups. However, due to time limitations, it was decided to recruit individuals that were part of relatively close personal social circles, with a direct invitation. Different strategies were taken to avoid bias and to keep the discussions as neutral as possible (see section 4.5).

Individuals fulfilled the selection criteria to be considered for the FGs if they were part of the population of interest's age range, live in or around Gothenburg and were able to speak English (to facilitate communication with the study authors).

Table 1. List participants from Swedish focus groups

Participant	Age	Occupation	Participation	Nationality
ES	29	Worker	SFG 1	Swedish
AF	29	Worker	SFG 1	Swedish
ID	24	Student	SFG 1	Swedish
SF	25	Student / worker	SFG 1	Swedish
AK	24	Student	SFG 1	Swedish
HB	23	Student	SFG 1	Swedish
AB	26	Student	SFG 2	Swedish
TW	25	Student / worker	SFG 2	Swedish
FV	25	Student	SFG 2	Swedish
FVC	28	worker	SFG 2	Swedish
SA	29	worker	SFG 2	Swedish
AM	26	student	SFG 2	Swedish
FO	28	worker	SFG 3	Swedish
ND	26	Student / worker	SFG 3	Moroccan
AC	30	worker	SFG 3	Greek
MR	23	Student / worker	SFG 3	Swedish
SG	28	worker	SFG 3	German

Source: Jessica J. Marin R. 2022

The sample included 17 participants (Table 1) divided into three FGs. 14 of them were Swedish and 3 were foreigners. All the foreigners had lived in Sweden a minimum of 4 years and had stayed in the country during the entire duration of the pandemic (at the moment of the performed FG).

4.4.3 Mexican focus groups

Four FGs were done with Mexican participants during February and March 2022. These FGs required a longer planning process and two different recruitment strategies. Unlike in the Swedish case, in Mexico all of the participants were Mexicans.

An online survey (Appendix 2.2) was used as the main tool to pre-recruit participants for the MFGs, with the use of the tool www.questionpro.com. The full results of the survey are not presented in this thesis, as it is considered they would need its own report in order to be explained properly. However they are accessible online (see Appendix 2.2). The distribution of the survey was done via Facebook, and consequently, respondents sharing it to their own social groups. It was also distributed with the help of a few professors, acquaintances of the author, from the University of Guanajuato and the Autonomous University of Nuevo León. The survey was answered by over 500 respondents distributed throughout Mexico and of those, 157 respondents expressed interest in participating in the FGs used in this thesis.

A first email was sent to formally invite participants to participate in the FGs. For easier communication and understanding of the invitation, it was decided to refer to FGs as, simply, group discussions, based on the assumption that a focus group is a type of group discussion.⁵ This was the first recruitment strategy.

Table 2. List of participants from Mexican focus groups.

Participant	Age	Occupation	Participation
IM	25	Student	FG 1
MA	27	Student	FG 1
DT	35	Worker	FG 2
JL	18	Student	FG 2
AJ	29	Student	FG 2
MB	29	Worker	FG 2
GR	25	Student	FG 3
AH	20	Student	FG 3
JA	30	Worker	FG 3
AC	33	Worker	FG 3
GO	25	Worker	FG 4
VV	29	Worker	FG 4
PC	25	Worker	FG 4
NN	31	Worker / Student	FG 4
MX	23	Student	FG 4

⁵ According to Payne & Payne (2004): Group discussion is a means of collecting data in one go from several people (who usually share common experiences) and which concentrates on their shared meanings, whereas a focus group is a special type of group discussion with a narrowly focused topic discussed by group members of equal status who do not know one another.

CR	19	Student	FG 4
DM	35	Worker	interview
DC	30	Worker	interview
SR	31	Worker	interview
AR	28	Worker	interview
MM	27	Worker	Interview
LR	31	Worker / Student	interview

Source: Jessica J. Marin R. 2022

For the first recruitment strategy, the invitation included a calendar with time slots, made using the online tool www.doodle.com, where participants could sign up. After the participants selected a day and time, a zoom link was sent to them. A reminder email was sent a day before the focus group. The first three FGs were set up following this strategy.

The second strategy to recruit participants was to invite them to select a week to participate and define the day later on. The same online tool was used to set up the slots. With this strategy, FG 4 was scheduled. This was also the meeting with the largest number of participants.

A total of 16 participants were part of the FGs, while 6 persons participated through individual SSIs.

4.4.4 Individual interviews

SSIs were organised with individuals that intended to participate in MFGs but, due to schedule clashes, could not attend (see section 4.4.4). The SSIs with individuals were not initially part of the methodology, but added to the methods as an extra tool to collect data from additional Mexican members of the target group.

All SSIs were made via Zoom and the times were set by the participants to adapt to their schedule. All of the SSIs lasted between one hour and one hour and a half.

A total of six SSIs were done. The guide of the MFGs was used during these SSIs and the same questions were asked. The intention of using the same questions was to be able to compare the answers and include them in the same results. No SSIs with individuals were done in the Swedish case study, since the FGs were sufficient.

A few extra questions were added at the end of one of the SSIs with the Mexican interviewees, mainly because one of the respondents was a medical professional (Appendix 2.4). These extra questions were taken directly from the interview guide for SSI with experts, but used as complement to the discussions of the FGs, not as an expert opinion.

4.4.5 Data collection and analysis

The data collection for the FGs was done as recordings and, for the Swedish case, written notes. Transcripts were made using only the audio recordings of the FGs. Due to the length of the FGs, selective transcription (Robson & McCartan, 2016)⁶ of the recordings was used as a practical necessity while translating from audio to text (Appendix 4). The data from the SSI with Mexican subjects of the population of interest was collected with the same approach.

It was made clear to the participants that their comments would be connected to the results of the thesis and used as quotes in an anonymous manner. The quotes are presented using the first two initials of the participants' names. Places of study, work, cities where they live and other relevant information is only mentioned if pertinent for the commentary. To further reinforce the anonymity of the participants and to avoid differentiation from the data collected during the SSIs with Mexican individuals, the selective transcripts are not divided by focus group but by theme (see Table 3).

A poll of seven questions, made using the online tool www.AHASlides.com (Appendix 5), was used as a tool during all FGs to make them more dynamic. It should not be considered as an extra research method. The first question of the poll was applied at the beginning of the sessions to “break the ice”, while the rest were applied at end of each FG with the intention of comparing comments made during the dialogues in an easier way, and be able to summarise the discussions of the FGs. The results of the poll from the FGs can be found online (see Appendix 5). The answers obtained from AHA Slides do not form a relevant part of the results and are only mentioned when pertinent.

The analysis of the data obtained from the FGs was made following a thematic analysis strategy (Braun & Clarke, 2012). This allowed to identify, organise, and offer insight into patterns found across the data, as well as making sense of the cohesions in how the participants of the focus group shared their experiences and how they talked about the focus of this thesis (Braun & Clarke, 2012).

The analysis consisted of seven themes (see Table 3) that were decided upon after a first examination of the transcripts from the SFGs and a comparison with the general themes from the FG guide. This examination was undertaken by colour coding quotes from the participants, classifying them into groups and finally, creating the general themes.

The process to define the themes for the analysis started with the design of the FG guide, where a group of questions was formulated to obtain information regarding the

⁶ According to Robson & McCartan (2016) whether or not to make a full transcript depends on the number of tapes to be transcribed and the way in which its proposed to analyse the data. An alternative to full transcription is to be selective, picking out relevant passages only (Robson & McCartan, 2016:305).

participants experiences of OR pre and post Covid-19. A second group of questions intended to obtain information on potential motivation to participate in OR. Both themes are part of the analysis.

Table 3. Themes used during the thematic analysis

Theme	General content
General trends pre and during the pandemic	Trends found generally over the discussions, including meaning of outdoor recreation, recreation before and during COVID, and transformation from indoor to outdoor activities.
Enabling factors for outdoor recreation	The participants explained what they need to be able to enjoy doing outdoor recreation.
Constraints for outdoor recreation	The participants comments on what stops them from spending time outdoors.
Consideration of Safety	Theme brought up by the participants with comparisons between genders, and places of birth.
Motivation requirements	Exploration on how to motivate the participants to spend more time outdoors and what could we (understood as the author, scholars, and authorities) offer to keep their motivation up.
Reaction towards the effects of the pandemic	Reports about how participants have felt throughout the pandemic and regarding the meaning they gave to outdoor recreation during the pandemic.
Expectations for outdoor recreation post pandemic	Participants points of view on their future participation in outdoor activities and possible considerations that stakeholders from management could consider

Source: Jessica J. Marin R. 2022

The rest of the themes were formulated organically during the classification of the material. The data from the MFGs and SSIs with Mexican subjects from the population of interest was analysed following the same approach and themes.

4.5 Avoiding bias

Defined as any inclination that prevents impartial attention of a question, bias happens when a systematic error is presented into sampling or testing by choosing or encouraging one outcome or reaction over others (Gerhard, 2008 as cited in Pannucci & Wilkins, 2010).

Bias can happen at any stage of research and it is nearly always present in a published study. And, while totally avoiding bias is not possible, there are options to reduce it (Pannucci & Wilkins, 2010).

During the design process of the FG guide, the questions were framed to be open ended to avoid participants to only answer yes or no without developing their answers further. In the case of the MFGs, the questions were also, in some cases, reframed during the session in order to get the participants to provide longer explanations, taking advantage of the organic nature and style of FGs

The participants were given the option to keep their cameras off, in case it was more comfortable, as the intention was to give them the freedom to share as much possible and to avoid them from feeling judged no matter what their answers were.

During the three SFGs, the roles of moderator and second researcher (Robson & McCartan, 2016) were switched, depending on which participants were in each session. The aim was for the person acting as moderator to be acquainted with fewer participants than the second researcher thus supporting the anonymity of the participants and allowing for extensive answers.

In both FG situations, any interventions were made only to keep the topic on track, ask follow-up questions or to motivate participants to share their experiences. Sharing personal experiences of the moderator was always eluded as much as possible to avoid influencing participant's answers.

Due to the one-year gap between the SFGs and the MFGs, the order of the questions of the Mexican FG guide was changed slightly. The questions that pushed the participants to think of the beginning of the pandemic were asked first, thus turning their attention to the past 2 years and not only to the most recent events. The questions regarding their needs to practice OR were asked later on, which was opposite to the SFGs, where the first questions focused on the description of OR, and the participants' usual outdoors activities, followed by the impacts of pandemic in said activities and finally, the questions regarding their needs for OR. This change of procedure did not represent any issues during the analysis of the material.

Because of the author's experience of the pandemic in both countries, avoiding personal social groups was a well-defined rule from the beginning. Nonetheless, as mentioned before, for the SFGs, it was necessary to be flexible and recruit personal acquaintances. This situation could have caused participants to only share experiences they see as fit for the general theme and refrain from fully engaging. However, to avoid this from happening, there was little intervention during the FGs, except to follow up the FG guide and steer the conversation when needed. It was made clear to the participants they should share to each other and to not consider any social relations as relevant during the FG session. For the MFGs, the participants were selected from the general population. In both cases, there was no previous knowledge regarding the participants' practices of OR, so no premeditated judgment was made prior to the FGs in either country.

4.6 Reliability, credibility, and validity

Thorough attention to the reliability and validity of research studies is deeply relevant in qualitative work, where the researcher's subjectivity can cloud the interpretation of the data and where research findings can be questioned or viewed with scepticism (Brink, 1993 as quoted in Cypress, 2017).

When it comes to the thesis reliability, as the temporal context was delimited to the Covid-19 pandemic, adaptations to the methodology would be needed to be able to apply it to at any other time frame. However, it is suitable to comment that, in fact, the methodology has already been reproduced once, as the collection of data was made in two different stages during different stages of the pandemic. The methodology brought up comparable results from the different stages, which shows a level of test-retest reliability (Middleton, 2019). The methodology had a few changes made to be applicable to the Mexican sample of population, specifically on some questions in the FG guide (see 4.4.3). This led to having two set of questions formulated to obtain the same type of data, and as mentioned above, the obtained data is comparable, showing parallel forms of reliability⁷ (Middleton, 2019).

Given that the purpose of a qualitative study is to explore and describe a phenomenon from a participants' point of view, the credibility of the results can only be confirmed by the participants themselves (Trochim, n/d). Thus, to strengthen the credibility of this thesis, all selective transcripts and original audios are available, for review, to any person interested in corroborating information. Errors during translation of the data from the MFGs is a factor, but this risk was minimised by translating the quotes with extensive care and by having the results and their translations reviewed by two trustworthy Spanish native speakers. There was, as well, a constant open communication with participants of all FGs in case any clarifications were needed.

In qualitative studies, the validity is related to “careful recording and continual verification of the data that the researcher undertakes during the investigative practice” (Cypress, 2017:259). To find participants relevant to the theme of thesis, a purposeful selection of the sample of population was made, by designing a list of conditions the participants had to fulfil (see 4.2). This guaranteed the data, however extensive, would be relevant to the topic of the thesis. As bias is a threat to the validity of qualitative studies (Cypress, 2017), different strategies were used to minimize it (section 4.5). The main steps to remain impartial and maintain the validity of the thesis were to avoid personal social circles as part of the sample, and truly focusing on observing and listening to the participants without much intervention. As previously mentioned, their perspectives on the topic, experiences and reasonings are documented as video and selective transcripts, both of which were used with great care when presenting and analysing the results.

⁷ “Parallel forms reliability overlooks different versions of a test which are designed to be equivalent. Test to retest reliability measures the consistency of the same test over time” (Middleton, 2019).

4.7 Limitations and critical reflections

During the entire collection of data from the FGs, both in Sweden and Mexico, there were clear limitations worth mentioning to further reinforce the validity of the thesis.

In the case of the SFGs, the recruitment process was especially challenging due to the lack of interest in participation. The initial recruitment survey was not fruitful and to be able to organise FGs in time, it was necessary to turn to personal social groups, which limited the pool of users available and required extra precautions to avoid bias. This also limited the age group to 23 to 30 years old, excluding the lower and higher limits of the defined ages for the thesis. Having participants from all ages would possibly have enriched the discussions.

In the case of the MFGs, the restrictions were not limited to lack of interest in participation but rather constant cancellations and rescheduling of the potential participants, resulting in the FGs becoming smaller in size than originally intended. It is still not clear how this situation could have been handled differently as the different strategies to recruit participants had little effect. It is not fully clear if larger FGs would have been a better option since, generally, MFGs were longer compared to the SFGs, even with less participants.

As explained earlier, the constant dependency on Mexican users' schedules and sudden changes of availability lead to adding individual SSIs as an extra method to collect data. Even though SSIs had to be improvised in between FGs in Mexico, the biggest silver lining of doing so was that it allowed to talk to individuals that, otherwise, would not have participated, nor shared their experiences. However, in comparison, the individual SSIs with Mexicans were, mostly, not as detailed as the FGs. In most SSIs, respondents did not give extensive answers, even after being asked questions intended to complement their replies. The atmosphere, although not planned in that manner, was a lot more formal than in the FGs, which might have been the reason why the conversation was not as fluid. This could, potentially, be explained by natural awkwardness of talking one-on-one to a stranger. In retrospect, referring to the SSIs as "conversations" or "one on one dialogues" could have helped to loosen up the formalities. Connecting with the participants beforehand and having a dialogue to select a time for the FG would potentially have worked to avoid the SSIs altogether and keep the permissive, calm environment FG are known for (Robson & McCartan, 2016).

The samples of population from the SFGs and the MFGs were slightly different in number of participants, which can create a disparity in the extend of the data obtained. Nevertheless, it did not represent an issue whilst analysing and comparing the material as the Swedish respondents share their experiences extensively, while the Mexican participants from the SSIs had more concise answers, thus balancing out the data.

There were also limitations that were not controllable, such as time zones. Mexico is divided into five different time zones, which made it difficult to set a date and time for the FGs there. Furthermore, Mexican Universities tend to have a mixed schedule, with lectures both during mornings and evenings, impeding students, which represented a large part of the population sample, to attend. Not much could be done about it, other than setting the times to CDMX's time zone for consistency.

Translation errors or slight difference in meaning of the transcripts from the MFGs might be present, since participants made a few of their comments using local slang thus making direct translations sometimes impossible. In terms of the latter, words with closest correct meaning were chosen. This, however, did not represent any issues during the analysis of the material, as the core ideas were translated with great care taken.

One of the most relevant reflections to consider refers to the time span in which the thesis' data was collected. As the SFGs were executed in March 2021 while the MFGs happened during February – March 2022 there was a possibility of disparity in the richness of the content of the material, given that the recollections from the Swedish experiences were referring to closer-in-time events. However, as Mexican participants endured harder and longer periods of restrictions that were still active at the time of the study, this time span between FGs is not considered as a relevant concern.

5. Results

The results of the thesis are presented as a thematic analysis divided into seven themes (Table 3). For clarity, the results of each block of FGs are presented separately, starting with the SFGs, and followed by the MFGs. The results of the SSIs with Mexican individuals are mixed within the results of the MFGs, as they are treated as equivalent.

Selective transcripts of the discussion of all FGs can be found in Appendix 4. Quotes presented in the results have, in some cases, been shortened for clarification. In the case of the Mexican FGs, as the quotes were translated from Spanish, some phrases have been adapted from colloquial speech to English for clarification. Specific places, such as a city park mentioned by name or a square, will only be mentioned in a generically way to make it simpler to understand points and arguments made by the FG participants.

5.1 Swedish focus groups

These FGs were held in April 2021, and participants were told to recall their experiences regarding the past year from March 2020, and consider any changes in their normal daily routines, and specifically their OR activities and behaviour.

5.1.1 Understanding of outdoor recreation

When asking what being outdoors meant for the participants, there was a consensus on what ideas came to mind as explained by a few of the participants as: “free feeling, just relaxing and no obligation when you are out” (FO) and “to explore new places that I have not been, and that is refreshing for my brain” (ND). This short discussion was a result of the short AHA Slides pool used to “break the ice” at the beginning of all FGs (appendix 5). There was no further dialog on this theme, other than the short comments mentioned above, however it helped to understand what the participants considered as OR and set the ground for the discussions that followed.

5.1.2 General pandemic trends

All discussions from the Swedish FGs started with the participants describing any changes to their normal routines and practices of OR. One person commented: “before the pandemic, I could take the PT and go to other places, now I am more home based and more experiencing the local area every day. I do not travel that far” (ID). A different participant mentioned: “if you want an outdoor experience far away from your home, that has not been possible, far away experiences have been limited” (SA). This shows that one of the effects of the pandemic was restricting OR to a home-based or local level.

Walking, together with outdoor exercise and at home exercise, were potentially the more mentioned activities that participants considered as their OR. One of the participants

mentioned “ I started going out on walks more. Since I stopped going to the gym and started working out at home instead, I have not really worked out outside, just walks basically” (ES). Someone else commented: “I more less spend the same time outside as before but walking much more” (HB). Many of the participants agreed to walking more.

There were also discussions on spending more time practising “safe activities”. During the second focus group, one of the participants commented that he had been going sailing and hiking more, since those types of activities had not been affected by the pandemic: “it’s a safe activity, you can still go hiking [...] you can go for a walk. I go sailing, it has not been affected by Covid, it feels like a safe activity, although lonely. But you cannot go to a museum or to a movie or theatre” (SA). A second participant second this opinion by saying: “being outdoors is safe, it has rarely been affected by the pandemic, I go fishing more often, I am pretty tired of my space, so I want to go out” (TW). One more comment regarding safe activities was related to bouldering: “I do not feel like going climbing anymore, even if it is allowed. I take more walks and work out at home” (AM). It was interesting to notice that OR was considered to be generally safer compared to indoor activities.

