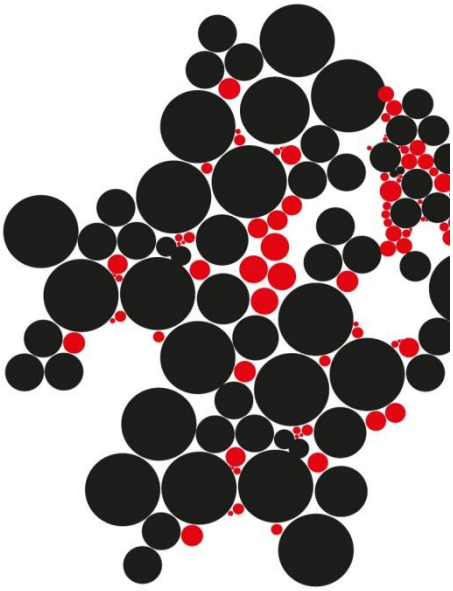

WHAT FACTORS EXPLAIN CARPOOLERS' DECISION TO USE CARPOOLING MATCHING PLATFORMS?

- A SURVEY-BASED OBSERVATION OF CARPOOLING MATCHING PLATFORMS IN EUROPE

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Abstract

The idea of sustainable mobility concepts is broadly discussed. The main focus currently lies on developing new technologies and innovations to decrease private car ownership and environmental pollution. Little is known about already existing initiatives which create sustainable solutions for our transportation systems. This empirical study considers the question of how carpooling matching platforms should be structured with the result that more travellers decide to use matching platforms for carpooling in the future.

Various structural elements and mechanisms based on the theory of transaction costs and of the network theory were identified which are crucial for carpoolers' to make use of web-based platforms. 201 people have responded to an online survey about users' preferences. Descriptive statistics and ANOVA tests have shown that transaction problems can be reduced by providing a costless platform and the opportunity for users to pay their shared rides in cash. Further, it is crucial that carpooling agencies offer insurances to their users that they control user's profiles and, that users are self-insured. The survey confirmed that benefits such as lower travel time, costs and lower planning time are crucial for users to decide to use matching platforms. The network effect 'size' is decisive for carpool users to make use of web-enabled carpooling providers.

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List of abbreviations

Ltd.	Limited Company
GmbH	Gesellschaft mit beschränkter Haftung (German)
GbR	Gesellschaft bürgerlichen Rechts (German); Company constituted under civil law (English)
HOV	High Occupancy Vehicle
ICTs	Information and Communication Technologies
SOEP	Sozio-ökonomisches Panel (German)
DIW	Deutsches Institut für Wirtschaftsforschung (German)
ANOVA	Analysis of variance

1 Introduction

"Anstatt das Automobil immer weiter zu entwickeln, sollten wir uns überlegen wie wir Mobilität in Zukunft anders gestalten"[1]

(Hans-Peter Dürr, German physicist; Herrenknecht-Sonderteil, n.d.)

Sustainable lifestyle is on everyone's lips. No matter if one talks about sustainable food production, textile production or sustainable mobility. Various organisations have undertaken the task to develop alternative solutions for living in a sustainable way.

One widespread solution is the creation of sustainable mobility concepts. In terms of car use, ridesharing or rather carpooling is one idea to overcome environmental problems. More than 70 different carpooling platforms are obliged to support the use of carpooling in Europe. But little is known about how these organisations are structured. The following study deals with the use of carpooling matching platforms and more specific, what factors explain carpoolers' decision to use this sustainable mode of transportation.

The first part of this work precisely describes the idea of carpooling and gives an overview of the current carpooling market in Europe. Next, the relevance of this study and the research question are formulated. Chapter two contains a short literature review with some study examples. The theoretical part is made up of the theory of transaction costs and of the network theory. The research question will be answered by taking approaches from both theories.

In addition, three hypotheses deduced from the theories, are tested in the next part. First, a conceptual model with all factors is presented. In addition, the chosen research and survey design and as well as data collection are explained in detail. The data analysis includes descriptive statistics of the results and comparisons of mean scores. The last parts conclude the main results, discuss problems and improvements of this work and give future prospects for further empirical studies about carpooling platforms and their organisational structure.

