https://doi.org/10.48295/ET.2023.93.9







Car-free Life and Factors Influencing Travel Mode Choice

Matúš Šucha*, Zita Jahodová

Department of Psychology, Faculty of Arts, Palacký University in Olomouc, Olomouc 771 80, Czech Republic

Abstract

The article discusses the issues related to the choice of a travel mode. It explores factors which may lead to the decision to lead a life without a car, as well as describing the advantages and disadvantages associated with such a car-free lifestyle. A qualitative design was chosen for the research. The first group comprised respondents who had never begun to drive, the second individuals who had given up their car voluntarily, of their own accord, and the third consisted of individuals who were forced by circumstances to give up car use. Respondents from the Czech Republic and Austria participated in the survey. The results suggest that the main factors conducive to a car-free life are the lack of a perceived need for a car, financial costs, and fear of driving. The concepts of voluntariness and internal motivation also play a role.

Keywords: travel mode choice, car-free life, traffic psychology, sustainable travel modes

1. Introduction

Transport-generated pollution has a negative impact on climate change (Oskamp, 2000) and generally on health, including cardiovascular and respiratory diseases. While infrastructural modifications and legislative measures provide incentives for reducing the numbers of cars on roads, psychological strategies targeting attitudes and perceptions are generally more acceptable and less costly (Taylor & Ampt, 2003), but so far not applied to a satisfying degree or in appropriate ways.

The research into psychological theories explaining travel mode choice and car use is not always consistent in its findings, as shown by a meta-analysis conducted by Lanzini and Khan (2017). According to them, the heterogeneity of the results may be largely attributable to differences in conceptual operationalisation and measurement errors. In addition, specific characteristics of certain groups, such as students, or the purpose of the journey (work, school, shopping, a trip) may play a role (Lanzini & Khan, 2017).

The role of habit is often brought up in discussions concerning car use. Daily commuting represents a typical situation where the "decision" is made under relatively

-

^{*} Corresponding author: Matúš Šucha (matus.sucha@upol.cz)

stable conditions: rather than resulting from decision making based on the evaluation of the situation, travel mode behaviour appears to be strongly influenced by previous behaviours and habits (Lanzini & Khan, 2017). Verplanken et al. (1997) noted that individuals with strong travel habits who were confronted with the choice of a travel mode tended to use heuristic strategies exerting less effort to arrive at a decision, like (biased) experience, while those with weak habits opted for more complex and cognitively elaborate strategies.

Verplanken and Wood (2006) argue that it was more likely for an individual to reconsider their behaviour in response to changes in the situational context. This proposition is referred to as the Habit discontinuation hypothesis. Bamberg et al. (2003) suggest that interventions to promote public transport should target individuals who have found themselves in a changed decisional context, e.g. a change of domicile, retirement from work, or leaving school for work.

Klöckner and Matthies (2004) sought to identify the degree to which life events may influence travel mode choice. It was found that individuals who had experienced at least one significant change in their lives developed a weaker habit regarding using a specific travel mode in comparison to those who had experienced no such major change. The key events (life changes) reported by the respondents included obtaining a driver's licence, a change of employment status, ownership of a car, getting married, etc. (e.g., Ouellette & Wood, 1998).

Lind et al. (2015) noted significant changes in the frequency of car use among numerous individuals aged 18-20 because of important events that trigger such changes. These include obtaining a driver's licence, entering university, or buying a car. At the age of 25-26, the most common significant events that had a bearing on the participants' travel mode choices included their starting their first job, buying a car, and having their first child born. In a qualitative survey among 20 German parents, Lanzendorf (2010) found that while having a child may contribute to car dependency, it can also provoke a change in the travel mode choice towards public transport or cycling. It should be borne in mind that the perception of the significance of different life events may vary greatly from person to person. Relevant psychological interventions should thus focus much more on the context of a person's entire life.

