D.3.1.3 HABITS AND BEHAVIOURAL ANALYSIS

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1. Aim and scope of this document

The MIMOSA Project has the goal of improving the quality and sustainability of cross-border and coastal passengers' mobility between Italy and Croatia. The specific role of WP3 in the project is to identify and spread sustainable solutions on the basis of an up-to-date knowledge about travels' demand and offer, as well as to propose an action plan for a sustainable transport planning model. In the framework of WP3, Activity 1, this document represents the Deliverable 3.1.3, which includes the behavioural analysis (survey on habits and travel behaviours determinants) of travel demand between Italy and Croatia.

The behavioural analysis is different from the segmentation analysis insofar it adopts an inferential approach. On the one hand, inferential statistics are the statistical procedures that are used to reach conclusions about associations between variables: data are collected from samples of travellers, as to make inferences and generalizations about a whole population. On the other hand, we are not interested only in "taking a picture" of what people do in given circumstances, but we want to gain further insights of why they do so: what are the motives underpinning behavioural choices in the domain of travels, so that policy makers, operators and all involved parties know which levers to act in order to shape the behaviours of target segments, and make them consistent with the envisaged goals. Within the MIMOSA project the behavioural analysis is focused on those variables that, according to mainstream literature, are the main determinants of travel mode choice.

This report describes the theoretical foundations of the analysis that was performed, the evidence of previous studies on the topic that can be found in literature, a description of the survey and the interview, with an overview of the results and the policy implications that follow.

The report is organized in the following sections: the first chapter frames the objectives and scope of this document within the MIMOSA project. After a preliminary Chapter devoted to a description of the aim and scope of the document (Chapter 1), Chapter 2 clarifies the rationale and the theoretical foundations of the behavioural analysis, providing a broad overview on the main streams of literature on travel mode choice. The chapter is further organized in sections pertaining to the rationalistic perspective (Section 2.1), the habit-based perspective (Section 2.2) and the specific case of trips between the Countries involved in the project (Section 2.3). Chapter 3 is devoted to an overview of what are the effects of an unprecedented event such as the Covid-19 pandemic on mobility, as regards both public transport (Section 3.1) and tourism (Section 3.2). Chapter 4 is about the empirical investigation performed for the project, and is further divided in

sections about methodological aspects (Section 4.1), the sample (Section 4.2), habits and behavioural determinants (Section 4.3) and Covid-19 (Section 4.4). Chapter 5 describes the semi-structured interviews that have been performed with project partners and external stakeholders, to get further insight on the topics of interest, while Chapter 6 represents the conclusion of the document and a discussion about policy implications. In this last section, policy considerations will also be drawn from three possible lines of action: communication/awareness campaign, behavioural change and incentive/disincentive actions.

2. Theoretical foundations of the analysis of behavioural determinants

In order to investigate the behavioral determinants in the field of modal choice (with a specific reference to cross-border mobility), the MIMOSA project team performed a literature review of:

1) The theoretical frameworks explaining modal choice: that is, what are the variables that determine whether an individual opts for a specific transport mode. Given the specific goals of the project, the main dichotomy has been the one between cars/private vehicles and alternative (often more sustainable) transport modes, plus the combination of the two (typical examples of this could be the case of a family going from Italy to Croatia with a car and a ferry)

2) The empirical investigations on the topic, with reference both to i) mobility in general and ii) Italian and Croatian mobility in particular since, although most of the collected evidence does not relate to the specific area of the MIMOSA project, it was possible to find some anecdotal evidence indeed focusing on the programme area.

3) Recent studies on how the COVID pandemic is affecting the psychological and behavioral determinants of travel mode choice, since the willingness to avoid social contacts is likely changing the perception of travelers about the desirability of different travel modes.

Behavioral research in the field of mobility is vast, encompassing different and heterogeneous literatures, though most of relevant theories have their roots in social psychology.

It is possible to identify two main branches of theoretical frameworks explaining the determinants of our behaviors in the domain of (among many others) mobility.

A) A **rationalistic perspective**. Individuals choose to use a specific mean of transportation after a rational, cognitive evaluation of the different available alternatives, elaborating available information and then developing specific intentions which, as long as no hindering factors emerge, develop into actual behaviors. It would be the case of a family on a holiday trip to Italy who looks for information about distance, costs and comfort of travelling either entirely via land (driving the private car from home till the final destination) or via alternative routes such as air trips of ferry trips. Clearly, a combination of the above-mentioned alternatives could be the optimal solution after the evaluation of all costs and benefits, like for instance travelling with a bus to the ferry terminal, and then reach the destination via sea).

B) A **Habit-based perspective**. Habits are a formidable behavioral determinant, insofar they are capable of hindering an aware evaluation of alternatives, so that the cognition-led intention to opt for a specific mode is substituted by an automatic choice. In the previous example, the family has

been adopting the multi-modal option bus+ferry every summer for their holidays, for many years, so they automatically opt for the same solution without looking for further information nor processing communication about new alternatives: for instance, a new air connection (cheap and fast) could have become available in the past couple of years.

2.1 The rationalistic perspective

Such perspective assumes that behaviors are determined by deliberated cognitive processes, which are based on a rational evaluation of the information at hand and the available alternatives, is represented by what is also referred to as the attitude-behavior research. The key theoretical foundations are represented by the Theory of Reasoned Action (Ajzen & Fishbein 1980) and the Theory of Planned Behavior (Ajzen 1991), with later developments that added further elements to increase its predictive capability. According to this perspective, travelers willing to go to Italy/Croatia consider the pros and cons of different alternatives (routes, travel mode, and so on), look for further information if they perceive they need to gain better understandings of the available options, and based on this rational process they develop the intention to choose a specific option (e.g., travelling by ferry, by airplane, and so on).

Indeed, these theories have their roots in acknowledging the attitude-behavior gap, which has a long track of evidence in literature and suggest that intentions are the closest predictor of actual behaviors. In other words, we to do something because we develop the intention to do so: we take our private car to go on a trip because, after examining the possible alternatives, we develop the intention to do so. Of course, although intentions and behaviors are closely interrelated constructs, they are not the same thing, as there might be hindering factors (both contextual and subjective) preventing the adoption of the behavior, regardless of the previously developed intentions: for instance, I might intend to go on a trip by bike, but suddenly weather forecasts change and, consequently, I have to change my plans and to drive the car. It is important to investigate what, in turn, predicts intentions. According to the Theory of Reasoned Action, **social pressure** and **attitudes** frame our behavioral intentions.

- **Attitudes**: attitudes reflect the generic predisposition (positive or negative) that we have towards a specific activity (e.g., I enjoy going to Croatia by ferry, I think it is nice). They reflect beliefs towards an outcome and the evaluation of whether such outcome is desirable or not. In other words, attitudes are the combination of beliefs and evaluations. Based on the information at hand,

how do I believe would it be to take a bus to get from Venice to Southern Croatia (belief)? Is this something that I consider as positive and enjoyable, or not (evaluation)?

- **Subjective norms**: subjective norms, on the other hand, reflect social pressure and how an individual perceives that his/her relevant ones would approve or disapprove a specific activity. For instance, would my friends appreciate, if they know I go on holiday only using sustainable transport mode?

The theory clearly represents an oversimplification of the complexity of factors leading to a specific behavior, like travel mode choice. The most important limitation of the model is represented by the fact that it assumes all behaviors being under volitional control: if I want to do something, I am able to actually do it. However, let's consider the example of a young couple willing to visit Italy. They are willing to travel as quickly as possible from their hometown in Croatia to their final destination to Italy, so that airplane would be the better option they would go for. The original formulation of the Theory of Reasoned Action would suggest that this is what the couple would actually do. However, many times there are subjective or contextual hindering factors so that it is not possible to act according to our own positive attitudes and subjective norms. For instance, the flights are fully booked, or the prices, given the high season, are extremely expensive so that they actually *cannot* opt for the airplane alternative.

In other words, although the couple holds positive attitudes towards flying to Italy (positive attitudes) and their friends and relatives would agree that it is the best choice, approving it (positive social pressure and subjective norms), they would have to reach the destination by means of other travel modes (e.g., private car and ferry).

- **Perceived Behavioral Control**: to fine tune the predictive capability of the model, the Theory of Planned Behavior (Ajzen, 1991) extends Theory of Reasoned Action adding perceived behavioral control as a further predictor of behavioral intentions: perceived behavioral control represents how easy or difficult we perceive a specific task is: how easy would it be to go by plane to Italy, for the young couple? It is important to stress the *perception* element: an activity could be inherently easy to be performed, yet if it is not perceived as such by the agents, most likely this will represent a formidable hindering factor.

The model has arguably become one of the most popular frameworks for investigating a large set of behaviors including those related to mobility, and its predictive capability proved to be very good, over a high number of empirical investigations that adopted it (either in the original formulation or in extended versions) for the analyses. Indeed, there are attempts at integrating further variables in the planned behavior framework, as to provide a more accurate description of

the elements underpinning individual choices: “albeit planned-behavior frameworks do not represent a novelty in consumer behavior studies, they act as a living organism, as current research is still working on the original formulation, adding variables capable of fine-tuning the model and increasing its predictive capability. Some of such variables are particularly relevant in sustainability-sensible domains. For instance, activities such as commuting or recycling are carried out repetitively in stable settings: I go to work every day at the same time, on the same route, and so on. The repetition of an activity makes it habitudinal, so that an automatic response at the subconscious level is triggered. […] [habits] been incorporated by many studies within the Theory of Planned Behavior framework, and integrated as an extension of the original formulation. Furthermore, other variables are included in addition with the original constructs, such as anticipated affect, emotions, descriptive norms, and many more” (Lanzini, 2018).

Habits represent, along with intentions and partially in alternative to them, the closest predictor of behaviors, whose relevance in determining behavioral patterns could not be overemphasized. However, they will be illustrated in a separate section, as they do not pertain, as to be clarified, to the rationalistic perspective.

There are on the other hand models that are rooted in the latter, and are particularly fit for studies focusing on behaviors with a relevant sustainability impact, such as mobility and especially cross-border mobility. The Norm-Activation-Model (Schwartz 1977) posits that personal norms represent the key factor orienting our behavior.

Personal Norms: Personal Norms can be described as “feelings of moral obligation to perform or refrain from specific actions”, insofar people tend to act socially and environmentally friendly, once they are aware of which are the consequences of their behaviors on the social/natural environment. The theory derives its name from the assumption that there are specific factors capable of *activating* personal norms: these factors are *problem awareness* and *ascription of responsibility*.

Problem Awareness: Problem Awareness refers to the extent to which people are aware of the consequences of not acting sustainably (e.g., awareness on the fact that travelling to Croatia by private car instead of by bus implies much higher polluting emissions and footprint).

Ascription of Responsibility: Ascription of Responsibility mirrors individual personal feelings of responsibility for the same consequences (e.g., is it up to me to reduce those emissions, or it is responsibility of other actors to provide better alternatives?).

As far as the relationship between awareness of consequences and ascription of responsibility is concerned, while some experts suggest that the former is an antecedent of the latter (and they both predict personal norms and behaviors), others propose an interpretation according to which both

constructs operate at the same level, as personal norms predictors. Like theory of planned behavior, also norm activation model is supported by a vast body of empirical evidence, with many studies confirming its validity.

While the MIMOSA project focused on the behavioral determinants of these two key frameworks (along with habits, which will be discussed as anticipated in a separate section of the document), it is worth stressing for the sake of completion that, indeed, there are many other theories which, though to a lesser extent, have been adopted in order to investigate individual behaviors in the domain of travel mode choice. For instance, we can here mention the **Value-Belief-Norm** theory (VBN, Stern et al. 1999), which is a sort of extension of norm activation Model where all variables are linked by a causal chain of 5 constructs, as "each variable in the chain directly affects the next; each may also directly affect variables farther down the chain". The relevant constructs of the theory are individual values (how people are oriented towards egoistic vs altruistic values), the New-Ecological-Paradigm (which, based on a validated scale, identifies the worldview of respondents), beliefs on the impacts of a specific behavior on the environment, ascription of responsibility, and finally personal norms. More in detail, as far as values are concerned, these (at least in the norm activation model context) stem from works of Schwartz, integrated and modified as to be applicable specifically to behaviors dealing with sustainability. Values can be described as constructs that pertain to desirable behaviors, transcending specific situations and guiding the selection behaviors.

In comparison with attitudes, values are more stable over time, broader and abstract in nature; actually, values can indeed influence attitudes. Some authors suggest that planned behavior framework is preferred whenever responsible behaviors are seen as angled towards self-interest, while norm activation and value belief norms models are preferred when such behaviors display pro-social motivations.

2.2 The Habits Based perspective

The models that have been briefly illustrated have in common their roots in a so-called rationalistic perspective, which means that the activities we perform and the choices we make are basically the result of an elaborated cognitive process. I decide to go from Venice to the Kornati Islands by ferry because, after processing relevant information about the available alternatives and their advantages and disadvantages, I rationally develop the belief that going by ferry represents the optimal solution, capable of maximizing my satisfaction. However, human beings are individuals

of habits: many times we do something not because of a rational evaluation of pros and cons of alternatives at hand, but simply because *we are used to*, we have done it for a long time.

There is growing evidence supporting the hypothesis that Habits represent a crucial predictor of behavioral patterns, especially in specific contexts such as that of mobility.

Although the term habit is often used in everyday life, it is no easy task to provide a correct definition and its operationalization. In literature different definitions can be found:

Aarts and Dijksterhuis, 2000: "A form of a goal-directed automatic behavior. Habits are represented as links between a goal and actions that are instrumental in attaining this goal. The strength of such link is dependent on frequent co-activation of the goal and the relevant action in the past. The more often the activation of a goal leads to the performance of the same action under the same circumstances, the stronger the habit"

Verplanken and Aarts (1999): "Learned sequences of acts that have become automatic responses to specific cues, and are functional in obtaining certain goals or end-states"

Verplanken (2011): "Repeated behaviors that have become automatic responses in recurrent and stable contexts".

There are indeed three elements that characterize a genuine habit:

1) Frequency of past behaviors
2) Stability of the context
3) Automaticity

Indeed, the mere repetition (although frequent) of a specific activity is not considered as a sufficient condition for a habit to emerge. On the contrary, it represents a necessary yet not sufficient condition, which needs to be coupled with the other two elements. Automaticity can be problematic if policy makers (or other actors such as companies) are willing to change individual behaviors. Indeed, whenever automaticity becomes salient and a habit emerges, the aware cognitive decisional process gets deactivated. As a consequence, individuals do not seek or even process the information that they receive or that they are exposed to, like in presence of an invisible communicational barrier where messages and inducements bounce back, prior to reaching the target.

Mobility is one of the behavioral domains where stronger is the possibility of developing habits, especially in daily commutes. Indeed, typically commuters travel on the same route (e.g., from home to the office, and back), more or less at the same time (i.e., with stable traffic conditions) so that a specific modal choice becomes the automatic alternative. Commuters that have driven a private car for years to go to work might not consider the possible advantages of a new alternative, such for

instance a new subway line that would make the trip quicker and more convenient. Rationally, they are aware of the existence of the alternative, but out of habits they keep behaving as they have been doing for a long time.

Table 1: Self-Reported Habit Index

Behavior X is something . . .
1. I do frequently.
2. I do automatically.
3. I do without having to consciously remember.
4. that makes me feel weird if I do not do it.
5. I do without thinking.
6. that would require effort not to do it.
7. that belongs to my (daily, weekly, monthly) routine.
8. I start doing before I realize I'm doing it.
9. I would find hard not to do.
10. I have no need to think about doing.
11. that's typically "me."
12. I have been doing for a long time.

Given the relevance they assume in shaping behaviors, it is crucial to find an adequate measurement of habits. The Self-Reported Habit Index (Verplanken & Orbell 2003) represent a well-established tool, based on a validated scale where (in its original formulation) respondents express their agreement (Likert scale) on a battery on 12 statements:

The **Self-Reported Habit Index** has been extensively used in behavioral research in a broad range of domains. Table 2 provides a list of studies where the Index has been used to investigate mobility-related behaviors:

Table 2: List of studies on mobility using the Self-Reported Habit Index

Verplanken, B., & Orbell, S. (2003). Reflections on past behavior: a self-report index of habit strength 1. Journal of applied social psychology, 33(6), 1313-1330.
Björk, P., & Jansson, T. (2008). Travel decision-making: The role of habit.
Haustein, S., Klöckner, C. A., & Blöbaum, A. (2009). Car use of young adults: The role of travel socialization. Transportation research part F: traffic psychology and behaviour, 12(2), 168-178.
Gardner, B., de Bruijn, G. J., & Lally, P. (2011). A systematic review and meta-analysis of applications of the self-report habit index to nutrition and physical activity behaviours. Annals of Behavioral Medicine, 42(2), 174-187.
Thurn, J., Finne, E., Brandes, M., & Bucksch, J. (2014). Validation of physical activity habit strength with subjective and objective criterion measures. Psychology of Sport and Exercise, 15(1), 65-71.
Walker, I., Thomas, G. O., & Verplanken, B. (2015). Old habits die hard: Travel habit formation and decay during an office relocation. Environment and Behavior, 47(10), 1089-1106.
Thomas, G. O., & Walker, I. (2015). Users of different travel modes differ in journey satisfaction and habit strength but not environmental worldviews: A large-scale survey of drivers, walkers, bicyclists and bus users commuting to a UK university. Transportation research part F: traffic psychology and behaviour, 34, 86-93.
Bordarie, J. (2019). Predicting intentions to comply with speed limits using a 'decision tree'applied to an extended version of the theory of planned behaviour. Transportation research part F: traffic psychology and behaviour, 63, 174-185.
Zarabi, Z., & Lord, S. (2019). Toward more sustainable behavior: a systematic review of the impacts of involuntary workplace relocation on travel mode choice. Journal of Planning Literature, 34(1), 38-58.
Qin, H., Gao, J., Wu, Y. J., & Yan, H. (2019). Analysis on context change and repetitive travel mode choices based on a dynamic, computational model. Transport Policy, 79, 155-164.

Table 3: Oreg Resistance to Change scale

Routine Seeking
I generally consider changes to be a negative thing.
I'll take a routine day over a day full of unexpected events any time.
I like to do the same old things rather than try new and different ones.
Whenever my life forms a stable routine, I look for ways to change it.
I'd rather be bored than surprised.
Emotional Reaction
If I were to be informed that there's going to be a significant change regarding the way things are done at work, I would probably feel stressed.
When I am informed of a change of plans, I tense up a bit.
When things don't go according to plans, it stresses me out.
If my boss changed the criteria for evaluating employees, it would probably make me feel uncomfortable even if I thought I'd do just as well without having to do any extra work.
Short-Term Thinking
Changing plans seems like a real hassle to me.
Often, I feel a bit uncomfortable even about changes that may potentially improve my life.
When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me.
I sometimes find myself avoiding changes that I know will be good for me.
Once I've made plans, I'm not likely to change them.
Cognitive Rigidity
I often change my mind.
Once I've come to a conclusion, I'm not likely to change my mind.
I don't change my mind easily.
My views are very consistent over time.

Another tool that is often used in behavioral analyses is represented by the **Oreg Resistance to Change scale** (Oreg, 2003), where once again respondents are asked to express their agreement on a battery of statement, delving into aspects such as routine seeking, emotional reaction, short-term thinking and cognitive rigidity.

The crucial difference between the two scales is that while the Self-Reported habit Index is about a specific behavior or activity, the Oreg Resistance to Change scale does not refer to any specific behavior: on the contrary, it is about subjective traits of personality that make an individual either prone to developing stable behaviors (and thus habits) or seeking change and different activities.

Accordingly, theoretical frameworks based on the role of habits will be illustrated: such models, ranging from the Attitude-Behavior-Context model (Guagnano et al., 1995) or to the Comprehensive Action Determination Model (Klöckner & Blöbaum 2010), represent attempts of merging in a single behavioral model both a rationalistic perspective and the acknowledgement of the role exerted by habits (Ajzen himself admits that habits can be integrated in the TPB framework, though with a marginal role).

The **Attitude-Behavior-Context** (ABC) model is based on the dichotomy between attitudinal and contextual factors, and assumes that stronger impacts of contextual factors will lead to a weaker attitude-behavior link. The four variables encompassed by ABC are attitudinal factors (e.g., values, norms etc.), contextual forces (e.g., incentives, external influences etc.), personal capabilities, and habits. According to the specificity of the case object of analysis, the relative relevance of each variable in guiding responsible behaviors can vary: for instance, travel mode choice is influenced more by policies and habits, while green purchasing is mainly influenced by factors such as knowledge or skills.

Also the **Comprehensive Action Determination Model** (CADM, Klöckner & Blöbaum 2010) advocates the integration of different approaches, since sustainable behavior can be influenced by intentional, habitual, and situational sources; according to CADM, moreover, intentional and habitual determinants can be in turn influenced by normative processes such as social or norms.

The question that arises is hence how to disrupt habits that are deeply rooted and not consistent with the envisaged goal. The problematic aspect is that people with deeply rooted habits erect a sort of subconscious invisible barrier, so that information about alternatives bounces back, without reaching them. If a commuter is used to do a specific trip for a long time and a habit emerges, she will not be processing information about alternative options that might be even more comfortable, cheaper and, in one word, better. There are however theories that suggest when to act in order to disrupt old habits. According to the Habit Discontinuity Hypothesis (…), commercial inducements and policy interventions should be deployed when so-called windows of opportunity open up. These windows can be represented by big disruptions in the business-as-usual scenario. In other words, interventions to change behaviors can be more effective as long as they are deployed in the context of i) life course changes (relocation, marriage, and so on) or contextual disruptions.

In other words, “behaviour change interventions may thus be more effective when delivered in the context of major habit disruptions, such as those related to life course changes” (Verplanken et al., 2008), and in such windows, individuals are more willing to search for further information about alternative courses of action, and are more open to change. When these discontinuities take place, individuals are somehow spurred to reconsider the way they do things, and willing to look for information about the alternative opportunities. It is when these windows of opportunity open that agents interested in framing new behavioral patterns should deploy interventions.

If we focus on (cross-border) mobility, the COVID pandemic clearly represents a striking example of a disruption that forced people to reconsider the way they travel, and to process information about alternative choices. The implications are relevant for operators and policy makers, insofar when the pandemic will be over there will be a limited amount of time where travelers will have the cognitive window open, and will be receptive to inducements and messages aimed at changing their traveling behaviors in terms of routes and modal choice. In a foundational paper on the topic, Verplanken and Roy (2008) tested the Habit Discontinuity Hypothesis on a set of 25 sustainable behaviours, and found that interventions were more effective for participants who had recently relocated, with the window of opportunity having an average duration of 3 months.

2.3 Previous studies on travel mode determinants between Italy and Croatia

The following table summarizes the results of the literature review on the determinants of modal choice with a specific focus on Italy and Croatia, while Annex I is devoted to Empirical investigations on the behavioral determinants of international modal choice since the year 2000:

Table 4: Previous studies on travel mode determinants (Italy and Croatia)

Title	**Main results**
Stiperski, Z., Malić, A., Kovačević, D. (2001): Interdependence of Transport Accessibility, Economy and Revitalization of Croatian Islands; Sociologija i prostor : časopis za istraživanje prostornoga i sociokulturnog razvoja, Vol. 39 No. 1/4 (151/154); https://hrcak.srce.hr/100345	According to the traffic and road accessibility, Croatian islands can be divided into three groups: (1) island-peninsula area, (2) large islands and (3) medium-sized and small islands. The first group of islands includes those islands that are connected to the mainland by a bridge. The second group of islands consists of islands with a regular ferry connection - ferry connections are in themselves a bit disincentive due to the waiting, price and timetable. The third group of islands are those islands with a ban or very disincentive measures of access of foreign visitors by personal vehicles from which the local population is somewhat spared.
Opačić, V. T. (2002): Geographic Aspect of Analyzing Ferry Traffic: Example of the Croatian Islands; Geoadria, Vol. 7 No. 2, 2002.; https://morepress.unizd.hr/journals/geoadria/article/view/91	Since there is no evidence of correlation between the index of seasonal frequency of the ferry lines (direct reflection of tourism) and the index of change in population trends on Croatian islands analyzed in this paper, the conclusion is that tourism, as the main economic activity on Croatian islands, can ease – but not significantly eliminate – depopulation characteristics of the insular part of Croatia.
Jurčević, M., Madunić, P., Tolušić, I. (2006): Relations Between Transport and Tourism- Croatia's Possibilities; Promet - Traffic&Transportation, Vol. 18 No. 5, 2006.; https://hrcak.srce.hr/102308	Aiming at improvement of the tourist as well as the traffic offer one should take into account the correct evaluation of the investment priorities both regarding the construction of the traffic infrastructure, and regarding the development of certain traffic modes, but one should not, at the same time, neglect the internal connections of individual Croatian regions with tourist destinations.
Kos, G., Brlek, P., Franolić, I. (2012): Rationalization of Public Road Passenger Transport by Merging Bus Lines on the Example of Zadar County; Promet - Traffic&Transportation, Vol. 24 No. 4, 2012.; https://traffic.fpz.hr/index.php/PROMTT/article/view/439	All the development concepts and strategies should include the system of co-financing, especially of city and suburban transport. It is essential to attract as many as possible of those passengers who use their private vehicles for transport. This can be achieved through comfort, frequency and travel speed and stimulating price. Moreover, it is significant to be able to use different measures to discourage the use of personal vehicles, especially carrying single persons.
Migliore, M., et al (2012): The Analysis Of Urban Travellers' Latent Preferences To Explain Their Mode Choice Behaviour; WIT Transactions on Ecology and the Environment, 162, 193-203; https://www.witpress.com/elibrary/wit-transactions-on-ecology-and-the-environment/162/23642	The initial results of the research support the assumption that psychological factors count in explaining mode choice behaviour and, consequently, are to be carefully analysed by transportation planners. The paper describes the first results of an ongoing research activity, which derive from a pilot study conducted in Palermo, the capital of the Sicilian Region.
Klarin, T., Gusić, A. (2013): Kultura putovanja mladih u Hrvatskoj i omladinski turizam; Liburna, Vol. 2, Br. 2, 2013., University of Zadar, Department of Tourism and Communication Sciences; https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=kultura+putovanja+mladih+u+hrvatskoj+i+omladinski+turizam&btnG=	Youth tourism in Croatia is in the development phase and shows the possibilities of inclusion in the world trends of youth tourism. The similarities between the behavior of young people in Croatia and those in the world are evident, and they certainly have limited financial resources in common. Young people in Croatia still travel less frequently than their peers in other developed countries. Bus transport is the most represented with 45.7%, followed by car (30.3%), and low-cost aircraft (7.2%). Only 1% of respondents stated that they use auto-stop when traveling.

