



# Article A European-Wide Study on the Effects of the COVID-19 Threat on Active Transport Modes

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Abstract: In the past year and a half, we have been forced to make many major changes which, besides other issues, have led to considerable changes in transport mode choices. While we observed an increase in the share of cars as a mode of transport, we also observed an increase in the level of engagement in other active mobility modes, such as walking and cycling. Relevant literature shows that although the restrictions adopted during the COVID-19 pandemic have effects on people's mobility behaviour, they can be viewed as a catalyst for positive changes as far as active forms of mobility are concerned. This work focuses on the thorough understanding of the changes in citizens' needs and attitudes toward mobility and transport mode choice during the COVID-19 pandemic. To reach this aim, we analysed the responses to an interview consisting of eight open-ended questions about the effects of the COVID-19 pandemic threat and situation of citizens in selected European countries and Russia. In total, 497 respondents participated by responding to an online questionnaire. The conclusions of this study confirmed that active traffic modes could benefit from the momentum generated by the COVID-19 pandemic. However, this can only happen if appropriate preconditions can be provided, which is not the case so far. To prevent a massive return of private motorised vehicles into urban centres, we must focus on support for active traffic modes, specifically on the improvement of the preconditions, especially as far as traffic infrastructure is concerned.

Keywords: active transport modes; sustainability; traffic psychology; COVID-19; walking; cycling

# 1. Introduction

While globalisation and urbanisation are central features of modern society, they make us vulnerable to pandemic outbreaks, such as that experienced in the present waves of COVID-19 infection [1]. In the past year and a half, we have been forced to make many major changes which have altered a number of our life routines. COVID-19-related problems and the way in which it spread resulted in major changes in transport mode choices [2]. Governments introduced various strategies leading to social distancing and isolation that were intended to help prevent the gathering of people at great concentrations, and not only in means of public transport [3]. These measures caused the users of public transport systems to think twice about their choices, which provoked a wave of massive transition to other modes of transport in many parts of the world [4]. Thus, we were presented with the opportunity to observe and examine changes in social mobility and their recent effects, as well as to foresee future developments in the transport domain [5].

Previous studies that have investigated people's economic and social activities during pandemics suggest that diseases provoke certain changes in mobility behaviour [6]. For example, research studies conducted during the outbreaks of other acute respiratory syndromes, such as SARS, "bird" flu, and "swine" flu, have consistently reported respondents' preventive steps, including their tendency to avoid crowded spaces [7–10]. The current



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**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). crisis has contributed to major transport-related restrictions. The governments of many countries adopted a range of measures to reduce the mobility of the population with the aim of protecting public health [11]. The policy of restrictions, however, only showed the importance of mobility in society, as defined by the need for movement [12]. While this need has been responsible for an increase in the share of cars as a mode of transport [13], it has also enhanced the level of engagement in other active mobility modes, such as walking and cycling.

A study in Turin, Italy showed that during COVID-19 restrictions, the concentration of pollutants generated by all road traffic sources (passenger cars, busses, heavy-duty vehicles, etc.) was reduced by at least 70% [14]. Other research done in Spain showed a decrease in overall mobility during COVID-19 restrictions by 76%; however, very importantly, this was less important in the case of the private car [15].

At the same time, a dramatic decline in the utilisation of urban mass transport systems was noted [16–18]. In addition, a rise in new travel behaviour trends making use of active mobility modes was observed. The changes in people's routines in favour of healthier and more sustainable lifestyles facilitated a growing interest in sharing services [3]. In Budapest, for example, the use of bicycles doubled [13], and in Germany, the popularity of cycling grew during the lockdown, as did the sales of bicycles [17].

The limitations on mobility that existed while the most rigorous restrictions were in effect are likely to have contributed to an increase in preferences for non-motorised mobility, which was reflected in the rise in its share in comparison to 2019 [19]. Some European cities (e.g., Berlin, Madrid, Paris, and Rome) resolved to introduce temporary cycling lanes during the lockdown [20]. Hence, according to published studies, the current public health crisis might help to maintain and develop networks of cycling paths assuring safe travel, which can subsequently prevent a massive return of private motorised vehicles into urban centres [2]. Thus, bicycles can become an environmentally friendly mode of transport that reduces the spread of the virus owing to a natural physical distance [12].

Abdullah et al. [21] showed that during the pandemic, people primarily travelled to buy food and other basic household items. Such trips tended to be shorter than those to work or school. In addition, Bergantino and Catalano [22] suggest that short-distance cycling trips (ranging from one to five kilometres) are environmentally more efficient than those with transport relying on fossil fuels. On the basis of these findings, bicycles and the trend of sharing them can thus become an ideal combination of inexpensive mobility and a health-promoting physical activity.

A number of recent studies have pointed out the structural problems of traffic planning, which often overlooks pedestrians' needs and totally disregards the needs of vulnerable road users [23]. As noted by Leden et al. [24], an environment that is hostile to walking involves numerous economic consequences in terms of costly infrastructure and adverse environmental or health impacts associated with motorised traffic. While cars predominate in the distribution of modes of transport during the current COVID-19 pandemic, greater interest in active modes of mobility, including walking, is also apparent [6]. Some analyses that used data from phones to identify people's travel behaviour showed an increase in the share of walking among the German population [25]. These findings were supported by Anke et al. [11]. In Paris, the city authorities used the emergency response as an opportunity for the development of mobility behaviour by quickly adopting various measures to facilitate walking. In addition to bike lanes, such changes in the urban infrastructure included the expansion of pedestrian zones [6]. Another good example is the short-term closure of the Smetanovo Nábřeží street in Prague to motor traffic; the street was temporarily turned into a pedestrian zone, accompanied by the introduction of policy changes aimed at safer and more sustainable urban mobility. Sustainable forms of mobility are thus becoming the focus of interest again, and not only in Europe [26].

It has been shown that it is vital for transport planning and policy making in pandemic situations to understand and predict people's travel behaviours while they are in perceived danger [21]. A social-psychological model developed by Ronald Rogers—the protection

motivation theory (PMT)—provides a good explanation of how individuals modify their attitudes and behavioural styles according to their interpretation of the perceived risk [5]. Relevant factors leading to a change in the choice of transport mode in an emergency include the reduction in the risk of self-infection, concern about spreading the infection, the strengthening of one's immune system by physical activity, and the usual means of transport being unavailable [11].

While the interruption of world tourism is likely the most remarkable aspect of this health crisis globally [12], as noted by Przybylowski [6], active modes of mobility could benefit from the momentum generated by the COVID-19 pandemic. However, this can only happen if we respond to the crisis with a thoughtful redistribution of space aimed at facilitating walking and cycling and in a more general sense by providing suitable environmental preconditions for walking and cycling. The lessons learned from this crisis can provide an opportunity for scaling up the development of decarbonised mobility [12].