It is important to consider the fact that car use is not determined only by rational economic decisions, but there are many other factors that have an influence, including aesthetic, emotional, and sensory responses to driving, the influence of the family and significant others, sociodemographic factors, and occupation. This implies that choices of different travel modes are underpinned by the belief that such modes will satisfactorily fulfil those functions (Sheller, 2004).

When comparing groups of frequent users of private and public modes of transport, Lind et al. (2015) found income and gender to be significant predictors, too. While the group of frequent users of motorcycles and cars, comprising mainly men, reported lower annual incomes, women were more likely to use public transport. This is in line with previous studies (e.g. Rundmo et al., 2011), in which men, older people, and individuals with lower levels of education appeared to be more frequent car users, while women, young people, and educated individuals tended to use public transport modes regularly. Similarly, Limtanakool, Dijst, and Schwanen (2006) ascertained that the men in their sample relied on cars more often than the women, who were found to tend to use trains for travelling medium to long distances. The same study also reported a positive correlation between the level of education and the travel mode choice.

Šucha, Viktorová, and Risser (2019) conducted an experimental study involving participants who were asked to give up car use for one month. The principal research question was whether an incentive to refrain from car use may initiate a change in travel mode choice behaviours in the future. The answer was yes, with positive experience with alternative travel modes being crucial in this respect. If such experience is negative, the willingness to opt for such modes in the future may diminish and car use routines may be resumed. The breaking of the habit of using a car appears particularly difficult for people who are not intrinsically motivated to do so and who are not already using any alternative travel modes. All the participants pointed out that it was necessary to plan their journeys, and their entire daily schedules ahead, which they found rather difficult to learn. Almost all the study participants used a car at least once during the period "without car", reporting "extraordinary circumstances" as the reason. The most prominent travel mode choice factors discussed by the respondents included time, comfort, baggage, flexibility, the weather, infrastructure in general, places to park, health, and children.

Time considerations were brought up in relation to various aspects – different travel modes were compared in terms of time efficiency, with references being made to waiting for connections, train or bus delays, and the need to get up earlier. Psychological comfort mainly involved the issue of stress. In relation to car use, major stressors identified by the respondents included parking, heavy traffic, and road conditions. On the other hand, some benefits of alternative travel modes, such as the opportunity to relax, read, and feel good about not using a car, were also noted. Importantly, the participants seemed to prefer psychological comfort to financial, health, and environmental aspects. Therefore, Sucha et al. (2019) argue that when creating incentives to promote a car-free life it is advisable to pay special attention to positive experience with alternative travel modes rather than focusing solely on financial and health considerations. This can be achieved, among other things, by improving the infrastructure. This positive experience may pave the way for reinforcing new travelling habits. Topics such as finance, traffic conditions, the behaviour of other passengers, distance, the possibility of consuming alcohol, travel safety, environmental aspects, and waiting for connections were discussed to a lesser degree.

The above suggests that the ever-increasing trend in car use is mainly due to the benefits which this mode of transport offers. They include flexibility, time efficiency, independence, and comfort. Nevertheless, excessive car use is also associated with negative aspects, manifested specifically in the environmental burden and the effects on drivers' physical health, as excessive car use and the ensuing dramatic reduction of physical exercise lead to health issues such as cardiovascular diseases and obesity. Traffic congestion is common, new roads are continuously being built, and we are faced with a shortage of parking places, especially on high-rise estates and in city centres. The research topic which we have identified on the basis of a literature review is defined as the operationalisation of motives behind travel mode choices, with a special focus on choosing active travel modes (especially walking, cycling, and public transport), in other words, a "car-free life". We aim to describe the ways of shaping human behaviour towards the reduction of individual car traffic and scaling up the share of active travel modes within urban mobility systems. Two groups of respondents, from the Czech Republic and Austria, respectively, were used to look for any cultural differences.