Ňakatová, D. (2014): Satisfaction with summer holidays in Croatia: Factors of intention to return and of recommendation for stay; Tourism: An International Interdisciplinary Journal, Vol. 62 No. 2, 2014.; https://hrcak.srce.hr/125577	It was detected that, out of seven predictors (gender, age, marital status, number of holidays taken with the travel agent, satisfaction with the destination, satisfaction with prices and satisfaction with transportation to the destination), the only significant predictor appeared to be the satisfaction with the destination. This finding applies to the intention to return as well as to the tourists' recommendation of summer holidays to others; it was confirmed repeatedly on a sample of 132 holidaymakers from Slovakia in the same tourist destination in 2013 summer holiday season.
Cankar, S. S., Seljak, J., Petkovšek, V. (2014): Factors that influence cross-border cooperation between businesses in the Alps–Adriatic region; Economic research, Vol. 27 No. 1, 2014.; https://doi.org/10.1080/1331677X.2014.952091	The results of empirical international research into cross-border cooperation in the Alps–Adriatic region between Carinthia, Friuli-Venezia Giulia (FVG) and Slovenia show that good personal relations, language skills and shared interests are the most important factors; the level of assistance and administrative/legislative barriers are the biggest barriers in cross-border cooperation. Different factors stimulating cross-border cooperation can be used to create a base for future strategies and training for business managers.
Milković, M., Štambuk, M. (2015): To Bike or not to Bike? Application of the Theory of Planned Behavior in Predicting Bicycle Commuting Among Students in Zagreb; Psychological Topics, Vol. 24 No. 2, 2015.; https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=209665	The results show that students mostly used public transport to go to university and that cycling is the second most common choice. The frequency of bicycle use differed due to the distance between the university and participant's home. Bicycle use first increased with the distance and then dropped at the category from 2 to 5km when it started to decrease and was the least frequent at distances longer than 10 km. All TPB components were significant predictors and explained 55% of the variance in intention of commuting by bicycle. Adding personal norm to the components of TPB made a small but significant contribution in explaining variance of the intention (additional 2%) at the same time personal norm was the weakest predictor.
de Luca, S., Di Pace, R. (2015): Modelling users' behaviour in inter-urban carsharing program: A stated preference approach; Transportation Research Part A: Policy and Practice, 71, 59-76; https://www.sciencedirect.com/science/article/pii/S0965856414002675	Results indicated that the inter-urban carsharing service may be a substitute of the car transport mode, but also it could be a complementary alternative to the transit system in those time periods in which the service is not guaranteed or efficient. Estimation results highlighted that the conditional switching approach is the most effective one, whereas travel monetary cost, access time to carsharing parking slots, gender, age, trip frequency, car availability and the type of trip (home-based) were the most significant attributes. Elasticity results showed that access time to the parking slots predominantly influences choice probability for bus and carpool users. The considered case study was the metropolitan area of Salerno.
Bator, I. (2016): Integrirani prijevoz putnika; Master's thesis, University of Zagreb, Faculty of Transport and Traffic Sciences, Zagreb; https://zir.nsk.hr/islandora/object/fpz:532	The process of introducing an integrated form of transport is a long-term process that enables the sustainability of the public urban transport system. The City of Zagreb has a perspective and a future regarding an integrated public transport system. It is necessary to bring the transport system into equilibrium and through purposeful planning to integrate as many professional solutions of the transport system in cooperation with experts in the system, and take into account positive experiences from other cities in the region, which will ultimately have a positive impact on public transport travel distribution.
European commission (2016): Inventory of legal and administrative obstacles in EU border regions; Entry no: 107; https://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/cross-border/review/#1	Long waiting times through non-harmonised technical and organisational railway systems is a board obstacle along the "South East Transport Axis". European Train Control System (ETCS) offers a uniform standard across the whole of Europe and will be a large step forward. But it will take decades to implement ETCS. Therefore, national and regional authorities will have to develop independent solutions for improving border-crossing rail transport of passengers and freight (esp. improved efficiency of administrative and control procedures).
European commission (2016): Inventory of legal and administrative obstacles in EU border regions; Entry no: 117; https://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/cross-border/review/#1	Poor development/ non-existing public transport across borders of Croatia and Slovenia. More intense institutional cooperation among public actors (national/local) and more capacity building in the border areas for improving public transport connectivity of remote areas and tourism areas and for promoting sustainable mobility in the cross-border area (also with respect to existing and future tourism flows).

European commission (2016): Inventory of legal and administrative obstacles in EU border regions; Entry no: 232; https://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/cross-border/review/#2	General lack of public transport at EU borders due to inadequate national legal provision. There is an evident need for mentioning more clearly the role of effective and sustainable local cross-border transport in EU-wide strategy documents and also for including related provisions in forthcoming EU-legislation in the field of transport.
Carrese, S., et al. (2017): Real time ridesharing: understanding user behavior and policies impact: Carpooling service case study in Lazio Region, Italy, 5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS); https://ieeexplore.ieee.org/document/8005607	The effect of information (knowledge of the service) such as, gender, usefulness and the interaction comfort play a fundamental role in predicting potential carpoolers. What emerges from the data is that who considers Moovit Carpool a possible alternative represent the 67% of those who have stated to use the private car and the 58% of those who use the public transport. These values show the necessity of drivers to amortize their travel costs and the common idea of an environmental awareness among citizens. Independently by the degree of awareness, interviewees list at the top of the reason of carpooling usage money saving (56%) and the reduction of the pollution and traffic congestion (54%) while, only the 22% have listed the possibility to have new friends.
Remezani, S., Pizzo, B., Deakin, E. (2017): Determinants of sustainable mode choice in different socio-cultural contexts: A comparison of Rome and San Francisco; International Journal of Sustainable Transportation, vol 12, 2018, Issue 9; https://www.tandfonline.com/doi/full/10.1080/15568318.2017.1423137	Results reveal that the local street network's integration is important in both cities and that (in both cases) built environment seems to have higher impact on mode choice than attitudes and sociodemographic factors. Built environment is especially impactful when diversity, design quality, density and syntactical accessibility are combined. In San Francisco willingness to spend time walking, biking or taking transit is lower than in Rome, and residents are more sensitive to concerns about safety and security.
Pleić, T., Jakovcic M. (2017): The impact of transportation connectivity on academic achievement of secondary school pupils: A case study of the Donji Miholjac Secondary School, Croatia; Hrvatski Geografski Glasnik, vol 79, p.87-108; https://doi.org/10.21861/HGG.2017.79.02.04	The study showed that according to the opinions of travelling pupils, the planned transport routes do not satisfy their needs, and that they should be redefined, in order to ensure that pupils are not subjected to transport marginalisation, which could lead to social exclusion. This can only be achieved through the mutual understanding of the needs of travelling pupils and the economic feasibility of those providing public transport services.
Miletic, G. M., Gasparovic, S., Caric, T. (2017): Analysis of socio-spatial differentiation in transport mode choice preferences; Traffic, vol 29, p 233-242; https://doi.org/10.7307/ptt.v29i2.2198	The results show that in Croatia, the number of people who frequently use public transport is far fewer than the number of frequent users of passenger car transport. The comparison has found that the number of frequent public transport users varies significantly among certain categories of respondents. Analysis has determined that the preferences towards the frequent use of car or public transport are significantly influenced by the age of the respondents, size of the settlement, accessibility of the destinations by public transport, the number of vehicles in the household and whether the respondent is the main car user in the household. Frequent users of car-only transport:78.1%; frequent users of public transport:21.9%
Hirnig, S., Šikić, L., Gržin, E. (2017): Sustavi dijeljena vožnji u funkciji smanjenja prometnih zagušenja uz zadržavanje dostignute razine mobilnosti stanovništva; Journal of the Polytechnic of Rijeka, Vol. 5 No. 1, 2017.; https://doi.org/10.31784/zvr.5.1.8	The results of the conducted research show that carpooling has successfully come to life in the Republic of Croatia and is already practiced by a relatively large number of passengers, especially younger ones, but also with a great potential for further development. Namely, 110 out of 129 respondents (85.2%) who have never used carpooling have expressed interest in using it. For the majority of respondents, the primary reasons for using carpooling are, as expected, lower costs (48 respondents, 43.6%) and flexibility compared to other transport options (36 respondents, 32.7%).
Cartenì, A., Pariotallaria, L., Henke, I. (2017): Hedonic value of high-speed rail services: Quantitative analysis of the students' domestic tourist attractiveness of the main Italian cities; Transportation Research Part A: Policy and Practice, 100, 348-365; https://www.sciencedirect.com/science/article/pii/S0965856416305365	Willingness to pay for an HSR ticket is up to 40% greater than that for a traditional one. Furthermore, tourists are willing to spend 2.2 h more to travelling on an HSR train to reach a destination. It may thus be concluded that the "catchment area" of cities on an HSR network is greater than those served by traditional rail. Estimation results show that there is also a "distance traveled effect"; the pure preference for HSR services increases in value from 9 Euros/trip to 13 Euros/trip (+44%) for distances traveled greater than 400 km. This means that if a passenger has to face a long journey, he will assign an higher value to on-board HSR services, since he will benefit them for longer time (greater willingness to pay in a travel experience context).

Ramezani, S., Pizzo, B., Deakin, E. (2018): An integrated assessment of factors affecting modal choice: towards a better understanding of the causal effects of built environment; Transportation, 45, 1351-1387; https://link.springer.com/article/10.1007/s11116-017-9767-1	The results point to the importance of incorporating all the urban form factors of diversity, design and street network integration if the goal is to increase the use of more sustainable modes of transportation for both work and non-work trips in Rome, but also show that attitudes and preferences can modify the response to urban design factors. The findings suggest that thoughtful policies triggering certain attitudes (cost sensitivity, sensitivity to peer pressure regarding the value attributed to sustainable transportation, and transit preference) can be adopted to significantly increase sustainable mode choice even in the neighborhoods with specific physical restrictions.
Transport Development Strategy of the Republic of Croatia (2017 - 2030), Ministry of the Sea, Transport and Infrastructure, Croatia, 2017	The principle enabling access to all public services for all citizens in the context of traffic, means providing access to public transport and other forms of mobility. For residents of areas with a low population density, using public means of transportation should be easier, faster, more cost-effective and sustainable. Quality organization of the transport system and reorganisation of the structure of the relevant stakeholders to optimise their resources are of crucial importance for improving the sustainability and quality of the transport systems.
Vilke, S., Krljan, T., Debelić, B. (2018): A Proposal of Measures Towards a Qualitative Enhancement of Bus Transport Services in the Primorsko-goranska County; Scientific Journal of Maritime Research, Vol. 32 No. 1, 2018.; https://doi.org/10.31217/p.32.1.6	The reason for choosing public transport as the sole means of transport was stated by 151 polled users, while subsidies, financial reasons and ecological awareness of the surveyed were recorded as answers to a significantly lesser extent. By increasing the transport user interest, the number of passengers would also grow and consequently the bus occupancy coefficient would be increased. Shorter travel times and cheaper fare tickets were the most frequent answers from the polled. However, both these answers are today reversely proportional to the quality of service. The negative side of the bus liner transport system rests with the economic component which has become the main motive for business.
Mrnjavac, N. (2018): Mobility of citizens of Croatia: experiences and attitutdes, with special reference to tourism; Acta turistica, Vol. 30 No. 2, 2018.; https://doi.org/10.22598/at/2018.30.2.129	The criteria for selecting a mode of transport in Croatia are convenience (46%) and speed (41%). The availability of a mode of transport and the lack of alternative modes are important for 27% and 29% of respondents, respectively. Price is important to only 17% of respondents. Croatian citizens are traveling more and more, and their traffic habits on tourist trips (of 300 km or more) are marked by the use of automobiles. Certain differences between EU and Croatia in attitudes suggest possible lines of action for traffic policy makers in Croatia. The greatest difference is in the role of rail transport. Unlike in the EU, rail transport in Croatia is not recognised as a form of transport that is important for either daily or tourism-motivated mobility.
Signorile, P., Larosa, V., Spiru, A. (2018): Mobility as a service: a new model for sustainable mobility in tourism; Worldwide Hospitality and Tourism Themes; https://doi.org/10.1108/WHATT-12-2017-0083	The sustainable mobility model proposed for the two Alpine regions, the Aosta Valley and the Autonomous Province of Trento, is MaaS or Mobility as a Service, a technologically advanced model that builds on several experiments in European countries such as Finland and Switzerland, and it has also found increasing attention in Italy, where in Milan, thanks to the favorable conditions of propensity to innovation and sustainability, day by day models comparable to the MaaS are experienced.
Gaborieau, J.-B., Pronello, C. (2019): Validation of a unidimensional and probabilistic measurement scale for pro-environmental behaviour by travellers; Springer, Transportation; https://link.springer.com/article/10.1007%2Fs11116-019-10068-w	The research was done in the metropolitan area of Torino (Italy). An improved GEB could include other forms of pro-environmental behaviour, such as, for example, diet-related behaviours, use of technology, holiday-related travel behaviours and ofsetting emissions. Public policies targeted to education—to affect people's beliefs—or advertising—to afect people's emotional response—can potentially have direct impacts on individual behavioural responses. A simple, efective measure of pro-environmental behaviour would allow public authorities to quantify the efectiveness of adopted policy.
Sottile, E., Piras, F., Meloni, I. (2019): Could a New Mode Alternative Modify Psycho-Attitudinal Factors and Travel Behavior?; Sage journals, Transportation Research Record: Journal of the Transportation Research Bord; https://journals.sagepub.com/doi/10.1177/03611981198434 78#sessionContainer	The transport context chosen for this study is a corridor linking the city center of Cagliari (Italy) to a university/ hospital complex. Attachment to the car remains unchanged, even after the introduction of the new bus route and light rail line. But, if these kinds of variables are stable over time, for policy makers this means that the implementation of a structural measure may not suffice to significantly influence individuals' cognitive factors. These findings support the idea of other studies that only the presence of a strong shock in the choice context or the implementation of personalized information campaigns, which focus on those factors that could diminish this emotional attachment, are able to trigger a shift in people's psycho-attitudinal characteristics.

Liang, l., et al. (2019): Household travel mode choice estimation with large-scale data—an empirical analysis based on mobility data in Milan; International Journal of Sustainable Transportation; https://www.tandfonline.com/doi/full/10.1080/15568318.2019.1686782	With the increase of vehicle ownership, the probability of choosing the public transport will decrease, most households will transit their travel mode to combined travel mode (i.e., usage of public transport and private car simultaneously). Supporting that the vehicle ownership is more than 3, many households does not take the usage of private car for granted, they may decrease the probability of using private car solely and try to use public transport and private car together.
Ljubic, P. (2019): Promocija održivog prijevoza kroz integraciju biciklističkog i javnog prijevoza; Bachelor's thesis; https://repozitorij.unizg.hr/islandora/object/fpz:1624	The City of Zagreb is still developing the Bike & Ride concept, so it is necessary to increase the number of public bicycle stations as well as the number of bus lines with the possibility of larger transport of a larger number of bicycles. The city would thus offer a number of alternatives when choosing a means of transport to carry out its daily activities. Greater availability, visibility and supply would affect the behavior of the population that would approach the bicycle as a means of transport, which would result in greater use of the bicycle and the development of transport. With an acceptable price, the change would be visible in the way of thinking of citizens and their possible involvement in cycling.
Naletina, D., Damić, M., Jabučar, A. (2019): Customer satisfaction with services of low-cost carriers at Pula and Zadar airports; InterEULawEast : journal for the international and european law, economics and market integrations, Vol. 6 No. 2, 2019.; https://hrcak.srce.hr/232507	The results of primary research show that passengers who travel with low-cost carriers place high importance on pricing, ticket availability and destination availability, and are satisfied with the service they receive in comparison to the ticket price. Passengers place importance on how quickly they can buy tickets online and the availability of various payment options.
Bargarić, L., Barišić, M., Martić Kuran, L. (2019): The importance of personal safety perception in a tourist destination from the perspective of young tourists; Journal of the Polytechnic of Rijeka, Vol. 7 No. 1, 2019.; https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=321162	The research results show that safety perception is a significant element when choosing a destination to travel, and Croatia is perceived as above-average safe country, which are important data that should be used more in promoting Croatia as a tourist destination.
Lattarulo, P., Masucci, V., Pazienza, M. G. (2019): Resistance to change: Car use and routines; Transport Policy, 74, 63-72; https://www.sciencedirect.com/science/article/pii/S0967070X18301495	A big event took place in Florence to test individual transport attitudes. The greatest resistance to changing mobility habits and adapting behaviour during this temporary event is on the part of car drivers, who are also the hardest to target with traditional policies; individual characteristics (gender, age and household structure) have a prevailing influence on adaptation choices, showing that 'affect heuristics processing' dominates and is connected to the perception of uncertainty and risk. Moreover, this evidence confirms that driving a car has an identity-making significance. Generally speaking, affective dominance seems to offset important information on alterations to relative journey times and costs during the event, thus discouraging habit changes.
Angelis, M., et al. (2020): Mobility behaviors of Italian university students and staff: Exploring the moderating role of commuting distances; International Journal of Sustainable Transportation; https://www.tandfonline.com/doi/full/10.1080/15568318.2020.1771641	Not having a bus or train season ticket is likely to prompt the use of the car at any distance to the final destination. Considering the habit discontinuity hypothesis, participants who had experienced more than one change of residence or relocation during the previous five years were more willing to reduce the use of the car only for their long commuting trips. Concerning habitual mode use behaviors, being used to driving is likely to facilitate the use of the car for one's own commuting trip, whereas being used to cycling is likely to reduce the use of the car, regardless the length of the journey. Finally, exhibiting a personal inclination to choose a different means of transport than the car is likely to reduce the use of commuting by car.
Djak, K. (2020): Sklonost turista održivom ponašanju: primjer hrvatskih državljana; Master's thesis, University of Split, Faculty of economics Split, Split; https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=SKLONOST+TURISTA+ODR%C5%A2IVOM+PONA%C5%A0ANJU%3A+PRIMJER+HRVATSKIH+DR%C5%A2AVLJANA&btnG=	It is evident that tourists who are citizens of Croatia have a high level of knowledge about the concept of sustainable tourism development and they generally behave in accordance with the principles of sustainable tourism. It is noted that the majority of respondents indicated that they generally do not use environmentally friendly means of transport, which is one of the most significant problems of ecological sustainability of tourism. Such a pattern of behavior can be attributed to the relatively poor public transport infrastructure within the Republic of Croatia and the weak transport connection with international destinations.

Maretić, B., Abramović, B. (2020): Integrated Passenger Transport System in Rural Areas – A Literature Review; Promet - Traffic&Transportation, Vol. 32 No. 6, 2020.; https://hrcak.srce.hr/253178	The analysis found an increase in the degree of mobility in the areas that use integrated passenger transport compared to the non-integrated one. This research of the literature review has identified the rural areas of mobility as under-researched. The mobility research can set up a more efficient passenger transport planning system in rural areas.
Slavulj, M., et al. (2020): State of Developing Mobility as a Service in the City of Zagreb; Technical Gazette, Vol. 27 No. 4, 2020.; https://doi.org/10.17559/TV-20190605125916	As for the City of Zagreb and its integration into the future vision of the European Union regarding MaaS, there are several problems that firstly must be solved: inefficient public transport system regarding operating speed and capacity, modal split in favour of private car suggests problems related to traffic user behaviour, lack of a unified and comprehensive mobility database as well as non-transparent data, especially by public transport operator. These problems can be solved with putting most efforts on the decision-making level into a sound traffic policy based on the current EU legal framework, with documents such as master plan and sustainable urban mobility plan as the guidelines for the development in the short and long-term.
Krpan, Lj., Hess, S., Baričević, H. (2020): Correlation between Mobility and Gross Domestic Product at Regional Level: Case Study of Primorje-Gorski Kotar County, Croatia; Technical Gazette, Vol. 27 No. 2, 2020.; https://doi.org/10.17559/TV-20180104121813	The trend of the basic macroeconomic indicators, such as gross domestic product, gross domestic product per capita, employment rate and unemployment rate as well as the average income of the employed population are in direct correlation with the trend of ownership and usage of motor vehicles. The research results in this paper have shown that the level of economic development of the Primorje-Gorski Kotar County affects the linear correlation of the macroeconomic indicators and the level of mobility. This confirms that, although the most developed county in the Republic of Croatia, at the European level it belongs to the medium developed regions.
Lončarić, D., Cegur Radović, T., Skendrović, P. (2020): Who attends Christmas Markets and why? Analysis of visitor structure and motivation for attending two Christmas Markets in Croatia; Econviews - : Review of Contemporary Entrepreneurship, Business, and Economic Issues, Vol. 33 No. 1, 2020.; https://hrcak.srce.hr/239996	Empirical research was conducted on the samples of Christmas Market visitors in Zagreb (mainly foreign visitors 52.2%) and Karlovac (100% domestic). The results of the research show that the travel behaviour of visitors and their motives for coming to the Christmas Markets differ, as well as their satisfaction level and loyalty. However, for both fairs a strong link was found between the visitors' satisfaction with the visits and their intentions to revisit the two markets, recommend them, and share their experiences. In the case of the Karlovac Advent, there is a possibility of recommending the visitors of the Zagreb Advent to visit Karlovac for a day since it is only 50 kilometres away.
Dorčić, J. (2020): DOCTORAL DISSERTATION SUMMARY: Modelling intentions for online reservations in hotel industry; Tourism and hospitality management, Vol. 26 No. 2, 2020.; https://hrcak.srce.hr/248132	The results of the descriptive statistical analysis show that in both samples the respondents rated all characteristics of website quality (system quality, information quality, service quality and hedonic quality), constructs of cognitive online experience, affective online experience and behavioural intentions with relatively high marks. The average scores for future behavioural intentions in both samples are high, suggesting that they will book hotel accommodation through this website in the near future, that they will consider this website if they need to book hotel accommodation, and that they have a high desire to book hotel accommodation through this website in the future. The sample of the study contains an overrepresentation of Croatian citizens.
Henke, I., et al. (2020): The Environmental Risks Related to Visitors' Trips to Festivals: Transport Planning for Sustainability; IEEE International Conference on Environment and Electrical Engineering and 2020 IEEE Industrial and Commercial Power Systems Europe; https://ieeexplore.ieee.org/abstract/document/9160825	Comparing the results with the current scenario, results show how increasing car costs or travel times lead to a less use of this transport mode to reach the place where the festivals take place. However, this policy brings dissatisfaction from a great part of travelers. On the contrary, policies based on public transport bring an increase in users' satisfaction and therefore a less reduction of car use and consequently of environmental impacts. The case study is the city of Naples, in the South of Italy.

Henke, I., et al. (2020): Mobility habits surveys: A real case application for university students in Italy; International Journal of Advanced Research in Engineering and Technology, 11(3), 321-332; https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3565885	From the main results emerge a largely heterogeneity in students' habits, which is directly related to different levels of transport accessibility of the university buildings. Overall, a greater propensity in using private car was observed (up to 81%) both because the average low quality of public transport and because a large and ease availability of free car parks near the university. By contrast, rail/bus transport services were preferred when the university is located near to the stations/terminals. The average car loading factor was equal to 1.5 students/cars higher than the national ones (1.3). Furthermore, the 47% of the interviewed are aware in using a carpooling service (sustainable transport mode) and 67% of them would be willing to use it, providing it is organized and managed by the University (higher safety and security perception).
Mišura, A., Sopta, D. (2020): Impact of Traffic Connectivity on Island Development; International Journal of Maritime Science & Technology "Our Sea", Vol. 67 No. 1, 2020.; https://doi.org/10.17818/NM/2020/1.10	The research shows that the improvement of traffic connection and increased density of traffic network between islands and mainland does not have a direct impact on the number of island's population, but it has a positive impact on all economic and social activities, by creating the prerequisites for sustainable development of the islands and raising the quality of life on islands, as evidenced by the growth of the island's population on bridged islands and drop population in small islands and islands unrelated to bridges.
Sottile, E., et al. (2021): An innovative GPS smartphone based strategy for university mobility management: A case study at the University of RomaTre, Italy; Elsevier, Research in Transportation Economics, vol 85 (2021) 100926; https://www.sciencedirect.com/science/article/pii/S0739885920301244	The strategy identifies the integration of all mobility management activities into one smartphone application called IPET. Regarding past behavior, the participants gave, on average, mixed responses. Attitude towards riding the bus was relatively low. Otherwise, all the individuals consider active mobility as a healthy travel alternative and driving the car a pleasant activity. In general, the respondents stated it would be difficult to reduce car, or shared mobility use or travel by public transport. Instead, they displayed a positive perceived behavioral control toward active mobility.
Angelis, M., et al (2021): A Cluster Analysis of University Commuters: Attitudes, Personal Norms and Constraints, and Travel Satisfaction; MDPI, Environmental Research and Public Health, 18(9), 4592; https://www.mdpi.com/1660-4601/18/9/4592	The first objective of the present study was to identify groups of commuters based on their modal choice in a large higher education institution in Italy. Strategies for promoting behavioural change that the institution can adopt may relate to the use of incentives or rewards for those who have shown to adopt sustainable trip chains. Also loyalty programmes or information kits on available discounts or sustainable routes, especially for recently relocated travellers, could be a successful strategy in creating new sustainable habits. Another strategy could be to encourage the academic community to plan events or interventions to make the workplace greener.
Inturri, G., et al. (2021): Linking Public Transport User Satisfaction with Service Accessibility for Sustainable Mobility Planning; MDPI, International Journal of Geo-Information; https://www.mdpi.com/2220-9964/10/4/235	The case study is Catania, a medium-sized city located in southern Italy, with a focus on the mobility of University students. PT should be combined with other modes of transport to increase its coverage. The same applies to the science and technology campus, which is actually the best in terms of PTAL and satisfaction, but which has a lower PPTAL, meaning that it is not easily accessible from everywhere. More effort should be put in making the mostly used bus lines more efficient, e.g., by introducing more reserved lanes or increasing service frequency. Some efforts go in this direction, i.e., with a BRT line from the city center to the campus that is highly used by students.
Zamparini, L., Vergori, A. S. (2021): Sustainable mobility at tourist destinations: The relevance of habits and the role of policies; Journal of Transport Geography, 93, 103088; https://www.sciencedirect.com/science/article/pii/S0966692321001411	The main finding of this paper shows that mobility at home, the use of a friendly transport mode to reach the destination and the choice of a static holiday in sea, sun and sand destinations are the most relevant variables that positively influence environmentally friendly mobility. Moreover, improved infrastructures and more appropriate mobility policies and strategies may determine more sustainable transport choices of visitors and residents. At first sight, it appears that the sampled Italian tourists have behaved in a less environmentally conscious way than foreign ones while staying in Apulia.

Sušić, F., et al (2021): An Overview of the Main Croatian Ports Important in Connecting Islands and the Mainland through the Prism of the RO-RO Technology; Journal of Maritime and Transportation Sciences, Vol. 60 No. 1, 2021., https://hrcak.srce.hr/260933	RO-RO passenger shipping is one of the key factors of the development of the Croatian islands. Authors point out the need to strengthen the role of the RO–RO passenger shipping as important part of maritime sector in the development and competitiveness of the Republic of Croatia through initiatives of sustainable growth of economic activities on islands and in the coastal area. The RO-RO passengers traffic simulations system would result in better insight into the possibilities for a more flexible connection of islands and mainland.
ICARUS project news: ARAP developed a journey planner app for trips between Abruzzo coast and Croatia; https://www.italy-croatia.eu/web/icarus/-/discover-happy-travel-app-journey-planner-between-abruzzo-coast-and-croatia	A journey planner application is developed to facilitate access to information and to promote sustainable mobility in the area. The application provides real-time information on means of transport/routes, e - ticketing solutions, and information regarding cultural and tourist walking routes and points of interest.

Some useful insights emerge from the analysis of the literature on mobility and transport in Italy and Croatia, and how this affects behavioral choices.

With 604 vehicles per 1000 inhabitants in 2017, Italy had the second largest number of private vehicles registered in the Europe, owing to a lack of valid alternative mobility options. Similarly, Croatian society, with 78% of car-only users in 2017, is also highly dependent on cars and far less dependent on public transport. For instance, the level of economic growth of the Primorje-Gorski Kotar County is related to the number of people who own and use vehicles. This shows that, despite being the most developed county in Croatia, it is classified as a moderately developed region in Europe. The reason for such behavior may be in a fact that Croatia has a very weak public transportation system and infrastructure, as well as a poor transportation connectivity to national and international locations.

Fast transit systems have a significant impact on mobility habits for medium-to-long-distance journeys, as well as on social, economic, and environmental changes. Therefore, the development of high-speed rail in Italian cities has resulted in greater use than traditional rails as it provides fast and high-frequency on-board services, even if it means a 40% higher price. The most important distinction between Italy and Croatia is the role of rail transport. Unlike in Italy, rail transport is not a key transportation mode in Croatia. The source of the problem lies in outdated infrastructure, outdated slow trains, underdeveloped intermodality, insufficient number of passengers as well as in low safety and comfort level which leads to non-competitiveness of the railway system in Croatia.