Relevant literature shows that although the restrictions adopted during the COVID-19 pandemic have both direct and indirect effects on people's mobility behaviour, including mode choice, they can be viewed as a catalyst for positive changes as far as active forms of mobility are concerned. It has been shown that measures to facilitate walking and cycling can be introduced within a very short time [11]. As Eisenmann et al. [17] show, we need to strive for the sustainability of transport systems in large urban areas first and foremost. The current situation may help in changing course towards more environmentally friendly modes of transport, such as walking, cycling, and electric scooters, including the sharing of some of these alternative modal options.

However, we now approach the research gap of this work. As is very well known from many social psychology theories dealing with shaping and changing human behaviour, we need to start from a deep analysis of human needs, attitudes, norms, habits, etc. It is only then that we can produce relevant interventions to promote the desired change. This work focuses on developing a thorough understanding of the changes in citizens' needs and attitudes toward mobility and mode choice during the COVID-19 pandemic. The qualitative nature of this study, which allowed us to understand the topic in depth—including everything "that lies behind the behaviour", such as motives, believes, norms, and attitudes—defines its novelty and main contribution to the current state of the art in this respect.

The aim of this study was to describe and understand the mobility needs, attitudes, and mode choice preferences during the COVID-19 pandemic. To reach this aim, we analysed the responses to an interview consisting of eight open-ended questions about the effects of the pandemic threat and situation (COVID-19) from citizens in selected European countries (and Russia). The different ideas given in the responses (as a characterisation of a common effect in Europe) were categorised, and their frequencies were calculated. The paper is structured as follows: a description of the methods, including the sample, instrument, and design; our findings; a discussion; and our conclusions.

#### 2. Method

#### Sample

A total of 497 respondents/individuals from different European countries participated in this study (Austria—AT, Czech Republic—CZ, Spain—ES, Finland—FI, Italy—IT, Lithuania—LT, Russian Federation—RU, Sweden—SE, and the United Kingdom—UK) by responding to an online questionnaire with eight open-ended questions. This questionnaire was distributed over the internet through social media, applying the "snowball" method. Therefore, the sampling was random but not probabilistic.

The data were collected during the spring of 2020.

Because the questions did not limit the number of responses, the study sample actually consisted of the number of valid statements or ideas collected in response to these eight open-ended questions. Responses that were not related to the question or did not make sense were discarded. Thus, despite being asked to be specific in their responses, some people gave more than one idea in their answer to a question, and others did not give any. A total of 3661 statements or ideas were processed, and this is the true size of the sample used. The statements (given as answers) are the units (cases) this study intended to analyse, on the basis of its objectives, and those that were processed.

#### 3. Instrument

The instrument consisted of an online survey developed specifically for this study and translated into the different languages of the countries where it was distributed.

This survey contained eight open-ended questions; respondents could write whatever they wanted to in the spaces provided. Although they were asked to be as specific and brief as possible, there was no limit placed on the length of their responses.

The questions were:

Question 1 (A1): Summarise in one sentence the most important change the COVID-19 situation has caused in your normal daily life.

Question 2 (A2): Do you think the situation caused by COVID-19 has influenced your ways of moving/getting around? In one sentence, write the main change that has affected your mobility.

Question 3 (A3): Do you perceive the environment in a different way from what you were used to before the COVID-19 crisis? In what way?

Question 4 (A4.1): If, as a consequence of the COVID-19 situation, you have had to change your travel or transport habits, what mode of transport have you used LESS than before (reduced your use)?

Question 5 (A4.2): What mode of transport have you used MORE than before (increased use)?

Question 6 (A6.1): If, as a consequence of the COVID-19 situation, you have had to change your travel or transportation habits, summarise in one sentence the main POSITIVE EFFECT or ADVANTAGE you think this has had (on you or on everybody).

Question 7 (A6.2): If, as a consequence of the COVID-19 situation, you have had to change your travel or transportation habits, summarise in one sentence the main NEGA-TIVE EFFECT or DISADVANTAGE you think this has had (on you or on everybody).

Question 8 (A7.2): If you believe that the crisis caused by COVID-19 will influence your mobility habits and preferences for means of transport in the future (once the situation is "normal" again), can you summarise in one sentence in what way (or how)?

Note: the code in parentheses indicates the original reference in the questionnaire

#### 4. Design

After the survey collection period had ended, the different responses obtained were categorised. This process was carried out independently in each participating country following a method that we already developed for another research project [27–29].

For each open-ended question in the survey, the different answers given were written on sheets of paper specifically prepared for this purpose, using the following criteria: if an answer represented the same idea as another answer that was already noted, the frequency was added (and the wording was checked to see if it is better); if it represented a different idea, it was written down as a new idea. In the end, from each country, we obtained a list of "different" ideas as responses to the corresponding question. Each idea was associated with a number that indicated the frequency with which that idea was repeated (people who responded with the same idea).

After this process was completed, the result sheets for the categorisation performed in each country were gathered in order to carry out a second common general categorisation. The categorisations carried out in the participating countries were the input, and the process was repeated to obtain the "common" ideas (in the European sample) and their frequencies. The frequency of the repetition of an idea/response was used as a measure of its importance.

This paper presents the results of the second categorisation, including the ideas/responses obtained from all the participating countries together.

#### 5. Findings

• Question 1: In one sentence, summarise the most important change the covid-19 situation has caused in your normal daily life

From the responses to this question, 662 valid statements were identified and processed. After they had been grouped into categories (different ideas), there were 48 different responses.

The following five ideas are those that, according to the respondents, best expressed the change perceived as a result of the pandemic (COVID-19) in the European population. They were the five most frequent responses given by the respondents.

The first idea, or the change perceived by the largest number of people, at 25% (rounded up), refers to confinement and its consequences. In this category, we included the expressions: *Confinement (at home); not being able to leave home other than for what are essential things (not being able to go to work/school; going outside much less; not going to cultural events); minimal activities outside the home; life was more sedentary; less free time activity; trips were reduced; holidays were cancelled.* 

Social isolation was the second most frequently perceived change in terms of response frequency (14%).

These two perceived changes could, to some extent, be considered logical; however, the frequency of the next two caught our attention more.

Teleworking (including online meetings and activities, as well as online classes) was in third place (10%). This new way of working increased (where it already existed) or begun (in those countries where it did not yet exist or existed very rarely) as a result of the pandemic situation. We imagine that the change in working life that teleworking involves and, above all, the forced process of adapting to it have meant advancing to a new situation from which it will be difficult to return. We can say that teleworking (with more or less intensity) is here to stay.