2. Aims and research questions

The main objective of this study is to identify the motives behind individual choices to use a car (or not) by means of interviews. We will particularly investigate the

psychological processes underlying the choice of travel modes (the role of habit, attitudes, and socialisation) and other motives which also have a bearing on this decision. Specifically, we will examine personal motives (motivation, beliefs, needs, health status, lifestyle, childhood), interpersonal motives (travel mode habits in the family, the influence of the parents, community, and the immediate social environment), and other factors such as infrastructure and the availability of different travel modes (Concerning the role that different variables might play in this respect see also Risser and Šucha, 2020 a and b). Finally, the perceived pros and cons of life without a car will be scrutinised.

In view of this research objective, the study employed three target respondent groups, which we will describe below. Group A comprised individuals who had never begun to use a car or used one for not more than a year. With this group, the following questions were addressed in particular: For what reasons did the respondents decide to use a car? What led the respondents to obtain a driver's licence (or not)? Would the respondents consider using a car in the future? If so, what were their motives?

Group B consisted of those respondents who had arrived at a voluntary decision to stop using a car after driving for more than a year. The following research questions were articulated for this group: What mechanisms or motives led the individuals to consider giving up car use? What situations caused some of the individuals to resume car use?

Individuals who were compelled to give up driving by circumstances came into Group C. Here, we sought answers to the following research questions: How did the individuals feel about not being able to drive? What advantages and disadvantages of a car-free life did they find? Would they welcome the opportunity to drive again? The groups are described in greater detail below.

3. Methods, procedure and research sample

The target population for this research consisted of individuals over 21 and living in the Czechia or Austria who met the criteria described below. As previously mentioned, the study sample was divided into three groups of people who do not use a car or did not use one for a certain period. Group A comprised those individuals who had never obtained a driver's licence or those who had one but had driven for not more than a year after they acquired it and had not resumed driving since. Another criterion was that they were 21 or more, i.e. they had not driven for at least three years.

Group B comprised individuals who had voluntarily decided to give up driving after using a car for more than a year. It also included those who met the above conditions but had resolved after some time that they would resume driving and were currently using a car. These respondents thus generally provided more of a retrospective account of their car-free period.

For Group C, we tried to recruit individuals who had to give up driving or car use. Such a situation could occur because of a ban on driving, health issues, or a lack of money. The requirement was that the period for which they could not drive lasted at least two months.

Given the qualitative nature of this research, non-probabilistic sampling methods were used. Specifically, this involved stratified purposive sampling combined with self-sampling. Respondents for Groups A and B were recruited first. Eventually, 16 respondents were assigned to Group A (9 from Czechia and 7 from Austria) and nine (6 from Czechia and 3 from Austria) were placed in Group B. Group C consisted of individuals who had been forced by certain circumstances to stop using a car. Altogether, seven respondents were recruited for this group, all from Czechia. Thus, a total of 32

respondents, 23 females and 9 males, participated in the study. The respondents were aged 23 to 70, i.e. all available age categories were represented. The respondents' mean age was 39 years. The general sociodemographic data for each group is summarised in Table 1.

Table 1: Respondents' sociodemographic data for each group

	Mean age	No. of	No. of	Single	Married	Respondents	s Secondary	Higher
		females	males			with	education	education
						offspring		
Group A	36	13	3	8	8	9	5	11
Group B	47	6	3	3	6	5	6	3
Group C	37	4	3	6	1	4	6	2

The data was collected using semi-structured interviews. Across all the groups, questions were asked to collect sociodemographic data, inquire about experience of the use of different travel modes during childhood and adolescence, and seek responses concerning the pros and cons of a car-free life as subjectively perceived by the respondents. In addition, we investigated all the respondents' current travel behaviours and the outlook for the future as regards any prospective changes in their travel habits.