One of the foreigner participants who had spent the entire time of the pandemic in Sweden commented: “In Germany, I think most people moved out because there was really no way to do things indoors. Gyms and restaurants were closed. You also could not meet as much with friends, even going for a walk in a group of 4 or 5 people was not permitted. It was rather restricted even outdoors. In Sweden, I think the effects were rather little, and I did not see myself doing more outdoors than indoors” (SG), thus making a comparison of restrictions between their home country and the local restrictions and further reinforcing the idea of OR not being affected in Sweden. Other foreigners did not make this type of comparison.

5.1.2.1 Transformation from indoors to outdoors activities

One of the main findings during the FGs was getting to know if the participants had been able to transform their activities to an outdoors setting, due to not being able to do as much indoors (or vice versa), especially for those that reported staying home for work or studies. This theme was derived from the FG guide (Appendix 2),

The majority of the participants mentioned turning to outdoor exercise to avoid gyms or closed spaces. Outdoor gyms were pointed out several times across all FGs: “I started running and going to the outside gyms” (SF, AK), a comment repeated by several participants.

When asked about how they practiced social activities, the experiences were divided. A few participants stated they had either only been able to meet their families indoors, as mentioned here: “I have met my family indoors, as we always do” (AB), and “I meet my

closest family indoors” (FV) or “we are mostly indoors, my family is not very sportsy” (AM). However, for most participants it was the opposite: “my mom lives in Gothenburg, I have seen her pretty much the same amount but we have tried to meet outdoors” (SA) or “if I meet a relative, it would be outside” (FV) and “it’s a bit trickier with my grandparents, but we have been sitting outside in their garden, trying to have distance” (TW). The quotes show that outdoor spaces have been used a lot more to have family interactions but at the same time, it might seem as if meeting family members indoors is considered acceptable.

When it came to friendships, comments such as: “If I am going to meet friends, then we only see each other outside” (HB) or “I take walks with friends instead of going to a bar or the cinema” (FV) and “I think it’s becoming more that we are doing social activities outdoors, when I meet friends, I usually hang outside, more now during the pandemic than before” (FVC) were acknowledged by the rest of the participants. However, a different participant shared how his/her experience had been different: “When it comes to hanging out with other people it might be the other way around, so a lot of my outdoor social activities, like going to restaurants or like walking together to lunch restaurants, have been a lot less. I think I have spent more time indoors with other people, but more outdoors with myself, more training and working out in outdoor gyms” (AB). This last situation was the only one where outdoor areas were not used for social activities.

5.1.3 Enabling factors for outdoor recreation

A third relevant point to explore during the FGs was the basic needs participants required to actively engage in OR activities. Participants answered that in order to participate in outdoors recreation, they would consider weather as a main factor, with comments such as: “it’s more weather dependent” (AF), or “if it’s raining and its very windy outside, there’s a lot less probability that I would go out to a nature reserve and go hiking. So I think weather there is much more dependent for the behaviour” (AK), and “my recreation is very, very dependent on the weather” (ID). Supportive of this trend, another participant commented how she: “rather go and do exercise outdoors now as it would be like taking advantage of the good weather” (SF), a statement to which the rest of the participants agreed on.

The definition of “good weather” was divided between “sunny with warm temperatures, as mentioned by several participants: “sunny warm day” (FVC), “warm weather” (AB), “best for me is a sunny day” (AC); or colder but still sunny, as a few participants mentioned: “best for me is a sunny day with snow” (MR), “sunny fall days ” (FO) and “this winter when it was a lot colder, that actually made me go out more, this winter when it was a lot colder, that actually made me go out more” (AK). Rainy, cloudy, and windy, generally had negative comments attached to it (see 5.1.4.4).

The type of activities that were considered as ideal during OR included: “hiking in a forest with a tent” (SA), go swimming in different bodies of water, canoeing, sailing, “go out for fishing and trekking” (TW), skiing, playing different sports, and “starting campfires and making food” (FO). In contrast with specific activities, having a definite place in mind was not necessarily the main need, as more than one person mentioned: “The weather and the company are the most important things” (TW) and “The weather and the company is the most important factor for an ideal day” (FVC). The references of places were left open, with general mentions such as: “hiking in a forest” (FV), “spending a day at the beach” (AM), “close to the ocean” (AB) or “skiing up north” (MR). No specific places were mentioned.

5.1.4 Constraints for OR

By questioning the participants regarding their preferred practices of OR and things that are found to be generally irritating while in an outdoors environment, it was possible to identify, in the case of the Swedish FG, overcrowding, level of accessibility, parking and transport, and weather as main constraints in terms of activities in the outdoors.

5.1.4.1 Overcrowding

When discussing what kept the participants from spending time outdoors before Covid-19 and what generally caused them to avoid OR, overcrowding was mentioned in all three FGs.

All the participants agreed on overcrowding being a negative aspect that takes motivation and enjoyment out of any outdoors experience, even giving a sense of annoyance compared to that of a crowded shopping mall. As explained by one of the participants: “It gets really hard to find space everywhere, anything that’s cool and on google is basically overcrowded, almost certainly. Takes away the exact thing you are seeking in a lot of places” (SG). Similar comments were: “If you go outdoors and there are too many people, it is almost like going to a shopping mall. I do not like being alone, but too many people at the beach feels a bit weird” (AC) and “I try to find some places without many people ... you go out in the forest and there are hundred other people there and that does not feel as free to me” (FO). With these interventions, participants agreed that overcrowding takes away the feeling of freedom that being outdoors usually offers to them.

When talking about overcrowding during the pandemic, the main comments referred to big groups of people around the city and how urban OR could be cut short due to this reason: “even just walking down the street right now, it does not necessarily feel like there's a pandemic” (ES), “when you are outside in town, in Gothenburg, sometimes it does not even feel like a pandemic, and you just want to turn around and go home because there are too many people” (ND) and “we are trying to have distance, but I am

not sure it's really working, people tend to forget it after five minutes". Those were some of the opinions shared. From these comments, it was interesting to notice how the general perception was the belief that large groups of people were unconcerned about the pandemic.

5.1.4.2 Accessibility

When asked if accessibility, and distance to outdoor areas had been a limitation to practice OR during the pandemic, one of the participants, commented: "I did not have a car so then no way at all to get any further, I do not appreciate going for a 30-minute hike if I have to drive there for an hour, particularly when it's a nice day" (SG). This was agreed upon by the rest of the participants in that focus group. Similar comments were: "I used to live closer to a lake before, and that's when I would rather go on a jog in nature, but now I live in the middle of the city so it's not as convenient" (AB), and "I have not really been to any specific parks or stuff like that because I do not really live somewhere close up to something that's very long to walk through" (ES). As participants agreed to the comments, it became evident that convenience and closeness to OR areas seemed to be what participants considered to be the key points of accessibility.

5.1.4.3 Transport and Parking

The discussions around mobility showed two main trends, one coming from car users and a second one from participants whose ability to move depended on PT.

The few participants with access to private cars had some general complaints about having to modify schedules for the visits and avoid peak hours: "in the summer you just need to go either early or late, so not at the peak hour" (ND), and lack of parking spaces available in popular areas: "Slottskogen in a sunny Saturday, no parking at all" (AC). One participant (AC) explained further that: "when visiting popular bathing areas around Gothenburg, parking was challenging" and he "regretted it because it took over half an hour to find a place." There were not many participants with access to private cars, so there were no further discussions on the topic. However it still seems relevant to mention and consider as a point to keep in mind for future reference of outdoor management.

Observations on all FGs mentioned how the use of PT was out of the question during the pandemic, with comments such as: "and I do not think I have been in the tram at all for a year" (SG), "the only problem is that I do not have a car and I have to take PT if I want to do something, and that was the only limitation we had" (ND), and "I would rather take walk, even to just the office, instead of taking the tram" (FVC). This indicates PT regulations had a negative effect on the participation in OR for the participants that do not have access to private vehicles, thus restricting their options.

5.1.4.4 Weather

By far the biggest constraint for OR was bad weather, which included rain, wind, and darkness: “It’s annoying when it’s just starting to be sunny, and you get to the forest and everywhere is wet because there’s been rain for like two weeks before or when it’s still windy” (FO). In all three groups, comments such as: “it’s been winter, I did not want to go out. It has been very cold this winter, I do think it has affected as well. I would also say I would that I have more resistant friends, so if it's very rainy, some of them will not go outside” (AK), were brought up and confirmed by different persons such as: “I do not really go unless it's super nice weather” (ES); “I do not go out if it’s too cold or windy, if it's raining or stuff like that. And my dog does not like if it's cold weather either” (ID). It was also brought up how this also affects where participants travel as explained by two different users: “when it's not really, really good weather, just go outside to move. But when it's super nice weather, you can go to parks, natural reserves”(ES) and “weather decides where I go” (SA). Generally, this shows how the participants agree on stopping their OR if the weather is “bad” and how, where and what they did OR is strongly dependant on weather conditions, an observation also noted in the literature to be a factor before the pandemic.

5.1.5 Consideration of Safety

During the second FG, the issue of safety was brought up. It was then decided to include the topic in the third FG and to have a follow-up email with the participants of the first FG to know their opinions on the matter. This is the only topic that shows results by gender, as females and male participants share different perspectives on it.

In general, female participants reported higher concerns over safety, especially when alone or when it’s dark outside. Opinions such as: “as a girl, you do not really want to go for a walk too far or to some places especially alone or when it gets dark” (AM) or “I prefer running outdoors while it is light outside, not seeing clearly when you have headphones on is a bit scary” (SF) were quickly pointed out and agreed upon, not only by female participants but also males: “as long as there is light there is safety” (SG). It was also observed that female participants felt safer when they had company or if they were doing something outdoors locally, for example directly in their neighbourhoods. Regarding this, a participant mentioned: “I do not think I would have a problem with it if I were to go with somebody, no matter male or female” (SF), while another one followed up by commenting: “I live in a neighbourhood where everyone is very kind and there are a lot of children, which makes me feel safer” (MR). A male participant also agreed on this point: “about the outdoors feeling I do not think I do not separate from my friends if we are going somewhere because you never know” (AC). During the second focus group there was also a female participant that mentioned she does not think about safety around her neighbourhood but:

“if you go into the city, it can feel a bit more insecure in some areas” (FV). As most female participants, and some males, agreed on the previous comments, it is possible to infer that a well-known environment and appropriate urban infrastructure can, generally, improve odds of participating more actively in OR.

Male participants did not worry as much about the topic or were generally more concerned about their female partners perspective, with participants sharing comments such as: “I have strict orders from the wife not to be out walking too late due to risk of violence and robbery. When I do go out either way, I am often most nervous about she feeling mad about me getting in trouble, rather than the trouble itself. It feels less risky when I am with someone else” (ES), “When I have been outdoors, I have not really noticed anything by myself” (FO), and “it’s not something that I thought about, I do not hang out in the central parks. It might be something that I have not experienced” (SA). One comment shared during this discussion was: “it’s not too much for my sake, [...], girls are more in the risk zone of getting attacked or having a hard time protecting themselves, are more victims of sexual violence. My partner and her friends are less prone to hangout in certain green areas which affects how prone I am to hangout in these areas. It’s something that I have experienced and there are some areas very close to where I live where I really do not want to hangout outdoors” (AB). Observing the difference in these perspectives, from male and female participants was particularly interesting as gender had not been a key factor in any other topic of the FGs. The different viewpoints reflect a sense of unbalanced inclusivity in OR spaces.

Interestingly, the participants from the FGs that were foreigners compared Sweden to their home countries: “I was raised in Greece and the safest area of my home city is the most dangerous here” (AC), “I grew up in Morocco so for me [Sweden] it’s a very safe country, I feel very safe” (ND), thus agreeing on a perception of Sweden as a safer country that reduced their concerns on the topic.

5.1.6 Motivation requirements

Given that one of the research questions of the thesis related to potential repercussions for post-pandemic OR management strategies and policies, it was important to investigate what the participants thought would facilitate their OR practices. The necessities were consistent across the FGs.

Participants expressed different needs related to infrastructure and exercise facilities: “perhaps a map of wind shelters around the area and free toilets” (HB), “proper outdoor gyms” (AF), “more outdoor sports facilities, green fields” (AB), and “more parks and green areas in the city” (AM). This is a relevant point for implications of management policies.

Better security was likewise mentioned across the FGs. With a participant commenting: “if the city [Gothenburg] was safer, that’d obviously be way nicer to walk in the evenings

and nights” (ES), “better security, some parks feel a bit unsafe in the evening” (AB), and “Brunnsparken, for example, it’s been a non-safe area where they wanted better lightning and more police presence. Obviously, there is a problem, that people see, and maybe they need to do similar things in other parks” (SA). It is not entirely clear, from the participants comments if better security is equal to having a stronger police presence or if it goes more in line with better planning of the spaces.

General mentions of accessibility were also a persistent discussion: “better accessibility, how easy it is to go to a nature reserve, is there a direct bus or tram” (SA), with several participants agreeing on it being a main factor on the prospect of doing outdoor activities: “Having more access to walking or biking paths, instead of cars roads, makes you a bit keener on walking for instance outside, rather than taking the car somewhere” (AM) and “having nice paths to walk along – like the canal. It’s really nice on the Hising side but pretty shit on most of the side between Stenpiren and Älvsborgsbron – that could be made way nicer for walking” (ES). The importance of walking paths seemed higher as shown above, by a few participants, compared to the need of better PT connections.

Intriguingly, car users had different requirements, most not related to accessibility but to better communication of available “non crowded spaces” and easy access to supplies, as emphasized here: “Advertising spaces that exist in Gothenburg in both English and Swedish, advertising for outdoors activities and some kind of app where people can know if those places are crowded or not” (SG) and “It would be nice if you can just go somewhere and know that you will find water and snacks, instead of having to carry them from home” (AC). As previously stated, participants with access to private vehicles were a minority in the FGs. However it is noteworthy to mention how access to a car seems to facilitate the practice of OR a lot, as there were no concerns from the car users regarding to have better accessibility or more urban infrastructure.

5.1.7 Reaction towards the effects of the pandemic

There were no direct questions regarding specific reactions to the effect of the pandemic during the Swedish FGs. Yet, it was still possible to identify certain emotions and perceptions during the analysis of the data regarding participants’ situations that were shared, as stated by one of the participants: “you kind of lost all the regular routines, even going to the bus ... You just lost everything. I try to take more calls outside, sitting inside talking for an hour feels really depressing” (ES). Another participant emphasized: “even if I do not leave my apartment during the day, I sit in the balcony or simply take out the trash: “just the importance of not seeing the same walls all day makes a lot of difference” (SF). These type of comments show a sense of isolation and disruption of the participants’ routines, not only referring to OR but to normal daily activities.

The participants that were students commented on feeling conflicted about practising OR, and often feeling ineffective. As one participant explained: “I have been feeling, especially having like learning on distance, that I am constantly at home, in the end you feel like that sometimes pushes you to get out because you are sitting so much inside, but at the same time I also feel like because I am at home I procrastinate so much more and then I feel more stressed of going out and feeling ‘I have to stay home, I have to study more’, so it’s kind of both pushes and suppresses the feeling of go out sometimes” (AM). And another: “I live very close to an outdoor area, so principally I am there every week and weekend, but maybe I should not do that. I am doing that more now because I do not have so many more things, or other things to do on the weekends, So then probably I spend much more time in outdoors than I should have” (HB). This shows a sense of confusion and remorse over spending time outdoors while needing to study from home, and, interestingly, also vice versa.

5.1.8 Expectations for outdoor recreation post pandemic

The common reaction from the participants when asked about their expectations for their future practices of OR and general routines was generally positive. Most participants were convinced that routines will go back to normal fairly quickly and are unsure on whether they will continue new recreational habits they have developed during the pandemic. The discussion led to comments such as: “ many things will go back to the way things were” (ES) and “I think there are some new habits that have arisen to different people, and they will probably continue doing them, but most things will most likely go back to normal. I would say pretty quickly” (AF). This was agreed upon by other participants.

When asked directly if their new OR activities would continue or not, some participants expressed a desire to go back to their old habits and be able to travel further away to practice OR activities, for example: “I really miss biking, so I am looking forward to when I have places to go, so I can bike more” (HB), and “I am kind of bored with my place, so I am really looking forward to going other to places” (ID). Other participants express things such as: “I bought a bike, so I will have to continue, I really enjoy it” (AK), and “I will be having very similar habits. So very likely going to keep strolling” (ES), showing thus that they consider that the new habits they acquired during the pandemic will remain.

5.1.9 Key takeaways

The FGs participants shared extensively on their OR habits and the effects the pandemic brought to their daily routines. The changes to their recreation OR routines are noticeable, with adaptations in scale and types of activities. The conversations on their motivations and constrictions brought up interesting points worth exploring further and, their expectations for the post-pandemic future are, generally, positive. The key takeaways of the Swedish FGs are presented below:

- Participants reported restricting their OR to a local scale. Walking, outdoor exercise and use of outdoor gyms were popular activities.
- OR was considered safe compared to indoor activities as the possibility of practicing it remained unaffected during the pandemic.
- Social activities were dividing between meeting family both indoors and outdoors, while interactions with friends were made almost exclusively outdoors.
- Participation in OR was reported to be strongly tied to “good weather”
- Overcrowding, bad weather, accessibility, safety, transport, and parking were identified as constraint to practice OR.
- Overcrowding made participants look for emptier places as it was reported that having too many people around takes away the essential aspects of being outdoors: motivation and enjoyment. Overcrowding also conveyed a sensation of no pandemic.
- Participants that depend on PT avoided it during the pandemic, limiting their options and thus having a negative impact in their OR.
- Female participants had more concerns over safety compared to their male counterparts, which can be interpreted as a sense of unbalanced inclusivity in outdoor areas.
- Participants reported needing more outdoor infrastructure, outdoor exercise facilities and improvements on safety, in order to participate more actively in OR.
- The participants reported a general sense of isolation, as well as remorse over deciding to spend time outdoors or remain indoors.
- The general expectations for OR post-pandemic reported are the expectation of things going back to normal considerably fast, and a belief of new habits adopted during the pandemic continuing, while reconnecting with previous habits.

5.2 Mexican Focus groups

The Mexican FGs were held between February and March 2022. Participants were asked to think back to the period of 2020 to 2022.

To facilitate the presentation and analysis of the data in this section, the terms “discussions” or “sessions” will be used when referring to trends found across the MFGs and SSIs with Mexican participants.

5.2.1 Understanding of outdoor recreation

When asked about the meaning of OR, finding an idea that fit every participant was complicated. This discussion was made using AHA Slides (appendix 5) and the list of

words obtained went from physical ideas to emotions including: “nature”, “relaxation”, “tranquillity”, “movement” and “fun” being some of the most frequently mentioned.