1.1 The idea of carpooling

Private car ownership increases and generates environmental problems. Although there are new technologies and innovations which can reduce the problems, for example the development of electric motors or fuel-efficient vehicles, there is still a need to overcome these problems by creating alternative and sustainable solutions.

[1] Translation: *"Instead of developing the car, we should consider how we make mobility differently in the future".*

Due to environmental challenges and impacts the use of private car ownership changes and causes new ways for travelling. Carpooling can be seen as an innovative way for travelling which leads to positive contributions to economic, environmental and social sustainable development (Hansen et al., 2010, p.80, 95). Furthermore, it is an "alternative to classical modes of transportation" with its own "flowing and growing network of public transport"(Morency, 2007, p.239; Jégou, Girardi, & Liberman, 2008, p.72).

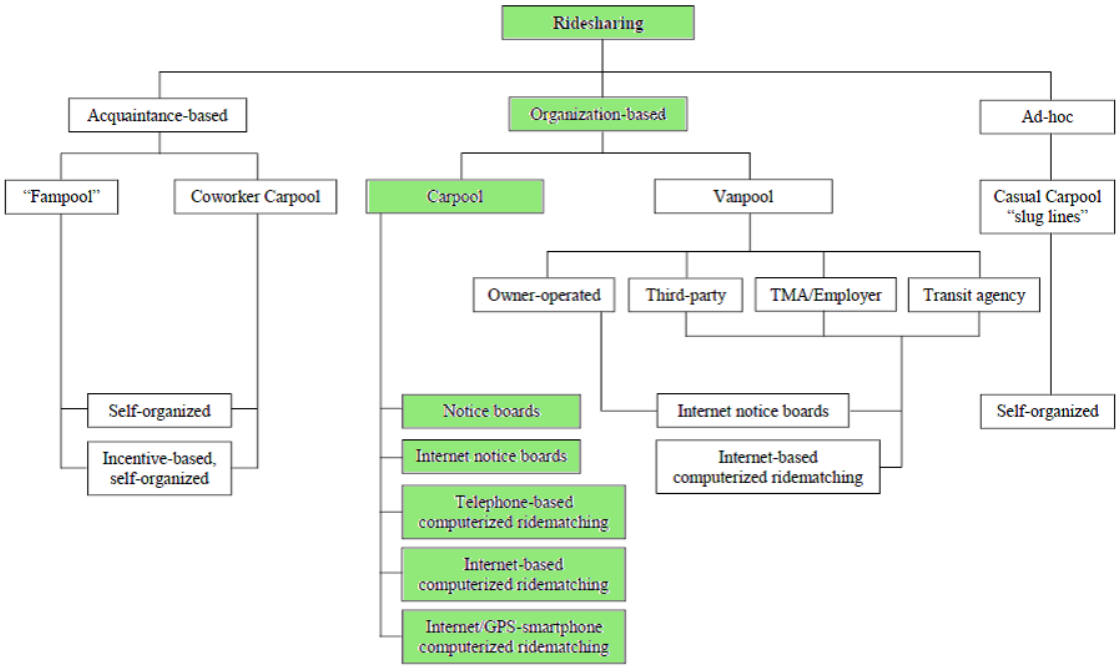
The idea of carpooling is not new. Chan and Shaheen (2012) pointed out that "World War II car-sharing clubs" were already developed in 1942 (p.97). From 1980s until 1997, travellers established organised carpooling schemes and some years later reliable carpooling systems. Today, we focus on "technology-enabled ridematching" meaning that carpooling is organised with support of new technologies and the Internet (Chan & Shaheen, 2012, pp. 97-102).

In the next chapter, the terms *carpooling* and *carpooling matching platform* are first defined and classified, followed by a description of their functions. The last part of the introduction gives examples of existing carpooling matching platforms in Europe.