Given the qualitative nature of the research, the grounded theory method was chosen to analyse the data. The strategy applied to analyse the data is described in greater detail below. Following their administration, the interviews were transcribed. Some of the interviews were rather confusing, especially as a result of too much information which was not always relevant to the aim of the research being provided. Such data was therefore adjusted by eliminating the redundant sections. The transcripts that met the quality requirements in terms of form and content were then analysed. The first stage involved open coding being used to identify and code the relevant segments of the interviews. The codes were then arranged into categories. The subsequent axial coding involved looking for relationships and associations between the categories. The interviews were re-read several times, which resulted in the identification of new categories and relationships or changes or modifications of the original categories. The selective coding phase involved the determination of any central category, for which relationships with other categories were also sought.

4. Results

The presentation of the results is divided into four sections. The first three showcase the most significant categories and provide the general characteristics of the typical representatives. These listed categories should be viewed as points of reference which do not always work as self-standing units; in fact, they tend to show strong overlaps. Accordingly, one category may feature data which comes under a different category at the same time. This applies to the analysis of all the respondent groups. The fourth results section compares specific signs of the individual groups and provides a brief account of the specific characteristics of the Austrian respondent group.

4.1 Group A

Group A, which included individuals who had never driven a car or driven for not more than a year, showed the following categories as significant: (not) obtaining a driver's

licence, fear of driving, childhood and the role of habit, no need for a car, financial costs, and car use in the future.

Motivation for obtaining a driver's licence includes particularly social pressure, the need to possess one because of school or work, and a sense of security for the future. The role of habit is typically seen as significant by those who experienced alternatives to car use as a travel mode in childhood. This aspect does not seem to be significant for current travel mode choices in individuals whose families used a car to a great degree.

One of the major themes emerging in relation to the attitude to a car is fear of driving, or perceived incompetence to drive, and fear of aggressiveness and recklessness on the part of other road users. Car use-related stress is also associated with heavy traffic, frequent closures, road repairs, hold-ups on motorways, and difficulty in finding a place to park. Individuals falling into this group find public transport services, walking, or cycling cheaper alternatives, as they associate the car with numerous expenses (repairs, fuel, insurance, etc.).

The most prominent motive for giving up the car is its redundancy in the event of the existence of efficient infrastructure in which a car-free life can save both time and money. Such individuals use cars as passengers and admit that their life without a car would be much more complicated for them without using this opportunity from time to time. While they bear in mind the environmental aspects, those are not the main reason behind their choice to give up car use. In the future, they would consider owning a car especially because of children, work, or taking care of their parents.

4.2 *Group B*

As mentioned above, this group comprised those respondents who had given up car use of their own accord. The categories that the analysis indicated as being significant were as follows: motivation to drive and attitude to cars, social influence, fear of driving and stress related to car use, moral and environmental values, practical reasons, and children.

It is not common for these individuals to desire to drive. They tend to obtain their driver's licences because of social pressure or a notion that one should have one of these days. Their attitude to cars is generally reconsidered in young adulthood, when people tend to ponder convenience and environmental issues.

A "trigger" motive for a car-free life can be the realisation that one can do without a car (when a car was being repaired for some time or broke down). Rather than being radical opponents of car use, the individuals in this group tend to prefer to use cars as passengers or when necessary. They have decided to give up car use voluntarily, and they do not want to change anything about this choice of theirs despite the social pressure and the lack of understanding from others in this respect. They are aware that if they owned a car, they would be tempted to overuse it.

Similar to Group A, the choice of a car-free life is mainly driven by financial considerations, the perceived redundancy of the car, and driving-related fear and stress. While environmental positions play an important role, they are not the single main motive for the choice to lead a car-free life.

4.3 Group C

This group comprises the respondents who were forced to give up car use, i.e., they did not do it of their own accord. Data analysis involved the following categories for Group C: attitude to a car, change in routine, finance, and car use in the future.