There is not only a problem with railway system in Croatia, but with public transport in general. Major problems with public transport in Croatian Counties have been spotted in a term of poor frequency, lack of lines and timetables, the age of the vehicles, low safety level for passengers, inadequate comfort, high purchase prices of vehicles and lack of passengers. For the most part, passenger school transport does not satisfy pupils' needs. To successfully encourage the use of public transport in Croatia it is highly recommended to work on shorter travel times, cheaper fare

tickets, frequency, and comfort. Also, using public transit should be easier, faster, more cost-effective, and more sustainable for people of low-density areas. On the other hand, it is essential to adapt the use of different measures in order to discourage the use of personal vehicles, particularly those transporting single passengers.

The limitations of existing transportation systems have encouraged innovations based on shared transportation systems, such as carsharing and carpooling, which have opened the way for the transition to more sustainable mobility models. The results from the Salerno metropolitan region suggest that inter-urban carsharing could be a competitive alternative to driving. Also, the Moovit Carpool app has the highest level of appreciation among commuters in the Lazio region. The top two motivators for carpooling usage in Italy are cost savings and reduction of pollution and traffic congestion. Furthermore, carpooling has successfully taken place in the Croatia as well and has a lot of potential for further development. There is a significant number of passengers, particularly younger people, already using carpool. Main motivators for carpooling in Croatia are cheaper prices and greater flexibility compared to other transport modes.

Mobility as a Service (MaaS) is a new business model for delivering sustainable transportation services that ensures the personalized use of a bundle of public and private transportation modes such as trains, buses, taxis, cars, and bike sharing. Milan, the largest metropolis in Northern Italy, has the optimal conditions of MaaS implementation due to propensity to change, innovation and geographical location. Close to the Alpine archway, and the tourist flows which came from Lombardy, present in both winter and summer period, to the Alps, make Milan the starting point for applying the MaaS concept to tourism context. The significant share of tourist flows from Lombardy is also an advantage in designing tourism for new, more sustainable mobility systems. For comparison, based on existing transport demand in Zagreb, the capital of Croatia, there is a need for a higher-capacity system, such as light-rail, to be introduced soon. Public transport has a low operating speed, so public transport priority has to be introduced to improve the attractiveness of public transport, since it is the backbone of MaaS.

Some Italian findings suggest that national policies can control specific attitudes (cost sensitivity, social pressure through more sustainable transportation and transport mode choice preferences) therefore policies should be implemented to increase use of more sustainable travel modes. With that in mind, a case study in city of Naples reveals that the policy of increasing car costs or travel time leads to a less car use but also brings dissatisfaction from a great part of travelers. Other Italian findings assume that psychological factors play a role in explaining mode choice behavior and, as a result, transportation planners should pay close attention to them. On the other hand, some

findings assume that the built environment appears to have a greater impact on mode choice rather than attitudes and sociodemographic characteristics. But, even with the addition of a new bus route and light rail line in the metropolitan area of Cagliari, people's attachment to their cars stays the same which means implementing a structural measure alone may not be enough to have a major impact on individuals' cognitive elements. Nevertheless, better infrastructure and more appropriate mobility policies and strategies may influence visitors' and inhabitants' transportation choices.

Car drivers are the most resistant to changing mobility habits and adapting travel behavior according to Italian findings. Individual variables such as gender, age, and household structure, also have a strong influence on adaptation choices, thus a household has more vehicles, the likelihood of using public transportation decreases. Similarly, in Croatia the age of respondents, where they live, the accessibility of usual destinations by public transportation, the number of vehicles in the family, and whether the individual is the primary driver of the household car all influence whether they use public or private transportation. Convenience and speed are the most important motivators for choosing a particular transport mode.

When it comes to habitual mode use habits for Italian students, being used to driving will likely make it easier to use the car for daily travels, whereas being used to cycling will likely minimize the car usage, regardless of the traveled distance. Considering that the Italian university system is not based on a "campus model", generally low quality of public transportation and accessible free car parking near the institution, students show a greater preference for the use of personal cars. However, when university is close to the stations/terminals, public transportation is preferred. Apart from that, students describe active mobility as a healthy travel alternative and driving as a pleasant activity. They seemed to have a positive perceived behavioral control when it came to active mobility. Students in Zagreb, on the other hand, mostly use public transport and bicycle to go to universities and they consider to be the most frequent bicycle users in Zagreb.

Higher education institutions are one of the great ways to promote sustainable mobility among students where their habits and attitudes can be strengthened or reshaped. More effort should be put in making the mostly used bus lines more efficient, e.g., by introducing more reserved lanes or increasing service frequency. Loyalty programs or information kits on available savings or sustainable routes, particularly for recently relocated travelers, could be an effective technique for establishing new sustainable habits. Another option could be to encourage academics to organize events or initiatives to make the workplace more environmentally friendly.

The Croatian economy mainly relies on tourism, so it is very important to emphasize how transport affects tourism in Croatia. In order to improve tourist and traffic offer the emphasis is put

on the construction of the traffic infrastructure and development of certain traffic modes as well as on the internal connections of individual Croatian regions with tourist destinations and connections with international locations. Despite of that, satisfaction with the destination is considered to be the only significant predictor in a case of Slovakian tourists. Croatia as a tourist destination is also known for its long coast and many islands and therefore ferry connection is a significant factor in the development of the Croatian islands. A close, direct connection between ferry traffic and tourism and between ferry traffic and general population movement was observed. It is found that improving transportation connections has a positive impact on all economic and social activities, as it creates the conditions for the islands' long-term development and improves their quality of life. The emphasis is put on strengthening the role of ferry traffic as an important aspect of the maritime sector in Croatia's development and competitiveness can be achieved through programs that promote sustainable growth of economic activities on islands and along the coast. The ferry traffic simulations system would provide a better understanding of the options for a more flexible island-to-mainland connection.

It is also worth mentioning that a Croatian youth tourism is in its early stages and demonstrates the possibilities of inclusion in global young tourists' trends. Young people are more adaptable, motivated and want to travel. Due to financial constraints, young people in Croatia mostly travel by bus with often use of discounts for young people. As young people are more likely to change their behavior, this is also one of the ways for promoting sustainable transport modes among young people.

Even though there is not much literature dealing with intermodal transport connection between Italy and Croatia, basic things which can help in improving cross-border connection between two countries have to be said. Firstly, it is important to bear in mind that at numerous internal EU borders, different or insufficient national legal provisions continue to hinder the growth of cross-border public transportation. Secondly, there are still long waiting periods for passenger trains at the borders which are caused by different electrification systems and lack of interoperability. The solution to this problem lies in implementation of European Train Control System (ETCS) that will provide a unified standard across Europe, although its implementation will take decades. Therefore, it is preferable for national and regional governments to establish their own strategies for developing cross border rail transport.

The findings of a study of cross-border cooperation in the Alps–Adriatic region between Carinthia, Friuli-Venezia Giulia (FVG), and Slovenia show that good personal relationships, language

skills, and shared interests are the most important factors, while the level of assistance and administrative/legislative barriers are the most significant obstacles.

Cross-border public transportation between Croatia and Slovenia is underdeveloped, inefficient, and unevenly distributed due to a lack of cooperation and joint initiatives. Public transportation is mostly centered in or near big urban areas, with urban public transportation primarily oriented to bus service. There are limited public transport connections to peripheral and tourist areas at the border. For encouraging sustainable mobility in the cross-border area, there is a clear need for more intense institutional collaboration among public actors and more capacity building in border areas.

Just recently, ARAP created a travel planner application called 'Happy travel' for organizing a trip in a scope of the ICARUS project to improve access to information and encourage sustainable transportation from the Abruzzo Region to Croatia. The app gives real-time information on modes of transportation and routes, as well as e-ticketing options and cultural and tourist walking itineraries and areas of interest.

To sum up, even though the car is the main transport for most people in Italy and Croatia, carsharing and carpooling are becoming more and more popular among travelers. Cost savings, pollution and traffic congestion decrease, as well as greater flexibility are the main motivators for encouraging shared transportation systems.

Italian findings give advisable practices how to increase the usage of more environmentally friendly modes of transportation. They stress how sound national policies should be implemented to increase public transportation, for instance enhancing car costs. Furthermore, the built environment appears to have a major impact on travel mode choice, so that better infrastructure and more appropriate mobility policies and plans could have very important impact on travelers' and commuters' way of travel. Both demographics (such as gender, age, household structure etc.) and psychological features, besides habits, have an influence on individual's mode choice to travel by public or private transportation, and more investigations are needed on the behavioral and psychological determinants of commuters and travelers behaviors.

Croatia has a poor public transportation system and infrastructure, especially rail infrastructure, as well as a poor transportation connectivity to national and international locations. Working on shorter journey times, cheaper fare tickets, frequency, flexibility, connectivity and comfort is strongly advisable to successfully stimulate the use of public transportation in the Country. Also, for people living in low-density areas, the use of public transport should be easier, faster, more cost-effective, and more sustainable.

While Italian papers are mainly focused on recommended practices for shifting travel behavior towards more sustainable transport, Croatian papers are more oriented on the infrastructural problems not only on international level, but mainly on national level. This raises the question about traffic development differences between Italy and Croatia, not only in the way of national provisions, but also compatibility on the ways how to integrate intermodal connections between two countries. Developing sustainable intermodal transportation on national level in the first place, is therefore much more serious issue for Croatia so it can keep up with making more efficient integrated cross-border multimodal transport.

In order to improve the cross-border connection between Italy and Croatia, apart from improving infrastructure connection, it is also very important to work on unification and improvement of national legal provisions and administration, mutual cooperation and even personal relations.

3. Covid-19 impacts on mobility

The exogenous shock represented by the Covid-19 pandemic heavily affected a heterogeneous number of behaviors, with mobility making no exception. Further, the need to keep social distance had a relevant effect not only on the actual options available (i.e., travel restrictions), but also on how individuals perceived different transport modes, in terms of safety for them and people travelling with them.

There is a growing literature on the effects of the pandemic on mobility, and specifically with a focus on how attitudes, perceptions and behaviors might change as a consequence. Table 5 illustrates the main findings that are available in literature:

Table 5: Literature on Covid-19 and Mobility

Title	Main results
Campisi, T., et al. (2020): The Impact of COVID-19 Pandemic on the Resilience of Sustainable Mobility in Sicily; Sustainability, 12(21), 8829; https://www.mdpi.com/2071-1050/12/21/8829/htm	The use of new digital applications for booking public transport (LPT and cabs) and private transport (bicycles, scooters) in combination with the spread of reduced fares and incentives for the purchase of means of transport should allow the testing and dissemination of Mobility as a Service systems, aimed at ensuring the maximization of the use of sustainable means of transport in line with the guarantees of social distancing and opportunities for savings on transport costs for operators and users.
Barbieri, D. M., et al. (2020): A survey dataset to evaluate the changes in mobility and transportation due to COVID-19 travel restrictions in Australia, Brazil, China, Ghana, India, Iran, Italy, Norway, South Africa, United States; Elsevier, Data in Brief, vol. 33 (2020) 106459; https://www.sciencedirect.com/science/article/pii/S2352340920313 41X?via%3Dihub	**Survey connected to the previous source. There is a balance between male and female participants, the average age is 33 and the general education background is high, as 81.2% of the respondents hold at least a BSc degree. Even if no specific information about income was collected, and in light of the fact that the survey participants were mostly young-aged and well educated, the overall dataset is more likely to express behaviours and attitudes among upper classes.
Neuburger, L., Egger, R. (2020): Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: a case study of the DACH region; Current Issues in Tourism, vol. 24, no. 7, 1003–1016; https://www.tandfonline.com/doi/full/10.1080/13683500.2020.1803807	It is important to focus on reducing tourists' travel risk perception in order to allow the industry to bounce back quicker once the threat of COVID-19 decreases. Therefore, travel media and any communication with travellers should not solely provide information that can cause an increase of perceived travel risk but also inform about cancellation or refund policies and cover health and safety measures to ensure that tourists can feel safe and ensured once travel restrictions are lifted. Another implication for destinations is a higher focus on revitalizing and supporting domestic tourism that is expected to recover first from the pandemic outbreak of COVID-19.
Matiza, T., (2020): Post-COVID-19 crisis travel behaviour: towards mitigating the effects of perceived risk, Journal of tourism futures; https://www.emerald.com/insight/content/doi/10.1108/JTF-04-2020-0063/full/html?utm_source=rss&utm_medium=feed&utm_campaign=rss_journalLatest	The subjective factors are the "subsequent" psychological and social risks associated with tourism in the COVID-19 era would be mitigated by the tertiary interventions to manage tourist perception. These interventions include managing the country's media profile, marketing and domestic tourism. Tourism practitioners need to be consistently reflexive to recognise and respond to changes in the tourism market. More-so, it is the role of tourism researchers to close the knowledge and information gap between theory and practice, taking into account real-world events.

Gajic, T., et al. (2021): The power of fears in the travel decision – covid-19 against lack of money, Journal of tourism futures, ISSN 2055-5911; https://www.emerald.com/insight/content/doi/10.1108/JTF-03-2021-0064/full/html	The findings confirm a positive significant link between the tourist experience and the influence of the media on risk perception. The statistical analysis confirmed that all the eight groups (makers, strivers, believers, experiencers, achievers, thinkers, survivors, innovators) of consumers have close values regarding the attitude toward the impact of COVID-19 on the decision for traveling. Both types of fears, fear of lack of money in a crisis situation, as well as fear of infection during the trip, have statistical significance in predicting travel for all tourists, but as predictors of travel between these two types of fear, there is no significant difference in predictive power.
Zhang, J., Lee, J. (2021): Interactive effects between travel behaviour and COVID-19: a questionnaire study, Oxford, Transportation Safety and Environment, Vol. 3, No. 2 166–177; https://academic.oup.com/tse/article/3/2/166/6224808	71.56%, thought it was very necessary to reduce travel during the pandemic, while the number of people who considered this very unnecessary is only 3.77%. The largest proportions are the residents who made no trips and those who made 1–3 trips. While before the outbreak of the pandemic, the largest proportion is the residents who made more than 10 trips. The proportion of residents who travel on foot increased by 23.73%, while the proportion of those who travel by public transport decreased by 20.53%. The decrease was caused by the fact that residents were reluctant to travel by bus and subway to avoid cross-infection. The proportion of residents who travel by private cars increased by 6.4%.
Schulte-Fischedick, M., Shan, Y., Hubacek, K. (2021): Implications of COVID-19 lockdowns on surface passenger mobility and related CO2 emission changes in Europe; Elsevier, Applied Energy, vol. 300 (2021) 117396; https://www.sciencedirect.com/science/article/pii/S0306261921007972?via%3Dihub	It was shown that in April, CO2 emissions from surface passenger transport encountered a decline of 50% which contributed to a 7.1% reduction in total CO2 emissions. After the climax of countries' lockdowns in April, private passenger travel recovered rapidly, while public passenger flows remained below pre-pandemic activity levels. Furthermore, a higher share of people participated in active transportation, raising cycling, and walking traffic intensively. Finally, changes in mobility behaviour over time entailed a rebound in emissions in the aftermath of the initial peak lockdown phase. European citizens might now be more willing to change their behaviour and it might now be the momentum needed to push in a certain, more sustainable direction.
Scorrano, M., Danielis, R. (2021): Active mobility in an Italian city: Mode choice determinants and attitudes before and during the Covid-19 emergency; Elsevier, Research in Transportation Economics, vol. 86 (2021) 101031; https://www.sciencedirect.com/science/article/pii/S0739885921000032?via%3Dihub	In the case of Trieste, due to the limited distances and the high urban density, walking is one of the preferred mode to access the city center. The modal share of the bus is high compared to other Italian medium-sized cities, while the car is less frequently used. Motorcycle use is also high, while cycling plays a minor role with a modal share lower than the Italian average and much lower than other European cities. They found that respondents would derive a higher utility from cycling with a private bicycle than from using the car or the motorcycle, equivalent when not superior to using the bus. Such a preference, however, decreases if the weather is not favorable. Walking is less valued, although less affected by the weather conditions. Bike-sharing is less used and less valued, probably also because it has been introduced only recently in the city.
Barbieri, D. M., et al. (2021): Impact of COVID-19 pandemic on mobility in ten countries and associated perceived risk for all transport modes; Plos one; https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0245886	As the COVID-19 pandemic is likely to entail a long-term effect on transport mode choice and people's cognitive assessment towards travel, transit operators need to carefully take into consideration the modal split changes and, regardless of socio-economic inequalities, endeavor to gain public trust and make journeys less risky by interpreting the pandemic as a "catalyst for change" and "hallmark of recovery".
Simovic, S., et al. (2021): What Causes Changes in Passenger Behavior in South-East Europe during the COVID-19 Pandemic?; Sustainability, 13(15), 8398; https://www.mdpi.com/2071-1050/13/15/8398/htm	From these results it can be concluded that acceptable occupancy of a passenger vehicle is influenced by education (Serbia, Montenegro, Bosnia and Herzegovina and Croatia), age (Serbia, Bosnia and Herzegovina and Croatia), health (Bosnia and Herzegovina and the Republic of Northern Macedonia) and in one case gender (Slovenia). Acceptable bus occupancy is influenced by education (Montenegro, Bosnia and Herzegovina and Croatia), age (Serbia and Montenegro), health (Slovenia and the Republic of Northern Macedonia), gender (Slovenia) and residence (Greece). The study showed that these factors differ depending on the type of transport (passenger vehicle and bus).
Bin, E., et al. (2021): The trade-off behaviours between virtual and physical activities during the first wave of the COVID-19 pandemic period; European Transport Research Review, (2021) 13:14; https://etrr.springeropen.com/articles/10.1186/s12544-021-00473-7	1. The ones with children in the household had smaller reductions in travel for eating out, hobbies, and visits to friends and family. 2. Online activities have replaced travelling to some extent. 3. Full-time workers and respondents with children in the household are more likely to keep their new online working habits. 4. Changes in behaviour were more considerable for respondents in Italy and India, while respondents in Italy and Sweden report that they are more likely to keep at least part of their new online behaviours. In the short-term, the reduction of car travel is likely to contribute to fewer emissions, while the long-term effects still need to be further explored.

Chan, H.F., et al. (2021): Can Psychological Traits Explain Mobility Behavior During the COVID-19 Pandemic? Sage publishing, Vol. 12(6) 1018-1029; https://journals.sagepub.com/doi/10.1177/1948550620952572	Younger and older respondents are more likely to have stayed home and less likely to leave home in the near future. Females are also more likely to have stayed home previously and continue to stay at home in the future. Finally, the number of confirmed cases in the country is negatively correlated with the tendency to have stayed home in the past week. For participants who said they need to leave home in the next 5 days, there is not found a strong link between personality traits and specific reasons to leave home.
Jiao, J., Bhat, M., Azimian, A. (2021): Measuring travel behavior in Houston, Texas with mobility data during the 2020 COVID-19 outbreak, The international Journal of Transportation Research; https://www.tandfonline.com/doi/full/10.1080/19427867.2021.1901838	While governments should enforce limiting outdoor activity, they should also focus on making public transit safer for when people make trips out of necessity, grocery and pharmacy visits for example. Employing cleaning staffs to visibly clean public transit stations could help overcome unease in employing shared modes. Additionally, installing hand sanitizer stations or providing disinfecting wipes could also be beneficial. Public transportation operators and policy makers may take advantage of online platforms and smart phone applications in enhancing transit services by providing live updates on when deep cleaning has occurred and how busy transit systems are.
Habib, M. A., Anik, M. A. H. (2021): Impacts of COVID-19 on Transport Modes and Mobility Behavior: Analysis of Public Discourse in Twitter; Sage journals, Transportation Research Record: Journal of the Transportation Research Bord; https://journals.sagepub.com/doi/10.1177/03611981211029926	People are avoiding public transport, and shifting to private car, bicycle, and walking in fear of COVID-19. Bicycle sales have increased remarkably; some cycle shops have even been sold out, failing to meet the huge demand. People are making recreational trips on bicycles to improve their physical and mental health. Cycling and walking has been identified as green solution to COVID-19 mobility problems, and to tackle climate change in the post-pandemic world. To meet the rise in number of active transport users, transport authorities across cities have extended cycling networks, improved walking facilities, and made way for micro-mobility options, such as electric scooters and bikes. Interestingly, though the world is experiencing a cycling boom, car sales have declined notably during the lockdown period.
König, A., Dreßler, A. (2021): A mixed-methods analysis of mobility behavior changes in the COVID-19 era in a rural case study; European Transport Research Review, (2021) 13:15; https://etrr.springeropen.com/articles/10.1186/s12544-021-00472-8	30.2% of respondents reported a change in mobility behavior as a reaction to the COVID-19 pandemic situation.16.0% stated not to have reduced their trips at all. The mean share of omitted trips was considerable with 33.49%. The share of persons that stated to have changed their mobility behavior was higher for retired persons (46.9%) than for employed persons (33.3%) whereas the mean share of reduced trips was nearly the same for both groups. The majority of the explanations referred to the introduction of remote work and the cancelation of classes. Some explanations also referred to the reduction of trips for pleasure and leisure activities that caused a reduction of mobility.
Przybylowski, A., Stelmak, S., Suchanek, M. (2021) Mobility Behaviour in View of the Impact of the COVID-19 Pandemic—Public Transport Users in Gdansk Case Study; Sustainability, 13,364; https://www.mdpi.com/2071-1050/13/1/364/htm	The willingness to return to using public transport after the epidemic is correlated only with two of the analysed factors—the feeling of safety and the feeling of comfort in public transport during the epidemic.The tidiness of the vehicle became a far more important factor than it had been before the epidemic. Whereas the behaviour of other passengers was also a significant factor in feeling safe before the epidemic. The fear of other passengers not following the hygienic regimes is also an important factor for the feeling of safety, more than the fear of becoming infected.
Awad-Núñez, S., et al. (2021): Post-COVID-19 travel behaviour patterns: impact on the willingness to pay of users of public transport and shared mobility services in Spain; European Transport Research Review, (2021) 13:20; https://etrr.springeropen.com/articles/10.1186/s12544-021-00476-4	The general willingness to use different modes of transport in the post-COVID-19 period varies greatly. Public transport is the option with the highest willingness to use. 89.7% of individuals reported that they would use these services in the post-lockdown period, a figure that seems high given that the survey was carried out during the critical period of the lockdown when the demand of public transport dropped up to 40–70% of the same period of 2019 in some of the biggest Spanish cities. The willingness to use bike-sharing or kick scooter-sharing is also relatively high (67.7%), a striking result given that the demand for these modes of transport was marginal in Spain in the pre-COVID-19 period.
Almlöf, E., et al. (2021): Who continued travelling by public transport during COVID-19? Socioeconomic factors explaining travel behaviour in Stockholm 2020 based on smart card dana; European Transport Research Review, (2021) 13:31; https://etrr.springeropen.com/articles/10.1186/s12544-021-00488-0	Those with the least resources have continued travelling with public transport to the greatest extent, creating a connection between wealth and risk of exposure to a potentially fatal disease. However, this variance seems to have decreased over time. The results indicate that socioeconomic factors influence people's change in behaviour when it comes to public transport use during COVID-19. They also find that gender influences the results. The probability to stop travelling by public transport increases with the share of the male population in the area. The findings indicate that this is mainly due to other socioeconomic factors.
Kopsidas, A., et al. (2021): How did the COVID-19 pandemic impact traveler behavior toward public transport? The case of Athens, Greece; The International Journal of Transportation Research, vol. 13, no. 5-6, 344-352; https://www.tandfonline.com/doi/full/10.1080/19427867.2021.1901029	The frequency of using public transport before the pandemic, along with the travelers' age, influence their behavior in terms of the time they will refrain from using public transport, after the pandemic. Self-employed travelers, and travelers with ages between 46 and 65 are the most likely to refrain from public transport, following a gradual exit from the pandemic. Also, there is evidence that specific psychological factors affect willingness to use public transport after the pandemic, such as safety perception and the desire to take precautions against an infection.

Wee, B., Witlox, F. (2021): COVID-19 and its long-term effects on activity participation and travel behaviour: A multiperspective view; Elsevier, Journal of Transport Geography, 95 (2021) 103144 ; https://www.sciencedirect.com/science/article/pii/S0966692321001976	In the case of commuting and education, at least a reduction in travel frequencies can be expected, and probably also a reduction in rush hour traffic, leading to less congestion on roads and less crowding in public transport. The assumption is that commuting levels of large parts of the population, especially those with office work, and business travel will decrease due to COVID-19. If so, the benefits of autonomous vehicles might decrease, and those of more local modes of travel such as (e)biking, micro mobility, walking, and urban MaaS travel might increase if people substitute commute and business travel time for local travel for other purposes. These changes could also make cars less attractive in general (strengthening the peak car effect).
Yang, Y., et al. (2021): Exploring the relationship between the COVID-19 pandemic and changes in travel behaviour: A qualitative study; Elsevier, Transportation Research Interdisciplinary Perspectives, 11 (2021) 100450; https://www.sciencedirect.com/science/article/pii/S2590198221001561	During the COVID-19 crisis, travel behaviour in Huzhou changed in four respects: the demand for travel, the purpose for which travel was undertaken, the modes of travel, and the convenience of travel. Most inhabitants, except those working in essential occupations such as police officers and doctors, minimised their travel. Most travel was undertaken for the purposes of shopping, and the number of trips undertaken for other reasons, such as commuting or leisure, was greatly reduced. Moreover, public transport became the least popular mode of transport, as both confined spaces and crowding increase the risk of transmission.
Corbisiero, F., Monaco, S. (2021): Post-pandemic tourism resilience: changes in Italians' travel behavior and the possible responses of tourist cities; https://www.emerald.com/insight/content/doi/10.1108/WHATT-01-2021-0011/full/html	The Italian tourists who were survey respondents are aware that physical distancing rules will probably remain in effect for an extended time and, therefore, they cannot imagine future tourism not conditioned by these measures. This does not mean that Italians will give up tourism in the short-medium term, however. Indeed, the research data highlight the resilient character of tourism in that it is transformed but does not cease to exist.

3.1 Public passenger transport

The COVID-19 pandemic has had a significant impact on our daily lives, with direct effects on passenger transport. CO2 emissions from passenger transport in Europe fell by 50% during the first lockdown in April 2020, leading in a 7.1% reduction in total CO2 emissions. While private passenger traffic recovered quickly after the lockdown, public passenger travel remained low.

Many people take the pandemic very seriously and therefore, according to some studies, they consider it is necessary to reduce travel during the pandemic. Therefore, the number of total trips in urban areas considerably decreased. Most trips were for shopping, and the number of trips for other reasons, such as commuting or leisure, was significantly reduced. Most common reasons for trips decrease are due to working from home or e-learning. In other words, online activities have taken the place of travel to some extent. Other reasons for trips decrease are connected to fear of the COVID infection and possibility of fulfilling their obligations online. Demographic characteristics are also affecting the number of trips. Younger and older people, as well as females, are more likely to stay at home.

People's choice for the modes of transport is also influenced by COVID-19. The use of environmentally friendly modes of transportation, such as public transportation and shared mobility services, has decreased dramatically. During the lockdown, many people chose private vehicles such as cars and bicycles, as well as walking. The decrease in public transport was due to people's aversion of taking the bus in order to minimize cross-infection. Taking private cars, however, makes it less likely for people to come into contact with COVID-19 infected people. According to

demographic characteristics, males are more likely to stop traveling by public transport. The findings in Croatia revealed that the choice of transport greatly depends on the respondents' education and age.