1.1.1 Conceptual classification

The term *carpooling* is defined in various ways so that it is important to show an overview of conceptualities. This study focuses on organisation-based carpooling, whereas there exists different terms and demarcations stated in Chan and Shaheen's figure (2012) 'Ridesharing classification scheme':

Figure 1: Ridesharing classification scheme



Source: Chan & Shaheen, 2012; modified

This classification scheme ideally includes the main terms and differentiations. *Ridesharing* is here defined as the umbrella term meaning the general term for sharing a car, divided into *acquaintance-based*, *organization-based* and *ad-hoc ridesharing*.

Hansen et al. and Teodorovic & Dell'Orco (2010; 2008) formulated a broad definition for ridesharing: "ride sharing as a more flexible mode of transport 'that assumes the participation of two or more persons that together share a vehicle when travelling from few origins to few destinations' "(p.83; p.135). This means that at least two people share one car to drive to the same place or to the proximity.

Acquaintance-based is generally defined as from neighbour-to-neighbour ridesharing which implies for example that workers autonomously organise their shared rides on a regular basis.

Ad-hoc ridesharing, in contrast, is a spontaneous organised shared ride such as hitchhiking. Hitchhiking signifies that one shared ride does not base upon "a pre-established agreement between driver and passengers" (Jégou et al., 2008, p.69). But it is also self-organised by commuters and travellers like the *acquaintance-based* mode of ridesharing.

Carpooling is not a self-organised mode of ridesharing. Different means of matching are provided such as *(Internet) notice boards, telephone- and internet-based computerized ridematching* and *Internet/GPS-smartphone computerized ridematching.* Chan and Shaheen (2012) defined carpooling as the "grouping of travellers into common trips by car or by van" (p.94). This study primarily focuses on carpooling and not on vanpooling meaning carpoolers conduct a shared ride with a van instead of a car. Jégou et al. (2008) confirmed that carpooling is an "organized service" which implies that carpoolers are informed about carpooling offers in advance (p.68). Furuhata et al. (2013) argued that next to sharing one vehicle, driver and passengers likewise share "travel costs such as gas, toll, and parking fees" and also have the same travel route and time (p.28).

Further modes of ridesharing can be added to the classification scheme described above. For instance, next to 'pure' modes of ridesharing, there are also mixed or hybrid modes between ridesharing and public transportation called "bimodal trips" and types of trips based on the time frame, namely short-trips and long-distance trips (Morency, 2007, p.243; Furuhata et al., 2013, p.29).

Another classification is given by Teal (1987). He divided the people who share one car into three groups: *household carpoolers*, *external carpoolers* and *carpool riders*. *Household carpoolers* are household members who commute together. However, *external carpoolers* are those who do not know each other but share one ride. Lastly, the *carpool riders* commute with other unrelated workers, but they only make use of shared rides as passengers and not as

drivers. He mainly focused on differences in use between household carpoolers and external carpoolers (Teal, 1987, p.206/207).

This work concentrates on carpooling as mentioned in Chan and Shaheen's classification scheme (2012), but for the following observation, it is not important to differentiate between carpooling users who regularly commute to work with unknown or the same people and users who have met for the first time when driving to one place. It is important, that carpoolers make use of online matching platforms to organise their shared rides.

As already mentioned, *Internet notice boards* provides the opportunity for drivers and passengers to offer a ride or search for suitable offers (Chan & Shaheen, 2012). These so-called matching platforms are agencies, companies or initiatives making these offers available. Drivers and passengers get the opportunity to organise their trip with support of internet-based matching platforms. These online platforms "facilitate [carpooling] services by matching between individual car drivers and passengers" (Furuhata et al., 2013, p.30).

1.1.2 Carpooling and online matching platforms

With support of online matching platforms, carpoolers are able to organise a shared trip with other carpoolers. To match driver and passenger, the carpooling initiatives have developed websites for facilitating an easy and fast matching process (Chan & Shaheen, 2012).