The other important change perceived was *fear* (with 8% of the responses coinciding), including a fear of contagion, a fear of touching people and things that others have touched, a distrust of others, a feeling of danger, increased hygiene behaviours, the avoidance of contacts, a fear of being indoors, and a fear of crowded places. These avoidance and prevention behaviours have become normalised and will surely be maintained to some extent in the future.

Finally, it should be noted that 6% of the responses indicated no perception of change (In general, *I did not change my life; no significant change*), and that the loss of one's job or its previous conditions was not the most important thing (of course, except for those respondents who experienced it, 5%).

Of the rest of the categorised responses, although they had a low frequency of repetition because they were more specific, we believe it is interesting to highlight the following: those that had to do with enjoying free time, which in most cases increased (there was also a reduction in some cases) as a result of mobility restrictions (job), such as walking more in the open air, more time for myself (hobbies, etc.), decreased stress, more cycling, cooking, baking, better diet (eating only at home), healthier life, new topics to think about, and increased physical activity. These examples are also shown in Table 1. **Table 1.** Quest: Summarise in one sentence the most important change the COVID-19 situation hascaused in your normal daily life.

Idea/Category	Total %
Confinement (at home); not being able to leave home other than for essential things (not being able to go to work/school, going outside much less, not going to cultural events); minimal activities outside the home. Life was more sedentary/less free time activity/trips were reduced/holidays were cancelled.	24.5%
Social isolation (family, friends, acquaintances, loss of social life, not being able to visit grandparents)/loneliness (no visits, spending less time with other people).	13.7%
Videoconferencing and teleworking. Sudden change that has meant going from working at the company to working online from home (contacting others online, online lessons, online meetings); these changes save a lot of travel time.	10.3%
Fear of contact with other people/feeling of danger (now)/I do not like to go to places where there are many people/I do not make plans out of fear of the situation/I try not to meet many people in a closed place (e.g., public transport (PT))/increased apprehension and mistrust of people and objects in everyday movement//do not touch things/be more hygienic/pay more attention to hygiene (disinfection)/having to keep a physical distance from other people (concern)/behaviours of prevention and caution/increased attention to people/worry more about oneself.	7.9%
In general, I did not change my life/no significant change.	6.0%
Get out of work//difficulties with working and or being paid/change my job/change my income//get a new job.	5.4%
I walk more in the open air/spend more time in the countryside/spend more time in the garden.	3.3%
More time for myself (hobbies, activities, studying, etc.).	2.1%
Shopping online/reducing purchases and time in the shop/modifying shopping habits.	2.1%
In general, it changed my life significantly (no other specification).	2.0%
Suffering as a result of not being able to show affection (hugging, kissing, etc.). Not being able to touch other people.	1.8%
Walk more (as soon as I can).	1.8%
Change of address, of city/house.	1.7%
I have valued family life more/spending more time with family (positive sense).	1.7%
Decreased stress (as a result of being at home with the family)/step out of everyday hectic life/slowing down/everything was calmer.	1.7%
Stop doing sports outdoors/sport places were closed.	1.4%
More cycling.	1.4%
Having to live intensively 24 h a day with my children and my husband (in a negative sense).	0.9%
Eating only at home/better diet.	0.9%
Change of schedule (timetable).	0.9%
Increased stress.	0.8%
Using a car/carpool/individual car transport was important.	0.8%
More sleep/getting up later/sleeping better.	0.8%
Life has become more stable (routine)/relaxed.	0.6%
Discovering new hobbies (cooking, baking, started to appreciate walks).	0.6%
Change in lifestyle (to a healthier life, change point of view on life).	0.6%
Spending time more effectively/I am allowed to schedule my time by myself.	0.5%
Impossibility of reconciling work and family life.	0.3%
Decrease in the supply and options of public transport (e.g., fewer connections).	0.3%
Being less active/lack of motivation for it.	0.3%
Restrictions on health care/saturation of health system/interruption of operations/lack of healthcare for other diseases.	0.3%
Less time spent walking.	0.3%
Fewer travel opportunities.	0.3%

Table 1. Cont.

Idea/Category	Total %
Being more frank and direct with people (I do not listen to or talk nonsense like before).	0.2%
Problems with time management.	0.2%
Volunteering.	0.2%
Appreciating contact with people more.	0.2%
Getting to know new interesting people.	0.2%
New topics to think about have appeared.	0.2%
Learning how to deal with myself, stronger morality.	0.2%
I lost my work rhythm (balance).	0.2%
Riding a bike less.	0.2%
Food was missing in the nearest shop I went to.	0.2%
More interested in politics now.	0.2%
Chaos in city hall.	0.2%
Life is monotonous.	0.2%
Complying with the regulations.	0.2%
Increased physical activity.	0.2%
	100.0%

In addition, there were other responses that were noteworthy, such as: having to live intensively 24 h with my children and my husband, which was stated (as a complaint) by some women from different countries (curiously, they coincided on this idea); more interested in politics now; saturation of the health system/lack of healthcare for other diseases; I have valued family life more/spending more time with family (in a positive sense); or the generalised use of a new shopping style, shopping online/modifying shopping habits, which we also think will be common from now on.

All the categories (which grouped the answers to this question that we believed represented the same basic idea) with their repetition percentages (when the same idea was expressed by more than one person) can be seen in Table 1 below.

• Question 2: Do you think the situation caused by COVID-19 has influenced your way of moving/getting around? in one sentence, write the main change that has affected your mobility

From the responses to this question, 619 valid expressions were identified and processed. After they had been grouped by categories (different ideas), there were 23 different responses or ideas.

For this question, we also believe the following six ideas are those that, according to the respondents, best expressed the perceived change in their mobility capacity as a result of the pandemic situation (COVID-19) in the European population, given that their response frequencies (people who agreed on the same idea) were far higher than the others.

The first idea, or the change perceived by the greatest number of people, with slightly more than 22%, refers to avoiding the use of public transport because of the fear of contagion.

The second perceived change focuses on the drastic reduction in daily mobility as a result of confinement (22%), leaving home only for specific tasks, such as exercising or going shopping.

Eighteen percent (rounded) of respondents did not perceive any influence or did not consider the change relevant to their mobility habits.

In addition, three modes of transportation were perceived to have increased in a relevant way: *increased walking or getting into the habit of walking*, with 11% agreement; the

use of, and dependence on, a private car, with 10%; and the use of a bicycle to get around, with almost 9% coinciding.

The rest of the ideas or categories had very low frequencies of response coincidences, perhaps because the changes were too specific; however, some answers attracted our attention.

The first was the *perceived tranquillity*, along with the ease and pleasure of getting around in one's own vehicle, because of the absence of *traffic jams* and the presence of less traffic.