A greater share of the population used active transport, resulting in increased bicycle and pedestrian traffic. Cycling and walking have been identified as a green solution to COVID-19 mobility issues, as well as a way to combat climate change in a post-pandemic scenario. To keep up with the growing number of people who use active transportation, city governments have expanded bicycle networks, upgraded walking facilities, and made room for micro-mobility options like electric scooters and bikes. According to the case of Trieste, estimates show a potential increase in cycling, but this would not result into an increase in active mobility because the bike would replace some trips that are currently conducted on foot. However, in places or nations where cycling is not a popular mode of transportation, the move to cycling will be minimal. In another case in Sicily, Southern Italy, participants showed a positive opinion on the micromobility usage during pandemic. These findings can be used as a foundation for long-term urban planning and as a guide for decision-makers who want to promote public transportation, walking, cycling, and micromobility.

On the other hand, there are also some findings pointing out that commuter safety perceptions had little effect on mode choice behavior during the pandemic. Despite the fact that public transport is considered as the most dangerous transport mode, real commute patterns did not reflect this. Socioeconomic characteristics, according to some studies, influence people's shift in behavior when it comes to public transport usage during COVID-19, most likely due to a lack of other mobility choices. Those with the fewest resources have continued to use public transportation to the greatest extent, establishing a link between wealth and the risk of getting a COVID-19. This variation, however, appears to have decreased over time.

High share of people in rural area haven’t changed their mobility behavior due to the pandemic situation and people who have changed their mobility are mostly retired persons and employed persons. Reasons for mobility change are mostly due to introduction of remote work as well as the cancelation of classes. Other reasons include less journeys for pleasure and leisure activities, as well as concerns over the inter-state travel prohibition in recent months.

The slowing down of infection is a critical issue for all public transportation operators. Two most important factors for willingness to return to using public transport are the feeling of safety and comfort in public transport during the pandemic. The number and behavior of other passengers, as well as the fear of other passengers not following the hygiene procedures, are still the most important reasons for the feeling of comfort and safety in public transportation vehicles throughout

the pandemic. The cleanliness of the vehicle became a significantly more important factor after the pandemic than it had been before.

Efficient strategies should include campaigns and measures, aiming at promoting a feeling of safety among public transport users. In order to make public transport safer, transport operators should constantly emphasize intensive public transport vehicles sanitization. Online platforms and smart phone applications can help public transportation operators and policymakers improve transit services by providing real-time updates on when thorough cleaning has occurred and how busy transit systems are. This could help with social separation and provide peace of mind when using public transportation. Moreover, since the public transportation demand fluctuates significantly, supply should adjust proportionally to reduce the number of people per vehicle, not just the overall average.

3.2 Tourism

The tourism sector, along with public passenger transportation, has been one of the most affected sectors of the COVID-19 pandemic. COVID-19 drastically influences tourist behavior and demand.

The intention to avoid or cancel travel during a pandemic like COVID-19 is strongly linked to risk perceptions about travel in general, and especially to destinations where cases have been reported, as well as increased perceived susceptibility to COVID-19 infection while traveling and self-efficacy, which leads to actions to mitigate any risk and avoid travel.

People are particularly afraid of infection while traveling, as well as running out of money and job loss during the pandemic. Both types of fears have statistical significance in predicting travel for all tourists, but there is no significant difference in predictive value between these two types of fears.

According to the Italian tourists, physical distancing restrictions are likely to remain in place for a long time and they cannot envisage future tourism that is not influenced by them. Even though the transportation network is one of the most fundamental components of successful tourism development, the fact that it is not always easy to comply with rules regarding appropriate social distances and the extremely high prices of airline and high-speed train tickets have driven many Italians to prefer car travel to reach tourist destinations.

Greater emphasis should be put on reviving and supporting local tourism, which is expected to recover first from the COVID-19 pandemic. It's also necessary to emphasize safety and health

precautions, as well as any activities that make tourists feel safer about traveling and reduce their risk perception, when it comes to domestic tourism.

Concerning communication strategies, tourism organizations mostly follow the objectives of governments and health organizations to primarily reduce the community spread of the virus. It is also important to focus on reducing tourists' travel risk perception in order to allow the industry to bounce back quicker once the threat of COVID-19 decreases. Therefore, travel media and any communication with travelers should not solely provide information that can cause an increase of perceived travel risk (such as the number of cases and deaths) but also inform about cancellation or refund policies and cover health and safety measures to ensure that tourists can feel safe and ensured once travel restrictions are lifted. Furthermore, travel communication should focus on inspiring tourists to travel and explore new places post COVID-19 (e.g. #traveltomorrow).

4. The survey

4.1 Methodology

The empirical part of the Deliverable is based on an online survey which has been distributed in November 2021. A rigorous methodology based on well-established protocols (Brancato et al., 2006) has been followed in order to structure the questionnaire, and the design and testing phases of the questionnaire are divided in the steps of i) conceptualization, ii) questionnaire design, iii) questionnaire testing, iv) revision, and v) data collection (the rationale and specific details have been already illustrated in Deliverable 3.1.2).

As regards the questionnaire design, the final version of the survey is structured in the following thematic sections:

- Travel experiences to Italy-Croatia and travel modes
- Covid pandemic
- Habits
- Behavioral determinants of modal choice
- Socio-demographics

The full questionnaire is shown in Annex II:

The final version of the questionnaire is typically the outcome of a multi-step process where subsequent drafts of the survey are structured and revised. The first step is represented by structuring the questionnaire and dividing it into thematic sections. The MIMOSA segmentation survey can be divided in different sections, as listed below (please see the appendix for the complete list of questions):

Guidelines and agreed-upon standards have been followed with respect to both the methodology to test and revise the survey, and the specific formulation of questions, to ensure validity and reliability of the study. Indeed, following the same approach adopted for the segmentation analysis, the research group discussed questions as to ensure clarity and comprehensiveness before circulating the draft for testing and revision (see further details about pre-testing in Deliverable 3.1.2).

A second aspect refers to the comprehensiveness of response choices, so that these cover a reasonably complete range of alternatives.

As regards acceptability issues, questionnaire is appropriate in length and safeguards the privacy of respondents, who had the possibility to avoid answering specific questions (no force response reply

tool has been added to the survey); further, replies are anonymous and data is analysed at an aggregate level, with no connection between a specific answer and the single respondent.
To avoid redundancies in the report, we refer to Deliverable 3.1.2 on segmentation for the aspects relating to the comprehensiveness of questions-response choices and types of questions. It here suffices to stress that, given the goals of the behavioural analysis and the need to systematize and synthesize a large amount of data, close ended questions have been preferred. At the same time, however, in order to get qualitative feedback from the sample and detect perspectives that might have been overlooked, a space for open comments has been left at the end of the survey.
As previously specified, specific attention has been devoted to the language, following some key-rules such as:
- sentences simple, straightforward and to the point,
- avoid jargon, highly technical language or abbreviations,
- avoid whenever possible double negatives,
- avoid ambiguous questions,
- avoid multipurpose questions, which may confuse the respondent by introducing two or more issues with the expectation of a single response.
Further, questions have been structured as to be as neutral as possible, as to invite true responses without producing any bias where respondents subconsciously provide the answer that they feel researchers are willing and hoping to obtain.
As for the Segmentation deliverable, a preliminary version of the questionnaire has been drafted in English, and pre-tested on a small convenience sample representative of individuals living in the project area and travelling abroad for tourism and/or business, to check for the clarity of the questions and to investigate whether there were ambiguities or formulations that could ingenerate confusion in respondents. Once the fine-tuning deriving from the pre-test was completed, we circulated the revised draft among MIMOSA partners to receive feedback and suggestions in order to integrate, amend or modify the work in progress and obtain the final version of the survey.
All partners' feedback has been carefully considered and represented a useful input for the drafting of the final version of the questionnaire, which has been eventually translated into Italian and Croatian, and tested one last time to check for clarity.
The two versions of the survey have been uploaded on the Qualtrics software, and the link to the survey has been distributed among MIMOSA partners so they could help spreading it through their channels.

4.2 Sample and socio-demographics

The population of interest for the behavioural analysis of the MIMOSA project is composed of people travelling between Italy and Croatia, with a specific focus on people living in the regions of the programme area. While the reference population of the programme area is about 12.5 million inhabitants, the Slovin formula for the adequacy of sample sizes suggests that, with a confidence level of a 5% margin of error, an adequate sample should be composed of 400 respondents (see Deliverable 3.1.2 for details). The empirical investigation on habits and behavioral determinants is based on a sample of 556 respondents: 403 replies were collected in Italy and 153 in Croatia, with the difference being explained by different populations of Italian and Croatian areas involved in the programme. Table 6 synthesizes some key demographic features of the sample:

Table 6: Socio-Demographics

Variable	Answers	%
Nationality	Italian	72
	Croatian	28
Age	18-22	10
	23-27	40
	28-35	17
	36-45	13
	46-55	13
	56-65	6
	>65	1
Gender	Male	37
	Female	63
Income	Much below average	5
	Below average	18
	Average	53
	Above average	22
	Much above average	2
Education	High school or lower	10
	Bachelor degree	47
	Master degree	36
	Doctorate	7
Occupation	Student	44

	Dependent worker	47
	Autonomous worker	6
	Unemployed	2
	Retired	1

In the presentation of the results, percentages pertain to those respondents that actually answered to each specific question. Indeed, the response rate to the different questions varied widely, but the accuracy in the responses was satisfactory, since for some questions it was possible to detect whether respondents were providing random answers (for instance, in the Kano questionnaire only 5 responses -less than 1% of the total- were labelled as *Questionable*, indicating random or not careful answering). Questions were made optional (no force-response tool has been applied), and this is relevant especially for some socio-demographic issues that can be considered as sensible (these questions have been re-structured in accordance with the recommendations provided by the Ethics Committee of Ca' Foscari University, which have been previously implemented for the Deliverable 3.1.2 on Segmentation.

The socio-demographic question investigates the typical AGIE factors (i-e., Age, Gender, Income and Education): the categories matched those of the Segmentation analysis, so once again as far as age is concerned, we asked respondents to state their exact age instead of age-groups, as to obtain more precise responses and given the extreme simplicity of the question. Figures 1 and 2 illustrate the gender distribution and the age groups of the sample:

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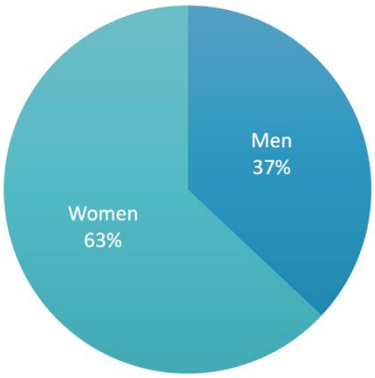


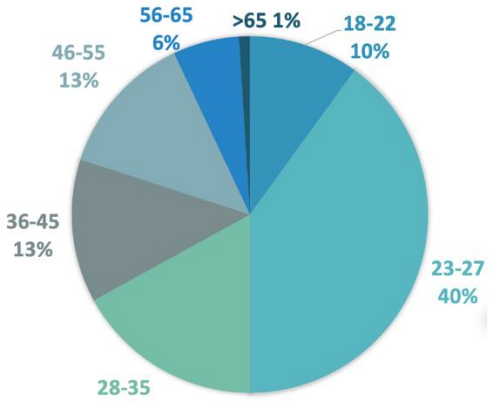


Figure 1: Gender

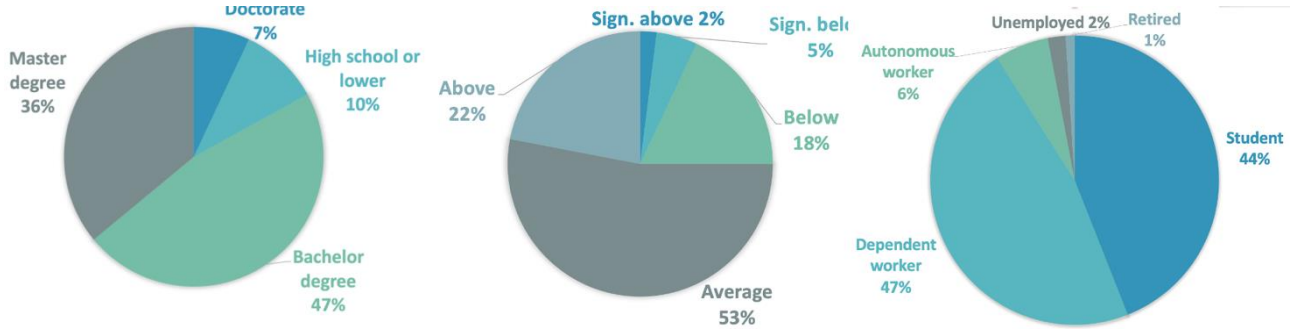
Figure 2: Age

As far as gender is concerned, most of respondents are female (63%). The two more represented age groups are individuals between 23 and 27 years old (40%) and between 28 and 35 years old (17%), while only 20% of the sample is 46 or older. The over-representation of younger cohorts is probably due to self-selection bias phenomenon. While predominance of younger age groups could be expected, the magnitude of the over-representation of youngsters in their 20s could be explained by a phenomenon of self-selection bias: on the one hand, the online tool might have prevented some potential respondents from older generations to participate in the survey while on the other hand young adults are typically more interested in international trips and holidays, and as a consequence more keen to volunteer in the completion of the questionnaire. The young age of respondents is relevant insofar there are typical peculiarities that affect behavioral choices, such as the absence of deeply rooted behavioral patterns, the willingness to explore new alternatives and a proficiency in new technologies that make them a relevant target for online communication campaigns and unconventional marketing strategies (e.g., viral marketing or social media marketing). Although the group size difference needs to be kept in mind when speculating on the results, it has been possible to detect interesting differences between younger and older cohorts, such as in the case of social distancing and travel satisfaction (see section on Covid).
In the following Figures, other socio-demographics are illustrated:

Figure 3: Education

Figure 4: Income

Figure 5: Occupation



The results show how the sample is composed mainly by dependent workers (47%) and students (44%), which is consistent with the young age of the average respondent. As regards income, to avoid low response rate and to account for income differences across Countries, we adopted an answering system based on the relationship between household and average national income, instead of absolute values. It can be noted how most of the sample considers its household to be representative of the national average, with only a small minority of respondents answering their household income being significantly above (2%) or below (5%) such average. Since also the percentages pertaining to incomes above (22%) and below (18%) average show no significant difference, it can be concluded that the sample is representative of the population living in the programme area, from the standpoint of household income. This is important insofar income might affect behavioural choice in travel modes between Italy and Croatia, given the fact that some options are clearly more expensive than others: an equally balanced sample hence guarantees that results are reliable, and not focused on a specific sub-group of the population of actual/potential travellers.

As regards education, results show a predominance of respondents holding at least a bachelor degree. This is consequence both of the young age of respondents (younger generations on average hold higher degrees compared to older generations) and on the survey distribution strategy, which has been partially angled towards contacts coming from academia, policy makers and mobility/transport operators, targeting people holding higher degrees than the general population.

Besides AGIE variables, we focused on other variables that could be of interest for the specific object of the research. For instance, we investigated the relationship status since there could be detectable differences in travellers that are in a relationship (and that could therefore travel with partners and family members) or singles. Further, we investigated the area of residence of respondents, as this clearly affects the availability of alternatives and the distance from ports, airports or national borders. The socio-demographic questions have been asked at the end of the

survey, consistently with established protocols that suggest structuring the survey according to a bell shape. Easy questions should be asked either at the beginning of the survey (when respondents are still getting familiar with the survey tool) or at the end (once respondents are beginning to feel tired, and are less willing to devote cognitive efforts to complicated questions requiring elaborated speculations). In a similar vein, key questions requiring respondents to think carefully about the correct answer should be put in the middle section of a questionnaire.

4.3 Habits and behavioural determinants

The core of the survey is represented by questions pertaining to habits and psychological determinants of modal choice. In other words, we investigated which are the elements at the basis of the decision to choose a specific transport mode when travelling between the two Countries.

The results of the behavioral analysis on habits and psychological determinants of travel mode choice for trips between Italy and Croatia will be discussed in the specific Output.

It here suffices to present the tables pertaining to correlations between the constructs being analyzed, for each transport mode. Table 7 illustrates for exemplary purposes the typical structure of a correlation matrix (e.g., for bicycle trips). The relevant information is represented by the correlation between the different variables that we consider in the analysis or, in other words, the statistical relationship between them. It is a measure of how the variables move in relation to one another, and it can assume values ranging from -1 (perfect negative correlation) and +1 (perfect correlation). If we look for instance at the relationship between attitudes (ATT) and intentions (INT), we see that there is a high positive correlation (0.75), which means that the two variables are strictly linked and, the more individuals display positive attitudes towards cycling, the more they actually develop the intention to choose bicycle as the transport mode (if one variable increases, so does the other). Since attitudes represent how people enjoy doing a specific activity, the results show in this case that people who like cycling actually develop the intention to use the bicycle to go to Italy/Croatia. However, we can see that the relationship between attitudes and actual behaviors (BEH) is much weaker (0.26). This means that although people enjoying bicycles develop the intention to use it as transport mode, few of them actually do so, for instance for the lack of infrastructures making this alternative viable. This result is confirmed also by the low correlation between intentions and behaviors (0.36), so that once again it is difficult to *walk the talk*, as a consequence of the attitude-behavior and intention-behavior gaps.

The second piece of information that we used in the analysis of the results is the so-called significance of the correlation. This is relevant because we are interested in making inferences about the general population of travelers between Italy and Croatia, so that we need to understand if the results that we gather from a specific sample can be generalized to the entire population. This can be achieved by means of so-called statistical significance tests, telling us exactly whether the observed results in the sample are expected to be true in the general population. Referring to the previous example, we want to understand whether the high positive correlation between bicycle attitudes and intentions is typical of travelers between Italy and Croatia in general, and not just those being reached by the survey.

Table 7: Correlation Matrix (bicycles)

	PBC	SN	PN	HAB	INT	BEH
ATT	0,2944364	0,6124731	0,2715361	0,359228	0,7482689	0,2633544
PBC		0,3064665	0,0838577	0,1552069	0,2216704	0,1945916
SN			0,1827182	0,1741825	0,4964211	0,1870379
PN				0,1448615	0,2722285	0,0350556
HAB					0,4408057	0,4609352
INT						0,3351781

This is the core idea of inference: we want indeed to make inferences about a population (Italy/Croatia travelers) based on a sample of the population (survey respondents).

We use the p-value, which represents the probability that the correlation between two variables (e.g., attitudes and intentions) emerging from the analysis of sample data occurred by chance, and not by an effective relationship between them. Consistently with the literature, we choose to consider significant the correlation where $p<0.05$. This means that there is less than 5% probability that results from our sample occurred due to chance.

However, we structured the tables as to present only those correlations (CORR) that i) are above the threshold of 0.20 (below which it can be considered negligible), and ii) have a good statistical significance ($p<0.05$). In the discussion of the results we will consider also correlations that do not show high significance, as this does not imply that they are incorrect, but rather that the outcome might be also due to chance, rather than the underlying covariance.

What emerges from the results about the use of car as the only mean of transportation is the high and significant correlation between attitudes/habits and habits/intentions. It is here relevant to stress how habits are not just about the frequency of a specific behavior, but also (and perhaps

mostly) about how automatically we develop the willingness to choose a specific activity (transport mode, in our case). This means that people enjoying driving automatically consider going to Italy/Croatia by car, without considering other alternatives.

Table 8: Correlation – Private Car

Constructs	CORR
BEH-ATT	0.28
BEH-PBC	0.22
BEH-HAB	0.50
BEH-SN	0.27
BEH-INT	0.40
INT-HAB	0.64
HAB-ATT	0.57
HAB-PBC	0.42
HAB-SN	0.46

The correlation remains high and significant also with reference to actual behaviors, although to a lesser extent meaning that for some travelers the preferred option (driving the car all the way to the final destination) eventually emerges to be not convenient (in terms of time, costs, and so on), so that other means of transportation (e.g., multimodal choice car + ferry) are chosen.

As to be expected (although not reported in the table), the choice of driving a private car to the final destination is negatively correlated with personal norms, which can be considered as a proxy of the sustainability orientation of individuals: the segment of car users does not care about the impacts of travel on the environment, or at least does not perceive it as a personal responsibility to choose other, more environmentally friendly alternatives.

Table 9: Correlation – Only Ferry

Only ferry	CORR
BEH-HAB	0.34
INT-ATT	0.72
INT-PBC	0.43
INT-HAB	0.34
ATT-PBC	0.45

The option of using the ferry as main transport mode (without a private car transported along) clearly implies difficulties connected to the availability of the service: for travelers living outside of cities with ferry terminals, it could be complicated and not convenient to organize this kind of trip. This is indeed confirmed by the results of the survey, insofar there is a very strong correlation between attitudes and intentions. Travelers that believe traveling by ferry with no private cars with them would be enjoyable often develop the intention to organize the trip consistently. Yet, there is a very low correlation with actual behaviors, meaning that the same travelers perceive they do not actually have a real possibility of doing so. This is also mirrored by the low correlation between behaviors and perceived behavioral control (which once again reflects how people perceive it would be difficult or easy for them to actually perform): I intend to go by ferry because at first I perceive it would be a viable option, but when it comes to gather detailed information about the pros and cons, I might understand that

indeed it would be harder than expected (for instance, because I understand that the ferry terminal is difficult to reach for people living far away, and not driving a car to the terminal itself.
Likewise for other considered options, the sample of the survey shows quite a strong correlation between attitudes towards alternative land transportation and intentions, while a weaker link to actual behaviors. It should be noted, however, that the specific transport mode, of all those investigated, shows the strongest (and significant) attitude-behavior correlation, so that individuals who like the idea of traveling via coaches or trains, on average, are capable of acting consistently.

Table 10: Correlation – Land Alternative Modes

Land - alternatives	CORR
BEH-ATT	0.35
BEH-SN	0.31
BEH-INT	0.39
INT-ATT	0.78
INT-PBC	0.50
INT-SN	0.63
HAB-ATT	0.42
HAB-SN	0.39
ATT-SN	0.74
ATT-PBC	0.52

This might be due to the fact that while ferry terminals and airports are located in a small number of locations, coach stops and train stations are (relatively) more capillary, so that it is always possible to find a transport node close to the residence of the prospective traveler. This segment is often represented by young people traveling in groups, and this is reflected also by the very strong correlation with subjective norms, which once again reflect the concept of social pressure, and what a traveler believes that relevant ones (in this case not only family members and friends, but specifically those travelling along) think about a specific transport mode.

Table 11: Correlation – Private Car + Ferry

Car + Ferry	CORR
BEH-HAB	0.52
BEH-INT	0.37
INT-PBC	0.42
INT-HAB	0.50
ATT-SN	0.30

The single multi-modal alternative investigated by the survey is represented by the possibility of reaching the final destination in Italy/Croatia travelling on a ferry while taking onboard the car, as well. Surprisingly, there is no correlation (or even a slightly negative one) between attitudes and intentions, and even the correlation between attitudes and actual behaviors is neglectable. This might be due to the fact that combining two different modes (ferry and private cars) makes the rational evaluative process of individuals more complex and problematic. However, it is possible to detect a modest correlation between intention and behavior, sensibly stronger than in the case of using ferry as only transport mode, as the availability and convenience of ferry hubs still requires the use of cars, while apparently it is difficult to reach a ferry without the possibility of using private mobility.

Table 12: Correlation – Airplane

AIRPLANE	CORR
BEH-HAB	0.48
BEH-INT	0.43
INT-ATT	0.73
INT-PBC	0.51
INT-SN	0.65
INT-HAB	0.55
HAB-ATT	0.35
HAB-PBC	0.35
HAB-SN	0.36
ATT-SN	0.77
ATT-PBC	0.52

The intention of travelling between the two countries by plane is characterized by a very high correlation (0.72) with attitudes, and also with perceived behavioral control (0.51), meaning that travelers that have a good opinion about the idea of air flights, actually develop the intention to travel by airplane. Once again, the hindering factor is likely represented by the convenience of airports nearby, and by the costs entailed. On the one hand, airports could be distant from the origin and/or the final destination of the trip, and there might be concerns about the connections to get from airports to these. On the other hand, although low-fares airlines often offer flights at very competitive prices, it could be difficult to find good deals especially in peak touristic season, where the demand for trips between the two countries skyrockets. It should be noted that there is a good and significative correlation between habits and behavior (0.48). This is typical also of other transport modes, and it means that on average individuals are quick in developing deeply rooted habits even for trips that, unlike daily commute, are not performed frequently. In the case of airplanes, travelers that opt for this specific option soon begin considering this the automatic choice, and are as a consequence less attentive to other (new) opportunities and alternatives that may arise. Since as anticipated this is typical of most of the transport modes analyzed, a critical aspect is represented by the fact that travelers between the two Countries are difficult to convince to change behavioral patterns. If these are not consistent with those envisaged by policy makers and stakeholders, the invisible communicational barrier erected by individuals might be difficult to overcome.

Table 13: Correlation – Bicycle

BICYCLE	CORR
BEH-HAB	0.46
BEH-INT	0.35
INT-ATT	0.75
INT-SN	0.50
INT-HAB	0.44

HAB-ATT	0.36
HAB-SN	0.61

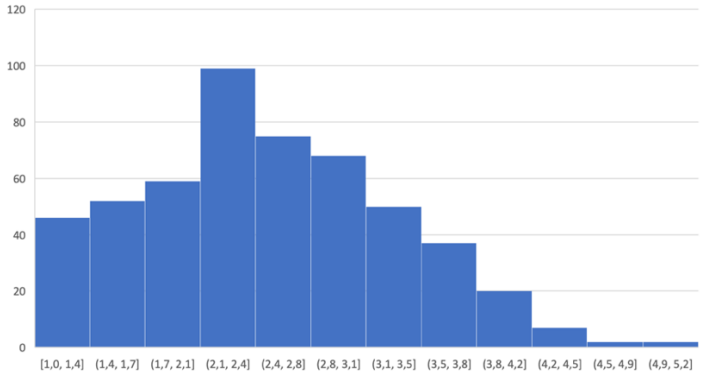
Results pertaining bicycles are affected by the fact that only a small minority of the sample has the possibility of using them as the main transport mode to travel between Italy and Croatia. While cycle-tourism is rapidly increasing in numbers, the distances involved make it common either to rent a bike at the destination of the trip, or to carry bicycles on other transport modes (e.g., on private cars). This might explain the low correlation between attitudes and behaviors, or even the negligible correlation between behaviors and personal norms, which are to some extent a proxy of the environmental predisposition of respondents.

It has been noted that, with specific reference to the travel mode, participants in the survey seemingly develop strong habits, so that the transport mode they choose to travel from Italy to Croatia or vice versa quickly becomes the automatic choice, deactivating an active search of information about alternatives. This clearly represents a problematic aspect for policy makers and operators willing to modify the behaviour of prospective travellers. For instance, if they are used to drive from Italy and Croatia and they began opting for this option because of the lack of alternatives (e.g., no airports close to the city of origin or the final destination, or no efficient coaches /train services), this might soon turn into a habit. If in the meantime infrastructures, transport network and services improve so that different alternatives become available (for instance, a new train service connecting with the final destination of the trip), the individuals might not be willing to look for information about this new opportunity, or to pay attention and process the communicational messages that might reach them. The difficulty of changing deeply rooted habits and the fact that these seemingly develop quite quickly even for trips like those between Italy and Croatia that are not performed frequently represent a key hindrance that involved actors need to deal with. The Covid pandemic bears the potential of opening windows for behavioural change, as travellers are now willing to look for further information about the pros and cons of different alternatives. It is in this period that communicational campaigns aimed at disseminating awareness about transport mode alternatives should be deployed. At once, such campaigns should focus on safety aspects related to Covid-19, as health related concerns are relevant for a segment of travellers, especially for older generations. One positive aspect that emerged from the analysis of the data is that individuals do not show a relevant resistance to change, as measured by the Oreg scale. It is worth stressing that, while habits (as measured by the Self Reported Habit Index refers to a specific behaviour investigated (for instance, travelling to Italy/Croatia by car), the resistance to change refers to the generic predisposition to change behavioural patterns. The following Figure illustrates the resistance to change of the sample. The value of the RTC represents the average of the scores

obtained on the three answers regarding the scale (so values can range from 1 to 5). Very few respondents have a score over 4, thus representing people with high resistance to change, who are the hardest target when it comes to awareness campaigns and communicational strategies aimed at changing behavioural patterns of people travelling between the two countries. On the other hand, around 50% of the sample scored 2.3 or below (on a 1 to 5 scale), signalling low resistance to change, and 20% of the sample averaged 1.7 or below, signalling an extremely low resistance to change.