After a few interventions from participants, it was clear that the definition of OR was not the same from user to user, and it changed depending on where they lived; as explained by a participant: “because the country is so big, due to size and population, the distances are different and this affects the way we see outdoor activities. In my city, I do not think we consider OR as going to an urban park, we think of it was going to nature, with no civilization. I also think in Mexico, we think of urban green areas as protected, OR is to be done in specific zones” (IM). One more user commented the following: “Is totally different in CDMX. Here we sometimes think we are outdoors if we are at an open mall grabbing a coffee. It hurts to accept it. They [the government] sold the idea of doing OR in semi open malls” (MA). This mismatch on how people understand OR was a constant in all FGs, with some many users even considering activities such as visiting museums or eating at restaurant with outdoor sitting as part of their OR, as one of the participants mentioned: “it would be going to a forest, or a field, but also a restaurant or coffee place that is not enclosed” (AC). This can be considered problematic, since participants might report levels of OR that are not reliable. This discussion became a determinant point on how to manage the discussions to truly focus on outdoor activities.

5.2.2 General pandemic trends

Mexican discussions started with reflections on changes in the OR routines of the participants. They were encouraged to think back to March 2020 and try to remember how things initially changed and how they developed as the pandemic progressed.

Many experiences were similar, with comments such as: “I was not going out at all. I started doing crafts. When the pandemic started, I had 6 months without school, I went to the psychologist, trying to not lose my head inside the house” (JL), “during the first months of fear and uncertainty when the streets were empty, my outdoor activities decreased a lot.” (DT), “I changed my routine completely, it was a 180 turn. Going to the forest or the square was completely restricted” (MA), “due to the pandemic I have changed my lifestyle to favour activities that are done inside the house, mostly related with technology” (MX), and “since the pandemic started and comparing the time I used to spend outdoors, it turned to nothing. Nobody could be outside; nobody could leave their house” (AJ). These types of experiences point out to a very intense decrease of OR, strongly related to the restrictions that the Mexican participants endured.

Many participants commented how having pets was positive throughout the pandemic, with experiences such as the following: “At the beginning of the pandemic, my moment of fresh air was walking my dog to the garage that has a bit of greenery, that was my OR. Now I take my dog out but very close to home, I only go to environments I feel are

controlled or with people I know” (AJ), “The only thing I did outdoor was walk my dog. I lived in a closed neighbourhood with wide streets, so I used to go out with the mask and walk the dog” (DT), and “I adopted a dog, it gave me the habit of taking him outside. In a way the pet helped me stop being sedentary” (AC). It can then be presumed that the role of pets was important, as they might have provided with a sense of relief during the period of isolation by providing the opportunity to spend time outdoors, even when limited.

Further, other participants pointed out the need to adapt due to recreation areas being closed: “before and during the pandemic I was not very used to being outdoors, I had to change because everything closed” (AC), “once lockdown started, I decided to have a healthier life, I started to exercise. I realized people really stopped going out, so I started to go out for walks, which I did not do before, and because green areas or parks were closed, I just went around my neighbourhood” (MB), “I prefer to stay nearby home, even if it’s a small place or a small linear park. At least it’s outdoors, there are trees, it’s not enclosed” (AJ), “I also now run on the street, not just in recreation areas, because some places were closed. It was a substitution” (DT). These types of experiences, with OR limited to a very local scale, can be directly correlated to the pandemic restrictions, and should be explored further when discussing repercussions for management strategies and policies (see section 6.3).

These changes in routines and adaptations were not the norm, as various participants reported: “the truth is I did not go out a lot before” (GO), “I have not spent more time outdoors, I have never been much keen to do things outdoors, I have always been more of staying inside” (SR), “it was not difficult for me as I have always been a person who is not affected by being at home” (PC), and “I am not a person that enjoys leaving the house a lot nor doing OR” (CR) are some examples. These experiences show a large tendency towards sedentarism.

When it came to social trends, participants explained situations such as: “it went from getting together at someone’s house to only having contact via social media” (MX), or “there’s a little paranoia about going out now, with me and my social circle” (MA). The experiences with close family were also explained by a few participants “my family and I would just take the car and drive around, but we never left the car” (JL), “I started to eat outdoors, so I could see my family, I would put the table outside in the garden” (AC) and “in my family, we did not go out. We followed the guidelines as close as we could” (IM). This, once more, reflects on the limitations that all the restrictions had. The disturbances affected not only OR routines but the normal social routines of the participants.

The last trend that was identifiable during the discussions was the consideration of others while practicing OR, or when deciding to take part in outdoor activities. Examples of opinions on the topic are: “the empathy that started with other people increased. People started to take the guidelines into account, to be more considerate. Even outdoors, we

wore the mask” (MA), “My mom was in a lot of distressed so to help her paranoia, I stopped doing things. I totally stopped going out” (JL), “there was a lot of controversy over which family members were careful and which were not” (AC), “you have to debate [with yourself] over your intentions of going out and the responsibility of taking care of others. You do not know if you are going to get sick or not” (DM), and “for me it was clear we needed to follow some rules, it was very stressful that people would not keep the distance, I still find it strange that a lot of people still wear the mask wrong. I was not living close to my parents so I could not get them sick. But we all had to go out at some point, and I was really trying not to pay attention to what other people were doing wrong” (DT). The statements can be interpreted that a certain sense of solidarity appeared during the pandemic, with a “take care of other by taking care of myself” approach adopted by the participants.

5.2.2.1 Transformation from indoor to outdoor activities

The main activity participants reported regarding moving indoor activities to outdoor settings was exercise. With mentions such as: “I started running, with the mask, which is pretty uncomfortable, but I prefer that over staying at home” (DT), “before I did not do any physical activity, and now I do it outdoors” (MB), “in my city, they [the authorities] started placing outdoor gyms but nobody was using them until the pandemic, because people could not go to the gym. For me, it was common to say I want to leave the house, but I cannot go to the gym, so I’ll go walk at the hill” (IM), to which a different participant agreed by commenting “the pandemic got me closer to outdoor leisure and to look for exercise outdoors” (AC). This can be related to the reported need to adapt to the available spaces explained in section 5.2.2, as participants had to turn to outdoor exercise in order to replace their normal indoor physical activities, by using urban furniture and moving towards natural environments.

However, the experience was divided between the participants. As some reported doing activities only indoors and feeling restricted even when it was possible to be outdoors: “the pandemic discouraged me, I prefer to be at home, it scares me to go out and be exposed to get infected” (MM), “There are few things that I have been able to adapt, like playing with my dog inside, I used to take him a lot more to the park before” (MX), “as the pandemic progressed, I did return to be outdoors but not at the same level than before. If I want to do outdoor activities it’s harder with the mask, so I just do it at home” (AJ), “I changed sports activities to indoor ones to not be static” (GR), and “I started doing exercise at home, I do not think I am going back to the gym even if they have the right conditions. Going to the forest, it’s a very limited thing. They have restrictions, but I feel like the dynamic changed a lot, you have to wear a mask. You have to be careful” (MA). These were comments other participants related to and experiences that align with the decrease of OR explained in section 5.2.2, showing thus a consistency in the participants’ recollections, and further implying negative impacts on the levels of OR.

5.2.3 Enabling factors for outdoor recreation

The discussion over the necessities for participants to be more active with OR brought up the need to disconnect and simply enjoy the landscape, as explained by different participants: “look at the environment and do nothing, just appreciate it” (JL), “going to nature and disconnect from cities. It is not very common in Mexico, but I used to do it a lot, it was a desi toxication” (DT), “observe things around me, it’s just about sharing the time and reflect, it gives me time to think” (AJ), and “to be relaxed and connect with nature” (VV). From this, it becomes clear that participants’ view on OR needs are related to be away from urban environments and adopt a slower pace when in nature.

In regards to activities that would be appreciate while practicing ORs, the discussions included an extensive list, with points such as: “just walking” (AJ, DT), “camping with friends” (GO, DT), “going to a forest” (JL, AC, VV), “going to a park” (SR), “going to a lake or a river” (LR), “hiking a hill” (GR), “a walk to mountainous areas” (AR), and “having a picnic” (MX, VV). Most activities relate to nature, confirming the implication of moving away from urban environments, with walking and visiting parks being the exceptions.

Good weather as a factor to facilitate OR was brought up, with participants explaining how “the ideal would be good weather, sunny, with vegetation” (MM), “if it’s too cold, that would stop me from going out” (AC) and “I need a sunny day, with a bit of shadow, not too warm if it’s in the city” (DT). Although weather was mentioned, it did not cause more detailed discussions in any of the FGs.

It was constantly repeated how the participants would need company to enjoy being outdoors: “my ideal day would be one with my family” (MX), “being in company of my friends or family” (CR), “honestly I do not go out much, but generally it would be with my family” (JL), “before the pandemic, what motivated me the most to do OR was spending time with my family and friends”, and “I would need people to second the idea, nobody wants to be outdoors anymore” (GO) are some of the many examples. This importance of having family to practice OR seems especially interesting and could be merely a Mexican cultural aspect, as it was brought up by participants from different backgrounds and living in different parts of the country.

5.2.4 Constraints for outdoor recreation

Mexican participants reported a long list of constraints. The ones presented in this section were the recurring ones: noise, overcrowding, time, accessibility, lack of transport, weather, and trash.

5.2.4.1 Noise

Noise was constantly mentioned as a constraint for OR, mostly as a disturbing factor. A participant expressed how “it’s hard to find a place at the beach where you can only listen

to the ocean. There is always a bar, or people with speakers, I do not like that excess of music in nature. Is like we are obsessed, like we are afraid of silence. That makes me avoid places” (DT). A few more comments regarding noise were: “noise is the most annoying for me” (AR), “everything that has been mentioned, lots of people, trash, lots of cars, but mostly noise” (GO) and “a lot of people in quiet places with strong noise” (GR). In all the discussions, the arguments on noise, quickly turned towards overcrowding.

5.2.4.2 Overcrowding

Across the discussions, most participants reported a general sense of discomfort caused by big crowds of people in outdoor areas, as explained here: “before and during the pandemic, it just makes me so uncomfortable to see people without the mask. If someone sneezes, it’s the worst. If it’s too crowded, I just wait until they leave” (MX) and “I did not want to be in overcrowded areas, I still do not trust people” (AJ), together with “I look for times that are not as crowded” (DT). This limitation appeared to be present since before the pandemic, as a few participants made comments such as: “it’s easier in smaller cities, there is less people. I either go out very early or in the evening to avoid meeting too many people” (IM), “it bothers me how crowding of people somewhere outdoors slows down activities and services” (PC), “I enjoy nature, I feel like it’s a good space to have during confinement, as long as there’s not a lot of people around” (VV) and “preferably, I would be outdoors with not too many people around me” (MM). Participants, as seen above, mentioned overcrowding as a reason to change their routines and places where they undertake OR. It becomes clear that overcrowding is a big determinant on where, and if, young Mexican adults participate in OR.

5.2.4.3 Time

One of the most mentioned constraints was time, referring to having to do lengthy journeys in order to get to any area suitable for OR and how the length of the journey could be discouraging. As explained by a few participants: “The problem is travelling long distances. Because of the city where I live, the highways tend to always be full. If I find myself in heavy traffic, I am usually disappointed when I get there” (PC), “sometimes it took so long, my mom used to say I should just go somewhere nicer, if I was going to take so long, I could go to a beach” (AC), “If I would want to take advantage of a nice place, a forest, the beach, I would need at least one or one and a half hour of trip. With the pandemic I just do not do it” (MB), and “in the city, if you want to do OR, it implies time and the stress of what do I have to do to get there. If it’s more than an hour, I am just going to be stressed, I am probably not even going to enjoy it.” (AJ), “I consider time a lot. Sometimes if I miss the time I am supposed to leave, I spend less time outdoors. I have to plan my entire day around the outdoor activities” (IM). Time as a constraint, in the way participants described it, can be directly related to accessibility.

5.2.4.3 Accessibility

Participants had a strong sense of limited accessibility to OR areas, both in close proximity and to further away spaces. A participant explained the following: “we have a lot of hills around, but you simple will not go hiking there, there are no paths, a lot is private property for farming and agriculture. It is very restrictive because there are few outdoor areas within the city and the ones that exist are not made for OR, they are just decorative” (IM). A few more participants explained: “the case of IM was so cool, because he has access and the ability to be there very fast. I have to travel about half an hour. Where I live, a lot is missing, you have to move to another district, in my neighbourhood it just does not exist” (MA), and “sadly, there is just no access to many places. And [during the pandemic] a lot of places closed so, even if you get there, it was just not possible” (MB). These reports on lack of OR areas with easy access is concerning, especially given that most participants agreed on the topic no matter their place of residence.

5.2.4.4 Lack of transport

Lack of private transport was an issue for many participants. For participants that depend on PT, participating in OR seemed complex and considered hard and requiring an extra effort, as stated here: “we used to take buses. It took very long and it was very restrictive, specially to small rural areas. Sometimes the bus goes only once a day, so we knew it was an effort” (AC), “In CDMX you have to take the bus or the metro, it is going to be crowded, with the pandemic is discouraging” (AJ), “I have to take PT and get there and then the same back, so I started to restrict myself. If I had a place closer or my way to move independently, I would be out in an open space or the forest a lot more” (MA), and “It’s hard, it takes about an hour and a half, or more. And buses are too full” (LR). These comments reflect how the participants felt exposed to the risk of getting sick during the pandemic due to overcrowding of PT, further reinforcing the limitation.

The participants with private vehicles found that it was generally easy to find an OR spot and this made participating in OR a lot more attractive: “now that we have a car, we can move easier, go to places that are closer and we also save time” (AC), “by car is not hard to get there, the hills are pretty close here” (GO), “fortunately, I have my own vehicle, so it’s very easy” (IM) or “most places are 30 minutes away from the city and they have easy access” (AR). Although not many participants reported to have access to a private car, this discussion was considered relevant as it displayed a disparity in accessibility due to socio-economic classes.

5.2.4.5 Weather

In section 5.2.3 it was mentioned that good weather, described as a sunny, was motivating to be outdoors. However, when the topic of constraints was discussed, this interpretation

of good and bad weather became a lot more subjective, with comments such as “if it’s too cold, that would stop me from going out” (AC) or “warm weather annoys me when outdoors” (CR). A participant explained in a more detailed way: “CDMX has template weather so I was walking a lot. When I moved to the south it was too warm so I stopped walking, is just not nice. And same in the north, the heat, it’s over 40 Celsius so you just do not walk, not even swim, you end up with horrible sunburns.” (DT). These different interpretations of weather are dependent on the different states in Mexico, as participants that commented on the topic were all from different places, and weather variations in the country are extensive.

5.2.4.6 Trash

During all FGs and individual SSIs, the cleanliness of the places was discussed. All users mentioned the presence of trash as one thing that discourages them from participating in OR. As participants commented: “nobody wants to be walking with trash around them or if no-one takes care of the space. It takes the attractiveness of doing any outdoor activity” (IM) and “it bothers me if it’s not taken care off and there is trash, a lot of zones in the forest are not being used because there is trash.” (MA). The rest of the participants agreed to these comments, making no further relevant remarks.

5.2.5 Consideration of Safety

A relevant breaking point when considering any OR was safety. Most participants, regardless of their gender, mentioned the lack of safety or the consideration of safety when planning any OR activities. Examples of these arguments are: “lack of safety is my main excuse. I used to play sports at a square and I got robbed” (NN), “having some references about the safety of the area is important” (GR), “I would go camping but now lot of those places are not as safe” (DT). Longer explanations were given by a few participants: “It’s about safety, think if we are not being able to read the space, people are going to think -if something happens, where do I run to. The forest I go to started to have a lot of crime, so people stopped going, and nobody was doing anything, People, like the runners, started organizing and working together in case of a crime” (MA) and “I think, the only obstacle would be safety. Because I used to live in a city famous for its shootings. I used to live in a closed neighbourhood but even if you wanted to go out after a certain time you could get mugged. Sometimes there was not enough light, if it was too dark, there is fear to go out. That definitely limits my time outdoors.” (AC). A female participant followed up the discussion by commenting: “unfortunately, there is a lot of street harassment, which bothers me the most given that when going to a place with my female friends there is the chance of being victims of harassment, it is impossible to avoid it completely” (MX). This situation is especially concerning given that participants not only

reported a sense of insecurity but some had been victims of crime, and thus participation in OR was not an option anymore.

5.2.6 Motivation requirements

Regarding needs to practice OR more actively, the requirements were different between almost all participants and trends could not be strongly identified.

A few comments were made in regards of improving the existing OR zones, for example: “if there is a path in the forest or the mountains, because not everyone can trek or mountaineering without paths. Not extremely well-made paths but zones to have calm hikes, is not like you want to fight nature everyday trying to get somewhere” (IM) and “there are big parks where a lot of activities can be done, and they are just not being used, they need more lighting, they need to be cleaned, it needs security. Being able to have a nice walk, being able to sit in the shadow, it can be natural elements, a rock, but somewhere to sit. We need some shadow, some shelter. Make the outdoor space comfortable and maintain it” (MA). These comments are relevant as they were the only ones directly connecting possible outdoor management implications with motivation.

However, the one requirement that was constantly mentioned across the session was lack of free time, for example: “I have the motivation, what’s missing sometimes is time to be able to spend more time outdoors more often” (AR), “I would need to have more available time” (LR), “I would need to have enough time to be able to take a trip to a secluded place, and that my family can also be with me” (PC). It was not further explained why the participants report a lack of time to practice OR, and although relevant, it beyond this thesis to explore this further.

5.2.7 Reaction towards the effects of the pandemic

As one of the intentions of the thesis is to discuss possible repercussions for future pandemic management policies, it was relevant to understand how the participants had felt throughout the pandemic, and the reasoning behind their reported changes in OR activities and behaviour.

Participants reported different negative emotions such as a sense of frustration and anxiety related to the pandemic and the limitations it has set on their OR practices, with comments such as: “I have felt frustrated, it was pretty hard, I experienced anxiety” (VV), “OR is vital. You do miss it a lot, it’s one of the best things, and being locked down it’s frustrating” (LR), “It has meant more anxiety. I enjoy the confinement, but also exploring and going out. The pandemic put limits on me due to safety, but I miss those moments of walking without a destination” (GR) and “not being able to do it [OR] makes me feel like I am in a bubble with limitations” (MX). It was also reported that many of the participants

felt fearful: “I did start to feel the tension of being locked down all of the time. That paranoia of saying if I go out, I am going to get infected. You start to feel that fear, that is what happened to me” (MB), “you could see people not following the restrictions, so I used to think - this is never going to end - I feel afraid, it scares me to go out and get sick” (DM). From the participant experiences, it is possible to infer that restrictions took a toll on their mental health, making them anxious and fearful, while also causing a sense of longing for recreation practices.

It was also agreed that it was simply necessary to follow the regulations: “regarding the restrictions, they are adequate to limit the propagation of the virus” (SR), “In fact I used to get mad because in CDMX there was not as many restrictions as in the rest of the countries. We took a lot of things lightly” (MM), “I did not feel like it was forced, I mean you understand it. Now it is an automatic thing, I think once everything is lifted it is going to be complicated to stop those new habits. I cannot imagine leaving my house without a mask” (AJ). This further reinforces the sense of solidarity reported at the end of section 5.2.2, and brings out a sense of understanding from the participants’ side in relation to the restrictions and the negative effects on their OR routines.

There was also new appreciation for OR as explained by a few of participants: “The issue, at the beginning, was that people reacted very negatively when they told us we could not go out. And as things worsen, that attitude changed. I think it is perfect that more people started doing OR, public spaces started to be used, it was a need because you could not go anywhere else” (IM), “it was really hard. What help was having this small space where I could do my exercise routine as close as what I used to do before the pandemic. And being outside, seeing the sky, feeling the wind, that help me a lot” (DM), and “it started in March 2020 and by October, my husband and I could not handle it anymore. It was us sharing everything, we did not have our own space, so we used to go out alone, it sounds mean, but it was because we were losing our personal space, [OR] it was giving us freedom back, to have our own thoughts” (AC). These arguments, arguably the most positive of the sessions, expressed how participants have a renewed perspective of the benefits of OR.