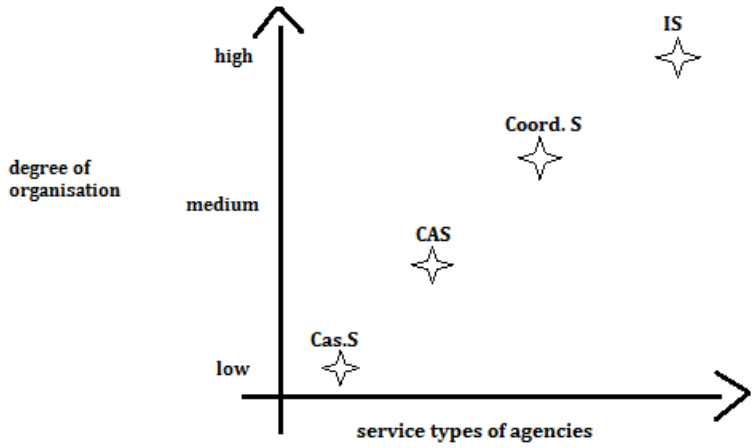
The online platforms are organised in different ways including various functions and characteristics. One main characteristic is the pre-arrangement of a shared carpool trip. Drivers and passengers communicate and jointly arrange one journey (Jégou et al., 2008).

Nowadays the pre-arrangement of one trip is often organised through Internet and Geographic Information System (GIS) components provided by online matching platforms. In the same way, the connection to social media can help carpoolers to find a suitable shared ride as well. New technologies and their functioning form the basis for carpooling programs, although the following empirical work will demonstrate that there are differences in creating such an online platform (Chan & Shaheen, 2012).

Furuhata et al. (2013) presented one classification scheme with four service types for carpooling agencies. The first one, *the integrated service (IS)*, contains functions such as planning the trip, gives a price fixing and payment possibility, whereas the *coordination service (Coord.S)* merely includes the planning and price fixing function. The third type, the *classified advertising services (CAS)*, provides a planning function, but the carpool users themselves have to decide upon the prices. Lastly, the *casual service (Cas.S)* does not comprise the pre-arrangement function. The matching process takes place on a first-come-

first-serve basis directly at the meeting point. Only the prices and travel route are fixed. The four types demonstrate that carpooling platforms are organised in different ways. Figure 2 shows the service types depending on the degree of organisation (Furuhata et al., 2013, p.36).

Figure 2: Service types of carpooling agencies



Source: own development, based on Furuhata et al. (2013)

1.1.3 Carpooling matching platforms in Europe

Over 70 different carpooling matching platforms exist in Europe (Mecke, 2015). They differ in terms of organisational form, internal structure, provided features on their websites and catchment areas. Their main aim is to offer carpooling possibilities by overcoming "the difficulty of finding carpool partners" (Teal, 1987, p.213).

Table 1 displays eight different carpooling websites with background information, catchment area, number of (registered) users and information about particularities. These platforms are selected because they supported my online survey and/or the number of respondents who use one of these platforms was relatively high. The table shows that four platforms were launched in 2013. The carpooling market especially has grown because one platform provider established a fee-based use for carpooling offers. Small companies have been grown and start-ups companies were developed offering carpooling without paying any fees. Further and concrete information about the use of these platforms are given in chapter three and six in this work (Aha!Car, 2015; Berlin Shuttle, 2015; Blablacar, 2015; Carpoolworld, 2012; Carpoolworld, 2015; Fahrgemeinschaft, 2015; Fahrtfinder, 2013; Mitfahrgelegenheit, 2015; Mitfahr-Monster, 2015; Brown, 2015; Müller, 2013).