Other ideas or perceptions of change affecting mobility that we found interesting (for use as questions in standardised questionnaires) were as follows: the decline in the number of purchases and visits to shopping centres (*large supermarkets*), the area of mobility being reduced to a neighbourhood or district boundaries (*mobility in a small location/only one district*), difficulty in maintaining a social distance of two metres and having to check whether others were complying with the rules, and the reduction in the amount of available public transport (e.g., fewer buses and reduced schedules) perceived by some respondents.

All the categories (which grouped the answers to this question that we believed represented the same basic idea), with their repetition percentages (when the same idea was expressed by more than one person), can be seen in Table 2.

**Table 2.** Question: Do you think the situation caused by COVID-19 has influenced your way of moving/getting around? In one sentence, write the main change that has affected your mobility.

Idea/Category	Total %
Avoid the use of mass public transport—metro, bus, tram, train, etc.—for fear of contagion.	22.0%
Drastic reduction in travel and everyday mobility (as a result of confinement and teleworking)/leaving home only for specific tasks (exercise, shopping, etc.).	21.8%
It has not had an influence or not in a relevant way (only using a mask)/It did not significantly affect my mobility habits.	17.5%
Increased walking (get into the habit of walking).	10.9%
Increase in private car use/I started to drive my own car/car dependence.	10.0%
Increased use of a bicycle for mobility.	8.8%
Increased use of a scooter/e-scooter.	1.6%
Change in type of physical activity (less, more, or other).	1.6%
The tranquillity.	1.4%
Not being able to go out for a walk or to the country to breathe fresh air.	0.6%
I walk less at the moment.	0.6%
Spending less time outside.	0.5%
Driving without traffic jams/getting around easily because of reduced traffic.	0.5%
More work from home (increased telework).	0.5%
Reduced the number of purchases and visits to large supermarkets.	0.3%
Difficulty maintaining a social distance of two metres (it has not been and is not easy).	0.2%
Had to use PT instead of a car because of finances.	0.2%
Checking if others observed the rules.	0.2%
My chin, nose, or tooth hurts because of the mask.	0.2%
Mobility in a small location (only one district).	0.2%
Travel by train instead of aeroplane.	0.2%
Bought an electric car and reduced my cycling.	0.2%
Reduction in the amount of public transport available.	0.2%
	100.0%

• Question 3: Do you perceive the environment in a different way from what you were used to before the COVID-19 crisis? in what sense?

From the answers to this question, 440 valid expressions were identified and processed. After they had been grouped by categories, there were 38 different answers or ideas.

On the question of whether respondents perceived the environment differently as a result of the COVID-19 crisis, the most repeated response was no (*no or I have not noticed anything important*), with 20% coinciding on this response.

This was closely followed by the perception of an environment of remoteness in social relations, wariness, and caution when coming into contact with others (*yes, people are more careful, using more caution when they have to communicate with others (social distance, use of masks, repressing displays of affection); less participation in joint activities; the way we relate is not the same as before*), with a coincidence of 19%.

Slightly more removed, with a concurrence of almost 12% in the response and closely related to the above, is the perception of a threatening environment of fear and insecurity (yes, now I am fearful; concern about leaving home; I perceive the environment (including public transport) as a threat; fear of contact with people or things that other people touch; distrust and feeling of danger with others; insecurity; people look at you as if they do not trust you; everything has become colder, less safe; paying more attention to people and their potential symptoms).

With almost 9%, we found a perception of emptiness and a lack of activity in the public space (*yes, fewer people on the streets, in places, on public transport, and in shops; less activity*). This percentage could increase slightly if we included the response "*Yes, there are fewer buses*" in this category. We did not include it because we preferred to keep this perception separate, due to the strongly negative effects the pandemic has had on public transport [30].

On the perception of a "hygienic" space and constant disinfection, 4.5% of the responses coincided.

Finally, the next two perceptions were of a less polluted environment. One referred to noise (*yes, less noise in the city; calm; quiet environment*), with 4.5%, and the other to the air (*yes, the contamination/pollution has been reduced; cleaner environment*), with 3%. These two categories could have been grouped into a broader category (e.g., contamination), which would have brought their percentage of agreement to almost 8%. However, we preferred to keep them as distinct ideas because of the importance this topic is acquiring.

Of the ideas that emerged with little coincidence, we did not consider them equally unimportant because some of them stood out more than others, such as the perception of aggressiveness in the environment (*yes*, *I perceive aggressiveness*, *hostility*, *and tension in people—aggressive in traffic*, *hostility in the street*, *very nervous and anxious people in general*), which appeared in the Czech Republic and Spain.

The perception of a reduction in "their" social space and its effect on lifestyle was represented by statements such as: *yes, now my environment is the closest, especially at home/I do not go to the workplace/the way I work is from home;* or *yes, impact on my lifestyle (coordination of work and family);* or *yes, more communication with the neighbours;* or *yes, we value social relationships more/I look forward to seeing my relatives even more, I think about staying in touch with them.* 

Finally, there was the perception that this pandemic has been a warning about our fragile future (*yes, an unexpected future*).

All the categories (which grouped the answers to this question that we believed represented the same basic idea), with their repetition percentages (when the same idea was expressed by more than one person), can be seen in Table 3.

**Table 3.** Question: Do you perceive the environment in a different way from what you were used to before the COVID-19 crisis? In what sense?