5.2.8 Expectations for outdoor recreation post pandemic

Common points were brought up when asking participants what they expect to happen once the pandemic is over. The expectation of Covid-19 as a motivator to continue to do OR was explained by a few of the participants: “It is sad because you start to lose your routine but I think it is good motivation to go outdoors and disconnect, enjoy nature (MX), “people love being outside, and after being lockdown for so long, I really think people now realize the importance of public space and doing OR” (MA), “it motivated me to go out more often for strolls in open natural environments.” (AR), “OR for local things it is now

part of my routine, walking, running, just walking my dog. It's going to be interesting to see what happens with the younger generations and how they deal with all of this later on" (AC). Thus, it would seem that the pandemic allowed participants to reconnect with the notion of OR due to the long period of confinement that Mexico had.

There were also mentions of uncertainty regarding the return to pre-pandemic routines: "being at home for me it's very comfortable, I do not have to take PT, so being locked down was not an issue. If I could stay working from home that would be perfect." (AJ), "the pandemic got me closer to outdoor leisure, and to look for exercise outdoors but it seems harder now, after being so long with the masks and such, it's harder to do all the things normally again." (AC), and "I cannot bring myself to go back. I used to go to yoga and spinning classes, and I stopped. I still do not feel like going back" (DT). This uncertainty is not surprising, as participants mention different adaptations (see 5.2.2) to the restrictions of the pandemic and as those adaptations became standard, pre-pandemic trends stopped being the norm.

5.2.9 Key takeaways

During the Mexican discussions, the participants shared in detail what disruptions their OR had, and the changes they had to go through due to the Covid-19 pandemic. Strong regulations set in place by the authorities to control the spread of the virus led to adaptation of OR routines and, at the same time, to a strong decrease of it. Key takeaways of the Mexican sessions are shown below:

- There was a noticeable decrease of OR related to the limiting restrictions set in place due to the pandemic.
- The lack of access to OR areas showed participants limited their OR to a local scale. A second trend was that of participants who reported little to no changes to their OR habits, as it was not part of their daily pre-pandemic routines.
- Pets played an important role in maintaining participants active and promoted OR participation.
- Social interactions were limited. The few interactions happened outdoors and were mostly with family.
- Exercise was considered the main activity that participants were able to transform from indoors to outdoors.
- In order to participate actively in OR, participants mentioned the need to travel to natural settings and have company with them. The importance of sharing OR experiences with family was likewise pointed out.
- It was possible to identify noise, overcrowding, time, accessibility, lack of transport, weather, and trash in OR zones as the main constraints to participate.

- Regardless of gender, the consideration of safety was seen as highly relevant when deciding where and when to do OR. Participants reported not only a sense of insecurity but some of them had been victims of crime, further restricting their OR.
- The need to increase security and improve the state of OR areas were mentioned as motivation points.
- Participants reported negative feelings as reactions to the pandemic and the restrictions set by the authorities. A sense of solidarity and consideration for the safety of others was also identified, as well as a new appreciation for OR and its benefits.
- Participants expect Covid-19 to continue to be an inspiration to continue practicing OR while reporting a sense of uncertainty over returning to their pre-pandemic routines.

6. Discussion

The aim of this thesis was to make a comparison between OR patterns of YAs (age 18-35) in Sweden and Mexico, before and during the Covid-19 pandemic, as well as to understand possible implications these findings could have for future pandemic management policies regarding this demographic group. In order to accomplish this aim, three research questions served as guide for the research:

- How were young adults' outdoor recreation habits before the Covid-19 pandemic in Mexico and in Sweden, and how were these habits affected by the pandemic?
- Which are the main discrepancies in outdoor recreation patterns between Mexico and Sweden, and what similarities between the two countries can be identified?
- What are the possible repercussions of said potential new habits for future pandemic management policies?

To facilitate the understanding of the results, this discussion is divided in three sections following the research questions of the thesis.

6.1 Outdoor recreation habits of young adults, and the effects of the pandemic.

Global reports point to a broad increase of OR from the general population. With examples from Venter et al. (2020), Warner (2022), and Thorpe (2020) showing elevated levels of participation in OR from the general population in their respective countries. Reports from Sweden, such as those from Samuelsson et al. (2020), Barton et al. (2020), Hedenborg et al. (2021) and Hansen et al. (2021), align with the reported global trends and show an intensification of outdoor activities across the country. Mexican reports, such as those from Valencia et al. (2020), Rodríguez & Mercado (2021), and Zamarripa et al. (2021), contrarily to the global reports, show a general decrease of OR caused by long periods of confinement as well as the closing of recreation facilities and restricted access to outdoor areas.

The results of the SFGs align better with the global trends of increased OR, although with its own limitations. Barton et al. (2020) reported Stockholm residents limited their OR to nearby areas, as a compensation for mobility recommendations. Aligned with this, the FGs with Swedish participants showed a trend of limiting OR to a local scale, as it was considered not viable to visit places and areas further away. This, due to the recommendations of avoiding PT, which many participants reported depending on and avoiding all throughout the pandemic. The report by Hansen et al. (2021) also confirms this dependency on PT. This, at the same time, goes in line with reports from Hedenborg et al. (2021), who found that OR generally became more local, with a few distant spots

showing some saturation of visitors. The Swedish FG participants did not report a significant decrease of OR, but a transformation of activities, turning mostly to outdoor sports and simple walking routines to fulfil their need for outdoor activities. This trend also aligns with the report from Hedenborg et al. (2021) on how physical activities transformed from indoors to outdoors.

Generally, Swedish participants considered OR as safe compared to other types of activities, based on how the option to practice outdoor activities had remained unaffected by the pandemic and the few recommendations placed on outdoor spaces (Hansen et al., 2021b). This interpretation goes in line with findings by Hansen et al. (2021), who report a general feeling of nature and outdoor life as a safer way to socialize. Further, due to OR having a safety tag attached to it, the FG participants reported doing activities such as sailing, fishing, or camping, during the few times they moved outside their local neighbourhood. The general understanding was that these types of activities would allow them to be outdoors while feeling safe, unlike visiting indoor spaces.

At the same time, Swedish participants criticised the big concentrations of people present in urban outdoor areas, as it, reportedly, made them reduce their OR time and it showed a sense of carelessness about the pandemic, which was perceived as concerning.

The scarce literature referring to OR of YAs, represented by the studies performed by Larson et al. (2021) in the United States, and that of UNICEF (2021) in Latin America, indicate that YAs reduced their practices of OR and physical activity during the pandemic. The Mexican situation aligns better with these reports than the Swedish one. To further emphasize this, Rodríguez and Mercado (2021) explain that Mexicans used to practice outdoor exercise regularly, but due to the pandemic, those practices transformed into sedentary activities. Likewise, during the SSI with Mexican expert Professor G. Mercado, he noted how before the pandemic, OR was perceptible because in most parks there were people doing physical activities.

Mexican participants reported during the different FGs and SSIs a considerable decrease of OR related to the limiting restrictions set in place to control the pandemic. This directly aligns with the reports from Rodríguez & Mercado (2021), where it is stated that people remained in long confinement, becoming less active. On that note, participants of the Mexican FGs and SSIs that tried to incorporate OR stated an adaptation process in which they limited their OR to a local scale due to the restricted access to outdoor spaces. Even when there was opportunity to visit recreational areas, the fear of exposure to the virus kept them from traveling, thus restricting any OR practices to local green areas and nearby parks. A third Mexican trend was identified due to some participants reporting little changes to their habits, as OR was not part of their pre-pandemic routines. This tendency to sedentarism from two of the trends was also reported by Forbes (2020), Zamarripa et al. (2021), and Rodríguez & Mercado (2021), who all show how, due to the pandemic,

many sedentary practices became the norm over practices of OR. The Mexican trends can also be related to the study by UNICEF (2021), which reported a decrease of OR in Latin America, and that of Larson et al. (2021) who reported on YAs in the United States. In line with the reports by Samuelsson et al. (2020), and Hansen et al. (2021) where nature was given a relevant social role, as people used it to meet safely during the pandemic, Swedish participants reported meeting friends and family, almost, exclusively outdoors, although again on a local scale. Especially when it came to meeting friends, Swedish participants reported taking walks together instead of visiting bars or restaurants. At the same time, and not previously reported in current available literature, the trend of meeting with close family indoors was considered acceptable. In contrast, Mexican participants pointed out how social interactions were limited to, mostly, family interactions that followed the social distancing restrictions. However, this does not align with the statements by Professor J. Zamarripa, who emphasized that outdoor activities generally were replaced by socializing with family and friends. On the contrary, Mexican FG participants made remarks indicating fear and paranoia from their social groups when they thought of being outdoors. This difference can be attributed to observations made in different parts of the country.

A trend mostly brought up in Mexico, with only a few Swedish participants agreeing, was the importance of pets during the pandemic⁸. Particularly dogs were seen as motivators to practice local OR during confinement, with participants reporting to walk their dogs as their only OR.

The observations of the sessions with YAs from Sweden and Mexico, and the previous analysis of the data from these sessions show clear discrepancies and similarities in OR practices between the two groups, which are explored in the following section.

6.2 Discrepancies and similarities in outdoor recreation patterns of young adults

The reports on the effects of the pandemic on the OR habits of the Swedish and Mexican YAs that participated in the discussions were unbalanced between the two groups. To begin with, it can be argued that the different experiences between the two countries, and the reactions of the participants, were linked to disparity in their countries' approaches to the pandemic. As Sweden based their entire pandemic strategy on recommendations, while Mexico adopted strong restrictions, this situation had different effects. As shown in the previous section, clear discrepancies regarding OR practices among the two groups

⁸ Upon identifying this trend, articles related to the topic were researched. Authors such as Applebaum et al. (2021), Edmond (2021), May (2021), Rajewski (2020) and Ratschen et al. (2021) explore the trend in detail.

during the pandemic were identified. However important similarities in their general OR activities and routines were also recognized and are presented further down this section. The identified main discrepancies were: 1) levels of OR, 2) socialisation practices during the pandemic and, 3) reactions to the pandemic and expectations for the future and post-pandemic times.

In terms of 1) levels of OR, Mexicans reported a strong decrease of OR, with many participants remaining at home for most of the time or, with very limited activities at a local scale. This was caused directly by the restricted access they had to outdoor facilities and recreation areas, described by Rodríguez and Mercado (2021), who explained how, as Mexican authorities closed recreational facilities, people stayed home, hence becoming less active and forced to change their general lifestyles. In contrast, the Swedish participants did not stop undertaking OR, but instead transformed it into local practices, taking advantage of nearby urban recreational areas, which aligns with the reports by Barton et al. (2020) and Hedenborg et al. (2021). The report of SCB (2022) also identified that YAs in Sweden generally increased their OR activities significantly in 2021. Similarly, the Swedish participants reported an increase in going outside for walks and outdoor exercise, which can be interpreted as part of the increment SCB shows.

The socialisation practices reported by Swedish participants showed a use of urban outdoor spaces to meet with friends and family, thus adding extra importance to those spaces. Hansen et al. (2021) reported this trend for the general Swedish population. However, the difference with previous reports was the consideration of meeting family members indoors as acceptable, based on the comments from the Swedish groups. This difference could mean participants considered meeting indoors with their families as safer than meeting their friends. In a different manner, Mexican participants reported that they had very limited contact with people outside their families, thus resorting to social media to maintain contact with their social circles. This can also be attributed to the strong restrictions that were set in place, which strongly supported remaining in quarantine and to socially isolate (Valencia et al., 2020). The trend further supports the findings of Zamarripa et al. (2021), who explain that social distancing and not being able to move freely caused an increment of time spent on social media to keep in touch.

The general reactions to the pandemic were also different between the Swedish and the Mexican groups. Swedes mentioned a general sense of isolation, disruption of daily routines and feeling of remorse and ineffectiveness over deciding between OR and studying/working remotely. However, there was no report of extreme negative reactions. Interpretations of this pattern cannot be made as the discussion was not extensive enough. Yet taking findings by Eklund et al. (2022) into account, it is possible to assume that the possibility of practicing OR was generally positive for the Swedish participants. Mexicans seemed more concerned about the pandemic and generally were overpowered

by negative emotions, such as frustration over not being able to participate in OR, anxiety and fear over the risk of getting the virus, all points emphasized by Valencia et al. (2020). At the same time, lockdowns, and thus limitations of OR, made Mexican FG participants gain a new appreciation of OR practices and a renewed perspective of the importance of spending time outdoors, thus in a way similar to thoughts expressed by the Swedish FG participants.

Regarding expectations for OR post-pandemic, Mexican participants mentioned that the pandemic was, and will continue to be, a motivator to promote practices of OR, as it allowed for a reconnection with the notion of spending time outdoors and thus brought up a new outdoor appreciation. There was also a reported sense of uncertainty over returning to their pre-pandemic routines, as their adaptations had turned into a new normality, and for many it seemed hard to imagine simply switching back to old routines. Opposite to this, Swedish participants reported that they expected things to go back to normal fast once the pandemic is over, and many also reported an intention of maintaining their new OR habits gained during the pandemic but expressed a desire to go back to their pre-pandemic routines and be able to travel to distant OR areas. This finding is in line with Hansen et al. (2021).

When it comes to similarities of OR patterns and habits between both groups of participants, it was possible to identify the following: 1) consideration of safety, 2) adaptation to local recreation, 3) enabling factors and constraints, and 4) understanding of OR.

At first glance, the understanding of OR by both groups of YAs may seem different. The Swedish FG groups immediately related practices of OR with natural environments, while the Mexican discussions showed a confusion over what exactly was included in OR. A deeper analysis confirmed that Mexican participants also considered OR as being in natural environments, disconnected from urban zones. The only disparity is that, in the Mexican context, activities such as going to open restaurants or semi open shopping malls were sometimes also interpreted as OR, a way of thinking that was not previously observed in the available literature and that could be related to the specific urban environments in which the participants that made the comments live in. This Mexican incongruency can be problematic and an important fact to consider in discussions of outdoor management strategies in times of crisis. At the same time, Swedish participants having a clearer idea of what OR represents could be a direct consequence of Sweden's strong OR policy, as mentioned in section 2.1 (folkhalsomyndigheten 2018), (Appendix 1) and the strong cultural links to OR that Sweden generally has.

Both groups of YAs reported an adaptation to local recreation habits due to the limitations caused by the pandemic. In Sweden, travelling with PT was not recommended (Public Health Agency, 2020), thus reducing possibilities to travel far and leading participants to

adapt their OR to a local scale. This aligns with the report by Hansen et al. (2021), who also found a larger dependency by youth on PT to access nature areas further away from home. Instead, participants turned to local outdoor exercises, walking, and running to replace their normal outdoor (and partially also indoor) activities. Similarly, in Mexico, as the restrictions included closing OR spaces (Rodríguez & Mercado, 2021), participants turned to green areas in close proximity to their neighbourhoods and nearby parks. The use of PT was equally avoided as it represented exposure to the virus and long travel time. In both cases, users that own cars or had access to private vehicles did not have issues with traveling longer distances.

In relation to enabling factors to practice OR, both groups of participants expressed their need for good weather conditions. They also discussed improvement of conditions in outdoor areas, such as adding lighting, shelters, and other means of safety, as well as access to walking paths (in both natural and urban settings), and probably most importantly, the opportunity to share outdoor experiences with friends and/or family. Reported constraints were also similar, with mentions of accessibility, transport, and overcrowding as typical restraints. These enabling factors and constraints are explored further in section 6.3 as they are directly connected to implications for management strategies and policies.

The consideration of safety, for both groups, influenced their decisions to take part in OR, and, although interpreted slightly differently, it shows a congruency in the behaviour of YAs, independently of their location. In Sweden, the views on safety were divided by gender, with females having specific concerns that males did not relate to. However, both genders agreed on the need of better lighting in outdoor areas to feel safer. The differences in the consideration of safety within the Swedish FGs can be interpreted as an unbalance in the sense of inclusivity and should be explored further in future discussions of outdoor management.

In Mexico, safety was a breaking point when considering participation in any OR activity. Reports of outdoor spaces becoming unsafe during the pandemic due to an increase in crime, first-hand contact with street harassment and robberies, and lack of sufficient public lighting, made the Mexican participants reconsider where and when to engage in outdoor activities. There were also reports of experienced recreationists self-organising to try to push back on crime, as the general sense was a lack of interest from local authorities to provide safety. From the experiences from both groups, it can be inferred that safety should be a priority for outdoor management, especially during times of crisis when people, as explained by Mateer et al (2021), turn to OR spaces to buffer the negative effects of a crisis time.

6.3 Repercussions for future pandemic management policies

As YAs' OR practices before and during the pandemic are not sufficiently covered by available literature (Hansen et al. 2021; Lovelock et al. 2016; Puhakka, 2021), and as the content of this thesis is somewhat new, there is not substantial support from previous studies to yet confirm many of the findings provided in this thesis. Therefore, more international comparison studies of habits before and after the pandemic, as well as further local research on YAs and their general OR habits and routines, are needed. Comparison with other demographic groups and their OR patterns should also be considered.

The approach taken to handle the pandemic by Sweden and Mexico were opposite of one another. As explained briefly in sections 2.3 and 2.4, Sweden opted for a strategy based on recommendations to the public, while Mexico adopted social distancing and lockdowns as some of the main restrictions. These approaches, based on the experiences of the participants of both groups, had different repercussions in their OR practices. These experiences and opinions are important and should be considered in future pandemic management strategies and policies, and in some cases, for general OR strategies and policies. Also, as demonstrated in this thesis, outdoor managers and planners should consider actively engaging in participative processes (workshops, FGs, dialogues...), not only in collecting visitor feedback, in order to have a constant communication with recreationists, set priorities based on their experiences, and plan accordingly.

As participants from the different FGs and SSIs adopted local scale activities to replace their OR activities, their dependency on PT became clear. In Sweden, PT was considered sufficient in the sense that it allowed access to areas further away from one's home. This was not the case in Mexico, where it was reported that busses were too full and caused overly long journeys. At the same time, PT was generally not considered safe during the pandemic in either of the groups, and the avoidance of it strengthened the use of locally available spaces in close proximity to home. From a health viewpoint, it can be debated that local recreation seems a safer option during times of crisis and thus, strategies to provide enough accessible urban recreational spaces should be prioritised by responsible planners. This would most likely also relief PT from overcrowding, in turn making it more attractive to use. Still, the need for better connections to outdoor areas in times of crisis should be re-considered and possibly revised based on conditions experienced during the pandemic.