These individuals have generally positive attitudes to cars. If not forced by circumstances, they would continue to use them. While they recognised certain benefits of alternative modes of transport (cheaper and at times less stressful alternatives to car use) when they could not drive, the perceived comfort, speed, and convenience of using a car cause them to resume driving as soon as they can. The power of both habit and strongly perceived comfort, and first and foremost, the aspect of the involuntary nature of giving up car use can hardly be overcome even by positive experience with other travel modes.

4.4 Comparison of all three groups

The benefits of public transport were repeatedly mentioned in all three groups. While the respondents referred to the speed of the car, they repeatedly noted that public transport may be a significant time-saver, especially when travelling around urban areas, where rush hours and traffic congestion are common. In addition, the respondents believed that parking issues and getting to a car could take more time than if public transport was used.

On the other hand, the interviews often referred to the overall quality of trains, their frequent delays, and connection issues. The respondents often pointed out that train delays are becoming ever more common, which makes it difficult to catch one's connections. A great deal of time leeway is thus necessary, which may deter one from preferring the train to a car. There were positive responses to new trains with efficient air-conditioning and heating, refreshment facilities, and wi-fi. Older trains received a very negative evaluation because of poor temperature control, the absence of wi-fi, and the overall low level of comfort. The respondents appreciated the possibility of choosing from multiple transport companies, which seemed to be a contributory factor to the reduction of car use. The negative aspects of urban public transport services included infringement of personal space as a result of overcrowding, sanitary conditions, no air-conditioning in the summer months, unpleasant passengers, and body odour. On the other hand, the speed of travel and the absence of driving-related stress were seen as positives.

Table 2 below summarises the categories which the analysis of the interviews showed relevant in terms of the benefits of a car-free life mentioned by the respondents. Each category includes subcategories indicating the numbers of respondents in groups A, B, and C who mentioned that particular subcategory in the interview. The same applies to Table 3, which summarises the disadvantages of a car-free life.

Table 2: Summary of major categories and subcategories of the benefits of a car-free life

BENEFITS OF A CAR-FREE LIFE						
Category	Category Subcategory		В	С	Total number	
Time	Time Time for oneself				17	
	Time spent with children	3	2	1	6	
	Time for work	4	2	-	6	
Money	Lower cost		9	4	29	
	No expenses on car repairs	10	4	2	16	
Driving-related stress	No stress resulting from driving	7	4	1	12	
	No parking issues	2	5	1	8	
	No concerns about other drivers being aggressive	2	1	1	4	
	No fear of causing a traffic accident	7	5	2	14	
Environment	Environment Lower environmental burden		9	2	20	
Lifestyle	Greater fitness	5	2	3	10	
	Need to plan ahead – mental exercise	7	5	2	14	
	Minimalism (carrying fewer things along)	3	3	1	7	

Table 3: Summary of major categories and subcategories of the disadvantages of a carfree life

DISADVANTAGES OF A CAR-FREE LIFE							
Category	Subcategory			С	Total number		
Time constrains	Lower flexibility in terms of time (dependency on connections)		3	4	12		
	Delays of public transport services	5	2	1	8		
Physical (dis)comfort	Heavy luggage carriage		2	2	10		
	Getting up early	3	2	-	5		
	Discomfort in the wintertime	3	2	-	5		
Psychological (dis)comfort	Need to plan		3	2	10		
·	Travelling needs to be adapted to timetables		1	4	8		
Children care	Going to extracurricular activities, medical appointments, etc. — time and planning constrains	3	3	2	8		

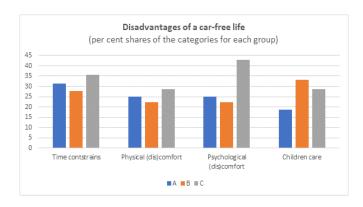
Figures 1 and 2 are also provided for reference. They show a proportional representation of each category for the respondent groups. This analysis included both the Czech and Austrian respondents.