Idea/Category	Total %
No, or I have not noticed anything important.	20.0%
Yes, people are more cautious, more careful when they have to communicate with others (social distance, use of masks, repressing displays of affection), and participate less in joint activities. The way we relate is not the same as before.	19.1%
Yes, now I am fearful/concern about leaving home/I perceive the environment (including public transport) as a threat/fear of contact with people or things that other people touch/distrust and a feeling of danger with others/insecurity/people look at you as if they do not trust you/everything has become colder, less safe/paying more attention to people and their potential symptoms.	11.8%
Yes, fewer people on the streets (in places and public transport) and in shops/less activity.	8.9%
Yes, people have increased their hygiene habits (cleaning/hand washing) and avoided touching or have disinfected things that might have been touched by other people (handrails, escalator handrails, rails, doorknobs, handles, etc.)/disinfection in public spaces.	4.5%
Yes, less noise in the city/calm/quiet environment.	4.5%
Yes, the contamination/pollution has been reduced/cleaner environment.	3.0%
Yes, I appreciate nature more/nature is doing better/I discovered beautiful new places in the countryside.	2.7%
Yes, got used to everything (he/she must now get used to everything).	2.5%
Yes, wearing masks.	2.3%
Yes, more people walking.	2.0%
Yes (no other specification).	2.0%
Yes, being outside has become nicer/I like to go out more/thanks to walking, I have come to know the area better.	1.8%
Yes, now my environment is the closest, especially at home/I do not go to the workplace/the way I work is from home.	1.4%
Yes, public transport is not saturated.	1.4%
Yes, impact on my lifestyle (coordination of work and family, people changed).	1.4%
Yes, people are more interested in cycling.	1.1%
Yes, I perceive aggressiveness, hostility, and tension in people (aggressive in traffic, hostility in the street, and very nervous and anxious people in general).	0.9%
Yes, I have noticed how narrow the pavements are and the excessive space for cars and (bar/restaurant) terraces.	0.9%
Yes, increased use of a private vehicle (car).	0.7%
Yes, more communication with the neighbours.	0.7%
Yes, we value social relationships more/I look forward to seeing my relatives even more; I think about staying in touch with them.	0.7%
Yes, in general, life is slower, more complicated now.	0.7%
Yes, I spend more time sleeping, prioritising walks, travelling less by car, and experiencing less stress/more free time.	0.7%
Yes, I feel the pressure.	0.5%
Yes, stricter rules everywhere.	0.5%
Yes, shopping hours changed.	0.5%
Yes, prefer outdoor spaces/uncomfortable in enclosed spaces.	0.5%
Yes, I did experience more fear about economics and finance; I have to refrain from expenses.	0.5%
Yes, there are fewer buses.	0.2%
Yes, everything seems more distant and, in a way, surreal.	0.2%
Yes, I am going to do what I should have done and get rid of useless burdens. I have accelerated decisions that had been pending for a long time.	0.2%
Yes, more people at public sport grounds.	0.2%

Table 3. Cont.

Idea/Category	Total %
Yes, people tend to ignore the preventive measures and that really bothers me.	0.2%
Yes, having to wear a mask means I decide to go out/shopping less.	0.2%
Yes, more garbage in the countryside.	0.2%
Yes, an unexpected future.	0.2%
Yes, fewer aeroplanes.	0.2%
	100.0%

• Question 4: If, as a consequence of the COVID-19 situation, you have had to change your travel or transport habits, what mode of transport have you used less than before (reduced your use)?

From the answers to this question, 492 valid expressions were identified and processed, and grouping by categories resulted in 14 different answers or ideas.

As for the mode of transport the respondents used the least as a result of the pandemic, the mode in first place was public transport in general, with a fairly high frequency of coincidence (almost 35%) compared to other modes. If we add the specific modes of public transport, this percentage increases even more: the bus would add 14%, the metro 8%, the train 5%, the tram 1% (we assume because not all countries have trams), and the aeroplane 1%.

Of the total responses, 18.5% said they had not reduced any mode compared to before the pandemic, or not significantly. About 12% said that their use of a private car decreased, although some said it was the only form of transportation (0.2%).

The rest of the response categories can be seen in Table 4, which presents all the categories included with their percentages of repetition (when the same idea was expressed by more than one person).

Table 4. Question: If, as a consequence of the COVID-19 situation, you have had to change your
travel or transport habits, what mode of transport have you used less than before (reduced your use)?

Idea/Category	Total %
Mass public transport in general.	34.6%
I have not reduced any (of the ones I used) or not significantly.	18.5%
PT (specific): bus.	13.8%
Car (private).	12.2%
PT (specific): metro.	7.7%
PT (specific): train.	5.1%
I have reduced overall travel because of confinement.	2.0%
Walking.	1.8%
Bicycle.	1.2%
PT (specific): tram.	1.0%
Flying.	1.0%
Taxi.	0.4%
My use of all vehicles has decreased.	0.4%
I have used my car less, but it is the only form of transportation I use.	0.2%
	100.0%

#### Question 5: What mode of transport have you used more than before (increased use)?

From the responses to this question, 348 valid expressions were identified and processed, and grouping them by categories resulted in 13 different answers or ideas.

As for the mode of transport used most as a result of the pandemic, walking was in first place, with 33% coinciding on this response, followed closely by private cars (with almost a 28% frequency of coincidence) and bicycles (with just over 13%). These three modes of transport experienced, according to the responses, a noteworthy increase during the period of the greatest COVID-19 risk.

Almost 20% of those interviewed stated that they had not increased their frequency of use of the modes of transport, or not one mode in particular, compared to before the pandemic.

The rest of the response categories can be seen in Table 5, which presents all the categories studied with their repetition percentages (when the same idea was expressed by more than one person).

Idea/Category	Total %
Walking more.	33.0%
Car (private)/using a car more.	27.6%
None or none in particular.	19.8%
Bicycle/cycling more.	13.2%
Motorbike.	1.7%
I have reduced my overall mobility because of confinement.	1.4%
 Taxi.	1.4%
Skateboard.	0.3%
PT (specific): metro.	0.3%
PT (specific): train.	0.3%
Mass public transport in general.	0.3%
Fewer flights.	0.3%
Scooter.	0.3%
	100.0%

Table 5. Question: What mode of transport have you used more than before (increased use)?

• Question 6: If, as a consequence of the COVID-19 situation, you have had to change your travel or transportation habits, summarise in one sentence the main positive effect or advantage you think this has had (on you or on everybody)

From the responses to this question, 536 valid expressions were identified and processed, and grouping them by categories resulted in 37 different answers or ideas.

As Table 6 shows, the most repeated positive effects of the COVID-19 measures on transportation were the reduction in traffic in general (with slightly more than 28% of coinciding responses), the reduction in pollution (with slightly more than 13% of coinciding responses), and the reduction in stress and noise or calm (with 7.5% of coinciding responses).

**Table 6.** Question: If, as a consequence of the COVID-19 situation, you have had to change your travel or transportation habits, summarise in one sentence the main positive effect or advantage you think this has had (on you or on everybody).