Accessibility was reported as a limitation by both Swedish and Mexican OR. In the Swedish context, it was understood as places not being close enough, making it less convenient to visit. This situation reinforced the practices of local recreation among the Swedish participants, who, for that same reason, mentioned the need for better access to walking and cycling paths in urban environments. In the Mexican context, it referred to a

lack of nearby spaces to perform OR, as well as a lack of public areas available for OR, which as mentioned in section 2.3 have a ratio of 10.4 per every hundred thousand inhabitants, a relation that seems deeply insufficient. In Mexico, it led to the appropriation of the urban space and to the adaptation of it for OR purposes. The issues of accessibility can, generally, be improved by following the same recommendations made for PT policies and local urban spaces mentioned above. In a more specific manner, in order to deal with the lack of nearby OR areas, reported by both participant groups, repurposing spaces in the urban grid by changing the land use and changes in recreational infrastructure policies should be considered. In the case of Mexico and the lack of public land available for OR, it is strongly recommended to consider repurchase of land for recreational use programs to be set in place. Furthermore, in both the Swedish and Mexican case, urban planners and urban designers should consider focusing on creating adaptable spaces, easy to modify and adjust to different circumstances when faced with times of crisis. Hansen et al. (2021b) point out that long-term flexibility and adaptability in managers' work and strategies must be a priority to be able to handle fast changes caused by situations of crisis, which can work together with the suggestion of developing adaptable spaces.

Related to the previous points, evaluating the state of current OR spaces is also a necessary step. For instance, participants in both contexts expressed a need for better lighting, shelters, better access to walking paths, resting areas, and outdoor facilities, such as outdoor gyms and toilets. Redoing plans and securing funds to manage these aspects is an important first step to improve the current state of OR areas. Furthermore, considering the recommendation of social distancing, while redoing current OR zones, can be a good step towards facilitating OR in times of crisis. Hansen et al. (2021b) also commented on the need to rethink infrastructure during times of crisis, and potentially maintain any modifications continuously. Modifications such as more and/or broader walking paths, and generally improving infrastructure, can help redirect big groups of people, avoid crowding and, in the case of a new pandemic, possibly avoid contamination.

For the participants of both groups, one of the biggest limiting factors when undertaking OR was overcrowding, as explained in 6.2. Mexican participants reported feeling exposed to the pandemic in places with large concentrations of people, which led them to visit different places and change their schedules. Swedish participants reported that overcrowding in urban recreation areas and the sense of general carelessness over the pandemic led them to disengage in urban OR. This brings out two issues: there are not enough OR spaces available (especially in the Mexican case), and there is an extensive spread of people visiting the same places/areas (closer related to the Swedish case). Too many people can be a challenge for outdoor management in normal times, but during times of crisis, such as a pandemic, it represents an additional health risk. Efforts to offer

alternative outdoor spaces so people can practice OR while still following safety measures are therefore needed.

Additionally, a deeper analysis on recreationist behaviour is also needed in order to understand the reasons behind crowding trends in certain spaces. Based on this knowledge, planners and managers can begin to design the right approaches to redirect recreationists to more appropriate spaces. This work also implies reorganisation of planning strategies, as well redirection of attention to the problem among management authorities. Additionally, as reported in the Mexican sessions, overcrowding leads to excessive noise and trash left behind. To approach this issue, stronger conscientisation campaigns should be set in place, to teach the general public how to protect outdoor spaces. Similarly to this proposal, Beery et al. (2021) point out how outdoors ethics may need to be taught to new recreationists that might be less familiar with the concept.

The consideration of safety might represent a bigger question when refocusing management policies, as only so much can be done. Providing OR areas, in both natural and urban contexts, with adequate services and infrastructure can be part of the solution. The introduction of park rangers⁹ in natural reserves can further reinforce the sense of safety for recreationists. In the case of urban OR areas, performing security index studies to obtain a reliable perspective of the situation, and working in collaboration with managers, planners and governmental representatives, can create a strong enough foundation to introduce patrolling security where needed. Designing promotion programs with the intention of revitalising OR zones and attracting more recreationists can also bring new dynamics that push crime out of these zones. The issue of insecurity must be managed from several fronts working together and cannot be left unattended.

To sum up, the experiences shared by Swedish and Mexican participants, and their adaptation strategies to new realities of OR caused by the pandemic, should be considered as valuable management and planning lessons for post-pandemic times. Specifically, their experiences can help planners and OR managers in both countries to provide recreationists with inclusive and flexible spaces where the renewed appreciation for OR as a result of the pandemic can be put into practice. Most importantly perhaps, focusing on YAs' habits can help identify gaps in OR management strategies and policies that tend to be overlooked, both in academia and in normal planning and management practices.

⁹ "A person in charge of patrolling and maintaining a park and enforcing regulations" Oxford Dictionary (n/d).

6.3.1 Outdoor management priorities

Key recommendations from the previous section, which are considered in need of priority attention, are presented below. These suggestions complement the reported needs and limitations that the participants reported during the pandemic, many of which are also relevant for outdoors management in ordinary, non-crisis times:

- Collaboration and further research: due to the novelty of the topic, international comparisons of YAs in different geographic contexts should be explored more. Likewise, more comparisons with trends from other demographics, and additional local research should be a focus. This research must be focused on continuing to fill the gaps on YAs in OR literature.
- Active participatory processes: engaging with recreationists in participatory processes would bring benefits to the work of OR managers and planners. By having discussions with users of OR areas, it would be possible to identify issues and upcoming trends early, thus facilitating the design of strategies and policies, as well as their ability to adapt to rapidly changing situations.
- Promotion of local OR and establishment of adequate urban areas: one of the main reported effects of the Covid-19 pandemic was the adaptation to local OR, especially in urban contexts, which seemed to be the safer option. In order to be able to promote this type of recreation in future crisis situations, cities must prioritize enough adequate outdoor areas by repurposing zones in the urban grid. For post-pandemic management, this could also imply better accessibility, less overcrowding, and better distributions of visitors.
- Focus on safety: the issue of insecurity in the outdoors should be treated as a collaborative work between managers, researchers, and planners. Performing security index studies and developing strategies that can adapt to different areas must be considered as an important first step. Safety is also an issue that can be very particular to specific OR zones or spots, which reinforces the need for flexible policies on the matter.
- Education and communication: conscientisation and education campaigns should be designed to help recreationists understand the benefits of OR in times of crisis, and how to preserve the areas they intend to visit long-term.

Some of the general recommendations presented above are supported by contemporary literature, such as Beery et al. (2021) and Hansen et al. (2021b). Further analysis of existing outdoor management policies and programs from Sweden and Mexico is recommended in order to define and explore particular country specific strategies, changes, and improvements.

6.4 Contribution to the literature and links to human geography

By answering the research questions, this thesis contributes to increasing the knowledge of YAs' OR habits on a daily basis, and the type of changes they face, and adapt to, during times of crisis. The thesis is a first exploration of motivations, constraints, and the variety of activities YAs considered when deciding when and where to practice OR. Consequently, it helped fill in the previously reported knowledge gap.

The thesis remains relevant to human geography as it analyses how human-nature relations of YAs, in two different contexts, were transformed due to the Covid-19 pandemic. By comparing the Swedish and the Mexican situation both from a geographic and demographic point of view, it allowed to appreciate the differences and similarities experienced by the participants. Furthermore, by exploring the adaptation processes the Swedish and Mexican participants went through, the results showcased how their interactions with their surrounding environment changed. In other words, it gave insights into YAs' OR habits and the effects the Covid-19 pandemic caused on the interactions of YAs with their immediate environment, which is a new, but relevant theme within human geography.

7. Conclusion

The study has concluded that outdoor recreation has been an important practice for young adults during the Covid-19 pandemic – both in Mexico, a country that imposed strong restrictive guidelines, and Sweden, a country that gave recommendations to their citizens. In both countries, the participants of this study's focus groups and semi-structured interviews saw benefits in spending time outdoors, even when they had to limit their activities to a local scale. It became clear that functional adaptation of many spaces took place with social activities moving outdoors and the use of non-recreational spaces for outdoor recreation increasing.

In both countries, similar enabling factors as well as the importance of safety, dependence on public transport, and rejection of overcrowded spaces emerged. It was unexpected that young adults in both countries largely pointed out these same factors, given the different approaches each country took during the pandemic.

One big difference between the groups was that Mexican participants reported a large decrease in outdoor recreation due to a lack of adequate, accessible outdoor recreation areas, whereas Swedish participants reported a shift to local outdoor recreation areas in an effort to avoid public transport. The Mexican participants further reported feelings of anxiety and fear due to the pandemic, which reinforced their likelihood to stay home whilst also increasing their appreciation for outdoor recreation. Interestingly, these negative feelings were not reported by Swedish participants and are therefore likely connected to the way the pandemic was communicated and handled by the respective governments.

As discussed towards the end of the thesis, the insights provided in the thesis work should be taken into account in future pandemic management policies, where they should serve as a motivation for general improvements of outdoor recreation areas, for young adults and the general public alike.

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Appendix 1. Outdoor Recreation Policies

Appendix 1.1 Sweden's 10 objectives for outdoor recreation policy.

<https://www.naturvardsverket.se/en/topics/outdoor-recreation/ten-objectives-for-outdoor-recreation-policy/>

1. Accessible nature for everyone
2. Strong commitment and collaboration for outdoor recreation
3. Right of public access (Allemansrätten)
4. Access to nature for outdoor recreation
5. Attractive urban nature
6. Sustainable regional growth and rural development
7. Protected areas as a resource for outdoor recreation
8. A rich range of outdoor recreation in schools
9. Outdoor recreation for good public health
10. Good knowledge about outdoor recreation

Appendix 1.2 Mexico's National Physical Activity Strategy

<https://www.gob.mx/conade/acciones-y-programas/muevete-en-30-30m?state=published>

1. "Muévete Escolar" – Scholar Get Moving
2. "Muévete Laboral" – Work Get moving
3. "Muévete" Población Abierta "Tú zona Muévete". – "Get Moving" Open Population "Your zone, get moving":
"Your zone, get moving":
Promote the use of public spaces in the community for the practice of physical and recreational activities on a regular basis, aimed at family and social integration.
"Mass Physical Activation"
Promotion of the practice of physical activities through the use of public spaces for mass events.
4. "National Network of Communities on the Move

Appendix 2. Focus group guide

Presentation from Jessica, what the focus group is about and how the conversation will go.

Introduction of participants.

Define outdoor activities to get into the topic

- Outdoor activities have been defined as those activities that:

are undertaken outside the confines of buildings (i.e., in the outdoors); and can be undertaken without the existence of any built facility or infrastructure; and may require large areas of land, water and/or air; and may require outdoor areas of predominantly unmodified natural landscape.

Can happen in Green urban areas or man-made environments (parks, gardens, urban recreational areas)

Define outdoor recreation

· Physical activity in outdoors or natural settings, which provides opportunities to connect individually, in small groups or as a community to the outdoor environment.

· experiences that derive from recreation activities in and depending on the natural environment

· Outdoor recreation includes activities that happen outdoors in an urban and man-made environment as well as those activities traditionally associated with the natural environment.

Questions

1. What does being outdoors mean to you? *USE AHASLIDES*
2. During this past year of the pandemic, have you spent more time outdoors? Have you done things outdoors you usually do indoors?
3. What kinds of indoor activities have been able to transform into outdoor activities?
4. How do you usually spend your free time, indoors or outdoors?
5. What does your ideal day outdoors look like? Is it a sunny day by a lake/the ocean, or a cold winter day with skiing?
6. What makes it a good day - the company or the location?
7. Has the pandemic made you try out new outdoor activities?
8. Is there something that annoys you while being outdoors? Trash, people not holding distance, not enough parking.
9. Do you go to different places or try to go to the same place? (Same park, same natural reserve... or different ones?)
10. What are the places you go to?
11. What affects your decision of location? Weather, time of transportation, smooth transportation (like less changes of busses/trams), curiosity, knowing what you get
12. How do you get to these places? Car, bike, walk, PT?
13. Do you experience difficulties to get to the places you want to go to, for example lack of PT, no bike roads, far to walk from the parking to the place you visit?
14. How would you like to see changes in transportation? Increased number of routes for buses, trams, or more parking lots?
15. Does the time of your travelling affect your expectations if you go to a new place?

16. If we could go to different authorities and ask for things that could motivate you to go outdoors more often, what would your requirements be?
17. Do you consider that safety/feeling of safety around your neighbourhood is a factor that either keeps you from spending time outdoors or that allows you to be outside? And why?

Appendix 2.1. Online recruiting form – Swedish focus groups

- For social media posts:

Hi everyone!

My teammate and I have a big favour to ask!

As part of one of our courses within the Master's in Geography at GU, we are having a 1 hour zoom conversation about outdoor activities that young adults (18-35 yrs. old) have been doing during the past year and how the pandemic has influenced those activities. We have two day available to do the dialogue: Thursday 22nd or Monday 26th, from 17:00-18:00.

It would be really helpful if you guys could join us (we do not want to fail our course!)

The link to register is here: <https://forms.gle/vj7iSbM9iVi4BMe4A>

Questions:

1. Name
2. Age (18-35)
3. What describes you best: I am a student, I am currently working, I am currently working and studying, I am currently not working or studying, other.
4. Area of Gothenburg you live in
5. Email
6. When would you like to join?

Appendix 2.2. recruitment Survey – Mexican focus groups

- For questionnaire and results, visit this link:
<https://www.questionpro.com/t/7BnRMcZquDN>

Appendix 2.3. Modified questions for Mexican focus group guide

- What kind of activities did you do outside that you now do inside?
- How quickly did you accept the restrictions?
- How would your ideal outdoors day would look like?
- When you used to do/or do outdoor recreation, do you go to the same places? Where do you usually go?
- Is it hard to get to those places? How far are they?
- Does the time that it takes to get to the places keep you from going? Does it affect your expectations of the place?

- How have you felt during the pandemic and the lockdown? Do you think having outdoor recreation would have helped? What does it mean to you to be able to go out? - OR DEPENDING ON ANSWERS: During the pandemic, which meaning has it had to be able to do outdoor recreation? How has not being able to go out felt?
- What do you think it will happen in the future? Will do you more outdoor recreation?

Appendix 2.4. Extra questions for interviews with Mexican individuals

- A few people have asked that not being able to do outdoor recreation caused higher levels of anxiety and even depression. In your case, you mention that not being able to do outdoor recreation has not had any special or significant meaning. Why do you think that's the case?
- What activities keep you from doing outdoor recreation?
- Why was it easy to accept the restrictions?
- What is your view on the decision of limiting access to parks and recreative areas due to the "red traffic light" and the levels of restrictions applied in Mexico?
- In Sweden, the government decided to keep the possibility of doing outdoor recreation. In your experience as a doctor, do you think a similar policy would have been positive for Mexico?
- As an expert in Medicine, do you think there is any type of effect caused by doing outdoor recreation?

Appendix 2.6 Selective transcript - extra questions from personal interviews

- A few people have asked that not being able to do outdoor recreation caused higher levels of anxiety and even depression. In your case, you mention that not being able to do outdoor recreation has not had any special or significant meaning. Why do you think that's the case?

SR - I have never been much keen to do things outdoors, I have always been more of staying inside

- What activities avoid you from doing outdoor recreation?

SR - Work and school

- Why was it easy to adopt the restrictions?

SR - Because I have never been too keen to have a lot of contact with people outdoors

- What is your view on the decision of limiting access to parks and recreation areas due to the "red traffic light" and the levels of restrictions applied in Mexico?

SR - I think it's adequate to limit the propagation of the virus, although the levels of restriction applied are not very real, they get modified according to what benefits the government

- In Sweden, the government decided to keep the possibility of doing outdoor recreation. In your experience as a doctor, do you think a similar policy would have been positive for Mexico?

SR - Yes, it could have been positive if implemented correctly.

- As an expert in Medicine, do you think there is any type of effect caused by doing outdoor recreation?

SR - Yes, It helps to improve the state of being of people by decreasing stress caused by work and other obligations

Appendix 3. Guide for interviews with academics/experts

Disclaimer: the answers given during this interview will be used as a reference for the thesis report with the preliminary name: Outdoor recreation patterns and the impacts of COVID-19. A comparison between Mexico and Sweden. Answers will be translated to English.

Questions

Name:

Occupation:

Description of research area of interest:

Pre COVID-19 trends in young adults.

In your experience:

- How was the general behaviour of Mexicans/Swedes regarding outdoor recreation activities? According to your experience, how often would people do any outdoor activities?
- In general, which demographic groups (by age/gender) tend to/used to be the most active and which groups were the least active ones?
- What type of outdoor physical activities used to be done more frequently before the pandemic and how has this been affected by COVID-19? Has it remained the same? Have these activities been replaced by others?
- Which places were used the most? Has this change due to the pandemic?¿
- In regard to green urban areas, where have they been used to do outdoor recreation activities? What type of activities?
- The focus group of this study are young adults. ¿Do you have any information regarding the trends that this demographic groups used to follow in regard to outdoor recreation activities before the pandemic

Trends due to the impact of COVID-19 in young adults

In your experience:

- Have Mexican/Swedish young adults, in general, increased, decreased, or maintained their levels of outdoor recreation? Which activities seem to have replaced outdoor recreation?
- Who has been the most affected, females or males?
- Which tendencies have you observed in relation to the type of activities that are happening outdoors?
- If the trend is not being able to do outdoor recreation, do you have any information regarding which activities have been done more often during confinement?
- Which restrictions do you consider affected the levels of outdoor recreation the most?

To finish:

(In Mexico there was a “traffic light” system to know which level of restriction each place was in, red being the highest)

- What is your point of view regarding the decision of limiting Access to parks and recreational areas during the “red light” and the restriction levels applied in Mexico
- Do you think that the traffic lights system was effective in keeping people in confinement?
- In Sweden, the government decided to keep the possibility of outdoor recreation and not limit access to parks, natural reserves, or green areas. In your experience, a similar policy could more time outdoors during the pandemic?

Appendix 3.1 Interview with Dr. Gilberto Mercado Mercado

Occupation: Professor / Researcher

Research area: Food Sciences

Pre COVID-19 trends in young adults.

In your experience:

- How was the general behaviour of Mexicans/Swedes regarding outdoor recreation activities? According to your experience, how often would people do any outdoor activities?

Before the pandemic, outdoor recreation was noticeable because in most of the parks there were people doing some sort of physical activity (running, rope jumping, general exercise, meditation, walking, different sports like football, American football, basketball, tennis), and cycling. One would find people in outdoor clubs, swimming centres or doing team training. Mostly during the early morning (6 to 9 am) or evenings (6 to 9 pm).

- In general, which demographic groups (by age/gender) tend to/used to be the most active and which groups were the least active ones?

It was very common to see young people playing sports games and tournaments at the parks on the weekends. Cycling and skating was more common from Tuesday to Saturday. Parks were always full of young people and children. Young adults were usually found more in gyms or in sports clubs during the evenings.

Children (6-10 years) and young people (13-18 years) were the most active. Young adults (25 - 38 years) were the least active, mostly due to work.

- What type of outdoor physical activities used to be done more frequently before the pandemic and how has this been affected by COVID-19?

Running, walking, cycling, outdoor gym training, skateboarding.

- Has it remained the same? Have these activities been replaced by others?

It has slowly restarted, but mostly running and walking

- Which places were used the most? Has this changed due to the pandemic?

With the pandemic we can see that young people now spend more time indoors at malls, cinemas, restaurants.

- In regard to green urban areas, where have they been used to do outdoor recreation activities? What type of activities?

Yes, for training such as Zumba or aerobics.

- The focus group of this study are young adults. ¿Do you have any information regarding the trends that these demographic groups used to follow in regard to outdoor recreation activities before the pandemic? Yes

Trends due to the impact of COVID-19 in young adults

In your experience:

- Have Mexican/Swedish young adults, in general, increased, decreased, or maintained their levels of outdoor recreation? Which activities seem to have replaced outdoor recreation?