Table 1: Carpooling matching platforms

Name of platform	Place	Launch	Catchment area	Organisational form	Number of users	Specific information
Ahacar.com	Bulgaria	2013	Eastern Europe	Ltd.	2400 (registered)	Matches drivers and passengers with focus on generation of positive environmental/social benefits and user-friendly applications on website
Berlinshuttle.de	Germany	2013	Germany (Berlin, Hamburg, Stuttgart & Düsseldorf)	GmbH	Not known	Carpooling website which matches drivers and passengers with special option that driver can use one vehicle provided by berlinshuttle.de
Blablacar.de	France	2006	Europe, India	Corporation	> 10 Mio (registered)	Matching platform with large community in 13 countries. Spreading of platform especially has occurred because other provider implemented fee-required use of matching process
Carpoolworld.com	USA	2000	USA, Europe, worldwide	Data sphere corporation	282.587 (registered)	Free online platform which offers shared rides worldwide. They offer carpooling matching software for companies
Fahrtfinder.net	Germany	2013	Europe	GbR	1000-1500 users on website per month	Fahrtfinder is a search engine for carpooling. Users find offers from eight different carpooling agencies
Fahrgemeinschaft.de	Germany	2012	Europe	GmbH	> 150.000 (registered)	Matching platform provided by ADAC e.V. (Allgemeiner Deutscher Automobil Club) in Germany
Mitfahr-Monster.de	Germany	2013	Europe	Not specified	1300 (in December 2014)	Mitfahr-Monster is a kind of search engine for carpoolers with focus on offers provided in Facebook groups for carpooling
Mitfahrgelegenheit.de	Germany	2001	Europe	GmbH	> 5 Mio (registered)	Largest carpooling matching platform in Europe. Carpoolers use a booking system to organise a shared ride and drivers pay 11% for each passenger to provider (carpooling.com)

1.2 Relevance of the study

The work at hand is relevant because it mainly focuses on the current carpooling market in Europe and provides contemporary information about the use and valuation of matching platforms through asking users of carpooling matching platforms. There are only few similar studies examining the "real [carpooling] market in Europe" and make use of cross sectional research design to find out how one carpooling matching platform should be created to satisfy users (Morency, 2007, p.240; Chan & Shaheen, 2012).

The interest in carpooling and its use is high, but little is known about how carpoolers prefer to use this mode of transportation and why travellers do not use carpooling offers. Furthermore, carpooling matching platforms support travellers to use carpooling, but studies concentrate on the type of carpooling rather than on how the use of carpooling should be organised. Internet-based matching platforms should enhance and facilitate the use of carpooling, but as already mentioned, too many travellers and commuters still use their own cars instead of sharing with others. As a result of this, environmental and traffic problems occur, for instance, increased CO_2-emissions and congested motorways (Abrahamse et al., 2009; Buliung et al., 2010; Furuhata et al., 2013; Hansen et al., 2010; Hartwig & Buchmann, 2007).

Next to environmental and economic issues, personal factors such as bad experiences with carpooling also play an important role. Some people do not use carpooling because they had negative experiences and indicate carpooling as inconvenient. The questions are what are the reasons and how can we overcome these problems? This kind of contracting problem between users and matching platforms will be examined in this work. While focusing on carpooling matching platforms and their organisation, one can find out what factors are crucial for travellers to decide to use carpooling (Morency, 2007; Williamson, 1998).

Some studies already provide ideas to solve above-mentioned problems. In general, the main problem-solving approach here is to develop a suitable organisational structure for carpooling agencies and their platforms or in other words: "choosing the appropriate social arrangement for dealing with the harmful effects" (Coase, 1960, p.853).

Hartwig & Buchmann and Hansen et al. (2007; 2010) stated that technological solutions can overcome certain problems. In addition, Chan and Shaheen (2012) argued that the use of innovative technology combined with policy support enable an easier use of carpooling. In the United States, HOV lanes give carpoolers an edge for sharing one vehicle. Only carpoolers are allowed to use this specific lane of the road. Further ideas are free parking spots, taxes for

entering cities or the implementation of emissions laws (Brownstone & Golob, 1992; Chan & Shaheen, 2012; Hartwig & Buchmann, 2007).

But these regulations are not developed by carpooling agencies and their platforms. Furuhata et al. (2013) in contrast pointed out, that it might be interesting to find out what the differences of the initiative's structures are and what the best way to operate new carpooling customers is. It means that the design of one carpooling matching platform is relevant to guarantee a successful matching process and as a result of this, the increase of using carpooling (Alchian & Demsetz, 1972; Furuhata et al., 2013; Powell, 1990). Therefore, this study approaches the idea of carpooling and how it can be organised to enlarge its future use.