Benefits of a car-free life
(per cent shares of the categories for each group)

120
100
80
60
40
20
0 Time Money Driving-related Environment Lifestyle stress

Figure 1: Benefits of a car-free life

Figure 2: Disadvantages of a car-free life



4.5 Differences between Czech and Austrian respondents

No major differences were found among the Czech and Austrian respondents as regards their motives for choosing a car-free life. In that respect, both the Austrian and Czech respondents referred to cars as redundant and not using a car as a way of saving money and time. All the Austrian respondents also mentioned the role of environmental considerations as essential, but, like the Czech respondents, they identified them as another perceived positive aspect of them choosing to give up cars rather than the main reason for doing so. None of these respondents considered resuming car use, and, besides those mentioned above, they indicated the following benefits of a car-free life: physical health, keeping mentally fit (the need to plan ahead more, mental hygiene involved in travelling by public transport or walking – no need to concentrate on driving), children learn how to be independent more quickly, and less stress associated with driving and parking.

5. Discussion and conclusions

The most discussed motives for travel mode choices in all the study sample groups were as follows: finance, the need to own a car, children, urban and rural infrastructure, flexibility, time, places to park, health, the social environment, and the availability of certain modes of transport. The motives which did not play a decisive role for the respondents and appeared only sporadically in the interviews were as follows: weather,

the need to get up early, the wintertime, and, surprisingly, distance. All the respondents mentioned the need to plan their journeys ahead to a greater extent, with most of them nevertheless not perceiving this as a barrier to a car-free life. However, the study participants believed that it was the greater need to plan their journeys, daily activities, and time leeway that could be factors which might deter people from choosing public transport instead of using a car. The respondents noted that it was mainly a matter of habit and overcoming laziness that prevented people from using public transport. That was the reason why they did not want to own or drive a car: if they had one, they might tend to use public transport less and opt for a car even in situations where it was not necessary at all.

No need for a car was the most common reason for the decision to live without one in both Group A and Group B. In particular, the need for a car appeared to decrease markedly in locations with good infrastructure where people could also use cars occasionally as passengers. Another frequently noted reason was the high costs of car maintenance, especially those incurred in relation to repairs and fuel.

The results of the comparison of the perceived pros and cons of a car-free life between groups A and B on the one hand and group C on the other hand are noteworthy. The respondents who were forced by circumstances to give up their cars viewed a life without a car quite sceptically. They did not see many advantages in other travel modes, and four out of the seven respondents wanted to return to driving as soon as possible. Although some of them noted that the operation of a car was more expensive than alternative modes of transport, factors such as comfort, habit, perceived time saving, and the joy of driving seemed to prevail over financial costs. We believe that such an attitude could be due to the reasons for not using a car and the factor of involuntariness. While external circumstances, e.g. the need to give up car use because of the suspension of one's driver's licence or a medical condition, may change one's view of travel behaviours, the overall change seems also to require some intrinsic motivation, as documented by Šucha et al. (2019). They argue that in addition to financial benefits and environmental issues, the competent authorities that seek to reduce the numbers of cars on roads should also focus on the role of time and comfort. This should be done especially by sharing the stories of people who have positive experience with public transport.

The topic of children in association with travel mode choice appeared in almost all the interviews across the groups. The study sample included both childless respondents and those who had one or more children of ages ranging from infants to adults. The childless respondents generally thought that when they become parents their life without a car would be much more difficult considering medical appointments and taking children to kindergarten, school, and after-school activities. Some of them even regarded having a child as an event which would make car use inevitable for them. This way of thinking may be significantly shaped by social influence, as parenthood is often mentioned in discussions about the advantages and disadvantages of a car-free life as one of the factors which make life without a car uncomfortable. However, parents also introduced a different perspective by admitting that while travelling with children may sometimes be demanding, it is still manageable. They found it beneficial for their children to achieve greater independence by commuting to school by public transport. The parents also had a positive view of the time spent with their children on a bus or train, where they can play, chat, and get to know the world around in comparison to travelling by car, where the parents need to focus on driving and cannot pay so much attention to their children. One of the respondents stated, however, that after her third child had been born, she returned