Considering the results of the habit analysis together with those of the resistance to change scale, it can be speculated that, albeit travel habits seem quite deeply rooted in travellers between the two Countries, the reconsideration of available alternatives triggered by the windows of opportunity opened by the covid pandemic might lead to changes of behaviour in large segments of the population, who have low resistance to change scale and are not hostile to the very idea of trying new alternatives, if available and convenient.

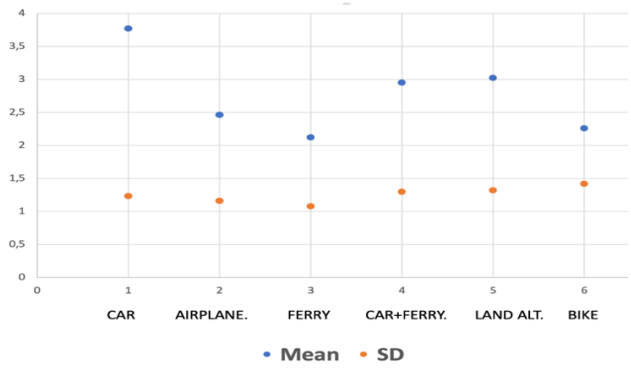
Figure 6: Resistance to Change



As far as habits of different travel modes are concerned, it is important to investigate both how strong these are, and the degree of variability in the sample. The following table and figure illustrate, for every travel mode, i) the mean, average score obtained on the Self Reported Habit Index (that is, how habitual, on average, has become for the sample to choose every single transport mode) as well as ii) the standard deviation, which illustrates how the different scores are either aggregated close to the mean, or dispersed. For instance, on a 1 to 5 scale the average could be 3, but the situation is very different in cases where, on the one hand, all respondents have a habit index of 3 or, on the other hand, half respondents have a habit index of 1, and half respondents a habit index of 5: the mean in both cases is 3, but in the first case the sample is very homogeneous, while in the second it is heterogeneous, with half respondents being extremely habitual and half being not habitual at all.

Figure 7: SRHI mean and standard deviation

Mode	Mean	Std. Dev.
CAR	3.77	1.23
AIRPLANE	2.46	1.16
FERRY	2.12	1.08
CAR+FERRY	2.95	1.30
LAND ALT.	3.02	1.32
BIKE	2.26	1.42



In analysing the results, it is important to stress a methodological aspect. We want to investigate the habit strength of a specific behaviour: that is, we want to investigate how habitual

it becomes, for respondents, to drive a car (take a ferry, take the airplane etc.) from Italy to Croatia or vice versa. For each transport mode, we considered only those respondents that have tried it in the past. So, for instance, in the case of private cars we excluded from the calculations those respondents who answered "never" to the question "*How often did travel exclusively by land with a private car to travel to Croatia-Italy?"*, since clearly, having never travelled by car, they could not have developed such a habit.

Results show how, **between all transport modes, travelling exclusively by car is the one where strongest habits develop (3.77). For the previously discussed reasons, this represents a problematic aspect (exacerbated by the pandemic, as private cars are perceived as safer) as long as the objective of policies is that of shifting private car traffic to more sustainable alternatives. Also driving the car to the destination using at once ferry services (2.95) and travelling by land with alternatives to cars such as trains and coaches (3.02) emerge as travel mode choices where habits develop quite rapidly, while for airplanes (2.46), bikes (2.26) and ferry alone (2.12) respondents who tried such modal options did not develop strong habits.** For the specific case of bicycles, it is worth stressing that only a marginal segment of the sample adopted bikes as the main transport mode, given the long distances entailed for individuals living far from the borders, so the significance of the emerging evidence could be disputed.

The standard deviation (which once again signals how dispersed the values of habits are around the mean) is quite similar for the different transport modes: the data for bicycles is the highest, but this could be due to the small number of respondents considered.

4.4 Covid-19 impacts

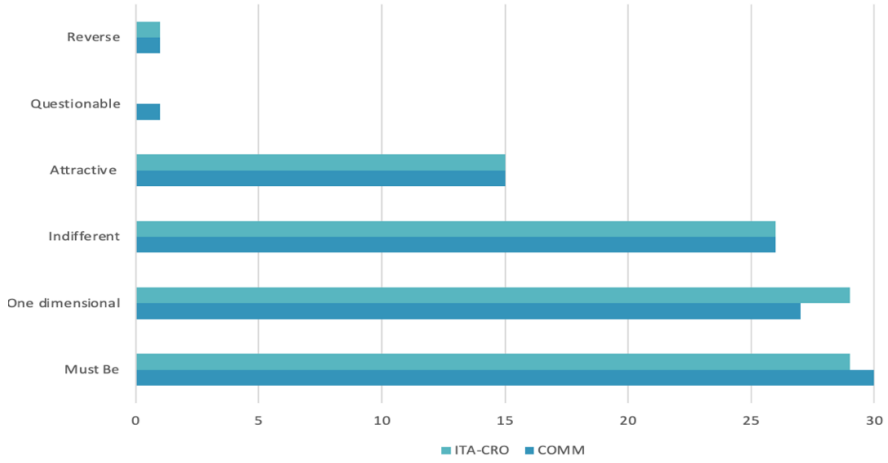
The behavioral survey of the MIMOSA project devoted a specific section to the impact of the COVID pandemic on the attitudes and intentions of respondents, based on the assumption that the willingness to seek social distancing might have an impact on modal choices as regards both everyday trips (such as commuting) and international trips between Italy and Croatia.
The first questions adopted the Kano Model [see Deliverable on Segmentation for further details] to analyze how respondents consider the attribute "social distancing".

The first result that emerges from the analysis of the data is that attitudes towards social distancing do not change according to the specific context or the type of trip. Commuting vs Italy-Croatia trips have significant differences in terms, for instance, of frequency (commuting and everyday trips are much more frequent) and length (typically, commuting and everyday trips last

much less then trips between Italy and Croatia). However, these differences are scarcely relevant in determining how important social distancing is for individuals responding to the survey.

The second result is that, indeed, social distancing is considered as a relevant requisite by the majority of respondents. While around one fourth of the sample is indifferent on whether the trip (either for commuting or between Italy and Croatia) guarantees social distancing, three quarters of the sample show to appreciate such attribute, though with different shades.

Figure 8: Social Distancing (Kano Model)



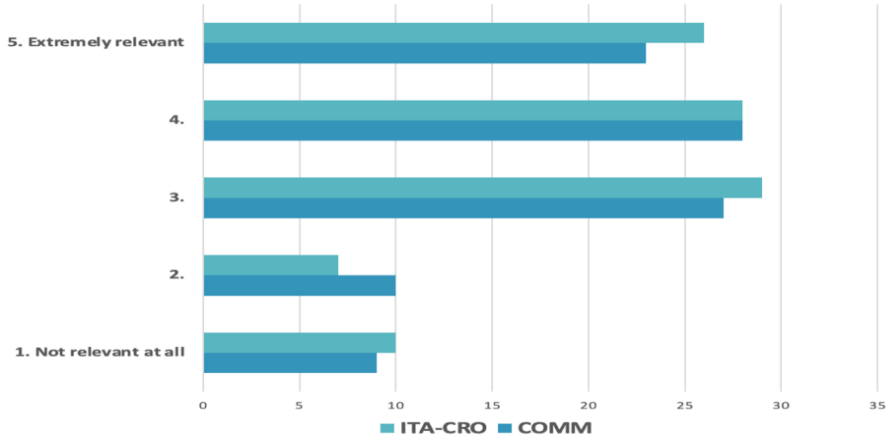
How do you feel if the means of transport for your daily commuting (to go to work, to shop, etc.) / hypothetical trip to Italy/ in the future do/do not guarantee adequate social distancing from people not living with you? (I like it that way; it must be that way; I am neutral; I can live with it that way; I dislike it that way)

More in detail, social distancing is considered as a Must Be attribute by 30% and 29% of respondents (as regards commuting vs Italy-Croatia trips, respectively), a One Dimensional attribute by 27% and 29% respectively, and an Attractive attribute by 15% of the sample, for both situations. The statistically insignificant number of respondents providing a Questionable outcome can be used as a control question, and confirm the reliability of responses.

Results are confirmed also by the second question on social distancing, which instead of the functional vs dysfunctional format of the Kano Questionnaire adopts a traditional multi-point scale where respondents are asked how relevant (on a 1 to 5 scale) is social distancing for the satisfaction about travel experience (both for daily trips and trips to Italy/Croatia). Indeed, while social

distancing is considered as scarcely or not relevant at all by less than 20% of respondents, the majority of the sample considers this aspect as extremely or very important (see figure 9).

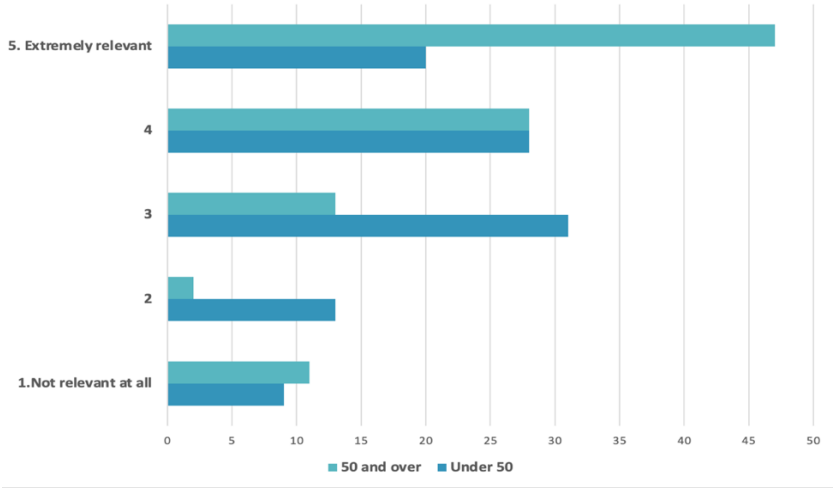
Figure 9: Social Distancing (relevance)



With reference to [a hypothetical trip to Italy-Croatia in the future/your daily transfers], how relevant would the guarantee of social distancing be in establishing your satisfaction or dissatisfaction with the travel experience? (1 = irrelevant; 5 = extremely relevant)

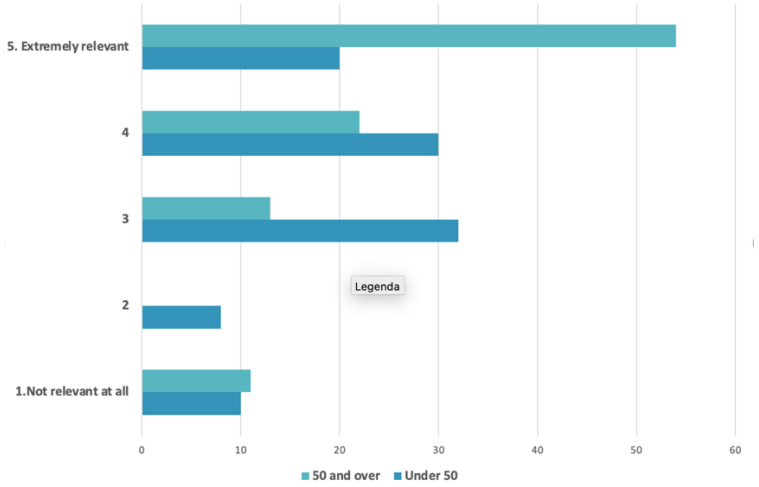
However, if we deepen the analysis as to investigate the different perspectives according to demographics, the results show that younger generations (respondents under 50 years old) consider social distancing much less relevant as an indicator of travel experience satisfaction, compared to older generations (respondents 50 years old or over). Figures 10 and 11 illustrate the difference between the two groups, with reference to daily trips and hypothetical trips between Italy and Croatia, respectively:

Figure 10 Social distancing per age– Daily trips



With reference to your daily transfers, how relevant would the guarantee of social distancing be in establishing your satisfaction or dissatisfaction with the travel experience? (1 = irrelevant; 5 = extremely relevant)

Figure 11 Social distancing per age: Italy-Croatia trips



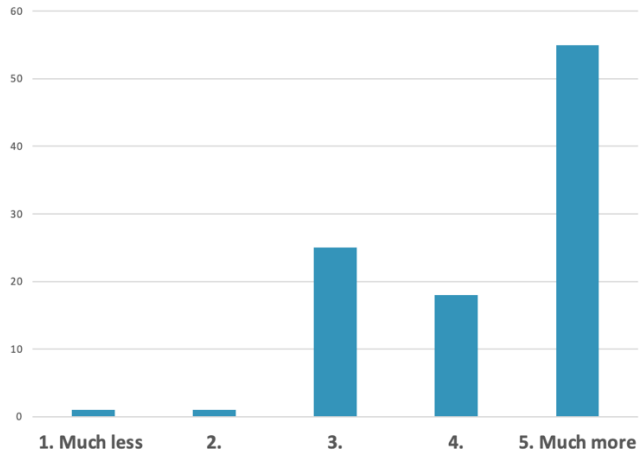
With reference to a hypothetical trip to Italy-Croatia in the future, how relevant would the guarantee of social distancing be in establishing your satisfaction or dissatisfaction with the travel experience? (1 = irrelevant; 5 = extremely relevant)

The following questions of the survey investigated whether respondents felt more or less safe using specific transport modes, compared to the pre-pandemic situation. Further, respondents were

asked whether they believe they would increase or decrease the use of the same modes in the future.

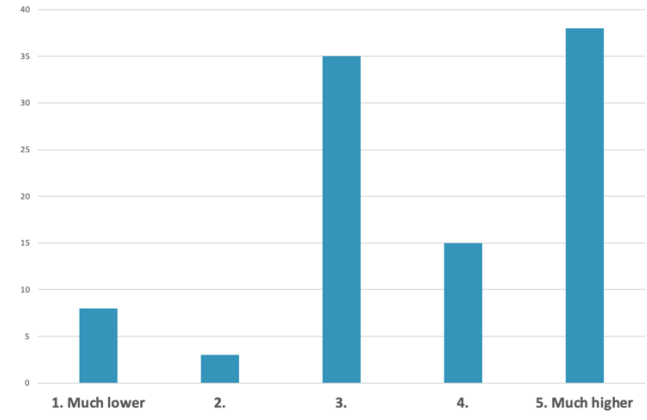
The next figures illustrate the results, for each transport mode of those being analysed.

Figure 12 Safety perception – Private cars



How safe do you feel to use [private cars] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

Figure 13: Future daily use – cars

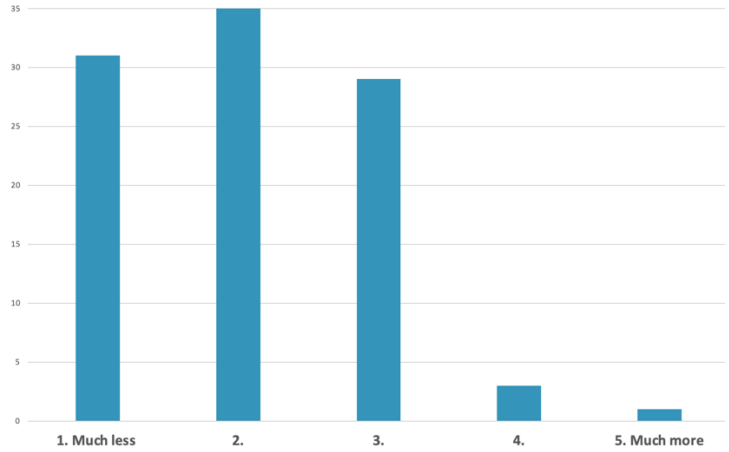


In light of the COVID pandemic, do you believe that your use of [private cars] to travel to your workplace / study place in the coming weeks will be, compared to the pre-COVID period: (1= much lower;5= much higher)

Private cars are clearly a transport mode that guaranteed social distancing from other people not living in the same household. As a consequence, they represent an optimal alternative for those individuals who are more afraid of the possibility of entering in contact with the Covid virus, in these months of pandemic. Clearly, although cars are a sustainable option if we focus on social sustainability (they protect the health of commuters and travelers, lifting pressure on hospitals, emergency rooms and health systems in general), they usually represent a non-sustainable alternative if we consider the environmental side of the concept (although of course many improvements have been made over the past years, and new vehicles are much less polluting than those produced years before). Further, an increase in the use of private cars (both for daily commuting and for trips such as those between Italy and Croatia) would lead to other problems in terms of road congestion and longer travel times on specific routes. A specific problematic aspect triggered by the current pandemic situation is hence represented by the fact that social and environmental dimensions go in different directions, and entail a trade-off which is difficult to disentangle. Focusing on Italy-Croatia trips, the long-term objective of shifting trips from private vehicles to public transport is at bitter odds with concerns in relevant sectors of the population (and older cohorts in particular) about social distancing, which clearly leads to increased car use.

It is worth stressing, however, that as illustrated by the figures not necessarily an increased feeling of safety for a specific mode translates into an actual change of behavior: indeed, while over 70% of the sample feels safer driving a private car in the light of the current situation, only slightly over 50% of respondents believe they will actually increase car use in the future (due to lack of alternatives, resistance to change, and so on).

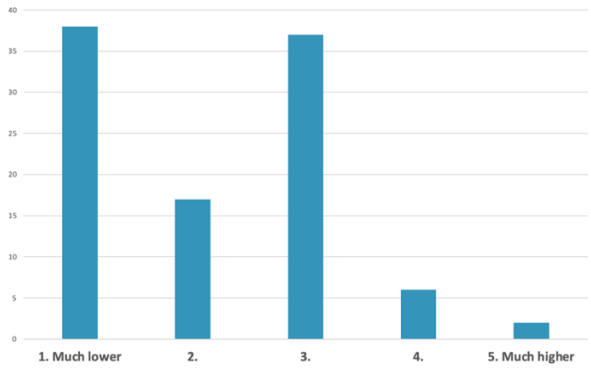
Figure 14 Safety perception – Coaches



How safe do you feel to use [coaches] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

Coaches, like Local Public Transport, experienced a steady decrease in popularity among respondents, as they are considered not safe from the standpoint of social distancing and thus fears of contracting Covid. Two thirds of the sample indeed feel less or much less safe when opting for such transport modes, while less than 30% of the sample did not have its safety perceptions affected by the pandemic, and the percentage of those who on the other hand feel safer now than before is statistically marginal.

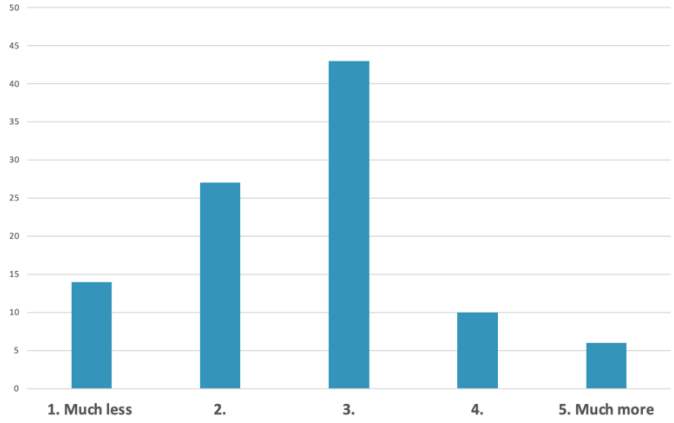
Figure 15: Future daily use – Coaches



In light of the COVID pandemic, do you believe that your use of [coaches] to travel to your workplace / study place in the coming weeks will be, compared to the pre-COVID period: (1= much lower; 5= much higher)

This has impacts on the cross-border mobility between the two Countries of the program, since coaches could represent a sustainable alternative to private cars: considering the duration that a trip from Italy to Croatia (or vice versa) by coach entails, it is clear how this might negatively affect operators' and policy makers' efforts in this sense. Over half of the sample is indeed confident that will (strongly) decrease the use of coaches in the future, while almost 40% is not likely to change current patterns.

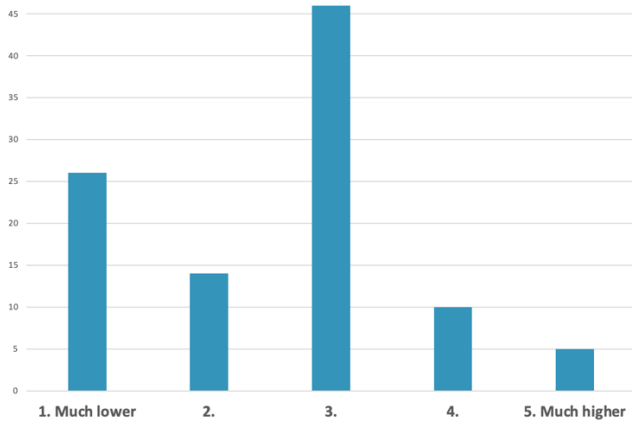
Figure 16 Safety perception – Trains



How safe do you feel to use [private trains] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

The results suggest that trains are perceived as less safe compared to the pre-pandemic situation, although the magnitude is not as prominent as in the case of other transport modes, such as local public transport. Indeed, while over 40% of respondents say the pandemic has not affected their views on the safety of train trips and a similar share of the sample feel less safe than before, a non-neglectable percentage of the sample (over 15%) answered that in their mind the safety perception indeed increased. The reasons could be manyfold: some individuals might sub-consciously considering a comparison with other, alternative means of transportation. Or the answer could be the rational outcome of the perception that, due to pandemic-related restrictions, trips on the train are less crowded than before, travellers are more controlled, and this increases the overall feeling of safety (perhaps not solely related to Covid infection).

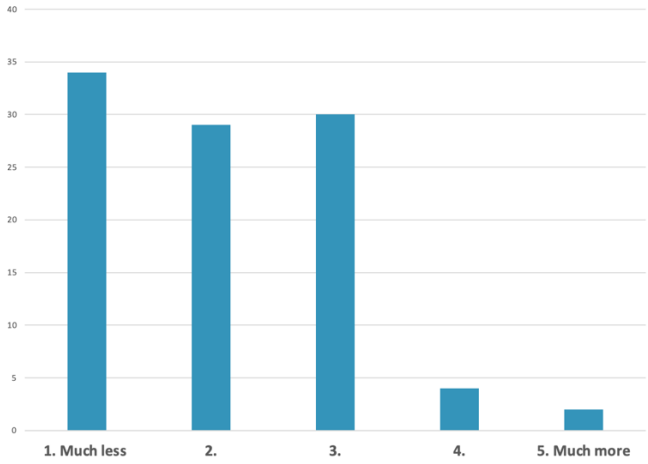
Figure 17 future daily use – Trains



In light of the COVID pandemic, do you believe that your use of [trains] to travel to your workplace / study place in the coming weeks will be, compared to the pre-COVID period: (1= much lower; 5= much higher)

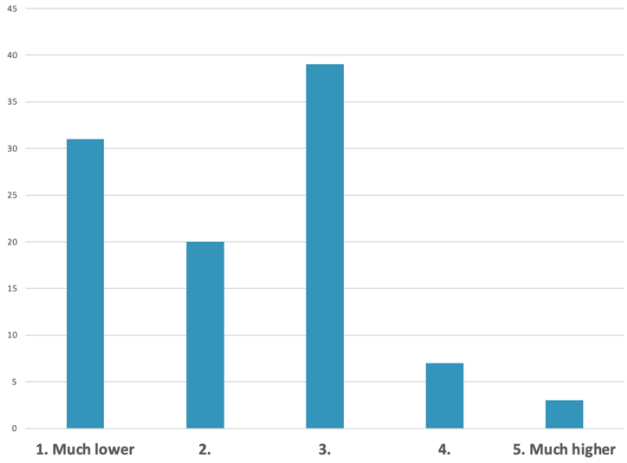
The perception of safety is mirrored also by the willingness to modify behavioural patterns in the future, although there is clearly no perfect correlation between the two. Indeed, while less than 15% of the sample feel much less safe than before, almost twice as many affirm to be likely to highly reduce their use of trains in the future. Like for other modal options, it is worth noting that part of respondents are likely to decrease train trips because of a shifting to other less risky alternatives such as private cars, yet also smart working might play a role, with people using the same means of transportation, but simply having to travel less than before.

Figure 18 Safety perception – LPT



How safe do you feel to use [LPT] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

Figure 19 future daily use – LPT



In light of the COVID pandemic, do you believe that your use of [LPT] to travel to your workplace / study place in the coming weeks will be, compared to the pre-COVID period: (1= much lower; 5= much higher)

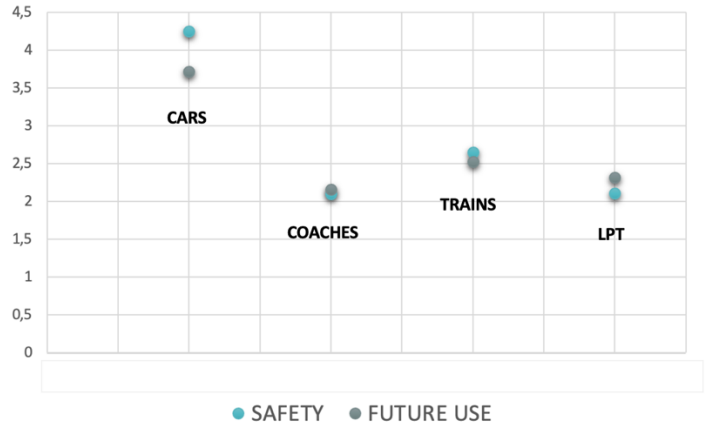
Local Public Transport is the transport mode (along with coaches) that emerged as more critical, from the standpoint of perceived safety. Indeed, compared to other means of transportation that entail interaction with other people LPT often suffer from overcrowding that is difficult to keep under control, while this problem is not pressing for instance for airplanes, ferries and (some types of) trains, where it is easier to control effectively the number of passengers abroad, so that social distancing can be better preserved. Further, there has been information about airplanes and trains having efficient technologies to guarantee constant ventilation and exchange of air, while many commuters might perceive this not being the case of other means of transportation. Over 50% of respondents believe that they will actually reduce their use of LPT in the future, shifting either to active travel or private cars. Further, new working scenarios and the increase in so-called smart working might imply that commuters are not shifting travel mode, but simply decreasing the number of days when they physically need to be at the workplace.

The consequences are relevant also for the Italy-Croatia travel scenario, since people not willing to use local transport systems are more likely to rely on their private vehicles, to be brought from home and used at the trip destination. It could be for instance the case of a middle aged Italian couple, who used to go to Croatia on holiday relying on local public transport for everyday trips at the final destination. If services like car hiring are not available and convenient, this profile of travelers might opt to take their car from home, as to be independent upon arrival.

It is interesting to visualize the relationship between safety perceptions and likely changes in future behaviors for each transport mode, as in the following Figure:

It is worth reminding that in this figure relates to daily commute and not to Italy/Croatia trips, on 5-point scales referring to i) the perceived safety of a specific transport mode (high scores signal that the respondent feels safer than before the pandemic to use that specific option) and ii) the beliefs about future changes in the use of the specific mode (high scores signal that the respondent believes he/she will increase the use of that specific option). So, scores above 3 reflect the situation where the respondent i) increased the perception of safety compared to the pre-pandemic situation, and ii) believes he/she will increase the use of that option in the future. The opposite clearly happens for scores below 3, while a score of 3 signals no significant changes.