Idea/Category	Total %
Reduction in traffic in general (less cars in traffic, fewer people on the pavement, etc./using the car less/fewer traffic jams.	28.4%
Less pollution.	13.4%
No advantage, indifferent, or nothing remarkable/no changes.	11.9%
Less stress and less noise/calm.	7.5%
Fewer people in PT/you have a free seat next to you).	6.3%
I have gotten used to walking more. I have discovered the advantages of walking.	5.4%
Increased bicycle use.	4.9%
Economic savings. Less spending in general and on transportation.	3.5%
Hygienic safety and health.	2.2%
Telework/online meetings.	2.1%
Fewer people everywhere.	1.3%
Exercise and enjoy the city more.	1.1%
Not worrying about having unfamiliar people around who keep their distance from me (supposedly because of confinement).	1.1%
Makes me wish for a more walkable city without transport pollution.	1.1%
Travelling in my own car has been an advantage for me and for others (because I have reduced contact with others). It has given me security.	0.9%
Fewer flights/less air traffic.	0.7%
Enjoy the countryside more.	0.7%
Fewer accidents "in itinere" (on route).	0.6%
I have valued going for a ride more, and now I enjoy it more than before.	0.6%
Some people are more considerate/people behave in a more respectful way.	0.6%
I used my motorbike more.	0.6%
More free time.	0.6%
Reduction in travel time (because of less traffic).	0.6%
My dog has had more company.	0.4%
Do not interact with other people.	0.4%
The (main) positive effect has been the reduction in the risk of COVID-19 contagion.	0.4%
More people outside.	0.4%
Animals returned to the cities.	0.4%
Not so many train and bus delays.	0.4%
New services and new devices.	0.4%
I have used local businesses more.	0.2%
Do not depend on modes of transport that use fossil fuels.	0.2%
The city was a paradise for cyclists and pedestrians (for the first weeks).	0.2%
The benefit of the change is that I learned to drive better because I used the car more often.	0.2%
Easy to travel.	0.2%
I get smaller fines on the road.	0.2%
Walked more with my wife and child, which is good family time.	0.2%
	100.0%

On a second level, we found the perception of free or empty space on public transport, with the ease of finding empty seats (just over 6% of coinciding responses), having discovered the advantages of walking and/or walking more (with just over 5%), the increased use of bicycles (with almost 5%), the economic savings of not having to spend money on transportation (3.5%), the benefits of hygiene, and teleworking (both with just over 2% of coinciding responses).

Finally, almost 12% of the responses considered that the pandemic situation did not have any advantage or positive effect on transportation, or it was not relevant.

The rest of the categories considered did not have a relevant frequency of coinciding responses, which does not mean that they were not interesting. All of them, with their percentages of repetition, can be seen in Table 6.

• Question 7: If, as a consequence of the COVID-19 Situation, you have had to change your travel or transportation habits, summarise in one sentence the main negative effect or disadvantage you think this has had (on you or on everybody)

Perhaps because this question is complementary to the previous one, the number of responses given was much smaller. Even so, 185 valid expressions were identified and processed in response to this question. After they had been grouped by categories, there were 23 different answers or ideas.

The most repeated response to this question was that the respondents did not find any disadvantageous or negative effect on their transportation habits (with almost 18% of the responses coinciding), followed by the perception of an increase in pollution as a result of the increase in the number of private cars (13.5%), social isolation and a reduction in face-to-face personal relationships (13%), not being able to leave the house when you want to (because of confinement; just over 8%), not using public transport because of fear of contagion (almost 8%), the impossibility of taking long trips (aeroplane, weekends, to other countries, etc.) because of the ban (6.5%), having to increase the attention and vigilance paid to others to maintain safety measures (distance, masks, hand washing, etc.) and hygiene behaviours (with almost 4.5% of coinciding responses), a decrease in consumption (seen as a threat to the economy and to business opportunities; almost 5%), and the cancellation of public transport connections and services (with slightly more than 4% of coinciding responses).

The rest of the categories considered did not have a relevant frequency of coinciding responses, which does not mean that they are not interesting. All of them, with their repetition percentages, can be seen in Table 7 below.

**Table 7.** Question: If, as a consequence of the COVID-19 situation, you have had to change your travel or transportation habits, summarise in one sentence the main negative effect or disadvantage you think this has had (on you or on everybody).

Idea/Category	Total %
Has not found any disadvantage at the moment or is indifferent.	17.8%
Pollution from increased use of private cars. More spending on petrol.	13.5%
Social isolation (family and friends). Decrease in face-to-face personal relationships.	13.0%
Not being able to get out (from home) when I want to (because of confinement).	8.1%
Not using any means of mass public transport because of fear of contagion.	7.6%
Impossibility of long trips (to other towns or provinces) because of the ban/not being able to travel by plane, train, or bus/I avoid travelling by plane/impossibility of long weekend trips abroad/the possibility of travelling to other countries has changed (resulting in a loss of opportunity to choose a desired holiday in summer).	6.5%
Having to increase attention and vigilance over the movements of others in order to maintain physical distance and follow other health safety recommendations (masks, hand washing, when touching buttons, card readers, lifts, etc.)/people unconsciously omit measures to maintain physical distance from others.	5.4%

Table 7. Cont.

Idea/Category	Total %
Decreased consumption (bad for the economy). Loss of business opportunities.	4.9%
Cancellation of some PT connections and services on PT.	4.3%
Needing more time (for mobility purposes).	3.8%
More sedentary life, impossibility or difficulty of doing exercise.	2.7%
Tiredness (perhaps affected slightly by COVID-19).	2.2%
That I have made fewer plans.	2.2%
Because of having hardly left home, they have had no chance to change their mobility habits, beyond reducing all the modes they used before.	1.6%
Drivers violating traffic safety laws more/more irresponsible drivers.	1.6%
Closed shops and petrol stations.	1.1%
The hourly restriction (reduction in the time you have to do something).	0.5%
Disorientation.	0.5%
More cyclists who did not understand the traffic situation.	0.5%
I perceive negative changes (in general).	0.5%
Problems with buying tickets: not being able to pay with cash.	0.5%
Problems with buying tickets: bus drivers do not sell tickets for one ride (which can be a problem for guests in the city).	0.5%
Many people lost their jobs because travelling was their main means of work.	0.5%
	100.0%

 Question 8: If you believe that this crisis caused by COVID-19 will influence your mobility habits and preferences for means of transportation in the future (once the situation is "normal" again), can you summarise in one sentence in what way (or how)?

From the responses to this question, 379 valid expressions were identified and processed. After they had been grouped by categories, there were 33 different responses or ideas.

It should be highlighted that almost 36% of the responses indicated that they did not believe the COVID-19 situation would affect their future transportation habits (when the pandemic threat is over).

The remaining responses indicated that it would affect them, in some cases affecting their choice of mode of transportation: walking (with almost 11% of the respondents agreeing), cycling (with slightly more than 8%), or a private car (also with slightly more than 8%). Others indicated that it would affect their future cautious behaviour: they would reduce their mobility for some time (with slightly more than 7% of the respondents coinciding), continue to keep a social distance (also slightly more than 7%), or avoid using modes of transport where there are crowds of people for a long time until there is a vaccine or conditions are safe (with slightly more than 6% of the respondents agreeing).

All the categories (which grouped the responses to this question that we believed represented the same basic idea), with their repetition percentages (when the same idea was expressed by more than one person), can be seen in Table 8.