to car use, as she found it very difficult to travel with all her children at the same time and virtually impossible to combine her work with collecting and transporting children without using a car. Lanzendorf (2010) suggests that while having a child can contribute to car dependency, it can also provoke a change in the travel mode choice towards public transport or cycling. This possibility is also implied by the results of the present research, and this dichotomy may involve the effect of factors such as infrastructure, the opportunity to use a car as a passenger, previous travel habits, and, finally, the personality of the child.

Polk (1998) reports that cars are socially stereotyped as a more masculine element, which was reflected in this study, too; both men and women pointed this out. In addition, some male respondents showed their belief that they should drive the car even if their female partner was an active driver. Four male participants in this research also expressed their perception of men's greater inclination to cars and driving, which was also associated with their perception of their role in terms of providing for the woman and the family. The answers to the question whether the respondents' peers wished to own a car when they were in their late teens were generally negative. The occasional positive responses were again more likely to be given by males.

One limitation of this research is that the study sample included 23 females and 9 males, which reduces the possibility of discussing gender-specific aspects of travel mode choice more extensively. It would be useful for further research to work with samples where both genders are represented more evenly to facilitate a more thorough investigation of the impact of social pressure on driving in gender-specific terms. In particular, it might be helpful in this respect to focus on male and female social roles and the ensuing social expectations and their potential effects on the choice of travel mode.

Another limitation of this study is the insufficient diversity of the respondents' domiciles, which is generally closely related to the quality of the infrastructure, which proved critical for the choice of travel mode. Most of the study sample comprised respondents living in urban municipalities with a population of over 50,000. In most cases it were the cities of Olomouc and Vienna, which were found by all the respondents who reside there to be cities with an excellent infrastructure and as places which were easy to get around without a car. It was noted very often that living in a village would probably lead the respondents to use a car. However, our study sample did not include enough respondents from smaller municipalities to determine whether a car is really a must when one lives in a village, or if people just assume so. We certainly realise, however, that a small municipality should not necessarily be associated with poor infrastructure, although the interviews suggest that it is a common perception among the respondents and their social environment.

The difference in the perception of the car across generations is also noteworthy. The respondents aged 40+ stated that it was not common to own a car when they were children. We could therefore assume that they would be much more sensitive to any excessive car use and disapprove of it, as they were used to doing without one. The analysis showed, however, that this does not apply to all the individuals in this age category. Younger respondents whose parents generally fell into the 50+ category frequently reported that it was this age group that tended to overuse cars. The lack of their parents' understanding of a car-free life was also mentioned regularly. If the parents showed understanding of this kind of lifestyle, it was typically due to their concerns about driving rather than consideration of the environmental or financial benefits.

Furthermore, the respondents pointed out the improvement of public transport as a way of reducing the numbers of cars on roads. They also thought that trains should be renovated, hygiene conditions and temperature control in trams and buses should be improved, and so should be the frequency of connections, and constant train delays should be avoided, as these are the things that deter people from choosing alternative travel modes to car use.

Other subthemes emerged in the interviews. One of them involved factors influencing the choice between alternative travel modes to car use, where the pros and cons of different modes of transport, personal preferences, and time considerations were mentioned. However, this research was primarily aimed at making choices between car use and other travel modes. Further research should focus on the aspects of choice between alternatives to car use to ascertain which steps could be adopted to enhance passengers' comfort as a useful motivation towards greener travel modes.

Given the qualitative nature of this research, its results cannot be generalised to the entire population. It should rather be viewed as a starting point and impetus for additional research projects which could explore more thoroughly the individual factors and topics which appear crucial in choosing a travel mode. One such topic could be car sharing, which is becoming increasingly popular abroad and could have a positive impact on our transport routines. The respondents mentioned very often that they found it beneficial to use a car as passengers, as it is a way of both protecting the natural environment and saving money. The redundancy of owning multiple cars within one family was mentioned several times. This refers to situations in which each family member has a car of their own and is completely independent of the others, although only one car could often be used to go to work, school, or shopping.