Figure 20: Safety-behavioral change comparison

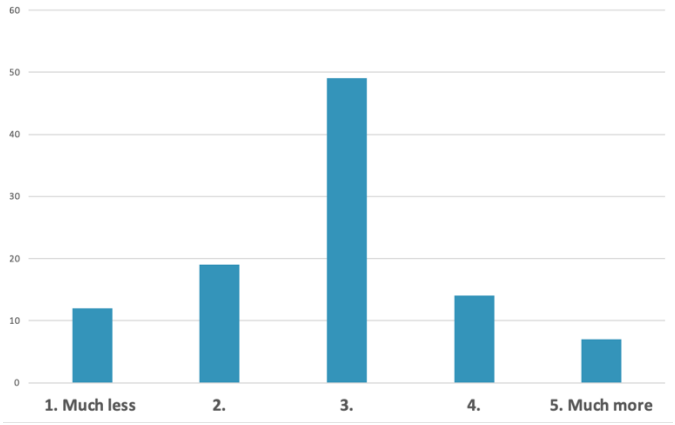


One might expect that there is a close relationship between the two variables: indeed, the safer I feel the more I intend to use that specific transport mode in the future. However, there are many aspects that need to be considered, as for instance I might perceive local public transport as unsafe, yet I am not in the condition of shifting to other alternatives (e.g., I do not have a car, it would be extremely difficult and/or expensive to find parking spots every day, and so on).

Results indeed confirm that there is a good correlation between the two aspects. However, in the case of cars the link is weaker: although most respondents perceive private vehicles as much safer than before the pandemic, many of them will not increase their daily use of this transport modes (either because that was already the chosen option, or because there is little behavioral control, as previously clarified). All other transport modes considered are perceived as less safe (as they all entail some degree of interaction with other passengers), and such perception is reflected

by the willingness to decrease the use of the specific travel mode, accordingly. This could be problematic from the standpoint of congestion, traffic, and air pollution.

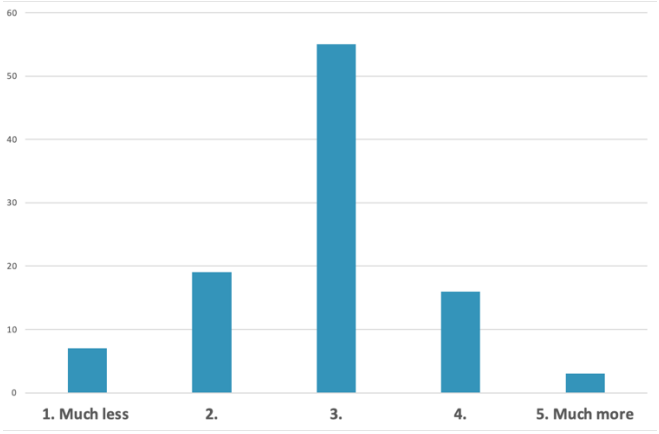
Figure 21 Safety perception - Airplane



How safe do you feel to use [airplane] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

We also investigated safety perceptions regarding two transport modes which can be used in order to travel from Italy to Croatia (and viceversa) but not in daily commute, such as airplanes and ferries. As a consequence, for such transport modes only safety perceptions are investigated, and illustrated in the following figures.

Figure 22 Safety perception - Ferry



How safe do you feel to use [ferries] compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)

Airplanes and ferries are characterized by similar results, that differentiate them from previously analysed means of transport. Indeed, why safety perceptions about private cars clearly improved in the wake of the pandemic while the opposite happened for trains, coaches and LPT (where social distancing represents a key-issue), airplanes and ferries are not so clear-cut. For both modes, around half of respondents did not see safety perceptions increase nor decrease; further, in both cases there is a slight predominance of respondents answering that their safety perception worsened, yet this is almost counterbalanced by a similar share of respondents holding opposite views. Ferries have the advantage that, unlike other transport modes, allow passengers to walk in wide rooms and environments, with the possibility of staying for long parts of the trip outside, avoiding the consequences of sharing closed rooms with other people.

Airplanes, on the other hand, implemented communicational campaigns vehiculating the message that the ventilation system is effective in constantly circulating fresh air, so that the possibilities of spreading the virus are minimized. Further, although different policies have been implemented by different Countries at different points in time, there is the perception that travelers on airplanes (and to a lesser extent) ferries are controlled, so that they can travel only as long as they have no symptoms, have vaccination proofs or a recent negative swab.

4.5 Focus: Primorje-Gorski Kotar County

As part of the implementation of the MIMOSA project, the Regional Development Agency of the Primorje-Gorski Kotar County conducted a thematic public opinion poll in 2021 (November, December). The questionnaire was compiled and forwarded to the general public for completion. Thematically, the questions referred to the specific issues of travel, frequency of transport and the choice of public transport, both within the Primorje-Gorski Kotar County and across borders. Emphasis was placed on the motive and purpose for choosing the mode of transport, especially in the context of the COVID-19 virus pandemic. The survey was conducted in Croatian, with 14 questions in total. In the data collection was used self-completion method. Respondents completed the survey themselves and on their own initiative. The data collected by the research enabled quality processing and drawing appropriate conclusions.

During the 45-day survey, a total of 114 responses were received, which were systematized and analyzed. Most respondents, over 60% of them come from Rijeka, which is understandable since it is a city in the Primorje-Gorski Kotar County with the largest population (over 100,000). 46.5% of

them were aged 25-45 and 50% of the total respondents were aged 45-65. By gender, the largest number of respondents are women (80.7%).

When they asked how quickly they accept change, 64% of respondents said it takes some time. About the use of public transport, only 43% of them answered in the affirmative. As a motive for using public transport, 37.7% of respondents state the frequency of transport, 23.7% of them state availability and 21.1% savings on fuel and parking. Lower prices of public transport and green public transport are the motive of 8.8% of respondents. A larger number of respondents, 56.1% of them use public transport sometimes, 26.3% never and only 7% use always. Public transport is mostly used for going to work (36.8%), leisure (35.1%) and tourism (26.3%). It is important to note that due to the very low response of the school and student population, the question of the purpose of using public transport to go to school or college has remained open.

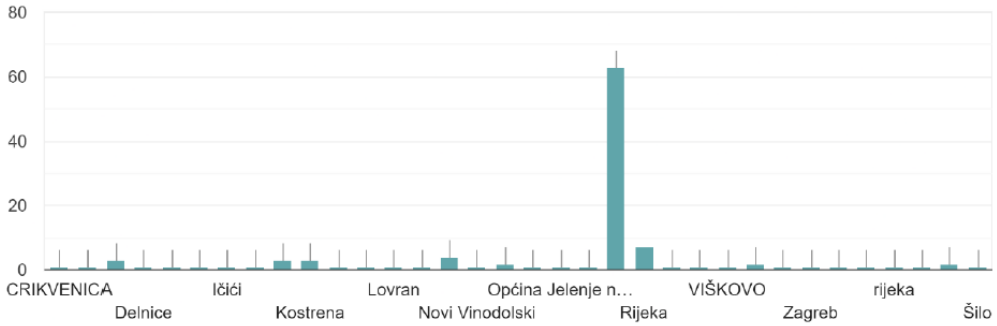
For travel to Italy, the majority of respondents (93%) choose a car, and alternatively a bus (57.9%). Only 52.6% of respondents are partially satisfied with the transport connections between the Primorje-Gorski Kotar County and Italy, and only 22.8% are completely satisfied.

The majority of respondents stated that they felt complete (41.2%) or partial (43%) discomfort when using public transport in the conditions of the COVID-19 virus pandemic. 70.2% of respondents found that social distance is very important for choosing a public transport. When asked about the acceptability of public transport, as many as 70.2% of respondents consider the bus to be the least acceptable choice.

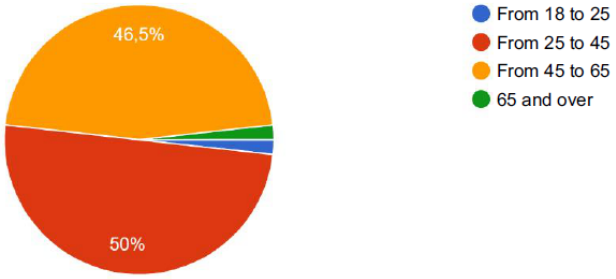
The conclusion is that in the changed conditions of the COVID-19 virus pandemic, travel by public transport is difficult for many people, especially in cross-border travel, where due to reduced availability and frequency of public transport, people choose their own transport, usually a car. The following box illustrates the main results emerging from the survey:

Box: Primorje-Gorski Kotar County results

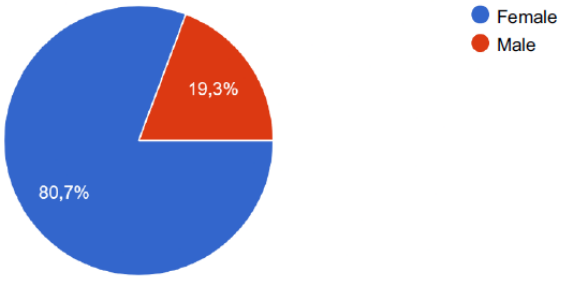
City or place of residence?
114 answers



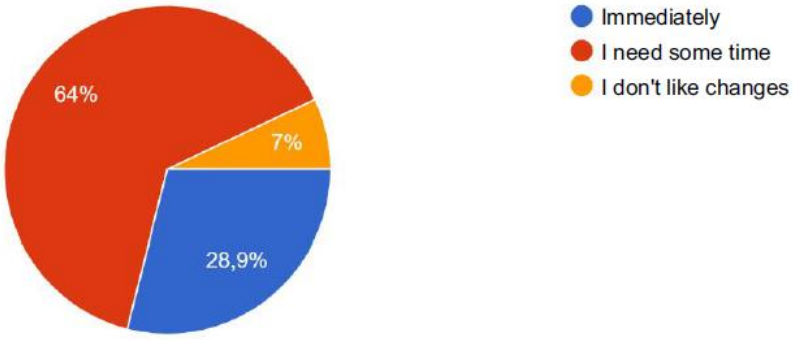
Age
114 answers



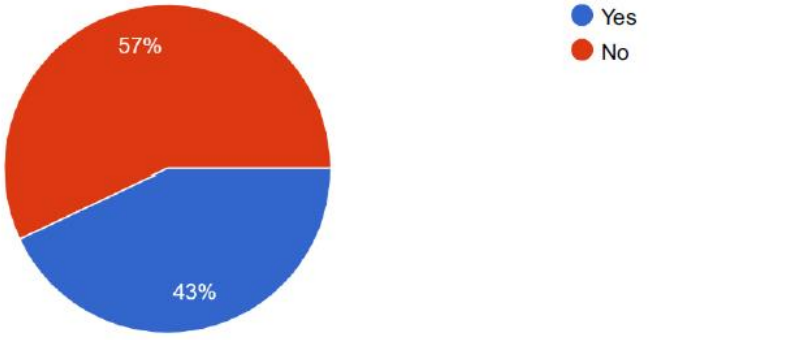
Gender
114 answers



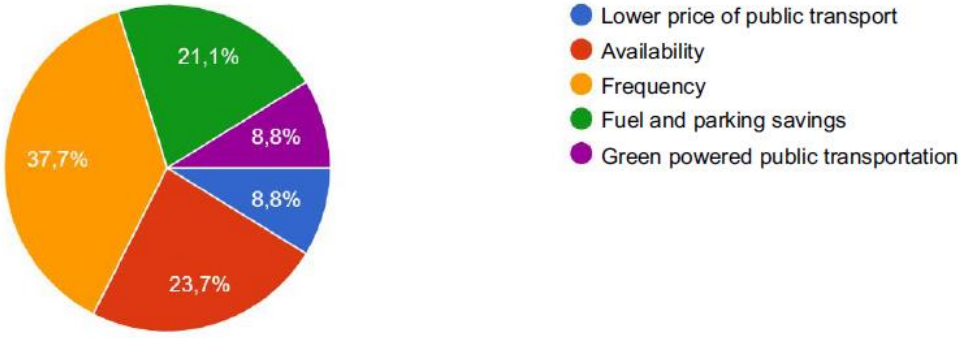
How fast do you accept changes?
114 answers



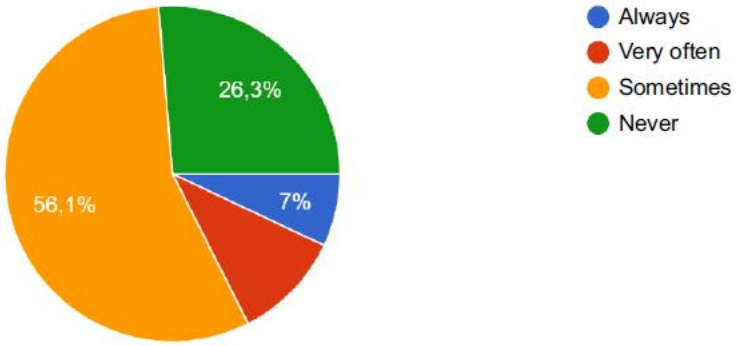
Do you use public transportation?
114 answers



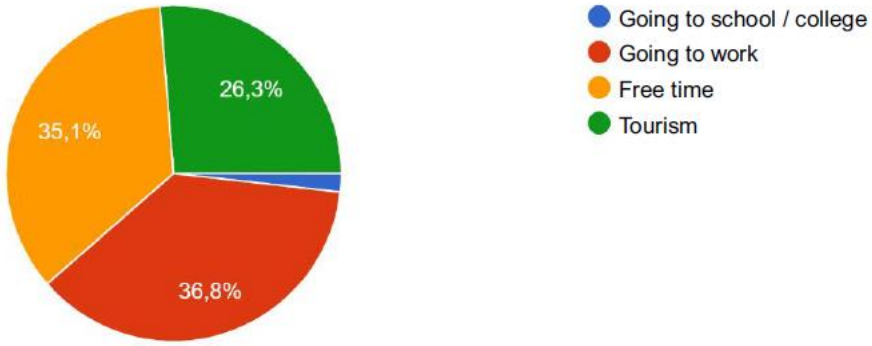
What would motivate you to use public transportation?
114 answers



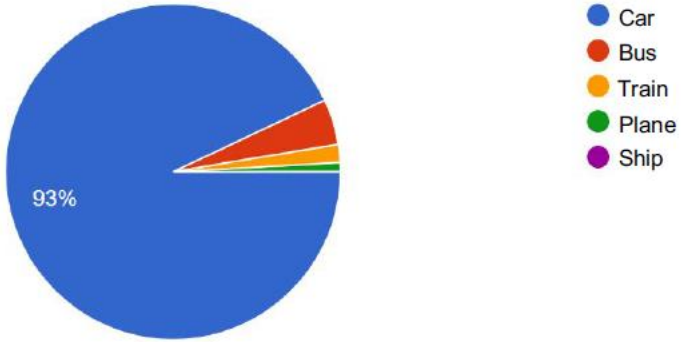
How often do you use public transportation?
114 answers



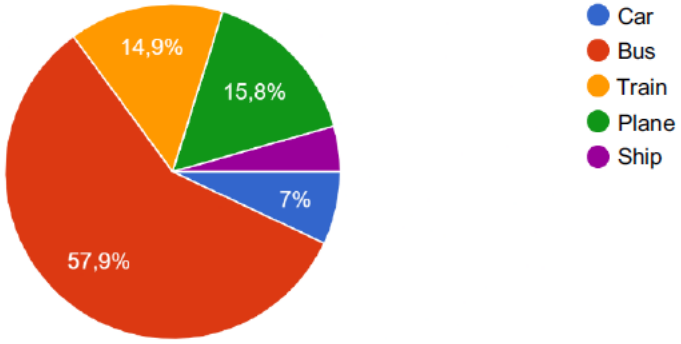
For what purpose do you use public transport?
114 answers



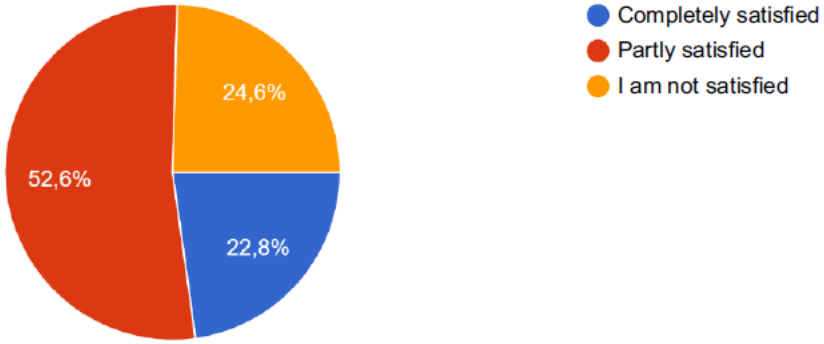
What is your first choice of transportation to travel to Italy?
114 answers



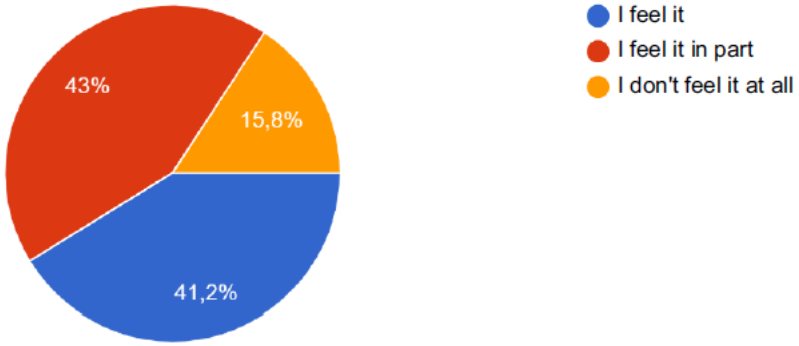
What is your first next (alternative) choice of means of transport to travel to Italy?
114 answers



How satisfied are you with the traffic connection of the Primorje-Gorski Kotar County with Italy?
114 answers

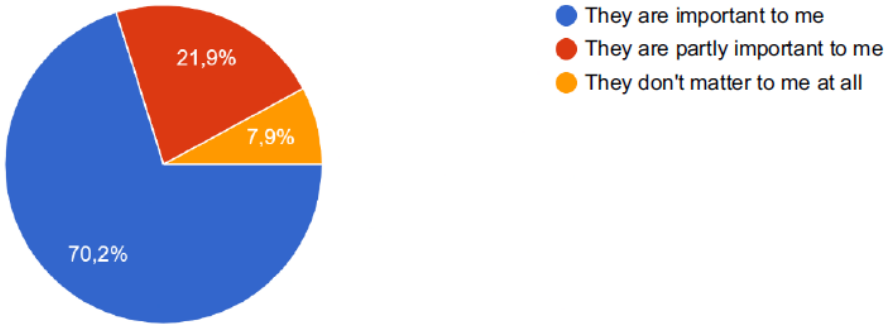


Do you feel uncomfortable using public transportation in a COVID-19 pandemic?
114 answers



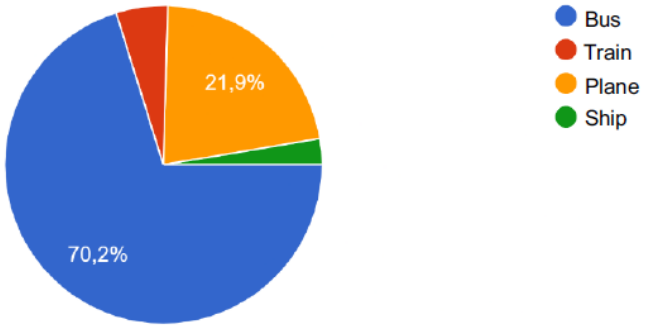
How important are the measures of social distance when choosing a public transport in the conditions of the COVID-19 pandemic?

114 answers



Which public means of transport do you consider the least acceptable in a COVID-19 pandemic?

114 answers



5. Interviews to partners and stakeholders

In addition to the Survey, interviews with Mimosa partners and external stakeholders were conducted to dig into their perspectives. Their opinion from the average passenger's perspective on the determinants of behavior regarding certain modes of transport was considered. The purpose of the interviews was to gain further insights on the compatibility of the operators' perspective with the actual passengers' perspective between two Countries. In other words, to understand the gap between operators' point of view and actual data collected from the Survey.

Firstly, Mimosa partners (both Italian and Croatian) were contacted through invitation email and asked for their availability to set a video conference interview via Google Meet that would last approximately 15 minutes. In the invitation emails, partners have been informed about the purpose of the interview and later have been thanked for their help and time. Secondly, after fourteen (14) interviews with project partners, it was the turn of external stakeholders. The search for external stakeholders began by contacting numerous travel agencies and project partners of other Interreg Italy-Croatia projects (E-chain, Icarus and Step-up) whose activities are related to passenger or intermodal transport. Assistance was also provided by the Ministry of regional development and EU funds in finding an even larger number of relevant stakeholders. Italy-Croatia ferry operators and tourist boards were also contacted. Eighty-one (81) external stakeholders were contacted via email and later via phone. In an invitation email, they were briefly introduced to the Mimosa project, informed about the purpose of the interview and how they can help our research with their willingness to participate in a 15-minute interview via Google Meet. Seven (7) of the contacted stakeholders expressed their interest to provide help and participate in the interview. The following Table illustrates the structure of the interview:

Table 14 Interview Structure

The survey is structured to investigate habits and the behavioral determinants of actual and prospective passengers travelling between Italy and Croatia. The main variables that have been included (according to validated scales with a long track of empirical investigations) pertain to:

a) attitudes towards travelling with a specific transport mode
b) social pressure to choose a specific transport mode
c) perceived behavioral control (how easy or difficult would it be to travel with a specific transport mode)
d) feelings of moral obligation to choose a sustainable transport mode
e) habits

The survey includes many transport modes. Let's here focus on 4 options, that is travelling from Croatia to Italy using:
a) only the car
b) car + ferry
c) only the ferry (no car)
d) coaches and/or trains

Please indicate what you think is the average score for travellers traveling between the two Countries (so we are not asking your personal opinion, but what you believe is the opinion, on average, of travellers)

1) Attitudes
- On average, for a traveller that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)

a) only car
b) car + ferry
c) only ferry (no car)
d) coaches or trains

2) Social pressure
How much do you think that travellers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car
b) car + ferry
c) only ferry (no car)
d) coaches or trains

3) Perceived Behavioural Control
How easy or difficult would it be, for travellers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car
b) car + ferry
c) only ferry (no car)
d) coaches or trains

4) Personal norms

How much do you think that, on average, travellers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travellers going to Italy:
- habits
- social pressure
- attitude towards different means of transport
- behavioural control (how easy/difficult would it be to go with different means of transport)
- feeling of moral obligation to choose sustainable transport modes

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travellers willing to go to Italy? How much, on average, on a 1 to 5 scale?

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

8) Do you think the pandemic will have persistent effects on choices of segments of travellers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?

9) What do you think could be an effective communicational strategy to convince travellers to abandon private cars and shift to more sustainable options? On which aspects should involved stakeholders focus on?

After conducting interviews with project partners and external stakeholders next can be concluded. Using a car for traveling between Italy and Croatia is found to be the most common option that travelers use and is considered as the most pleasant (average 4,3 out of 5) and easiest (average 4,7) option of transport mode among the interviewed stakeholders. Even though, some find it not so pleasant stating it depends on the distance between the locations. From some more distant places traveling with car can be found very exhausting as it takes a lot of time to reach the destination. Some state that positive social pressure (average of 3,2 where 3 is neutral and 5 is positive pressure) is put on the side of the car as it is most preferred option for traveling, stating it as the most practical and comfortable solution because a traveler can stop wherever and whenever they want.

The next preferred option of traveling between the two Countries, found very pleasant (4,1) and easy (3,9), is the combination of a car and ferry for more distant places that are not so easy reachable by a car. One of the advantages of traveling with ferry is the possibility of night traveling where a traveler can rest and relax not losing daytime and not driving a long distance. Also, it is very convenient option because once a person is off the ferry, he can continue to reach his destination with a car. The problem lies in the very limited travel due to insufficient timetables, especially out of season and it can also be time consuming.

Traveling with only ferry is also a preferred option. It is considered to be relatively pleasant (3,6) and easy (3,5) but still found to be restricted since it is limited by further means of transport once a person arrives at the destination. It is assumed that using a ferry without a car is most often connected with a public transport since there are only few destinations strictly connected with ferries. Ferries, with or without a car, are considered to have some positive social pressure (3,3) even though most of stakeholders have stated that people are not driven by the social pressure when choosing their modes of transport.

Public transport, which refers to coaches and trains, is the least considered option in case of travel between the two Countries stating there is very bad public transport connection, there are not much direct lines and it's time consuming. Most stakeholders consider it to be not so pleasant (2,5) nor very easy (3,0) pointing out bad infrastructure, especially rail, on Croatian side. There is no significant social pressure on this kind of transport (3,0).

Interviewed stakeholders do not believe that environmental consequences affect individual's mode of transport (1,7 out of 5) and the main reasons for such behavior include the lack of alternatives and a concern about cost, time and comfort is still way more important while traveling.

The pandemic has to some extent influenced the mobility and choice of travel modes. All travel modes are affected since the number of passengers has been significantly reduced, especially the public transport which has been mostly affected due to restrictions and social distance recommendations. Most stakeholders find traveling by car during pandemic as the safest option and traveling by coaches and trains the least safe option as it is easier to get infected in the public transport. Perception of a social pressure is different during the pandemic. Positive social pressure is now put on the car use (4,2) and negative social pressure on the coaches and trains (2,1).

Social distance is considered to be relevant aspect of the trip (4,0) when choosing the transport mode but still not the most important aspect. Economic aspect, commodity and speed of travel are still found to have a huge impact on travel mode choice. Also, there are people who don't have

other alternatives, so they have to still continue to travel the way they used to before the pandemic, especially commuters.

People's habits were found to be the most relevant factor in orienting modal choice of travelers followed by equally important factors: attitude towards different means of transport and behavioral control meaning how easy or difficult would it be to go with different means of transport. The next variable is social pressure that is not considered to be so relevant and a sense of moral obligation to choose sustainable transport modes is considered to be the least relevant variable in choosing modes of transport. During the pandemic, the relevance of the mentioned factors has been changed. The most relevant variable is now considered to be behavioral control, followed by habits and two equally important variables: attitude towards different means of transport and social pressure. A sense of moral obligation to choose sustainable transport modes is now even more irrelevant factor that people almost don't pay any attention during the pandemic.

When asked about differences in the perception about the need to guarantee social distancing between transnational trips and everyday trips all agreed that there is a significant difference probably because of stricter cross-board restrictions and required covid certificates than the ones within the country. Yet many stakeholders agreed that it is more of psychological barrier greatly influenced by the restrictions, as people can get infected anytime and anywhere. Some think that one of the reasons could be that people feel they are surrounded by more strangers when they go on transnational trips than on ordinary everyday trips.

Most of the answers connected to persistent effects on choices of segments of travelers for shifting to private cars to avoid crowded places such as ferries or coaches indicate that the pandemic will only have a short-term impact. People have a short memory and once the pandemic is over everything will go back as it was before. A lot of people are looking forward to traveling again, which can be confirmed by a good season we had this summer. People will continue to be driven by economic aspects, comfort and speed when choosing the mode of transport. It is considered that the pandemic could only leave a persistent effect on remote working resulting in less daily commuting.