It has decreased. During the pandemic we saw a notorious dispossession of outdoor activities, empty parks, there was nothing going on. It all got replaced by gatherings with friends and family at home.

- Who has been the most affected, females or males?

Males

- Which tendencies have you observed in relation to the type of activities that are happening outdoors?

We are starting to notice that people go out during the mornings or around sunset, to run, do aerobics, go for walks, we see more people at the squares.

- If the trend is not being able to do outdoor recreation, do you have any information regarding which activities have been done more often during confinement?

Most people prefer to be laying down or sitting in front of a monitor or cell phone, sleeping, or doing chores around the house.

- Which restrictions do you consider affected the levels of outdoor recreation the most?

In Mexico, restrictions happened with an epidemiologic traffic light system, where red is null activity, orange is 30%, yellow is 50-70% and green is 100%. Due to this, the restrictions were different in each state. On top of that, some recreational centres have no access or could only be accessed during a certain time with a time limit for activities.

To finish:

(In Mexico there was a “traffic light” system to know which level of restriction each place was in, red being the highest)

- What is your point of view regarding the decision of limiting Access to parks and recreational areas during the “red light” and the restriction levels applied in Mexico?

Decisions have been taken without properly analysing the health situation of people, since it brought up psychological and eating issues in most people. Restrictions lead to changes in weight, depression, anxiety, cardiac effects, amongst others. Due to this, it is necessary to work on a strategic plan regarding how to handle access to parks and recreational areas to avoid health issues to be triggered.

- Do you think that the traffic lights system was effective in keeping people in confinement?

Yes

- In Sweden, the government decided to keep the possibility of outdoor recreation and not limit access to parks, natural reserves, or green areas. In your experience, a similar policy could have motivated Mexicans to spend more time outdoors during the pandemic?

Yes, confinement has led to people not fully following the government's restrictions and doing outdoor activities in a clandestine way to avoid staying home.

Appendix 3.2 Interview with Dr. Jorge Isabel Zamarripa Rivera

Occupation: Professor / Researcher. Universidad Autónoma de Nuevo León

Research area: Physical- sports activities and life quality/living standards

Pre COVID-19 trends in young adults.

In your experience:

- How was the general behaviour of Mexicans/Swedes regarding outdoor recreation activities? According to your experience, how often would people do any outdoor activities?

- Based on the results of studies I have conducted (Zamarripa, 2010), a very small proportion of the inhabitants of Monterrey, NL. (24%) performed physical exercise that met the minimum criteria of frequency, duration and intensity established by the WHO, that is, at least 30 minutes per session, with a frequency of at least three times per week and moderate or vigorous intensity. Subsequently, in more recent studies (Zamarripa et al., 2018), the prevalence complying with the above increased to 43.9%. In addition to the above, the results of a recently published study (Zamarripa et al., 2021) indicate that the number of hours spent in light, moderate and vigorous intensity physical activities was higher before than during confinement by Covid-19. With respect to sedentary behaviours, there was an increase during confinement in the number of hours people spent using technology (television, computer, cell phone, etc.) for leisure purposes.

- In general, which demographic groups (by age/gender) tend to/used to be the most active and which groups were the least active ones?

With respect to Zamarripa's study (2010), the following can be concluded:

Being male, being between 15 and 29 years of age and having completed university studies are the main characteristics of physically active people in Monterrey.

Being a woman, being between 45 and 59 years old and having completed high school are the main characteristics of the regiomontanos who abandoned physical activity.

Being a woman, being 60 years old or older, and not having an education are the main characteristics of the people from Monterrey who have never been physically active.

Regarding the study by Zamarripa et al. (2021), men spent more time doing light, moderate, strenuous physical activities, as well as a higher weekly leisure time activity score than women. The same happened with the group aged 18 to 37 years compared to the rest of the age groups in mild and moderate physical activities, as well as to the weekly leisure time activity score.

- The focus group of this study are young adults. ¿Do you have any information regarding the trends that these demographic groups used to follow in regard to outdoor recreation activities before the pandemic?

The number of hours dedicated to physical activities of light, moderate and vigorous intensity outdoors was greater than before during the pandemic. In regard to sedentary

behaviours, there was an increase during confinement in the number of hours people spent using technology for leisure purposes.

Trends due to the impact of COVID-19 in young adults

In your experience:

- Have Mexican/Swedish young adults, in general, increased, decreased, or maintained their levels of outdoor recreation?

The period of confinement as a strategy to prevent the spread of COVID-19 in Mexico affected people's level of physical exercise, since light, moderate and strenuous physical activities decreased during that period.

- Which restrictions do you consider affected the levels of outdoor recreation the most?

Confinement

To finish:

(In Mexico there was a “traffic light” system to know which level of restriction each place was in, red being the highest)

- What is your point of view regarding the decision of limiting Access to parks and recreational areas during the “red light” and the restriction levels applied in Mexico?

I particularly believe that this was a good decision because even if social distancing had been maintained, the risk of becoming infected would remain through contact with facilities, devices or implements that other infected people could have infected.

- In Sweden, the government decided to keep the possibility of outdoor recreation and not limit access to parks, natural reserves, or green areas. In your experience, a similar policy could have motivated Mexicans to spend more time outdoors during the pandemic?

I do not think so, because culturally we are different, in Mexico there is still not such a widespread culture about taking care of the body through physical exercise/recreation as there is in most European countries, I think it is more a question of culture than of access to facilities.

Appendix 4. Selective transcripts

Appendix 4.1- Focus groups Sweden

What does being outdoors mean to you?

“Freedom, I grew up in the northern part of Sweden and every time I was sent out, I just went to the woods and always felt free like I did not have any obligations or anything, it’s a kind of free feeling, just relaxing and no obligation when you are out, when you are hiking with friends is the same thing for me” - FO

“To explore new places that I have not been, and that is refreshing for my brain, I am always interested in seeing places where I have never been, so I think that’s something I enjoy” – ND

During this past year of the pandemic, have you spent more time outdoors? Have you done things outdoors you usually do indoors?

“I mean, I, for one, have been trying to walk more, so you kind of lost all the, you know, the regular routines before you like, even going to the bus and then the bus to the office, all of this kind of stuff. You just lost everything. So I kind of saw that if I do not do anything special, then I might take a thousand five hundred steps per day or something so then I was like: OK, I have to do something about that. So it started to go out way more on the way, more walks. But yeah, you know, since I stopped going to the gym and started working out at home instead and but I have not really worked out outside and just walk basically” - ES

“Yeah, I have also been walking much more than before, before I biked too, I took my bike to school every day. So that was my outgoing then. But now I do not need to bike anymore. So now I try to walk, take a walk every day and um. And so I think more or less spend the same time outside in my daily life as before but in another way because I am walking now” - HB

“Yeah, I, I have not really changed that much, so I was not working that much outside before the pandemic and I am still not, I am still working out at the gym. Working as regular so is not that big of a change for me... I mean, I am still outside from time to time where I like to take a walk in the evening, but that I did before as well. So it's not super big of this difference. And then we are going out to the gym and working in general. It's just mandatory for me. So I do not really have a choice.” – AF

“Yeah, so I think my outdoor life has been very ineffective and affected in many ways, but like in my everyday live, like for sure, like I do not have to travel so much. I am staying at home studying, but instead of going by bus and so on, when I am actually going somewhere, I just started to bike everywhere. And basically, I learn that it's possible and it's very effective to bike. I did it also like before, but now I do it everywhere I go, like around the whole city. So even like further trips as well. So I think that changed. But for me it's the same with like walking. I but I think I walk less now. I am trying to like to go on walks. But before I think I would walk like a lot, but now I do not. So I have to try to keep up with my everyday walking. But yeah, I am biking instead. I bought my first like at like faster bike. So that's when I bought it also during the pandemic”- AK

“Before the pandemic, we could take the PT and go to other places than the local. But now we are more locally based and more experiencing the local area every day. So I think that's the biggest change that had happened in my life, that I am more home based, or I do not travel that far anymore but have not changed my pattern of going out that much in other ways.” – ID

“I used to go out a lot, go hiking, go sailing, quite a lot even before the pandemic but I think it's even more this last year. And it's mostly related to what TW wrote earlier that it's a safe activity, it has not really been affected by the pandemic, you can still go out hiking, you can go for a walk, you can go sailing. But you cannot like to go to museum or to a movie or theatre or something.” So has it increased your outdoor activities? “Yeah, it has.” SF

FV: I guess it has been pretty similar, I still go on runs, and to the gyms. Has not changed that much.

TW: was doing outdoor activities quite frequently before the pandemic, he is pretty tired of his space on the weekend, so he wants to go out. He goes fishing more often. If he has to wait for a tram, in busy hours he rather walk part of the way. “A little bit less lazy”

“The only problem is that I do not have a car and I have to take PT if I want to do something, other than that my friend has a car and sometimes he picks me up and we go somewhere. The limitations that I really felt is the travel one because that's the only limitation that we as Swedish residents had, in terms of transportation. But to go out, to go to hikes or go next to the sea, it has been very normal for me” – ND

What kinds of indoor activities have been able to transform into outdoor activities?

“Yeah, I think for me, one thing that I have been doing is trying to take way more calls outside. So whether it's with friends or just anyone basically just trying to do that while walking instead of just sitting in it, like sitting inside talking for an hour, it feels really depressing. But if you are like out walking, it can be really good. And especially with air pods or something, it's super nice. So that's at least one thing that cannot really think of anything else. I cannot really think of anything either.” - ES

“I cannot really think of anything either, sadly, I am trying but I cannot” – AF.

“I think it's more difficult now. In the beginning, I started to work out a lot more outside, like running and going to the outside gyms and so on, and I have started now again, but it's been winter. So then I did not want to go out. It's been very cold this winter, so I think that has affected as well.” – AK

FVC: “I think it's become more that we are doing social activities when I meet friends, you usually hang outside now during the pandemic than before. Otherwise for me I usually like to go outside and take walks and stuff, in that way I have not changed much.” Take walks around the house, or in parks.

AB: “I have definitely been working out more outdoors than in the gym, so that's a big, that affected me mostly. When it comes to hanging out with other people it might be the other way around, so a lot of my outdoor social activities, like going to restaurants or like walking together to lunch restaurants, have been a lot less. I think I have spent more time indoors with other people, but more outdoors with myself, more training and working out in outdoor gyms.”

AM: I think it has changed a bit. My activity is bouldering. She took more walks and working out at home. She does not feel the need any more to go climbing, even though it's possible. She moved here in the pandemic. The walking has increased since she has been here.

FV: Take a walk with friends instead of going to a bar or the cinema.

Anton: "It has not really affected too much. There have been some cancelled events that I would have spent time with my family but I did not. And we have met indoors. I have not met my grandmother; she has been in quarantine. "I have met my family indoors, as we always do."

AM: have not seen her family that much. She went home during Christmas. They were mostly inside since her family is not very sportsy.

SA: "my mom lives here in Gothenburg, so I have seen her pretty much the same amount as last years. But we have tried to meet more outdoors I think." Hanging out outdoors. The other parts of the family that lives in other cities he has seen less of this year than previous. When they have met, they have been trying to do outdoor activities more than indoor activities.

FVC: "I think it has changed a lot. I do not think I have been home as much, most of my family lives in Stockholm."

FV: Still visiting her parents' house. She has not seen her sister that lives in Oslo for quite a while. They have other restrictions there so it's a bit more difficult. But she has been able to meet her other siblings. She meets her closest family indoors. If she met a relative it would be outside.

TW: his mother is vaccinated, and he has antibodies. But it's a bit trickier with his grandparents, they have met but they have been sitting outside in their garden. "Trying to have distance, but I am not sure if I believe that distance is really working, or actually people tend to forget it after five minutes, but now they are vaccinated as well."

"I would not say so... Like in Germany, I think most people moved out because gyms where closed and there was really no way to do many things indoors, so gyms were closed, restaurants were closed like in most parts of the World and still are but then at the same time you also could not meet as much with friends and such so even going for a walk in a group of 4 or 5 people was a times not permitted so it was rather restricted even outdoors I would say and so in Sweden I think the effects were rather little and I did not see myself doing more outdoors than indoors "- SG

"I moved to Gothenburg during the pandemic and I lived before inside the forest so being outdoors was kind of my everyday life and now I am in a more of an urban environment and I have to take the train or take the car, anything to get to the places I am familiar with, like being in the forest in Bohuslän or I started doing different kinds of activities to try to still have that outdoors experience, I started frisbee golf or going out just for hikes and such" - FO

"During the pandemic, this year that we have had, I think I have been outdoors more than before because since we could not gather in houses then it made a lot of sense to go there... I have gone to more walks around forests, and I have a car so I just might drive somewhere" – AC

“Most of the time since I have to study is a lot of Zoom and recorded lectures, so I walk my dog but not much has changed” - MR

How do you usually spend your free time, indoors or outdoors?

I used to go out a lot, go hiking, go sailing, quite a lot even before the pandemic but I think it's even more this last year – SA

What does your ideal day outdoors look like? Is it a sunny day by a lake/the ocean, or a cold winter day with skiing? Who comes with you?

“I like rain, too, and snow, so I guess I can be out in the winter.” - HB

“Yeah, for me, I think it depends a lot on if we are talking everyday life or like vacations and so on, because every vacation that I did this year has been to go to a nature reserve or to go outdoor, hiking and skiing and so on in Sweden, of course. And so then, well, you just have to cope with the weather. We had snow in the summer, like in June. We had to go in with a lot of snow just hiking through. And I mean, then you are capable to handle it. But if it's raining and its very windy outside in your everyday life, you I think there's a lot less probability that I would go out like a nature reserve and go hiking. So I think weather there is much more dependent for the behaviour.” - AK

“But also, what Hannah said with the snow,” I think actually this this winter when it was a lot colder, that actually made me go out more because I really like to be outside with the snow. It was not so much in Gothenburg, but I mean around. So that's actually like really nice weather to be outside in” - AK

“I would say my recreation is very, very dependent on the weather. I do not go out if it's too cold, if it's raining or stuff like that, if I do not have to. And the dog does not like if it's cold weather as well.” – ID

And I also think that going to the gym and running or doing the exercise bike, I'd rather go and do that outdoors now. Yeah, it would be like taking advantage of the good weather rather than saying, oh, I'll just stay in. - SF

I do not know if I have actually been enough times that it's a really clear pattern. I mean, so maybe last year was there more with kind of the same friend group as usual in different natural reserves, but and maybe a bit with parents as well. But again, I do not really go unless it's super nice weather just to be there and not necessarily to walk around. But again, when it's just walking, it does not really matter. I can go there by myself, for sure. - ES

I guess that I go with different friends or alone, or my family - HB

Yeah, I would say maybe that I have more resistant friends, so if it's very rainy, some of them will not go outside, maybe in some would. So I think it depends a lot on what you are actually planning on doing.- AK

I would usually go with friends if I would visit such a place. I think it's not just out strolling and then you can end up whatever, but then does not start with a goal or I am not trying to get there. - AF

SA: sailing, sunny, good wind, or hiking in the forest with a tent, with a big backpack

FVC: sunny warm day, having a picnic outside. Close to the water, does not matter if it's in the city or nature. The weather and the company are the most important factor for an ideal day.

AB: warm weather, sports, tennis football, nice foods, barbeque. “Definitely outside the city, close to the ocean is a plus!”

FV: hiking in the forest, up a mountain, set up a camp, if there is a lake you could go swim, you could have a bonfire.

AM: “spending a day at the beach, playing some beach volleyball, in the evening have BBQ with your friends. Laying on the beach tanning, maybe go for a swim now and then.”

TW: weather and the company is the most important thing. Canoeing and a tent, go swimming and do some sports, combined. Go out for fishing, trekking, and fishing.

“The best for me is a sunny day, beach volley, and if you get tired find some shadow, you can eat something, ice cream, surrounding by fun people, spending all day out” - AC

“I guess there’s a sweet spot in temperature at least, once you have reached it the hole joy goes down very quickly, and so Swedish summers are really nice... good temperature, going for a hike or such, ending the day with a nice outdoors restaurant” – SG

“Moving towards the sea, maybe friends and family, playing football, sun next to the sea, jump in the sea after being sweating, doing some kind of activity with friends” – ND

“So, my family is from up north, so I really enjoy skiing, it’s one of my absolute favourite outdoors activities, so a perfect day would be when the sun is shining at the top of a very high hill with snow everywhere and it’s below zero degrees” – MR

“For me it would be with a couple of friends, out in the forest, but I like those sunny fall days when the night starts to come, we start a campfire, make some food and just have a good time” – FO

“Pretty similar to ES. I think that it's more weather dependent. Not really out that much, mainly working, otherwise, if it's nice outside then might catch up with Friends, basically going for a walk, It does not really matter to me which weather is, but if I would go out and chill with friends, then I would probably not be outside. If it's raining or snowing, depends on what you are doing, but just going for a walk in the city, then it does not really affect that much. * ES agrees with this” – AF.

Has the pandemic made you try out new outdoor activities? Or stopped you from doing your usual ones?

I think I have been trying to leave my sphere a little bit more so that even if maybe I do not leave my apartment one day, at least I go out on the balcony or I take the trash out, or just the importance of not seeing the same walls all day makes a lot of difference.- SF

If I am going to meet some old friends, then we only see each other outside. So that has been changed because otherwise we should probably have seen each other inside

Places to go, how to get there” - HB

“So, I think last year, while it was still the pandemic, but still good weather went quite a bit, too. Natural reserves and Parks and that kind of stuff, because it's nice to even be still and just in the sun. But for the last six to nine months, almost, you know, it's not super nice just to sit somewhere. So then I personally only just focused on going out specially to move. ES

I think I have been trying to leave my sphere a little bit more so that even if maybe I do not leave my apartment one day, at least I go out on the balcony or I take the trash out, or just the importance of not seeing the same walls all day makes a lot of difference.- SF

“I live very close to an outdoor area, so I am yeah, principally there every week and weekend, but I think that. Yeah, maybe that would not be that. Yeah, maybe I am doing that more now because you do not have so much more things, other things to do on the

weekends, otherwise you might go and see your friends but now you are more home. So then probably I spend much more time in the (audio cuts) than I should have.” - HB

SA: “If you want an outdoor experience far away from your home, that has not been possible” “The more far away experiences have been limited”

AB: “not at all”

FVC: “the same, you want to be more outdoors”

FV.: “it’s sort of easier to do these kind of things now”

AM: technically I could have done the stuff myself. it’s more difficult to do the ideal day outdoors now because we cannot meet with friends.

TW: agree with AM, you cannot meet up with some friends from other cities. Not so accessible.

Is there something that annoys you while being outdoors?

Trash, people not holding distance, not enough parking. Overcrowding Weather Allergies -TW, wrote “allergies”, he does not feel like it is stopping him. SA agreed about that problem

When it’s just starting to be sunny, and you get to the forest and everywhere is wet because there’s been rain for like two weeks before or when it’s still windy” – FO

“Insects, mosquitos, flies” – MR

“I agree with MR about insects” – ND

“When you outside here in town in Gothenburg, sometimes it does not even feel like a pandemic, and you just want to turn around and go home because there are too many people” – ND

Do you go to different places or try to go to the same place? (Same park, same natural reserve... or different ones?

SA: “I think I have been actively trying to find new places to hike”

Anton: not much

FVC: take a different route when walking or jogging.