References

- Bamberg, S., Schmidt, P. (2003) "Incentives, Morality, Or Habit? Predicting Students' Car Use for University Routes with the Models of Ajzen, Schwartz, and Triandis", Environment and Behavior, 35, 264-285.
- Bamberg, S., Ajzen, I., & Schmidt, P. (2003) "Choice of Travel Mode in the Theory of Planned Behavior: The Roles of Past Behavior, Habit, and Reasoned Action", Basic and Applied Social Psychology, 25, 175-187.
- Klöckner, C. A., Matthies, E. (2004) "How habits interfere with norm-directed behaviour: A normative decision-making model for travel mode choice", *Journal of Environmental Psychology*, 24 (3), 319-327.
- Lanzendorf, M. (2010) "Key events and their effect on mobility biographies: The case of childbirth", *International Journal of Sustainable Transportation*, 4 (5), 272-292.
- Lanzini, P., Khan, S. (2017) "Shedding light on the psychological and behavioral determinants of travel mode choice: A meta-analysis", Transportation Research Part F—Traffic Psychology and Behaviour, 48, 13-27.
- Limtanakool, N., Dijst, M., & Schwanen, T. (2006) "The influence of socioeconomic characteristics, land use and travel time considerations on mode choice for medium-and longer-distance trips", *Journal of Transport Geography*, 14 (5), 327-341.
- Lind, H. B., Nordfjærn, T., Jørgensen, S. H., & Rundmo, T. (2015) "The value-belief-norm theory, personal norms and sustainable travel mode choice in urban areas", *Journal of Environmental Psychology*, 44, 119-125.

- Oskamp, S. (2000) "A sustainable future for humanity? How can psychology help?", American Psychologist, 55(5), 496-508.
- Ouellette, J, A., & Wood, W. (1998) "Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior", *Psychological Bulletin* 124(1), 54-74.
- Polk, N. (1998) *Children of the Dark House: Text and Context in Faulkner*, University Press of Mississippi.
- Risser, R., & Šucha, M. (2020a) "Start walking! How to boost sustainable mode choice—Psychological measures to support a shift from individual car use to more sustainable traffic modes", *Sustainability*, 12(2), 554.
- Risser, R., & Šucha, M. (2020b) *Psychological Perspectives on Walking: Interventions for Achieving Change*, Routledge.
- Rundmo, T., Nordfjærn, T., Iversen, H. H., Oltedal, S., & Jørgensen, S. H. (2011)" The role of risk perception and other risk-related judgements in transportation mode use", *Safety Science*, 49 (2), 226-235.
- Sheller, M. (2004) "Automotive Emotions: Feeling the Car", *Theory, Culture & Society*, 21(4-5), 221-242.
- Šucha, M., Viktorová, L., & Risser, R. (2019) "Can an Experience with No Car Use Change Future Mode Choice Behavior?", *Sustainability*, 11 (17), 4698.
- Taylor, M. A., Ampt, E. S. (2003) "Travelling smarter down under: policies for voluntary travel behaviour change in Australia", *Transport Policy*, 10 (3), 165-177.
- Verplanken, B., Aarts, H., & Van Knippenberg, A. (1997) "Habit, information acquisition, and the process of making travel mode choices", *European Journal of Social Psychology*, 27(5), 539-560.
- Verplanken, B., Wood, W. (2006) "Interventions to break and create consumer habits", *Journal of Public Policy & Marketing*, 25 (1), 90-103.

Financial support:

The funding for the present publication was provided by the Czech Ministry of Education, Youth and Sports for specific research (IGA_FF_2021_018).