All things considered, public transport has been, and continues to be even more now, the least preferred transport option for most travelers who are traveling between Italy and Croatia leading us to the last question on communicational strategies to persuade travelers to shift to sustainable options. First to point out, there is very poor intermodal connection between Italy and Croatia, therefore the first thing is to improve infrastructure, especially rail infrastructure in Croatia, and introduce more intermodal connections between the Countries so people can consider traveling by

public transport more. In other words, the offer should be built and improved in order to attract demand. Secondly, the cost and time of travel are very important factors that should be taken into account to persuade travelers to consider the sustainable options instead of cars. And third, the emphasis should also be put on the availability, safety and comfort of public transport, on connecting bicycles with other modes of transport, developing apps that gather all information in one place to facilitate the use of public transport, as well as on educating people and increasing their awareness how they can change their behavior in order to save the planet. During the pandemic it is very important for transport operators to emphasize the sanitization of the public transport vehicles, ensure social distance and introduce green passes.

6. Concluding remarks

The analysis presented in this document was carried out based on the methodologies considered most reliable in the current state of knowledge. While we are aware of the inevitable margins of error that studies of this type entail, we are also relatively confident that some of the results are statistically robust enough for us to believe that certain considerations are well-founded enough to be shared. The survey distributed among actual and prospective travelers between Italy and Croatia led to some useful insights that can be considered as an informational background on which to frame future communication and awareness campaigns, behavioural change and incentive/disincentive policy options in general.

Statement 1: **environmental issues are not considered as a relevant driver by a large majority of respondents**. Consistently with evidence in literature, even greener profiles are less attentive to sustainability when it comes to holidays or activities that are not performed on a routinary basis, this being the case of trips between Croatia and Italy. Inducements and awareness campaigns based on sustainability claims could be effective with a minoritarian group within what has been labelled as the Deep Green segment in the analysis of segmentation (Deliverable 3.1.2), composed of youngsters with higher education. This profile is also less affected by the covid pandemic in terms of safety issues, so that sustainable transport modes that entail interaction with other people might be a viable alternative (provided that adequate safety measures are put in place).

Related policy implications. Communication policies towards end users that focus on the need to reduce environmental impact are less effective than communication that promotes themes of innovation in travel modes and themes of innovative services. For example, promoting a bus + bike alternative route because it is less polluting would have a lower impact than promoting the advantages in terms of comfort and quality of the travel experience. As far as possible *behavioural change policies* are concerned, it is therefore crucial that actions are tailored to the needs of well-identified segments and not to generic users. For the same reason, behavioural change policies oriented to create awareness on environmental impact are unlikely to be effective, because, generally speaking, "already aware" subjects oriented towards car use would not change their habits. Rather, it is necessary to orient behaviour towards the re-evaluation of the functional aspects of travel that are more consistent with sustainability objectives.

Statement 2: **positive attitudes towards more sustainable travel modes often fail to translate into actual behaviours**. This result emerges from the fact that the prevalent positive and significant correlation between attitude and intention is higher than the correlation with behaviour. We interpret this to mean that travellers have a positive predisposition towards intermodality and/or

transport modes that could represent an alternative to private cars: that is, “they would like” to opt for that specific option. Data signal a relevant attitude-behavior gap, which is probably due to the scarce availability of convenient alternatives: I might for instance be willing to take a coach or a train for my journey, but perhaps there are no stops close to my city of residence, or to the final destination of the trip.

Related policy implications: more intermodal-oriented segments of travellers need to be given the opportunity to convert intentions into concrete behaviour. The implementation of new multimodal services goes in this direction, but for them to be effective it is necessary to identify the segments in question precisely, to understand their needs and actual size, to understand the real economic viability of the initiatives.

Statement 3: **habits are stronger for people driving with private cars**. Once car-related habits develop it is very difficult to reach prospective travellers with effective communicational or awareness campaigns. The automaticity that defines the emergence of a habit creates a sort of invisible barrier, so that travellers do not look nor process new information about viable alternatives that might have become available and be rationally preferable. On the bright side, respondents show a low resistance to change in general, so that they should not be considered as opposing *a priori* new options.

Related policy implications: this condition represents an actual problem for policy makers, since typical communication/awareness and behavioural change actions have little or no effect. The most problematic situations (typically, the large car traffic congestion that occurs on weekends in July and August at the border crossings between Croatia and Slovenia) should be addressed with targeted disincentives that help dilute traffic, such as differentiated tariffs according to the period of passage. The aim of long-term action must be to avoid the emergence of habits, and in this sense the most effective tools are the growth of alternative modes of travel, accompanied by communication campaigns aimed at young people

Statement 4: t**he Covid-pandemic might act as a double-sided sword**. The pandemic constituted a significant discontinuity. Its strong negative impact on the perceived safety of using a shared vehicle is likely to result in a further strengthening of private car travel, rather than a 'window of opportunity', intended as the opportunity for introducing effective measures of behavioural change. Realistically, the dominant habit towards cars will be further strengthened.

Related policy implications: Rebuilding confidence in public transport will only be possible over time and with the end of the pandemic and the return to normality goes beyond the boundaries of mobility policies and is only linked to the end of the pandemic. Until then, caution is required in

using the traditional communication tools as means of behavioral change since the risk of generating distrust towards travellers is particularly high, also in light of the social conflict that has arisen on issues related to the pandemic, which have exacerbated the debate on prevention measures. On the other cohesive hand, actions and pilots, such as those of the MIMOSA project, which were developed at the height of the pandemic, help increase awareness of the existence of alternative modes of travel more effectively than traditional communication would, moreover counteracting mistrust.

ANNEX I: Studies on travel mode choice determinants for international travellers (2000-2021)

Nicolau, J. L., Mas, F. J. (2006): The influence of distance and prices on the choice of tourist destinations: The moderating role of motivations; Tourism management, 27(5), 982-996; https://www.sciencedirect.com/science/article/pii/S0261517705001652?via%3Dihub	The empirical application carried out in Spain on a sample of 2127 individuals, shows that the dissuasive influence of distance and prices on the selection of destinations is moderated by motivations, in the sense that the motivations have a direct (increasing the dissuasive effect) or inverse (reducing the dissuasive effect) moderating effect on the influences of distance and prices.
Maggi, R., Masser, I., Nijkamp, P. (2007): Missing networks in European transport and communications; 12(4), 311-321; https://www.tandfonline.com/doi/abs/10.1080/01441649208716825	Starting from the keyrole of infrastructure for economic development, it is argued that unless urgent action is taken to fill the gaps (related to combined freight transport, the European airline system, highspeed rail networks, European common carriage, inland waterways and telecommunication) they threaten to reduce seriously the competitive advantages that will be gained from the single European market. It has been argued that the only way out of this situation is a more integrated approach. This implies the consideration of a pentagon of concerns in respect to hardware, software, orgware, finware and ecoware. Only if all these critical success factors are taken into account, will it be possible to solve the missing networks problems on a European level.
López, E., et al. (2009): Assessment of Cross-Border Spillover Effects of National Transport Infrastructure Plans: An Accessibility Approach; 29(4), 515-536; https://www.tandfonline.com/doi/abs/10.1080/01441640802627974	The main conclusion of this study is that accessibility benefits located outside the borders of the country under consideration should not be left out of the planning process. In the PEIT case, this co-financing may be sponsored by the EU Structural and Cohesion Funds, or even by funds from the Ministries of Public Works of neighbouring countries. The paper also highlights the transferability of this methodology to lower administrative levels, such as the assessment of regional/state transport plans, or to higher levels, such as the assessment of international corridors, like those included in the TEN-T.
Hergesell, A., Dickinger, A. (2013): Environmentally friendly holiday transport mode choices among students: the role of price, time and convenience; Journal of sustainable tourism, Vol. 21 Iss 4; https://www.webofscience.com/wos/woscc/full-record/WOS:000318598700006?SID=F2qrpxNRNPckkCFWUso	Results indicate that cost is the most important product attribute followed by time, with convenience playing a secondary role for student travelers. Flying emerged as the top choice (50%), followed by rail (25%) and car (21%). The findings also show that the degree of respondents' general pro-environmental behavior - rather than their environmental attitudes - shapes students' transport mode choices.
Larsen, G. R., Guiver, J. W. (2013): Understanding tourists' perceptions of distance: a key to reducing the environmental impacts of tourism mobility; Journal of sustainable tourism, 21(7), 968-981; https://www.taylorfrancis.com/chapters/edit/10.4324/9780203771501-23/understanding-tourists-perception-distance-key-reducing-environmental-impacts-tourism-mobility-gunvor-riber-larsen-guiver	Change towards more sustainable tourism mobilityis unlikely to happen through tourists becoming more aware of the damage caused by their current travel behaviour. Change could be encouraged if tourists were more aware of good and valued holiday experiences at closer destinations with more sustainable transportation choices, combined with policy changes that will mitigate constraints felt on tourists' time and financial budgets.
Juvan, E., Dolnicar, S. (2014): The attitude–behaviour gap in sustainable tourism; Annals of Tourism Research, 48, 76-95; https://www.sciencedirect.com/science/article/pii/S0160738314000668?via%3Dihub	The conversations with the study participants brought to light a wide range of beliefs that were used to cope with cognitive dissonance, including the denial of the consequences of vacation activities either at the individual level or the level of the tourism industry (as postulated by value-belief-norm theory). Participants also evidenced: downward comparison, which makes

	their behaviour more acceptable in contrast to worse behaviour by themselves or others (as postulated by social comparison theory); denial of responsibility, either in principle or due to one's powerlessness to make a difference and thus the inability to take responsibility (as postulated by both attribution theory and value-belief-norm theory); denial of control due to external pressures, and financial or time limitations (as postulated by the theory of planned behaviour); exception handling of vacations in contrast to everyday life; and compensation of harm done to the environment through other benefits resulting from tourism.
Reichert, A., Holz-Rau, C. (2015): Mode use in long-distance travel; Journal of transport and land use, 8(2), 87-105; https://www.jtlu.org/index.php/jtlu/article/view/576	Among the variables analyzed, socioeconomic attributes like household income, level of education and, for business trips, also gender are seen to be significant influencing factors on longdistance travel behavior. An urban lifestyle seems to encourage people to undertake more long-distance trips, especially to make use of airplanes and trains more frequently. These differences are not only restricted to business travel. It also can be concluded from the analysis that private travel shows the same tendencies. This strengthens the "escape trip" hypothesis.
Gutiérrez, A., Ortuño, A. (2017): High speed rail and coastal tourism: Identifying passenger profiles and travel behaviour; Plos one; https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0179682	For passengers at both stations, tourism and leisure were the top reasons for travelling, though that answer was more common at Alicante Station (76.6%) than at Camp de Tarragona (64.5%). This role of tourism and leisure as key travel motivation in summer at both stations is clearly related to their proximity to sun and beach destinations. The characteristics of the two regional contexts studied help to explain these differences.
Gupta, A., Dogra, N. (2017): Tourist adoption of mapping apps: a UTAUT2 perspective of smart travellers; Tourism and hospitality management, Vol. 23 No. 2, 2017.; https://doi.org/10.20867/thm.23.2.6	The results indicated that the most significant antecedents of behavioral intentions are habit, facilitating conditions, performance expectancy and hedonic motivation. It was observed that the actual usage behavior was influenced by traveler's intentions and habit to use the technology (mapping apps). However it was noted that effort expectancy, social influence and price value had no significant effects on the tourist's intentions to use mapping apps while travelling.
Kurowska-Pysz, J., Szczepańska-Woszczyna, K. (2017): The Analysis of the Determinants of Sustainable Cross-Border Cooperation and Recommendations on Its Harmonization; 9(12), 2226; https://doi.org/10.3390/su9122226	The sustainable, cross-border and inter-organizational cooperation in the borderlands results from the simultaneous interaction of three groups of factors: (1) people and institutions (the quality of interpersonal relationships); (2) cross-border planning, procedures and support mechanisms (e.g., the possibility of jointly planning the cross-border cooperation and obtaining EU funds for the development of the borderlands as well as the availability of other funds helpful in this kind of cooperation); and (3) environment (historical affinity and geographical proximity of neighboring border regions, system support at the regional and local level in neighboring countries).
Sivilevičius, H., Maskeliūnaitė, L. (2018): Multiple Criteria Evaluation and the Inverse Hierarchy Model for Justifying the Choice of Rail Transport Mode; Promet - Traffic&Transportation, Vol. 30 No. 1, 2018.; https://doi.org/10.7307/ptt.v30i1.2417	The main reasons why passengers preferred the trip by train over the trip by plane was primarily determined by the independence of the trip by train from weather conditions, a shorter boarding time and the location of railway stations (which are nearer to passengers than airports). Less important sub-criteria included the arrival of the passengers' luggage together with them, a higher threat of terrorism on the plane, fear of people to travel by plane and the absence of luggage examination on the train.

Li, Y., Yao, E. (2020): Modeling the Tourism Travel Mode and Route Choice Behaviour based on Nested Logit Model; IEEE 5th International Conference on Intelligent Transportation Engineering; https://www.researchgate.net/publication/347447967_Modeling_the_Tourism_Travel_Mode_and_Route_Choice_Behaviour_based_on_Nested_Logit_Model	Tourists who travel with their family are more likely to choose car (including selfdriving, taxi and rental car) as their travel mode. The proportion of public transport in friends tourism increased by 22.22%, which may be related to that the main group of friends tourism is students, who have not yet established a family or owned a car. The proportion of tour bus in group tourism is five times than that in other modes.
Tang, X., et al. (2020): Choice behavior of tourism destination and travel mode: A case study of local residents in Hangzhou, China; Elsevier, Journal of Transport Geography; https://www.sciencedirect.com/science/article/pii/S0966692320309728?via%3Dihub	There are 75% of tourists driving to travel destination are not satisfied with the parking situation. Limited parking spaces is one of the most focused problems. This could be used as a policy leverage tool to convince people to travel by more sustainable modes. In such areas where public transport use frequency is reduced and people tend to use cars more than other modes, improved bus service could help broaden the range of people to have access to those destinations and limit the dependency on car-ownership and limit its heavy space requirements on those areas. Suggestions have been proposed to mitigate the congestion and parking problem based on model analysis from the perspective of the bus line setting, transfer improvements, and the policy to limit cars, respectively.
Wang, Z., Yang, Y. (2020): Tourism Travel Mode Identification Based on Cell Phone Signaling Data; IEEE 5th International Conference on Intelligent Transportation Engineering; https://www.researchgate.net/publication/347448569_Tourism_Travel_Mode_Identification_Based_on_Cell_Phone_Signaling_Data	Based on fuzzy theory, a tourist travel mode identification model is established based on cell phone signaling data. The travel mode is divided into four types: slow travel, bus, rail transit and car, and a fuzzy set of system states and output of each travel mode are constructed. Car is the main mode of Badaling Great Wall tourist travel (approximately 60%), followed by public transport (approximately 25%), and rail transit (approximately 13%), slow travelers are the least (1%). In the survey, there are 603 valid observations and 232 respondents that from Beijing.
Kamb, A., et al. (2020): Potentials for reducing climate impact from tourism transport behavior; Journal of Sustainable Tourism; https://www.tandfonline.com/doi/full/10.1080/09669582.2020.1855436	The results show a theoretical potential for an emissions reduction of 67%, while the readiness potential is 26%. About half of the readiness potential for reductions is from changing destination, while only a small share is from changing transport mode. This shows that, when accounting for people's readiness to change behaviour, destination choice has a greater potential to reduce emissions compared to transport mode choice.
Dällenbach, N. (2020): Low-carbon travel mode choices: The role of time perceptions and familiarity; Transportation Research Part D: Transport and Environment, 86, 102378; https://www.sciencedirect.com/science/article/pii/S1361920920305654	While people who are inclined to travel by plane see a high value in minimizing the total travel time of their journey, likely train travelers put less emphasis on minimizing total travel time. Prospective train travelers find it highly important to be able to use their travel time productively, which does not seem to be the case for potential air travelers. As consumer insights about the willingness to substitute flying with train travel are rare, the emphasis is put on the importance of fostering public transportation use as well as promoting travelcards that are valid beyond a particular commute. It is important to consider that these subscription types can result in positive spillover effects on modal choices that are not directly a part of subscription offers.

ANNEX II: Behavioural Survey

We thank you for your participation to the survey on behaviours, which will take around 6 minutes to be completed.

We first ask you to answer the following question, which refers to the generic predisposition (or resistance) to change, and therefore does not focus on any specific behaviour. For each statement, respond by expressing agreement or disagreement by adopting a scale ranging from 1 (entirely disagree) to 5 (completely agree):

- *I like to do the same old things rather than try new and different ones*
- *When I am informed of a change of plans, I tense up a bit.*
- *I sometimes find myself avoiding changes that I know will be good for me*
- *I often change my mind.*

Now we would like to collect information on trips made to Italy, or on the intention to do future trips to that country.

Have you ever been to Italy?
Yes, and I plan to do it again.
Yes, but I'm not planning on doing it again
No, but I'd like to do it in the future.
No and I have no plans to do that in the future.

More specifically, how often did you travel to Italy before 2020 and the COVID emergency?
- I've never been to Italy
- Once
- 2 or 3 times in total
- More than 3 times in total, but less than once a year
- Once a year
- 2 or 3 times a year
- More than 3 times a year

Have you been to Italy since the Covid19 pandemic began (March 2020)?
- yes
- no

What is your main reason for traveling to Italy?
- *Work*
- *Education*
- *Shopping*
- *Vacation / leisure*

- *Other (specify) …..*

- *Your typical destination, when going to Croatia, is:*
- *Inland*
- *Coast / islands*
- *Zagreb*

- *How often did you use each of the following means of transportation to travel to Croatia?*

(1 = never; 5 = on every travel occasion)
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

Choosing the plane to go to Italy is something that: (entirely disagree) to 5 (completely agree)
- I do automatically
- it would make me feel weird if I didn't
- is typically me

Choosing the car (without ship/ferry) to go to Italy is something that: (entirely disagree) to 5 (completely agree)
- I do automatically
- it would make me feel weird if I didn't
- is typically me

Choosing the car (on a ship/ferry) to go to Italy is something that: (entirely disagree) to 5 (completely agree)
- I do automatically
- it would make me feel weird if I didn't
- is typically me

Choosing a ship/ferry (without the car) to go to Italy is something that: (entirely disagree) to 5 (completely agree)
- I do automatically
- it would make me feel weird if I didn't
- is typically me

Choosing a trip via land with alternatives to private car (coach, trains, etc.) to go to Italy is something that: (entirely disagree) to 5 (completely agree)

- I do automatically
- it would make me feel weird if I didn't
- is typically me

Choosing a trip via bicycle to go to Italy is something that: (entirely disagree) to 5 (completely agree)
- I do automatically
- it would make me feel weird if I didn't
- is typically me

In this following section (next 6 questions) we ask you to refer specifically to your LAST trip to Italy. Please confirm you never travelled to Italy to be forwarded to the next section.
- I already travelled to Italy
- I confirm I have never travelled to Italy

- What was the departure point of the trip (Region)? .....
- What was the destination of the trip (City / location)? .....

What would have been the distance between departure and destination, if the trip was to be performed exclusively via land?
- Less than 400 km
- Between 400 and 800 km
- Between 801 and 1200 km
- Over 1200 km

Who did you travel with, in your last travel experience to Italy? (multiple answers possible)
- Alone
- With my partner
- With children aged 14 or under
- With parents
- With relatives
- With friends
- With colleagues
- With a group / organized trip
- Other (specify)…

- *Still referring to this last trip, what was the main travel mode?*
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*

- *Trip exclusively by land - Bicycle*

On your last trip to Croatia:
- Did you bring your own bike? (Yes No)
- Did you rent a bike at your destination? (Yes No)
- Was the bike the main transport mode to get to Croatia? (Yes No)
- Was the bicycle the main transport mode once you arrived in Croatia? (Yes No)

[COVID SECTION]

The following section addresses the issue of the Covid pandemic and social distancing on means of transport, both in everyday trips and when going abroad. We ask you to answer the following questions, choosing the most suitable option:

How do you feel if the means of transport for your daily trips (to go to work, to shopping, etc.) guarantee adequate social distancing from people not living with you?
- I like it that way,
- it must be that way,
- I am neutral,
- I can live with it that way,
- I dislike it that way

- Focusing instead on a hypothetical trip to Italy/Croatia in the future: how would you feel, if the means of transport to go to Italy guaranteed adequate social distancing from people not living with you?
- I like it that way,
- it must be that way,
- I am neutral,
- I can live with it that way,
- I dislike it that way

- How do you feel if the means of transport for your daily commuting (to go to work, to shop, etc.) DO NOT guarantee adequate social distancing from people not living with you?
- I like it that way,
- it must be that way,
- I am neutral,
- I can live with it that way,
- I dislike it that way

- Focusing instead on a hypothetical trip to Italy/Croatia in the future: how do you feel, if the means of transport to go to Croatia DO NOT guarantee adequate social distancing from people who do not live with you?
- I like it that way,

- it must be that way,
- I am neutral,
- I can live with it that way,
- I dislike it that way

- With reference to your daily transfers, how crucial is the guarantee of social distancing in establishing your satisfaction or dissatisfaction with the travel experience? (1 = irrelevant; 5 = very relevant)

- With reference to a hypothetical trip to Italy/Croatia in the future, how relevant would the guarantee of social distancing be in establishing your satisfaction or dissatisfaction with the travel experience? (1 = irrelevant; 5 = extremely relevant)

- How safe do you feel to use the following means of transportation compared to the pre-Covid situation? (1 = much less than before; 5 = much more than before)
- private car
- plane
- ship / ferry
- Coach
- long-distance train,
- Local Public Transport

- In light of the COVID pandemic, do you believe that your use of each mode of the following list to travel to your workplace / study place in the coming weeks will be, compared to the pre-COVID period: (1= much lower;
5= much higher)

- private car
- coach
- train
- Local Public Transport

[FUTURE TRIPS DETERMINANTS SECTION]

The last section is dedicated to questions to analyze aspects connected to hypothetical future trips to Italy/Croatia.

What could convince you in the future to go to Italy using only transport modes that are alternative to private cars? …… ..

- My intention to use (...) as the main means of traveling to Italy at the next occasion is:
(1 = very weak; 5 = very strong)

- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

- *For me, using (...) as the main means of reaching Italy in the future would be (1 = very unpleasant; 5 = very pleasant)*
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*
-

- *If I used (…) as my main means to go to Italy, the people close to me would be (1 = very sorry; 5 = very happy)*
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

- *For me, using (...) to travel to Italy would be (1 = extremely complicated; 5 = extremely simple)*
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

- *The choice of specifically using (...) to travel to Italy (1 = it is something that does not depend on me; 5 = it depends exclusively on me)*
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*

- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

How much do you agree with each of the following statements?

- When choosing the means of transport to go abroad, I feel that it is my duty to take into consideration the environmental consequences of this choice as well. (1 = entirely disagree; 5 = completely agree)

- Regardless of what others do, I feel morally obliged to always minimize the impact on the environment of my transport choices, even when I travel abroad. (1 = entirely disagree; 5 = completely agree)

On my next trip to Italy, I intend to use (...) as the main means:
(1 = entirely disagree; 5 = completely agree)
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

I consider it pleasant to use (...) as the main means of traveling from Croatia to Italy
(1 = entirely disagree; 5 = completely agree)
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

People I know (and whose opinion is important to me) would approve if, to travel to Italy, I used as the main means (...)
(1 = entirely disagree; 5 = completely agree)
- *Trip by Airplane*
- *Trip exclusively by land - Private car*
- *Trip on a ship/ferry, without car*
- *Trip on a ship/ferry, with car*
- *Trip exclusively by land - alternatives to private car (coach, train, etc.)*
- *Trip exclusively by land - Bicycle*

We thank you for participating in the questionnaire, and in conclusion we ask for some general information about you:

You are:
- *Male*
- *Female*
- *Prefer not to answer*

Age:

Nationality
- *Italian*
- *Croatian*
- *Other*

City / Province of residence:…….

Family status:
- *single*
- *in a relationship*
- *Prefer not to answer*

How do you consider your family income, compared to the national average income?
- *Significantly below average*
- *Below average*
- *Average*
- *Above average*
- *Significantly above average*

What is your occupational status?
- *Student/pupil*
- *Autonomous worker*
- *Dependent worker*
- *Unemployed*
- *Retired*
- *Prefer not to answer*

What is your educational qualification?
- *Primary school diploma*
- *Middle School diploma*
- *High school graduation*
- *Bachelor degree*
- *Master's degree*
- *Doctorate*
- *Other (specify)…..*

If you wish, you can leave a comment: ....

ANNEX III: Summary of interviews

Interview 1. Transport operator

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5 / 4**
- car + ferry **3 (it is always better to go by one mode of transport)**
- only ferry (no car) **4-5**
- coaches or trains **5 / 2**
- **/ Covid: the number of passengers has been visibly reduced and it has influenced the choice of means of transport – people come more often by car and the ferry would be more acceptable than other public transport, she does not know to what extent**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3 / 2**
b) car + ferry **3 / 2**
c) only ferry (no car) **3 / 2**
d) coaches or trains **3 / 1**

- **People from more developed countries feel more pressure towards more sustainable modes of transport, while people here do not**
- **/ Covid: there is a certain pressure, there is a lot of emphasis through the media that travel is generally avoided, so all modes of transport are affected, even the car, and especially public transport, the frequency of travel has dropped dramatically**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **4 (depends on the personal preferences of the passengers) / 4**
b) car + ferry **3 / 2**
c) only ferry (no car) **4 / 3**
d) coaches or trains **4 / 2**

- **/ Covid: the frequency of travel has decreased, the demand is lower so those who have a greater need to travel have less choice of means of transport**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

1/2 - people are still not so aware.

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **2 / 3**
- social pressure **4 / 2**
- attitude towards different means of transport **3 / 4**
- behavioral control (how easy/difficult would it be to go with different means of transport) **1 / 1**
- feeling of moral obligation to choose sustainable transport modes **5 / 5**
- **/ Covid: She believes that the passengers were looking for other alternatives due to a certain pressure, and they reduced the trips to a minimum**
-

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
4 – there are passengers who continue to travel and are not affected

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
It is the same because people can get infected anywhere, although many travelers have different perceptions between transnational and everyday travel, she does not know why exactly.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It will have lasting consequences.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
By educating people, not just travelers. How much gas emissions affect all of us so maybe each individual will make different decision.

Please feel free to further comment or add any information that you deem relevant:
…. **Passenger transport is one of the riskiest activities at the moment.**

Interview 2. Transport operator

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **3 (it depends on the location departure/arrival, because from some parts is very easy to reach the destination, but for some parts it takes a lot of time to arrive; for some travelers it can be useful and for some doesn't have to be useful)**
- car + ferry **5 (you can spend the night traveling, when you arrive to the destination with ferry you also have a car to get around easily**
- only ferry (no car) **4 (it can be a bit difficult because of the connection with public transportation later if you don't want to stay in the same location where the ferry goes)**
- coaches or trains **2 (not so much trains in Croatia, bad connection)**
- **/ Covid: for him grades would stay the same**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3 / 5**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**

- **/ Covid: pushed a lot of people to use their own car because they are afraid to use public transport where you have to spend a lot of time with the unknown people**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car 5
b) car + ferry 5
c) only ferry (no car) 1 (you probably have to take a local transport to reach final destination, so it is difficult to find information on local public transport)
d) coaches or trains 2-3 (medium difficulty, you probably have to move within different modes of transport **so it can be difficult)**

- **/ Covid: the same difficulity**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot) **3. It depends on the age – 50-above years old are not so interested in the environmental consequences, but younger people (younger than 50 years) are more concern about that. For example he is trying to work from home most of the time, travels by bike…**

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **1**
- social pressure **4 / 1**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid:**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

Yes, totally. Because when people travel abroad, they have to be more secured. Even though he is trying to keep social distance even when going shopping, but he is more afraid when traveling abroad.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to

private cars to avoid crowded places such as ferries or coaches?
When the pandemic ends, people will feel better again with ferries and coaches. The perception / the fear of traveling with other people will end together with the pandemic. Even though, a lot of people are looking to travel again somewhere far away after taking vaccination.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Talk to the people about cost savings when using public transport instead of car, to organize intermodal options, to simplify the booking and reaching the destination. And during Covid-19 to emphasize that people's health is very important so to emphasize the sanitizing of the public transportation, asking for green pass maybe, people have to feel safe during these times.