**Table 8.** Question: If you believe this crisis caused by COVID-19 will influence your mobility habits and preferences for means of transport in the future (once the situation is "normal" again), can you summarise in one sentence in what way (or how)?

Idea/Category	Total %
They do not believe it will influence them (either because they do not want to, or because the place where they live does not offer them alternatives to those they already use).	35.9%
I will practise walking more as a means of getting around/I will walk longer distances/more walking in general.	10.8%
I will use a bicycle.	8.4%
I will use a private car more/the pandemic forced me to brush up on my driving skills.	8.4%
(For some time) I will continue to move around very little/I will reduce my trips (if they are short, I will go on foot or by bicycle; if they are longer, I will use my car)/my expectations of travelling will be lower/I will think more about where and how to travel; if it is not necessary I will not go there/it will be necessary to plan trips more responsibly to make them safe/I do not go to public places unless it is necessary.	7.4%
I will be more cautious/I will keep my distance from people/I will touch things in public places as little as possible/I will continue to use masks, etc./I will pay more attention to hygiene/everyone should be more hygienic on PT (disinfection, masks, etc.). It may become a habit after the pandemic/we will have to take many more safety measures to avoid catching the virus, whether we are entering or exiting the vehicle//I think the health crisis will help improve the health safety of public transport, in the sense of disinfecting it more often and normalising the use of masks when we have a contagious disease.	7.4%
Until there is a vaccine, I will avoid, as much as possible, the modes of transport where there are a lot of people. I will reduce, as much as possible, the use of mass PT for a long time (until conditions are safe).	6.3%
I have realised that a person needs a car, even in the city/the car has become more important (to move around and to get away from people in the countryside).	2.1%
Changing travelling habits is not as difficult as it seemed before.	2.1%
Teleworking and online meetings should be increased (many things can be done from home without the need to travel somewhere)/I have learned that it is possible to work from home/alternative ways of participating in some events (meetings, conferences, etc.).	1.8%
I will try to use a private car less.	1.3%
We should use PT more.	1.3%
I will look for individual modes of transport where personal contact is avoided, as long as there are no reliable solutions or treatment for the virus. I will use personal modes of transportation. (Note: This category would include two already treated separately, bicycle and walking; however, we found it interesting to treat this as a separate category because it highlights individual use in general and includes light vehicles for sustainable personal mobility ("personal light electric vehicles"))	0.5%
Realising that people panic easily.	0.5%
I am not sure or unspecified changes.	0.5%
I will only use a taxi.	0.5%
The timetables for taking a vehicle are reduced (we assume in PT), and traffic jams will increase.	0.3%
Pollution (will increase).	0.3%
The style of shopping has changed (a new style of shopping that does not require going to a physical shop has been reinforced by this pandemic), and it has made us better prepared for this change.	0.3%
I think more about how to make travel more efficient in relation to petrol consumption (electric cars?).	0.3%
We appreciate freedom of movement more.	0.3%
Drivers are more dangerous when they are back on the road after a long time (it is not possible to ride a bike anymore).	0.3%
More consideration for other drivers.	0.3%
Others who drive often and everywhere should realise that is not necessary (they can use other means of transport, such as PT).	0.3%
I will use a tram when travelling within a city (but between cities I will use a car).	0.3%
I will try to use a scooter more.	0.3%

Idea/Category	Total %
Using PT less.	0.3%
There should not be traffic jams in the city-initiatives that try to exclude cars from the city centres make sense.	0.3%
The price of petrol has dropped (fewer cars on the roads).	0.3%
I think there will be less air travel.	0.3%
I have learned to live in a slower mode.	0.3%
Increased appreciation of surrounding areas.	0.3%
I will try to travel as much as possible and pay as much attention to my family as I can during the pandemic.	0.3%
	100.0%

# 6. Discussion

Table 8. Cont.

To start the discussion, it should be highlighted that this study is a qualitative one. In the presentation of the results, we gave in to the temptation to present percentages, because the number of responses was very high—far more than a hundred people answered the questions in all cases. Nevertheless, the answers should not be interpreted quantitatively. If we presented the answers we received here in a quantitative setting and let larger populations allocate their weights to these answers, it could happen that comments that were made only once or twice as expressions in their authors' own words in the frame of this qualitative study would find support from larger portions of the population and vice versa. Therefore, in the discussion, no weight will be given to the frequencies of the comments received from the interviewees.

# 7. Changes in Daily Life because of the COVID-19 Situation

Not all respondents perceived a relevant change. For some, the pandemic led to confinement and more social isolation, precisely as reported in other studies, for instance, that of Bergantino et al. [3]. There was an increase in teleworking (home office) in working life, with pros and cons. On the one hand, one could stay at home safely while work was still completed. On the other hand, the disadvantages included the above-mentioned social isolation, restrictions on space at home, and disturbance by children or other adults in apartments. This aspect seems to be new; we could not find any indications of it in earlier literature.

A different aspect of change that was mentioned was *fear*, mainly the fear of being infected by others, which caused avoidance and prevention behaviour. In accordance with this finding, the studies by Cowling et al. [7], Liao et al. [9], and Kelly et al. [10] came to similar conclusions. These studies reported preventive steps by the population, including the avoidance of crowded spaces.

According to our study, free time seemed to increase for some of the respondents, and that gave them time for more physical activity, walking in the open air, and for hobbies and family life. Decreased stress was mentioned, and more cycling, cooking, baking, and a better diet became possible. Paradoxically, the possibility of living a healthier life was hinted at. These are also aspects that we consider rather new, as they were not discussed much elsewhere.

As many shops could not open during the pandemic, shopping habits changed, some said, while experiencing that one could do without many things. This is in accordance with Abdullah et al. [21], who showed that during the pandemic, trips to provide the bare necessities were shorter than those to work or school, allowing the use of modes of transportation appropriate for shorter distances, such as walking and cycling.

Some statements that we could not find in the earlier literature referred to the notion of some of our interviewees that their interest in politics rose. We interpreted this as a consequence of the fact that, in this case, politics has a more directly perceivable effect on one's own life than is usually the case.

# 8. Changes in the Perception of the Environment

A number of respondents did not perceive any changes, while others pointed at moments when they were wary and cautious when coming into contact with others. This is in accordance with what was discussed above concerning fear. The environment sometimes became threatening, and fear and insecurity rose. The reminders of the rules of hygiene and constant disinfection were mentioned. In line with this, Barbieri et al. [5] cited the protection motivation theory (PMT), which explains individuals' modification of their attitudes and behaviour, including transportation mode choice, in order to reduce their risk of self-infection and of spreading infection.