FV V: maybe a couple of new running trails

AM: excited that she lives in a new city, so a lot of walking

TW: 50/50

What are the places you go to?

I have not really been to any specific parks or stuff like that because I do not really live somewhere close up to something that’s very long to walk through. So, for instance -place of residence-, by its super nice, but it’s pretty small still. So for me, when it’s not really, really good weather, just go outside to move basically to feel better. But when it’s super nice weather, you can go to parks, natural reserves just to spend actual time there. That’s my case at least.” - ES

What affects your decision of location? Weather, time of transportation, smooth transportation (like less changes of busses/trams), curiosity, knowing what you get

SA: Weather decides where to go, accessibility. He has a car, makes it easier.

Anton: convenient, he used to live closer to a lake before, and that’s when he rather went on a jog in the nature, now he lives in the middle of the city so it’s not as convenient. That’s a large factor.

FVC: also convenience, and weather

FV: agrees with the previous answers

AM: “Lately I have been feeling, especially having like learning on distance that I am constantly at home, in the end you feel like that sometimes pushes you to get out because you are sitting so much inside, but at the same time I also feel like because I am at home I procrastinate so much more and then I feel more stressed of going out and feeling ‘I have to stay home, I have to study more’, so it’s kind of both pushes and suppresses the feeling of go out sometimes.”

weather,

TW: it has to do with planning, when everybody can meet, and good weather

“I try to find some places with not too many people because when I am outside and doing activities, you know you go out in the forest and there is hundred other people there and that does not feel as free to me as I am used to” – FO

“If you go outdoors and there are too many people is almost like going to a shopping mall, I mean I do not like being alone but maybe too many people a at beach or somewhere it feels a bit weird” - AC

“It gets really hard to find space everywhere in this overcrowded world, whether is a beach or a forest or anything that’s cool and on google is basically overcrowded, almost certainly. Takes away the exact thing you are seeking in a lot of places” – SG

“I lived in Smögen it’s a summer place that is really lovely in the summer but I mean in the winter there are 3000 people living there and in the summer there is over 1 million people going, so a lot of people and people that used to lived there, we had our secluded places where families and friends used to hang but nowadays when I go up with my friends it’s just people everywhere, you cannot even stand up on the beach” – FO

How do you get to these places? Car, bike, walk, PT?

FVC: Rather take a walk, even to the office, instead of taking the tram

“I usually go to new places with my friends, I ride a motorbike or PT” – FO

“Really depends, until recently I did not have a car so then no way at all to get any way further and also transport or travel is also something that for me is such an awful thing to do, so that really limits my radios but I do not appreciate going for a 30 min hike if I have to drive there for an hour, then I am too lazy to get into the car, particularly when it’s a nice day. And then PT that’s really the one impact in Gothenburg during the pandemic, so I do not think I have been in the tram really at all for a year. I think having a bicycle would be nice” – SG

“Since I live in a different city, I unfortunately have to go by PT, so train, tram and bus, and I got a car now but it’s not always available” – MR

“Always with car, except if I want to drink. If we are hiking or if we go to the beach, then yeah almost always the car.” – Aris

Do you experience difficulties to get to the places you want to go to, for example lack of PT, no bike roads, far to walk from the parking to the place you visit?

“Parking was only challenging when I went to one or two really, really popular beaches around Gothenburg. So, I regretted it the moment I arrived there because it took me over half an hour to find a place. But in general, the parking is usually good” – AC

“Slottskogen in a sunny Saturday, no parking at all” – AC

“We usually go (by car) to the sea, in the winter there is no problem of course because there’s no one, in the summer you just need to go either early or late, so not at the peak hour. But it happened that we did not find parking” – ND

If we could go to different authorities and ask for things that could motivate you to go outdoors more often, what would your requirements be?

“I think some advertising of the spaces that exist in Gothenburg in both English, and Swedish can a good thing to do, advertising for outdoors activities”

“Some kind of app where people can know if those places are crowded or not... So, if they can that in the most famous places like Deljsön, Salthölmén, then it could attract people to go there, of course it could mean everyone goes to the same place and then that’s a problem” – ND

It could be nice if you can just go somewhere and you know that you will find water and fast food, maybe not a restaurant but snacks and fast food. So, in general that’s the thing I do not really like, having to be prepared always, you cannot just wake up and go, you have to plan your meals and if you would have something there, you cannot even buy water nearby” – AC

Do you consider that safety/feeling of safety around your neighbourhood is a factor that either keeps you from spending time outdoors or that allows you to be outside? And why?

TW: He wrote “safe during the pandemic” in the poll. He meant that Outdoors is safe, seen from a healthy, corona perspective. Do stuff outdoors, meet with friends outdoors instead of indoors,

SA: accessibility, how easy it is to go to a nature reserve, is there a direct bus or tram.

AM: have more parks and green areas in a city, “having more access to walking path or biking paths, instead of cars or roads, maybe that makes you a bit keener on walking for instance outside, rather than taking the car somewhere.”

AB: more outdoor sports facilities, green fields, outdoor gyms, better security, some parks feel a bit unsafe in the evening. A lot of drugs and gangs in parks, when you just want to hang out and do BBQ. More police presence.

AM: “especially as a girl, you do not really want to go for a walk too far or to some places especially alone or when it gets dark, so yeah definitely I agree” (With Anton)

TW: “I live quite close to Slottskögen and there I do not feel the need but when I go to work and stuff, I pass by parks that look a little bit, yeah, not too safe, and I feel like if I live in that area, I would not go to the park, so I can understand the argument.”

Anton: he lives in Vallgraven, the green areas around it, is a lot of drugs, it’s not only past midnight, but it can also be in the afternoon. “I have had experiences when I have gone for a BBQ evening or an outdoor meal in these areas. Close to 8, at night, and there are alcoholics, or alcohol induced people, that are being violent and not very nice. So I think that’s a problem.” *Does that limit you? Does that cut your hangout short?*

“It’s not too much for my sake, it’s like AM said, girls are more in the risk zone of getting attacked or having a hard time protecting themselves, are more victims of sexual violence, a lot of my partner and her friends they are less prone to hangout which affects my, how prone I am to hangout in these areas. It’s not something that I think a lot, but it’s something that I have experienced and there are some areas very close to where I live that I really do not want to hangout outdoors.”

FV: safe neighbourhood, feels safe when she goes out. Have not thought so much about it. “But sure, if you into the city it can feel a bit more insecure in some areas.”

SA: it's not something that I thought about, I do not hang out in the central parks. It might be something that I have not experienced. "You hear about people being worried about crimes. So yeah, I think it's something that affect people's willingness to hangout in the parks in the central Gothenburg at night."

FVC: it's does not stop her. But good idea with more security.

SA: "Did not they do a lot of work at Brunnsparken? Because it's been a non-safe area where they wanted like better lightning and more police presence. Obviously, there is a problem, that people see, and maybe they need to do similar things in other parks."

"For me, how I grew up, as I told you I grew up in Morocco so for me it's a very very safe country, I had one incident, I had the wheel of my bike stolen, I should not complain, that's the basic level of Moroccan safety so I feel very safe." - ND

"I have lived in like 5 different areas of Gothenburg and I mean the most dangerous is probably where I am now, you feel the difference but for myself, I mean I am not really careful because I was raised in Greece and the safest area of my home city is the most dangerous here, so I do not really care... In general, if we talk about the outdoors feeling I do not think I do not separate from my friends if we are going somewhere because you never know." - AC

"I generally feel very safe but I am also a naive person when it comes to that, there surely has been more stabbings and these types of things around or also very close to where I live but I think it's usually within the gangs and one should not be overly careful either but in the winters its surely a bit more, it feels less safe than what it did a few years ago and in the summers is kind of still the same thing, so as long as there is light there is safety, probably naive as well" - SG

"I live in one of the, not bad neighbourhood in Gothenburg, I live in..., and you know for me I had not had any problems when I go outdoors or try to find some trail or anything, but you know from the people around me I hear a lot of that I have to take precautions when I go outside but I have not really noticed anything by myself, but when I have friends over I always tell them to park a little bit further away or something like that because you have heard different stories from people around here." - FO

"I live in a very safe neighbourhood, very small just outside the centre of the town on Alingsås, it's the city I live in, so everyone is very kind, there are a lot of children here, so I feel very safe. When I go out to walk my dog for example, I rarely lock my door. So, I feel very safe." - MR

Do you think you will continue/will go back to/start doing outdoor recreation once the pandemic is over? What do you think will happen? – AHA Slides

"I think we are going to keep working remotes so and that in itself will be having very similar habits. So very likely going to keep scrolling and stuff because when you do not have an office to go to, you do not get the same habits. So, you know, moving your office to your home, that's going to have the same effect long term, I think. But it's I am absolutely sure, you know, most people just will go back to the way things are. I mean, even just walking down the street right now, it feels does not necessarily feel like there's a pandemic. So, yeah, I think very, very many things will go back to exactly the way things were." - ES

"Yeah, I think I bought a bike, so I will have to continue, I, I really enjoy it, so I think I will continue with that habit as well." - AK

“I think there is some new habits have arisen to different people or individuals who what and they will probably continue doing them, but most things will most likely go back to normal. I would say pretty quickly. That's just a random guess.” – AF

“Well, in my life, I really miss biking, so I am looking forward to when I have places to go, so I can bike more or so probably I would bike more and walk less. Yeah, well.” - HB

“I am kind of bored with my place, so I am really looking forward to going other places. “- ID

Appendix 4.2. Focus groups and personal interviews - Mexico

What does being outdoors mean to you? - Words from aha slides

IM - I think, in Mexico we are at the same type very similar and very different between Mexicans, because the country is so big, even in the centre of the country, life in CDMX and life, for example, in Gto is very different, due to the size and population. The distances are different, for example you can cross Guanajuato in PT in one hour, hour and half depending on traffic, and this affects the way we see outdoor activity as well, because I would say in my city, a normal outdoor activity is walking around the hills or going to our dams that have camping and fishing areas around, we all do it. I do not think we consider outdoor recreation going to an urban park. We think of it as going to nature, having plants around, with no civilization to put in a way. So in small cities is easier, there's less people, its more accessible, it's easier to plan. But also, we have a lot of hills around but you simple will not go hiking there, there's no paths, a lot is private property for farming and agriculture, it's very restrictive because there are few outdoor areas within the city and the ones that exist are not made for outdoor recreation, they are just decorative for the city, that changes how we do outdoor recreation. I think in Mexico we think green urban areas are protected and outdoor recreation is to be done in specific zones”

MA - Yes, it is totally different in CDMX. Here we sometimes think we are outside if we are at an open mall grabbing a coffee. It hurts to accept it. They sold the idea of doing outdoor recreation is semi open malls, and now they are trying to fix it, but I still think of malls. I think other than that, proper outdoor recreation, I do it rarely with my family, I mean I have done it a few times, planned times. Going to Cuemanco, which is nearby, going to the Tlalpan forest, which is more accessible. We are planning a camp, but we have to plan, we cannot just go. They sold the idea of doing outdoor recreation is semi open malls, and now they are trying to fix it, but I still think of malls.”

During this past year of pandemic, have you spent more time outdoors? Have you done things outdoors you usually do indoors?

MA - I changed my routine completely, it was a 180 turn. I was sent to do home office, I took my classes online and it was super hard, and my municipality started having a lot of restrictions. Going to the Tlalpan forest or to the square was completely restricted. I think, a lot of us, as in me and my closest circle, started to restrict ourselves a lot. When I was able to go back to work meant I could clear my mind, I also think the empathy that started with other people increased, people started to take the guidelines into account, to be more considerate, even if we were outdoors, we wore the mask. People love being outside, and

after being lockdown for so long, I really think people now realize the importance of public space and doing outdoor recreation there

IM - I lived two very different experiences. I was working at a mine in Sonora, so the precautionary measures were, you could not leave the area of the camps and we had to take test constantly to ensure you were not at risk. When I stopped working to continue studying, I went back to Gto and, at least in my family, we did not go out, we followed the guidelines as close as we could. The issue, at the beginning was, at least in my city, people reacted very negatively when they told us we could not go out. In my city everyone is used to walking a lot to everywhere, climbing in the surrounding mountains, so when they told people - you cannot go out, you cannot be downtown on Friday evenings-, it got a negative reception. And as things worsen, that attitude changed but a lot of indoors spaces like gyms and movie theatres just said they were taking precautions and to me that was not enough. So, I think it's perfect that more people started doing outdoor recreation, public spaces started to being used but it was not because people wanted to, it was a need because you could not go anywhere else. I did not change my way to act too much, I have never been one to go out every day but was noticeable to say I want to leave the house, but I cannot go to the gym, so I'll go walk at the hill, basically that's what everyone started doing".

MA - "for what I can understand, the case of IM was so cool, because he has access and the ability to be there very fast. And I have to travel like half an hour, and I have to take PT. So, moving is like I have to go out, I have to take PT and get there and then the same back, so I started to restrict myself, not only when it came to go out but in closed spaces. If I had a place closer or my way to move independently, I would be out in an open space or the forest a lot more. But also, where I live, a lot is missing, you have to move to another district, in my neighbourhood it just does not exist, it's sad. So those dynamic IM talks about are like wow, and the fact that those were restricted must have been shocking. But in my case, I feel like they did not restrict me, because getting to the places was impossible, it involved time, getting myself into PT"

AH - "I have spent more time outdoors; I do activities outside. I do not think I have done outdoor activities inside; I feel like it's not the same"

MB - " Yes, I think a lot more time outdoors"

GRH - "My time outdoors decreased a lot during the pandemic, I changed sports activities to indoor ones to not be static".

SR - "I have not spent more time outdoors"

GO - "No, the truth is I did not go out a lot before"

AC - Personally, before and during the pandemic, generally I was not very used to be outdoors. I am more used to go to the gym, to spinning classes, and I had to change all of that dynamic because in 2020 everything closed. And I needed something to handle the stress, we had switched to online classes at work, and it was not beneficial for me, so I had to adapt some space at home to be outdoors, I felt like I could not breathe inside the walls. My husband is also a teacher, so it was hard, both of us doing online classes at home, he started to go for walks, we live in a neighbourhood that has some benches, some greenery so he started walking. And I also adopted a dog, it gave me the habit of taking him outside, so in a way the pet helped me stop being sedentary, and therefore I started taking on walking or doing yoga but outdoors, I had to do it outdoors. Something

very important was to re-encounter things I did not value anymore, especially with nature, I like plants a lot and I would just have some indoors, but I started improving my garden, watering my plants, and just that gave me a lot of benefits. I also missed tourism, especially in 2020, I was only able to go back to a beach in December 2021, after so much time. I started looking for places to visit that are more open. The social aspects, for parties we looked for open gardens, we did some camping, for valentine's day this year I looked for a restaurant with open outdoor sitting and not the typical indoors dinner, it was a different mentality. Generally, the pandemic got me closer to outdoor leisure, and to look for exercise outdoors, but that was until 2021, when parks were a bit more open. It was a progressive thing; it was not immediate."

AJ - Since the pandemic started and comparing the time I used to spend outdoors, it turns to nothing. Nobody could be outside, nobody can leave their house so, at work everything that was outdoors was cancelled and personally, same, at the beginning I was not going out because of the uncertainty of are you going to get sick, are you not going to get sick, stay at home, so I stayed locked down. My moment of fresh air was walking my dog to the garage that has a bit of greenery, that was my outdoor recreation. As the pandemic progressed, with the vaccines and starting activities, I was able to do outdoor things at work and in my personal life, I did return to be outdoors but not at the same level than before. I used to like going out for walks at the street or a park or any outdoor space where I could walk, run, cycle and now I do not, I first think about how crowded it will be and with the mask, I cannot do the same outdoor activities, if I want to do outdoor sports it's harder with the mask, so I just do it at home. I decreased it a lot, about half, I just walk and hope places are not crowded, if they are crowded, I just stay for a bit.

JL - At the beginning, I did lock myself down, I was just going out to take out the trash or just walking the dog. There was a time when my family and I would just take the car and drive around, just to see but we never left the car. My mom was in a lot of distress so to help her paranoia, I stopped doing things. I totally stopped going out. Once I got my two vaccines, I started going to museums but other than that not really, or always following the restrictions, with the mask. And just now [feb, 2022] I started going to the gym.

DT - At the beginning, I lived in Tuxtla (South of Mexico), now I live in Coahuila (North of Mexico), and during the first months of fear and uncertainty when the streets were empty, my outdoor activities decreased a lot. I was part of a soccer team so I used to play at least once a week and that stopped. The only outdoor thing I did was walking my dog. I lived in a closed neighbourhood with wide streets, and there was no one walking and I used to go out with the mask and walk the dog. About 3 blocks from home there is a small park and some other dog owners would join so that also stopped. Once the restrictions started to loosen, I think in Tuxtla, the restrictions started in March 2020 and by August 2020, parks were open again, you had to use the mask and so on but since I could not play soccer, I started running, with the mask which is pretty uncomfortable, but I preferred that over staying at home. And even before the vaccines, people started to relax a lot, I used to be anxious about it be out on the streets and see people without the mask. I think, in March 2021, when I got my vaccine, I started running without a mask. My outdoor recreation decreased but not as strongly, I replaced one thing for another.

What kinds of indoor activities have been able to transform into outdoor activities? Has the pandemic made you try new activities?

AH - "I tried indoors exercise"

IM - "I was going out to walk to the hills, or wherever it was far away.

IM - "They started placing outdoor gym, but nobody was using them until the pandemic. Because people could not go to the gym as defiance they exercised there, it was like a type of protest against the restrictions but it ended up being used as intended.

MA - I started doing exercise at home, I do not think I am going back to the gym even if they have the right conditions, and going to the forest, which I like, it's a very limited thing. They have restrictions sure, some measures, but I feel like the dynamic changed a lot, you have to wear a mask, you have to be careful

AJ - Before the pandemic I used to go out for walks, during the weekends. I would go to outdoor markets or to parks to feed the squirrels. I take my dog out, but really close to home. I did not want to be in crowded areas, I still do not trust people. I still do not go to indoor spaces. I only go to environments that I feel are controlled or with people I know. I started to get plants because I cannot go to green areas as much, I keep the windows open a lot more. The time I used to spend outdoors changed to being at home, maybe relaxing something or learning something new.

MB - It was different for me; it was the opposite. Before the lockdown, I had to leave the house really early and take PT, so it was a battle. Once lockdown started, I decided to have a healthier life, I started to exercise, because I did not lose time taking the PT, it gave the chance to use my time in other things. I realized people really stopped going out so I started to go out for walks, which I did not do before, because green areas or parks were empty. I felt very comfortable, and I kept doing it for these past two years, I go alone with my dog and I do not necessarily go to an outdoor recreation area, just around my neighbourhood

DT: I used to love the movies and concerts, scenic arts, that all changed, I cannot bring myself to go. I used to go to yoga and spinning classes, so I stopped as well. And I still do not feel like going back. I do not like it as much but now I run; I look for times that are not as crowded. I also now run on the street, not just a recreation area, because some places were closed. It was a substitution.

JL: At first, I had my routine and I would not break it, everything was very calculated, everything at the same place and time, so when the pandemic hit, I was left wondering what to do with my time so at the beginning I started working out at home but that did not last much, then I decided what to do inside, I was not going out at all. I started doing crafts. Once the pandemic started, I had 6 months without school, totally my own space and time, I went to the psychologist, trying to not lose my head inside the house. As the pandemic progressed, I went back to exercising and then I would go to museums. But that was when things had calm a lot. I had to learn to manage my time, after having it so strict all of the time.