Please feel free to further comment or add any information that you deem relevant:
…. **In the future a lot of meetings will probably stay online and will be working from home, but they will travel for holidays for sure.**

Interview 3. Public body - city

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **4 / 5**
- car + ferry **4 (depends on the location)**
- only ferry (no car) **3 (depends on the location)**
- coaches or trains **2 coaches 1 trains / 1**
- **Covid: most people prefer a personal car to public transport**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 5**
b) car + ferry **3 / 4**
c) only ferry (no car) **5 / 3**
d) coaches or trains **3 coaches 1 trains / 1**
- **/ Covid**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5 / 5**
b) car + ferry **4 / 3**
c) only ferry (no car) **4 / 3**
d) coaches or trains **3 coaches 1 trains / 2**
- **/ Covid: car is most preferred and easiest way of transport**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

1 – not at all

-

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **3 / 4**
- social pressure **4 / 2**
- attitude towards different means of transport **2 / 3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **1 / 1**
- feeling of moral obligation to choose sustainable transport modes **5 / 5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale? **4**

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

Yes, transnational trips have higher pressures, stricter restrictions and different behavior than everyday trips. Requirements for distance are higher in transnational trips, so the perception of passengers also changes regarding that.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?

Short-term yes, long-term no.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?

To put emphasis on safety in public transport and the availability of public transport, and then the environmental component for which all this is done in a first place. These three elements are the most important.

Please feel free to further comment or add any information that you deem relevant:

…. **Public transport connections are very weak between Italy and Croatia, there are almost no trains, road transport and ferries depend on the region, so there is often no choice except the use of a private car**

Interview 4. Travel agency

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **4**
- car + ferry **5**
- only ferry (no car) **4**
- coaches or trains **1**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5**
b) car + ferry **5**
c) only ferry (no car) **5**
d) coaches or trains **1**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
1

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **5**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **4**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Yes

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
The use of cars can be partially avoided by increasing the use of ferries and fast boats. The use of seaplanes (used in the past although many lines have previously been shut down / closed / discontinued) should be pointed out again. Stakeholders should be encouraged to invest in fast boats (passenger-only transport) because the use of bicycles

can be added this way (intermodal transport: bicycles + boats + bicycles).

Please feel free to further comment or add any information that you deem relevant:
…. **Regarding passenger transport between Croatia and Italy: most travelers from Italy travel to Croatia for a vacation. They usually stop on the Croatian coast using ferries and cars. The best solution in the context of environmental sustainability might be the use of fast ships designed to transport passengers and bicycles connecting as many points of the Croatian and Italian coast as possible. More environmentally friendly means of transport should be used at ports. But there will always be passengers whose destinations will be located at points within another country that cannot be reached by the sustainable means of transport. In these cases, the use of passenger cars will be inevitable.**…..

Interview 5. Public body – shipping company

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **4 / 3**
- car + ferry **4 / 3**
- only ferry (no car) **4 / 3**
- coaches or trains **4 / 3**
- **depends on the preferences of the individual**
- **/ Covid: it has changed in terms of safety, so people travel less**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 4**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**
- **/ Covid: passengers feel the pressure because they must have covid certificates for all modes of transport**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **4 / 4**
b) car + ferry **5 / 4 (has enough space)**
c) only ferry (no car) **5 / 4 (has enough space)**
d) coaches or trains **3 / 2**
- **/ Covid: it is harder for all modes of transport**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
3 – people here are not as aware as in other more developed countries

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1 / 2**
- social pressure **5 / 1**
- attitude towards different means of transport **3 / 4**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2 / 3**
- feeling of moral obligation to choose sustainable transport modes **4 / 5**
- **/ Covid: habits have changed, and the pressure has increased**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
3

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
There are differences, people don't pay so much attention on everyday trips.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It will for a short time, but one day everything will eventually return to the way it was.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
We need to make people aware of how CO2 harms the planet and how much they can affect our planet by using alternative modes of transport.

Please feel free to further comment or add any information that you deem relevant:

Interview 6. Travel agency

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **3**
- car + ferry **4**
- only ferry (no car) **4**
- coaches or trains **3**
- **/ Covid: unchanged**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 4**
b) car + ferry **3**
c) only ferry (no car) **3**

d) coaches or trains **3**
- **/ Covid: more positive pressure towards private cars**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5 / 4**
b) car + ferry **5 / 4**
c) only ferry (no car) **5 / 4**
d) coaches or trains **3 / 2**
- **/ Covid: it's harder now because of the Covid tests and certificates, so it would apply to everything then, he would reduce the grade in everything**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot) **1 – they do not consider it at all**

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- habits **1 /**
- social pressure **4 /**
- attitude towards different means of transport **2 /**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3 /**
- feeling of moral obligation to choose sustainable transport modes **5 /**
- **/ Covid: stays the same**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale? **3.**

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes, there is a difference. People are more careful when going on transnational trips because more people are involved from different parts of the world, and when it comes to everyday trips it is always the same circle of people, the same routes, so they are a little less careful.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
No, it won't have persistent effects, in time more people will probably switch to public transport because the economic consequences will be felt, so more people will travel by public transport.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Pay more attention to global warming, increasing people's awareness. If more people are going in the same direction, there is the possibility of public transport so people should use public transport more than personal cars in order to save the planet.

Interview 7. Public body - region

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **4**
- car + ferry **3 (when ferry is necessary)**
- only ferry (no car) **1**
- coaches or trains **1 (no trains in Croatia because of infrastructure)**
- **/ Covid: travelers' attitudes do not change a lot; a car is still the best way to travel**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3 / 4**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**

- **people feel free to choose their own ways of transport**
- **/ Covid: people are concerned about getting covid and there is a fear for going with the coaches or trains, they tend to choose the car as a safer choice. It is different for going to work if you don't have an option, so there is a difference for commuters and tourists.**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5 (the easiest option)**
b) car + ferry **3 (depends on frequency-number of ferries a day and if the transport with ferry is necessary)**
c) only ferry (no car) **2**
d) coaches or trains **1 (they should be divided; coach lines exist connecting Trieste with different part of Croatia, but train connection doesn't exist)**

- **/ Covid: nothing's changed**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

1 - environmental impact consequences are not so much taken into account because there are not many options/alternatives

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **2**
- social pressure **4 / 3**
- attitude towards different means of transport **3 / 4**
- behavioral control (how easy/difficult would it be to go with different means of transport) **1**
- feeling of moral obligation to choose sustainable transport modes **5**

- **/ Covid: People prioritize the social distance**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
4 – it is important now, but not a priority so much because if someone wants to travel they will, but for public transport it is more important.

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Differences are in a different way of traveling – car use is more emphasized within transnational trips. It is different for going to work if you don't have an option, so there is a difference for commuters and tourists.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
No, people have a short memory, habits will come back. We will have a persistent effect in general because of the remote working so there will still be less commuters.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
We should consider time of travel, the fare, communication, facilities, trip organization with apps, MaaS. The service could be different for commuters and leisure time because people like to use public transport in leisure time.

Interview 7. Public body – foundation non-banking sector

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **2**
- only ferry (no car) **2**
- coaches or trains **1**
- **/ Covid: people have changed their behavior so the number of cars is constantly rising. Public transport should pay more attention for safety commission; fast trains – they have checks for green pass, so it is safer. Ferries are probably less effected than other solutions.**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 5**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**
- **probably people speak about sustainable transport but there is still no pressure**
- **/ Covid: car is perceived as the safest solution so on public transport there is some pressure now**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5**
b) car + ferry **2**
c) only ferry (no car) **2**
d) coaches or trains **2**

- **it is difficult to come with any kind of public transport**
- **/ Covid: nothing changes**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
1 but hope it will be higher. Cost and time of travel are the most important things.

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **2**
- social pressure **4**
- attitude towards different means of transport **3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **1**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid:**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
5 at the moment in Italy, people are very scared. It is very important aspect, but sometimes there is no choice to choose, they don't have a choice and have to adapt.

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
The same needs so it is quite the same thing.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Only short to medium terms. For long terms probably won't have effects because people forget the situation very soon. Once all of this is over, people will completely forget about this. Everyone want to travel so this is not so strong to have an effect in very long terms.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
The real problem is that there is no reliable solution connecting Italy to Croatia and existing ones are either too expensive or require too much time. Communication is not such a problem, because solution doesn't exist. They should push traditional campaign and marketing advertising 'visit Croatia/Italy in sustainable way - by ferry or public transport', to promote beautiful places on both sides, about 15 sec.

Please feel free to further comment or add any information that you deem relevant:

…. **Applying some gaming tools might promote more sustainable behavior. For example, if you go to work not using a car but public transport there is an app that is calculating you are saving and this way the app shows you've saved some virtual animal on the north pole, for instance. A child from the person who developed this app is making pressure on his father to use public transport more, so this can be very helpful especially for children to gain more consciousness regarding sustainable travel behavior.**

Interview 8. Public body – port authority

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)

a) only car **5 (you can stop wherever and whenever you want)**
b) car + ferry **4**
c) only ferry (no car) **3**
d) coaches or trains **1**

- **/ Covid: nothing's changed; coaches and trains have been and stayed the worst ways to travel between two countries because of lack of connections and lack of freedom. So that's why public transport was less used before pandemic as well.**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a. only car **4**
b. car + ferry **4**
c. only ferry (no car) **2**
d. coaches or trains **1**

- **/ Covid: nothing's changed**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a. only car **5**
b. car + ferry **5**
c. only ferry (no car) **4**
d. coaches or trains **2**

- **/ Covid: nothing's changed**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

2

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **2/3**
- social pressure **4**

- attitude towards different means of transport **2/3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **1**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
3 – the risk can have a medium impact on choice on a way how the trip is organized. Car and ferry are safe, and many people use this kind of transport.

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
The perception is different. For everyday trips people are used to this kind of behavior and they perceive this kind of trip as normal even the social distancing is not guaranteed.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
There won't be persistent effects, because when choosing the trip, the priority will be given to the cost, connections and efficiency especially for long trips. Even more a couple of years from now.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Most important is to pay attention on quality of firm connections and intermodality, then in terms of time and cost to opt for travel car. However, they could focus on the advantages of public transport where they just have to book the ticket and once they are on board they don't have to focus on driving, they can relax. The issue of connection should be dissolved first in a form of connecting different modes of transport.

Please feel free to further comment or add any information that you deem relevant:

Interview 9. Public body – region

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant) **(of course it also depends from where in Croatia to where in Italy..)**
- only car **4**
- car + ferry **3**
- only ferry (no car) **2**
- coaches or trains **3**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3**
b) car + ferry **3**
c) only ferry (no car) **4**

d) coaches or trains **5**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **4**
b) car + ferry **3**
c) only ferry (no car) **2**
d) coaches or trains **3**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot) **3**

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **5**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **4**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale? **3**

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
The effects will still be persistent for some months.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
They should focus on information on what are the real consequences and the real impact of choosing a less sustainable means of transport, and the differences with a sustainable one.

Please feel free to further comment or add any information that you deem relevant:

Interview 10. Public body - region

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)

- only car **3 (depends on the location)**
- car + ferry **5 (depends on the location as well)**
- only ferry (no car) **5**
- coaches or trains **2 (very long, no fast trains and there needs a lot for interconnection)**
- **Covid: nothing's changed**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3 / 5**
b) car + ferry **5 / 4**
c) only ferry (no car) **5 / 4**
d) coaches or trains **1**
- **/ Covid: the level of car is only very positive pressure**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5 (the only problem is the time/distance)**
b) car + ferry **5**
c) only ferry (no car) **3-4 (without the car is harder to move in the region, depends on the place)**
d) coaches or trains **2**
- **/ Covid: nothing's changed**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

2 – maybe only few people take environmental consequences, depends on responsibility of each individual

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **3**
- social pressure **4 / 1**
- attitude towards different means of transport **1**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2**
- feeling of moral obligation to choose sustainable transport modes **5 / 2**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

4-5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

The social distance is being guaranteed more in long distance trips and is completely different within local transport.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to

private cars to avoid crowded places such as ferries or coaches?
The pandemic has already affected. After the pandemic we will go back to normal.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
We have to push the action in order to achieve the results, built the offer in order to push the demand.

Please feel free to further comment or add any information that you deem relevant:
…. **To take into account the intermodality because there is only one intermodal transport**
…. **To connect bicycles with other modes of transport**

Interview 11. Public body - ministry

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5 (because of luggage and connections that aren't perfect otherwise, possibly crowded, but are aware that it always exists)**
- car + ferry **5**
- only ferry (no car) **4**
- coaches or trains **1-2**
- **Covid: car is most important**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 4**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**
- **quite individual, more economic impact, availability**
- **/ Covid: perception during covid is different because it is a recommendation to avoid crowded places and keep social distance**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **3 (hard especially if you travel long distance)**
b) car + ferry **3-4**
c) only ferry (no car) **5**
d) coaches or trains **2 (slowness and discomfort)**
- **/ Covid: the priority is the car because you are in your own environment, although the transport operators have adapted so there is trust, people have adapted to this**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty

to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
2 - people are not yet aware of it, they think primarily of comfort and money

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **4 /**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3 / 1**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid:**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
3, there are other influences (economic, commodity)

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
The more restrictive are transnational trips, there is psychological barrier to travel more in the country.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Shouldn't have long term effects, people will forget all this, just like this summer.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Lower price of transportation, state regulations, some kind of incentives for young people, co-financing of electric cars etc.

Please feel free to further comment or add any information that you deem relevant:
…. **they hope that everything will return to normal and that multimodality will become more accessible and the choice of more people.**

Interview 12. Public body - agency

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **4**
- only ferry (no car) **3 / 2**
- coaches or trains **1 (from Croatian side)**
- **Covid: nothing's changed**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a. only car **3 / 5**
b. car + ferry **3**
c. only ferry (no car) **3**
d. coaches or trains **3 / 2**

- **people have not evolved to make ecology a top topic for them**
- **/ Covid**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a. only car **5**
b. car + ferry **3 / 4**
c. only ferry (no car) **2**
d. coaches or trains **2 / 1**

- **/ Covid**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

People have no alternative, they go by bus if they have to, 1-2.

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **1**
- social pressure **4**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

4

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

There is a difference due to covid certificates, people have to think on less things during everyday trips.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?

Right now, it will, but people will probably modify their behavior over time, it will have some effect that is likely to fade once the pandemic ends. More yes than no.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?

A strategy, whatever it is, won't be efficient enough because when one puts it into practice, very few sustainable modes of transport are there on the market. Better connection is inevitable. Profits are important to everyone, and it is difficult to manage good connection and less costs or better profit. Make people more aware how their mode choice affect on the environment. Big cities make them to use subway or long distances make them to use a plane. It is hard to make people in Croatia to use more public transport because of bad connections.

Please feel free to further comment or add any information that you deem relevant:

Interview 13. Public body - limited company

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **4**
- only ferry (no car) **5**
- coaches or trains **3-4**
- **Covid: the only thing is that there are less passengers, so passengers are more comfortable in public transport**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **4 / 5**
b) car + ferry **3**
c) only ferry (no car) **4**
d) coaches or trains **4**

- **/ Covid: personal transport is encouraged more**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5**
b) car + ferry **4**
c) only ferry (no car) **5**
d) coaches or trains **3**

- **/ Covid: nothing's changed**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

2 – people are not aware yet how they can contribute to a cleaner air, but they know they are much more comfortable using a car

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **5**

- social pressure **3**
- attitude towards different means of transport **1**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2**
- feeling of moral obligation to choose sustainable transport modes **4**
- **/ Covid:**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
4

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
No.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Very likely for a while, and later it should all go back to the way it was before.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
First the quality of service - if passengers are offered something of better quality they will use it more, trains - build a new line, provide fast trains. Good quality offer would attract people.

Please feel free to further comment or add any information that you deem relevant:
….

Interview 14. Public body - university

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **5 (night lines)**
- only ferry (no car) **5**
- coaches or trains **4 (the trains are great on the Italian side; buses are good here) / 2**
- **Covid:**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**
- **/ Covid: people will learn to live with it, everything should probably get back to normal after a while**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5**
b) car + ferry **5**
c) only ferry (no car) **5**
d) coaches or trains **4 / 3**
- **/ Covid: multimodality is worse now**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
2-3

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **4 / 2**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
4

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
The perception is similar, maybe a little stricter in transnational trips because of all restrictions.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Shouldn't leave persistent effects.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
To guarantee people physical distance, cleanliness, ventilation.

Please feel free to further comment or add any information that you deem relevant:
….

Interview 15. Public body - region

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **3 (depends on the location) / 4-5**
- car + ferry **4**
- only ferry (no car) **4**
- coaches or trains **1 coach 3 train (traveling is more comfortable by train) / 1**
- **/ Covid: less frequent schedule, people are now limited by restrictions, travel conditions have changed - more than travel in general, so people will now prefer to use cars both for safety and for comfort. Although it also depends on age, let's say students and people who don't have choice will not think about it as much.**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3**
- **/ Covid: nothing's changed**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5**
b) car + ferry **4**
c) only ferry (no car) **3**
d) coaches or trains **3 / 2**
- **/ Covid: It still depends on everyone's habits. Changes are more regarding travel conditions because, for instance, there is limited number of passengers in public transport.**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

1 – people's goal is more just to come where they want as soon and as comfortable as they can, not in which way

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **1**
- social pressure **4/5**
- attitude towards different means of transport **3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2**
- feeling of moral obligation to choose sustainable transport modes **4/5**
- **social pressure and feeling of moral obligation are the same for them**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

4

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes, people are home, they are not far away, so they don't think so much about social distancing.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It won't have persistent effects; everything will go back to the way it was before when the pandemic ends.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Reducing the price of tickets, promo tickets, more frequent timetables.

Please feel free to further comment or add any information that you deem relevant:
…..

Interview 16. Public body - state own company

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **4 (problem that the trip takes a very long time)**
- only ferry (no car) **4**
- coaches or trains **4**
- **Covid: nothing's changed, there is only less capacity in public transport given the measures**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3 / 5**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **3 / 1**
- **/ Covid: individual transport is encouraged while public transport is discouraged**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5**
b) car + ferry **2**
c) only ferry (no car) **2**
d) coaches or trains **2**
- **/ Covid: nothing's changed**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
1

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **5 / 4**
- attitude towards different means of transport **2**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3**
- feeling of moral obligation to choose sustainable transport modes **4 / 5**
- **/ Covid: social pressure for people to travel separately, but that still doesn't deviate too much from people's habits**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes, people are much more careful on transnational trips compared to everyday trips where they don't worry so much.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
No, a pandemic only has an impact right now. People who normally travel by public transport, most often people who travel daily to work, will still use public transport because personal transport is expensive and public transport is the most cost-effective option, and people who have traveled by car to work so far will continue to travel by car. There could be an increase in the number of public transport passengers given the measures by which the government encourages the use of public transport – the example of subsidizing the transport of students and children under 18 by train free of charge. People will continue to use public transport when they feel safer using it.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
It should start from the children in primary school and teach them how important ecology is. Primarily when they adopt the habits of traveling by public transport this will be able to develop further. Current strategies are connected with companies that promote green modes of transport, multimodality in general and public transport but as long as this is not accompanied by funding from the state or the employer, people are very unlikely to use public transportation. Possible effective strategies: encouragement of employers, state initiative, morale of the citizens, joint communication between the carrier and the state.

Please feel free to further comment or add any information that you deem relevant:
….

Interview 17. Public body - port authority

1) Attitudes

- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **4 (flexible; because of the length of travel maybe 3, depending on where you're going; the person is not tied to the driving schedule, it depends on himself) / 5**
- car + ferry **4 (depends on the number of lines and the season - limited travel, service is fine)**
- only ferry (no car) **4 (limited by further means of transport)**
- coaches or trains **2 (the coaches don't have very direct lines, a very long journey) / 1-2**
- **/ Covid: most people travel by car for safety reasons now,**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3 / 5**
b) car + ferry **3 / 4**
c) only ferry (no car) **3**
d) coaches or trains **3 / 1**

- **/ Covid: more relevant now in a pandemic time than usual**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **4 (easiest) / 5**
b) car + ferry **3-4**
c) only ferry (no car) **3 / 2**
d) coaches or trains **1**

- **/ Covid**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

2

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **1 / 2**
- social pressure **4 / 1**
- attitude towards different means of transport **2 / 3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **3 / 4**
- feeling of moral obligation to choose sustainable transport modes **5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

Yes, it affects whether a person goes by car or foot, whether you are surrounded by people or not. Transnational trips are more difficult to achieve now due to higher requirements and problems, so it is more difficult to decide on going for such trips than for everyday trips and trips within the country.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It will for a while, probably not for so long. Although this season has already been better, it means that people still travel despite the pandemic, although much more by private cars and they tend to choose quieter places. The question is to what extent it will last and whether it will be permanent or not. Even though, compared to last year, there is an increase in traffic, and it will probably continue to be like that because the economy and people want to continue their lives normally, so people will adjust to be able to work and live as they are used to.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
Promoting travel safety, ensuring social distance in public transport and providing all the conditions according to the rules. It is important that there is a more frequent and flexible travel timetable, so people have more choice when traveling by public transport.

Please feel free to further comment or add any information that you deem relevant:
….

Interview 13. Public body - port authority

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5**
- car + ferry **4**
- only ferry (no car) **4**
- coaches or trains **2**
- **/ Covid: nothing's changed**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **3**
b) car + ferry **4**
c) only ferry (no car) **4**
d) coaches or trains **4**
- **/ Covid: nothing's changed**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a. only car **5**
b. car + ferry **4**
c. only ferry (no car) **3 / 2**
d. coaches or trains **3 / 2**
- **/ Covid: people don't choose ferry and public transportation as much**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
1

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1**
- social pressure **4**
- attitude towards different means of transport **3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2**
- feeling of moral obligation to choose sustainable transport modes **5**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
4

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?
Yes, more is considered when traveling transnational than on normal everyday trips. People do not dare to go by public transport on transnational trips as much as for these shorter everyday trips.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It will eventually.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
To save time and money and to improve intermodal connections.

Please feel free to further comment or add any information that you deem relevant:
….

Interview 19. Public body - agency

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5 / 4**
- car + ferry **5 (faster, good transport modes) / 4**

- only ferry (no car) **4 (probable need for using public transport in the destination, knowledge of public transport applications, etc.) / 3**
- coaches or trains **3 train 4 coach / 3**
- **/ Covid: better for trains and buses because there is more space, comfort is better, but it is also harder to get a ticket, the situation for all forms of transport is generally worse – lower grade for all means of transport**

2) Social pressure

How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)

a) only car **3**
b) car + ferry **3**
c) only ferry (no car) **3**
d) coaches or trains **2 (although public transport is more stigmatized by society, so it is a bit negative; it is inconvenient to travel by train given the condition of Croatian railways)**
- **/ Covid: transportation is viewed differently; it is more seen to travel only when necessary**

3) Perceived Behavioral Control

How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)

a) only car **5 / 4**
b) car + ferry **4 (you have to wait, they don't go very often) / 3**
c) only ferry (no car) **5 (if the destination is connected to the ferry) / 4**
d) coaches or trains **4 coach 3 train / 3-2**
- **/ Covid: it is generally much harder to travel, but there is no difference between the means of transport (so he would lower everyone's rating on that)**

4) Personal norms

How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)

1 – people think more about arriving faster and making their trip more pleasant

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:

- Habits **3 / 4**
- social pressure **4 / 2**
- attitude towards different means of transport **1 / 1**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2 / 3**
- feeling of moral obligation to choose sustainable transport modes **5 / 5**
- **/ Covid**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?

5

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

Yes, going to another country is viewed differently, and so is social distancing.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
It shouldn't have a persistent effect on the choice of means of transport, we will forget that as a society. Only trade and meetings will be held more online than before so the traffic will reduce in general. Although after the pandemic people will probably travel more and then the travel will decrease later with time.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
The most important thing is to work on infrastructure that is very bad in Croatia and within countries, let alone between countries, thus not referring to road but to public transport. There is no future if there won't be further investments in rail infrastructure in Croatia. Trains are good, but infrastructure is very poor.

Please feel free to further comment or add any information that you deem relevant:
…..

Interview 20. Tourist agency

1) Attitudes
- On average, for a traveler that from Croatia would like to go to Italy, using (…) would be (1 = very unpleasant; 5 = very pleasant)
- only car **5 (most common option)**
- car + ferry **5**
- only ferry (no car) **3**
- coaches or trains **2 (Croatia don't have good connections, by train almost none, and by bus connections are weak)**
- **/ Covid: nothing's changed, only further emphasized the need to go by car and because of missing connections, generally the habits of passengers and now social distance**

2) Social pressure
How much do you think that travelers that from Croatia would like to go to Italy feel a social pressure to choose the following means of transportation? (1= very negative pressure; 3=no pressure; 5= very positive pressure)
a) only car **5 (positive pressure is put on the side of the car as it is most preferred option of travel)**
b) car + ferry **5**
c) only ferry (no car) **3**
d) coaches or trains **3**
- **/ Covid: nothing's changed in general**

3) Perceived Behavioral Control
How easy or difficult would it be, for travelers that from Croatia would like to go to Italy, to do the trip with each of the following transport modes? (1= very difficult; 5= very easy)
a) only car **5**
b) car + ferry **4**
c) only ferry (no car) **2 (not available everywhere so should be combined with public transport)**

d) coaches or trains **2**
- **/ Covid: nothing's changed**

4) Personal norms
How much do you think that, on average, travelers that from Croatia would like to go to Italy feel that it is their duty to take into consideration the environmental consequences of their modal choice as well? (1= not at all; 5= a lot)
1

5) Please order from the most relevant to the least relevant the following variables in orienting modal choice of travelers going to Italy:
- Habits **1 / 2**
- social pressure **5**
- attitude towards different means of transport **3**
- behavioral control (how easy/difficult would it be to go with different means of transport) **2 / 1**
- feeling of moral obligation to choose sustainable transport modes **4**
- **/ Covid: the number of lines is now slightly disturbed**

6) The pandemic heavily affected mobility and how different means of transportation are perceived (e.g., the need to guarantee social distancing). Do you think that social distancing is considered as a relevant requisite of the trip, for travelers willing to go to Italy? How much, on average, on a 1 to 5 scale?
3 – for some people it is very important, and for some it is more important that they get to their destination faster and easier, which may include means of transport that do not offer that social distancing.

7) Do you think that there are differences in the perception about the need to guarantee social distancing between transnational trips (Italy-Croatia) and everyday trips (commuting, shopping trips etc.)?

There is no difference, but people perceive it differently. In transnational trips, however, people are longer in the means of transport, and they are more careful, and in everyday trips they do not even have the feeling that they are in front of so many strangers, so they don't worry so much.

8) Do you think the pandemic will have persistent effects on choices of segments of travelers, so that they will shift to private cars to avoid crowded places such as ferries or coaches?
Currently, it has an influence and probably some people will keep the habits of traveling more by car in the future. To what extent exactly we don't know yet.

9) What do you think could be an effective communicational strategy to convince travelers to abandon privatecars and shift to more sustainable options? On which aspects should involved stakeholders focus on?
There should be more direct lines and direct connections to avoid transition and ease the trip as much as possible, in terms of paperwork as well. The price certainly affects the choice, too. While pandemic, to include some safety measures in terms of disinfection, hygiene, etc.

Please feel free to further comment or add any information that you deem relevant:
…

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