Some positive changes included more time for family, more communication with neighbours, and a higher value attributed to social relationships. The expression of this perspective is rather new, at least as far as the literature that we studied is concerned. This is also valid for the fact that environmental effects were mentioned in a more narrow sense. This refers to the impression that air quality improved and that the level of noise decreased. An interesting comment regarding this connection was that this pandemic was a warning concerning our fragile future.

# 9. Changes in Mobility

Though not everybody in our project experienced relevant changes, several respondents experienced a reduction in out-of-house mobility, especially as far as the use of public transport was concerned, as a result of a fear of contagion. In accordance with this, Campisi et al. [4] showed that the users of public transport started to think twice about their choices. In fact, Borkowski et al. [16], Eisenmann et al. [17], and Yıldırım et al. [18], among others, reported a dramatic decline in the use of urban mass transport on the basis of different case studies. This decrease occurred in general in all the countries studied, despite the cultural differences, which we already highlighted in another work [31].

At the same time, our interviewees perceived an increase in walking and cycling. Some respondents saw a reduction in car use as well, at least at certain times, leading to more tranquillity and the absence of traffic jams. In his analyses carried out in Budapest, Bucsky [13] registered an increase in walking and cycling, while he also identified an increase in car use. In fact, some of our respondents also perceived an increase. It is possible that these perceptions could result from experiences at different times of the day; on different days of the week; in different countries; and during different phases of the restrictions in those countries, as there was no full synchronicity between the countries in this respect.

According to our interviewees, mobility patterns showed declines in trips to shopping centres etc., while mobility in the neighbourhood or within district boundaries increased in the eyes of some, which would fit the increased proportions of walking and bike use. This perception is corroborated, for instance, by the studies in Germany by Eisenmann et al. [17], Schlosser [25], and Anke et al. [11], who all reported a considerable increase in the choice of active modes of mobility.

#### 9.1. Positive Effects of Changes in Mobility

In the literature that we studied, it was not common to find assessments of the quality of modes by the citizens and of the effects of a mode change, either positive or negative. Therefore, we consider our study innovative in this sense. Of course, environmentalists support the use of sustainable modes of transportation. In this sense, our respondents mentioned the reduction in car traffic as long as it lasted, combined with a reduction in pollution and noise. However, they also mentioned aspects that are not usually referred to by experts, such as the reduction in stress. For those who still used public transport, quality improved because of the lower numbers of passengers, with more space and more free seats as a consequence.

In connection with walking and cycling, many advantages were listed, including financial savings, and fitness and health benefits. Working at home was seen as another advantage by some, as the number of trips to and from work was reduced.

# 9.2. Negative Effects of Changes in Mobility

As stated above, the collection of comments from the general public on the quality of certain modes of transport and the consequences of their use is not very common. Therefore, our findings reveal partially new aspects. For many of our respondents, there were no negative consequences at all because of the changes in their mobility. Those who had the impression that their car use had increased mentioned an increase in pollution. Others referred to "change in mobility" as a relevant reduction in (their own) mobility with reduced face-to-face contacts, because of the confinement they experienced.

A disadvantage connected to public transport was that the service and numbers of connections were cut down on many occasions as a result of the significant reduction in the number of passengers.

One important negative aspect that was mentioned was the impossibility of making long trips. Air travel was heavily reduced, and (longer) trips to other countries were difficult or impossible because of the prevailing COVID-19 rules. This coincides with the data from Eurocontrol [32] showing that air traffic decreased significantly as a result of COVID-19 measures.

# 10. Expected Changes of Mobility Patterns and Habits in the Future

While many respondents believed that the COVID-19 situation would not affect their future mobility patterns and habits, others assumed that their mode choice might change. Walking and cycling, but also the use of a private car, would play a more important role, according to these assumptions, meaning that the use of public transport would decrease. Others referred to changes in mobility that pay more attention to staying safe. They imagined that they would reduce their mobility for some time and continue to maintain "social distance". Some said that they plan to avoid the use of modes of transport where there are crowds of people until conditions are safe, for instance, because an effective vaccine is available.

#### 11. Conclusions

The policy of restrictions showed the importance of mobility, or more generally the implicit human need to move from A to B, for human society. At the same time, these restrictions can function as a catalyst for positive changes. Active modes could benefit from the momentum generated by the COVID-19 pandemic. However, this can only happen if appropriate preconditions are provided, which is not the case so far. A number of recent studies have pointed out the structural problems of traffic planning, which often disregard the needs of vulnerable road users: pedestrians, cyclists, children, and older or impaired people. For instance, Risser and Sucha [23,33] discussed this matter extensively with respect to walking. Leden et al. [24] also argued that the traffic environment at present is often hostile to walking.

At the same time, measures to facilitate walking and cycling can be introduced within a very short time, as Anke et al. [11] showed. In European cities, such as Berlin, Madrid, Paris, Prague, and Rome, measures were taken to support walkers, cyclists, and the users of other forms of micromobility by providing instant cycle lanes, closing streets to car traffic, and allocating space to active modes [12,20]. When hearing from our respondents who came from several European countries, it was clear that such a development was rather appreciated by the public. As a consequence, to prevent a massive return of private motorised vehicles into urban centres, this could be a route to take in the future that does not strive against public opinion. The comment by some of our respondents that the COVID-19 pandemic was a warning concerning our fragile future goes in the same direction as the statement from Eisenmann [17], who said that we need to enhance the development and use of sustainable modes of transport.

## 11.1. Shortcomings and Strengths of the Research

The main shortcoming of this research is that a connection to a quantitative follow-up could not be presented. However, this qualitative study complements another quantitative study already published [30]; thus, the results of the variables studied can be consulted there. In this study, we learned about the possible impacts of COVID-19 restrictions on individuals' and societies' everyday life and daily mobility, as experienced by our interviewees. However, we were not able to report about the quantitative distribution of such views and experiences in the population. This means that the effects that were mentioned are in fact experienced, or imagined, by individuals, but we do not know by how many.

Another problem—not exactly a shortcoming—is related to the fact that the time periods are not clearly delimited. The character of restrictions varies over time and between countries; there is no real "after" period, and there are only periods when measures are eased, at different times and in different ways in different countries. Moreover, the "before" phase could—for natural reasons—only be analysed in retrospect.

The strength of the paper is connected to the fact, per se, that we asked citizens to ponder about their experiences and expectations in their own words, thus gaining information that is not usually included in other papers about the topic dealt with here, or about similar themes.

## 11.2. Future Research

The presented research is of a qualitative nature, which means that the results help us to understand the importance of the topic from the point of view of the targeted population. Based on the findings presented in this paper, the next research step would be to conduct a quantitative study, e.g., by applying a standardised questionnaire, in order to collect data from representative portions of the population. This would enable us to generalise our results on a more broad level concerning the populations of the included countries.

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