How quickly did you accept all the restrictions?

MA - "It was not easy; it took me a long time and I got depressed. I valued going out and enjoying the way to school or simply going out to work and socialise"

GRH - "It was very hard; I personally like to go out and spend time outdoors on my own and with friends but by studying online that changed and it affected my mood"

SR - "It was pretty easy"

GO - "Pretty hard, I could not do anything"

AC - It was not complicated to abide the rules, I am very obedient when it comes to those things, I am a bit fearful, I think I have a bit of an anxious personality. I remember 2019, when it first came out everything about the virus, and I was visiting my family but no one expected anything, and I think was thinking ahead already, it was easy to adapt but also, in 2020 I was going out less., I was already using alcohol gel and such but it was also worrying. But it was also a bit of a grief, not being able to access places, because they were not considered essentials, coffee places, libraries with coffee shops, or cultural spaces, beaches were closed, it was a sad thing, a nostalgic thing, because you ask yourself -now what? Where do I go? - and you start to plan for new destinations. And for the social aspects, it was hard psychologically, there was a lot of controversy over which family members were careful and which were not, who got sick and who did not, I even had conflict with my sisters over this.

AC - it seems harder now, after being so long with the masks and such, it's harder to do all the things normally again. I never disobeyed the restrictions if I was going somewhere I followed the rules.

MB - I think it was a very individual experience, in 2020 when everything started, my company right away sent to home office and being at home was very easy but a month in, I started to feel the strength of the measures but it was more less that time to adapt. After that, I did start to feel that stress, the tension of being locked down all of the time, that paranoia of saying if I go out, I am going to get infected, if I go to the store, I am going to get infected. And besides that you start to feel that fear, that's what happened to me.

AJ - With the restrictions, I did not feel like it was forced, I mean you understand it and something that took a lot to get used to was the mask and specially because they were deciding like the fabric one's work, no they better to use these other ones, so knowing which to use. It was a bit hard to remember the routine I had to follow, disinfecting everything and changing your clothes once you got home, remove the shoes, do not touch anything, that routine was complicated. Now it's an automatic thing, I think once everything is lifted it's going to be complicated to stop those habits. I cannot imagine leaving my house without a mask, when I see someone without it's a shock. And about being in isolation, I was more worried about losing my job, and not being able to pay for things in case I got sick, that was different from my closest circle, they were more worried about their health. Being at home for me it's very comfortable, I do not have to take PT and such, so being locked down was not an issue. If I could stay working from home that would be perfect.

DT: So, at work I was able to go just once a week and I learned how to be productive working from home, because at first that is hard, you are on your pyjamas, with the TV and food, no-one is checking on you, but once I got used to it, I started liking it. I did not have to take PT so I did not waste time on transport. With my students, I spent like a month fixing the online connection, because half of them are from small towns and internet connections are really bad, so I could not do online classes, I had to record them. Now I share the idea of it being rather efficient to work from home, and sometimes there is no need to meet in person, something can be emails. The hard part is that a lot of the discussions happen during coffee breaks, collaborations start there, and that I miss. Those discussions are really important and I did not realized. About the mask and alcohol

gel and such, for me it was very clear we needed to follow some rules to avoid contagion, and what stressed me was seeing other people not doing it. For me it was very stressful that people would not keep the distance, and using the mask is not really hard and I still find it strange that a lot of people still wear it wrong. That was the hardest thing, seeing people not follow the restrictions. And now, with the vaccines there is not that many people dying but 2 years ago, I was afraid, I live with my wife and dog, and I was not living close to my parents so I could not get them sick, but we all had to go out at some point, and I was really trying not to pay attention to what other people was doing wrong. Now with the vaccines, I do feel more relaxed, I meet more people, the things that gave me anxiety are not affecting me that much.

What does your ideal day outdoors look like? What would you need to be motivated to go outdoors?

GRH - "Hiking a hill, it's very relaxing, hiking is a very holistic activity"

SR - "Going to a park to walk, I would need less people to be around"

What makes it a good day - the company or the location?

AH- "Both, it's not the same going somewhere with someone you like. Same as, it would not be the same going someone we do not like"

GO - "Camping at a forest with my friends. [I would need] for the people around me to second the idea, because nobody wants to [be outdoors] anymore"

AC- It would be going to a forest, or a field, but also a restaurant or a coffee place that is not closed. It would involve different activities, it can be working on a vegetable garden, gardening in general, do some exercise, yoga, running. I started to eat outdoors, so I could see my family, I would put the table outside in the garden to not feel trapped all of the time.

AJ - When I go out alone, I like to walk. When I go, I like to listen music or podcasts, and just walk. That's my ideal plan, listen to music, observe things around me, I can still listen stuff happening around me. It gives me time to think. And when I am with people, with my best friend or my boyfriend, we walk and we grab something to eat, we sometimes cycle, it's just about sharing the time and reflect.

MB - I am a big fan of meditation, and because there are less people outside, I can do it outdoors. I try to focus on what's happening around me. When I go out, it's either with my dog or alone. I just go out and read or just look around.

DT - I also like walking a lot. I used to do it after lunch almost every day. Luckily, where I lived back then, has a lot of green areas and you can do it. Now that I lived in the north, with the hot dry weather, I miss that. I need a sunny day, with a bit of shadow, not too warm if it's in a city. If it's going to be warm, then I like having something to cool down, more in nature. That culture of going to nature and disconnect from cities is not very strong in Mexico, but I used to do it a lot when I was younger, I would go camping with friends to a beach. Now a lot of those are not as safe but we used to just go camping. Swimming, walking at the beach, just talking to my friends, it was a desi toxication. Being able to go to the ocean and have warm water is not that common and we have that in Mexico.

JL - Honestly, I do not go out much. Generally, it would be with my family, the pandemic made us grow closer, so I think going to the beach or a forest and take our dog, just look at the environment and do nothing, just appreciate the environment.

What would you need to do outdoor activities?

GRH - "Having my own transport since I do not have it, that makes me use PT to get to my destination and I feel exposed"

MA - And yes, there are big parks where a lot of activities can be done, and they are just not being used. And a lot of the comments say they need more lighting, they need to be cleaned, it need security... But once that happens, people do visit the parks and practice recreation. When I used to pass by a big park on the way to university, it was the same I did not feel like staying for more than a few minutes, it was just not attractive, and now that they fixed it, people use it a lot but there is a mall across and it's just easier to go to the mall.

Has the pandemic made you try out new outdoor activities?

MA - "Yes, I started going to the forest again, even though getting there takes a long time" Is there something that annoys you while being outdoors?

AH - "I think what bothers me the most is that close to where I live, there are no places to go"

GRH - "A lot of people in quiet places with strong noise. In general, people. I feel like our culture is complicated when it comes to respecting nature and that part is very sad"

SR - "Lots of people and lots of cars"

GO - "Everything that you mentioned - lots of people, trash, noise, lots of cars - but mostly noise and people.

IM - I tend to go out when there's not many people. I either go out very early or in the evening to avoid meeting too many people.

IM - I agree, nobody wants to be walking with trash around them or if no-one takes care of the space. It takes the attractiveness of doing any outdoor activity.

MA - The lack of safety, if it's not taken care off and there is trash

MB - Definitely, the distances. Sadly, there is just not access to many places. And a lot of places closed so, even if you could go, it was just not possible.

JL - Generally, people. Before and during the pandemic. It just makes me so uncomfortable to see people without the mask, is like people wear it. If someone sneezes, it's the worst. If it's too crowded, I just wait until they leave, they also make so much noise, I just do not like it. That's why I go to museums, nobody goes there.

DT: When I moved to the south it was too warm so I stopped walking, is just not nice. And same in the north, the heat, it's over 40 so you just do not walk, not even swim, you end up with horrible sunburns. I think what keeps me from doing outdoor recreation is people. Thinking back, I went to Playa del Carmen before the pandemic, and now it's hard to find a place at the beach where you can only listen to the ocean, there is always a bar, or people with speakers, I do not like that excess of music in nature. I also went to a river and again, loud music everywhere, is like we are obsessed, like we are afraid of silence. That makes me avoid places. I am looking for peace not party. In urban environments, you look for outdoor recreation where there will not be big crowds. I think, in other countries is also easier to get to outdoor areas.

Do you go to different places or try to go to the same place? (Same park, same natural reserve... or different ones? What are the places you go to?

GRH - "Both things, I enjoyed going to my favourite places but I always gave myself space to visit new places"

GO - "same places, I used to go to the Cerro de la Bufa when I was little"

AC - Whenever I move to a different city, I like to explore. So when I have the opportunity, I do enjoy it, I get to see new places. I try to see new places, because I might not have other chances. I try to see things that are representative. If there are places around where I live that I do not know, I try to see what is around. Sometimes people travel further away and does not even know their state.

What affects your decision when you think about where to go?

AH - "Mostly how to get there and how to move around"

GRH - "How to get there and knowing the place, at least how to get there and how to go back at a safe time, as well as having some references about the safety of the area"

GO - "How to get there and the time it takes"

IM - I consider time a lot, and sometimes if I miss the time I am supposed to leave, then I spend less time outdoors, so I have to plan my entire day around the outdoor activities.

MA - Time and accessibility. How much time do I need to get there and how do I get there.

AC - we have to plan ahead our gas and take advantage of the red days but It make us easier to appreciate being outdoors. It's really tied to when we have vacations and work schedules. But for local things, it's now part of my routine, walking, running, just walking my dog.

AC- The weather, if it's too cold, that would stop me from going out. And when there is pollen, since I have allergies, it affects me. Sometimes people think about money, because it might seem expensive, but that's not true, you can find places in rural areas, small rivers, small stream.

How do you get to these places? Is it hard to get to said places? How far away are they?

AH - "Walking, they are not far from my house, 5 to 10 minutes from my house"

GRH - "PT or walking when it's safe or I am going in a group. Half an hour or an hour in PT"

GO - "by car, is not hard to get there, the hills are pretty close here"

IM - "I, fortunately, have always lived in small cities and also, fortunately, I have my own vehicle, so it's very easy. The only difficulty when I take PT is thinking where the stops are but there are not really limitations to go."

MA - "PT is enough, but I do have to walk, take the metro and then walk again, so maybe the solution is to move to be closer, it's not hard, I would have to get closer, more than anything."

AC - "Before we did not have a car, but we used to take buses, it took very long and it was very restrictive, specially to small rural areas, sometimes the bus goes only once a day, a bus every 24 hours, so we knew it was an effort. And now that we have a car, we can move easier, go to places that are closer and we also save time, we have to plan ahead our gas and take advantage of the red days. It made us easier to appreciate being outdoors.

Does the time of your travelling affect your expectations if you go to a new place?

AH - "For new activities, I would think about it if the place were far away".

GRH - "No, it affects me more how unsafe the area is"

GO - "If it's really far I will not go, but due to laziness. It does not affect my expectations"

How have you felt during the pandemic? Do you think that outdoor recreation has helped you/could have helped you? How has it made you feel not being able to or being able to do outdoor activities during the pandemic?

GO - "At the beginning it did not affect me, now it does, I would love to go on a trip to a quiet place"

AC- Sometimes it took so long, my mom used to say I should just go somewhere else that is nicer, if I was going to take so long, I could go even further to a beach or something.

MB - Definitely, If I would want to take advantage of a nice place, a forest, the beach, I would need at least one or one and a half hour of trip, so with the pandemic I just do not do it. If I do not go to the supermarket in a normal way, much less to go outdoors. That has always been an issue, I would not do it neither before the pandemic or now.

AJ – Yes, distance and the way to get there. From CDMX, for example, we have the Chapultepec Forest, which is east of the city and not everyone can get there easily. You have to take a bus or the metro, it implies taking PT, it's going to be crowded. In the city, if you want to do outdoor recreation, to have the chance it implies times and the stress of what do I have to do to get there. And with the pandemic and people not respecting the restrictions, it discourages you to go. Going through all of that and then again, going back. At least, I prefer to stay nearby home, even if it's a small place or a small linear park. At least it's outdoors, there are trees, it's not enclosed, I can just walk. If it's more than an hour, I am just going to be stressed, I am probably not even going to enjoy it.

MA - I can only talk about my experience, I imagine it was different for other cities, but a lot of spaces closed, and we adapted but now going out is like oh I "have" to go out, with a little precaution, there's a little paranoia about going out now, with me and my social circle."

If we could go to different authorities and ask for things that could motivate you to go outdoors more often, what would your requirements be?

IM - I like hiking, so if there is a path in the forest or the mountains, because not everyone can trek or mountaineering without paths. So, if there's zones with paths, that works very well. I feel like we do not realize but I do not think there is people that dislike going to a forest or go hiking once a month. But that's what I would need, not extremely well-made paths but zones to have calm hikes, is not like you want to fight nature everyday trying to get somewhere.

MA - I agree, I think being able to read the space, being able to have a nice walk, being able to sit in the shadow, it can be natural elements, a rock, but somewhere to sit. We need some shadow, some shelter. Make the outdoor space comfortable and maintain it. And we also need to work together, appropriate the space, teach people it benefits everyone if they pick up their trash.

Do you consider that safety/feeling of safety around your neighbourhood is a factor that either keeps you from spending time outdoors or that allows you to be outside? And why?

MA - It's about safety, think if we are not being able to read the space, people are going to think "if something happens, where do I run to". In the forest I go to, it started to have a lot of crime, so people stopped going, and nobody was doing anything, so the people, like runners started organizing and working together in case of a crime. But a lot of zones in

the forest are not being used because they are no paths, there is trash and it does not feel safe, there is vandalism.

AC - I think, the only obstacle would be safety. Because I used to live in a city famous for its shootings. I used to live in a closed neighbourhood but even then, if you wanted to go out after a certain time you could get mugged. Sometimes there was not enough light, if it was too dark, there is fear to go out. That definitely limits my time outdoors.

- What has it meant to be able to do outdoor recreation or not being able to do so?

GRH - " More anxiety. I enjoy the confinement, my personality is a bit lonely and more of being at home but I also enjoy exploring and going out and get lost, the pandemic put me limits due to safety but I miss those moments of walking without a destination"

SR - "Nothing special, it has been just as always"

GO - "Not much, my house has a big garden so I have not been without vegetation like other people"

AC - There was a moment when there was a crisis, it was very mentally tiring. It started in March 2020 and by October, my husband and I could not handle it anymore, it was us sharing everything, being locked down, we did not have our own space, so to have that we used to get out, it sounds mean to say I go without you, but it was because we were losing our personal space, it was giving us freedom back, to have our own thoughts, refresh. I would go back a lot more relaxed. I had psychological repercussions, I am in therapy now because of stress at work and because of the stress of going back, of facing the return to physical work. I did not fall into a depression, because I had been in therapy before, so I already had some tools to deal with what we were living, and one of those things was outdoor recreation, exercise outdoors, getting a pet, but I was scared to get worse and that's why I asked for help.

I got to meet new people, other women that was also going out around the neighbourhood, people that I otherwise did not talk to. People started to join and to go out at the same time, just to go for walks, that helped to have more friendships. So being outdoors was also a benefit there. And maybe other people criticised that, but we were always wearing the mask, and some other neighbours were never outside.

But it was also a bit of a grief, not being able to access places, because they were not considered essentials, coffee places, libraries with coffee shops, or cultural spaces, beaches were closed, it was a sad thing, a nostalgic thing, because you ask yourself -now what? Where do I go? - and you start to plan for new destinations. And for the social aspects, it was hard psychologically, there was a lot of controversy over which family members were careful and which were not, who got sick and who did not, I even had conflict with my sisters over this.

- How have you felt during the pandemic? Do you think that outdoor recreation has helped you/could have helped you? How has it made you feel not being able to or being able to do outdoor activities during the pandemic?

GO - "At the beginning it did not affect me, now it does, I would love to go on a trip to a quiet place"

AC- Sometimes it took so long, my mom used to say I should just go somewhere else that is nicer, if I was going to take so long, I could go even further to a beach or something.

MB - Definitely, If I would want to take advantage of a nice place, a forest, the beach, I would need at least one or one and a half hour of trip, so with the pandemic I just do not

do it. If I do not go to the supermarket in a normal way, much less to go outdoors. That has always been an issue, I would not do it neither before the pandemic or now.

AJ – Yes, distance and the way to get there. From CDMX, for example, we have the Chapultepec Forest, which is east of the city and not everyone can get there easily. You have to take a bus or the metro, it implies taking public transport, it's going to be crowded. In the city, if you want to do outdoor recreation, to have the chance it implies times and the stress of what do I have to do to get there. And with the pandemic and people not respecting the restrictions, it discourages you to go. Going through all of that and then again, going back. At least, I prefer to stay nearby home, even if it's a small place or a small linear park. At least it's outdoors, there are trees, it's not enclosed, I can just walk. If it's more than an hour, I am just going to be stressed, I am probably not even going to enjoy it.

MA - I can only talk about my experience, I imagine it was different for other cities, but a lot of spaces closed, and we adapted but now going out is like oh I “have” to go out, with a little precaution, there's a little paranoia about going out now, with me and my social circle.”

Other remarks / general comments

MA - “I am studying a Bachelor's in Urbanism and what I like the most is mobility. Nobody thought of public space or outdoor recreation, I think a lot was brought up during the pandemic and a lot of paradigms were broken, like the privilege the bicycle, however for a person to move safely we need to consider the perception of public space and this dynamic [the focus group] it's a first so it's going to be very cool to see all the conclusions. Nobody thought of public space or outdoor recreation. I think it's going to be very useful, having information coming directly from people is very important”.

AC - “I thought the topic was really interesting. With the pandemic, the perspective of leisure changed, maybe it got us closer to the outdoors but maybe it also separated us more. It all depends on personality and where you live, not everyone has the chance to be in natural environments. It's going to be interesting to see what happens with the younger generations and how they deal with all of this later on. I thought the topic was really interesting, I like to be part of these type of studies, it helps enriching knowledge, and hopefully some policies can come out of this for future situations.”

Appendix 5. AHA SLIDES Survey

- Swedish poll:

FG 1: <https://presenter.ahaslides.com/share/outdoor-activities-during-covid-19-a-dialogue-1618320828902-bjvrtusyd9>

FG 2: <https://presenter.ahaslides.com/share/outdoor-activities-during-covid-19-a-dialogue-1619185654433-h42so31hlq>

FG 3: <https://presenter.ahaslides.com/share/outdoor-activities-during-covid-19-a-dialogue-1620391042395-9hps1hpkqp>

- Mexican poll:

FG 1: <https://presenter.ahaslides.com/share/outdoor-activities-and-the-impact-of-covid-19-fg-1-mx-1643479117674-zhoe0s7zed>

FG 2: <https://presenter.ahaslides.com/share/actividades-al-aire-libre-y-el-impacto-de-covid-19-fg-2-1644620394793-zj0cdtkaed>

FG 3: <https://presenter.ahaslides.com/share/actividades-al-aire-libre-y-el-impacto-de-covid-19-fg3-1645819050625-61uunbbdi4>

FG 4: <https://presenter.ahaslides.com/share/outdoor-activities-and-the-impact-of-covid-19-Compilation-interviews-1652414127934-frqll50tcc>

Compilation from the interviews: <https://presenter.ahaslides.com/share/outdoor-activities-and-the-impact-of-covid-19-interviews-1652414105774-0ka1q5bsna>