1.3 Research question

For structuring carpooling matching platforms and their functions, one has to figure out the factors which are important for carpool users. If these factors are identified, one can create an efficient-working matching platform for attracting more users (Alchian & Demsetz, 1972; Chan & Shaheen, 2012; Jones et al., 1997).

For that reason and based on the previous assumptions, the main research question can be formulated:

What factors explain carpoolers' decision to use carpooling matching platforms?

With the present work, this research question will be answered. First of all, the next part gives an overview of existing studies and relevant literature. The theoretical framework, chapter three, contains theoretical approaches and their explanations used for this research namely the 'theory of transaction costs' and the 'network theory'.

2 Literature review

There already exist various studies about sustainable mobility and the use of carpooling or ridesharing services. Jégou et al. (2008) studied the design of hitchhiker services and how these services can be improved so that more people decide to use this mode of transportation. They applied a method called 'open design process' including 42 cards with important elements and characteristics of selected hitchhiking initiatives to find the best design strategy. The selection and combination of specific cards can lead to one possible solution which improves this service (Jégou et al., 2008).

However, Hansen et al. (2010) focused on community-based toolkits and how ride access could be improved. They claimed that the reason why people do not use carpooling is that carpoolers often have to use public transport for reaching the "ride access points RAPs" (Hansen et al., 2010, p.84). Further, they emphasized that embedded transaction costs regarding the communication and coordination process negatively influence carpooling systems and their spreading. Their work also concentrated on improving the design of carpooling initiatives: "How can toolkits for user innovation and design be instrumental in reducing transaction costs for ride-sharing services?" (Hansen et al., 2010, p.82). With one ridesharing provider called 'Momax GmbH', the authors found out that a network of RAPs with a GIS-based search algorithm included could connect roads and meeting points. This implies that more people get access to carpool offers and it creates a dense network of drivers and passengers. The researcher examined how one can improve finding and reaching meeting points for using carpooling.

Morency (2007) argued that carpooling is one crucial strategy for sustainable transportation, but the study conducted showed, that using this mode is especially decreasing in urban areas. The research was conducted in the Greater Montreal Area in Canada. One possible explanatory factor is the "efficiency of the public transit system" (Morency, 2007, p.244).

In contrast, Brownstone & Golob (1992) pointed out, that the 'transportation demand management (TDM)' must be improved by implementing incentives such as the reservation of parking possibilities, subsidies from employees for using carpooling or "guaranteed rides home for ridesharers" (Brownstone & Golob, 1992, p.6). They used travel time and distance, the availability of cars, household structure, income and the presence of HOV lanes as possible explanatory factors in their research. The main result of their analysis is that reserved parking facilities and HOV lanes significantly influence the decision for using carpooling (Brownstone & Golob, 1992).

Another study was conducted by Singhirunnusorn et al. (2012) about students' traveling behaviour. The researchers examined how one could change the current behaviour of students in favour of using sustainable transportation. A comparison between two projects called "car-free day project" and "Ribbon-Bicycle project" at the Mahasarakham University were run to find out the most important factors (Singhirunnusorn et al., 2012).

An earlier study from Teal (1987) examined the questions of who carpools, how carpoolers use this mode of transportation and why they use it. First of all, Teal mentioned the main disadvantages and advantages. Disadvantages are for instance, the extended travel time, because drivers have to pick up passengers at public meeting points and as a result of that,

there is no flexible schedule possible. For some people, it is inconvenient and they probably feel offended in their privacy when sharing one vehicle with other unknown travellers. Furthermore, drivers sometimes decide to use public transit instead of offering their cars, because the parking costs are very high if they have to collect passengers for example in city centres. In spite of that, sharing travel costs is an important advantage deciding for carpooling. Teal (1987) made use of the 'Nationwide Personal Transportation Survey (NPTS)' from 1977-78 containing more than 3.000 commuters who use carpooling for going to work. For the analysis, factors such as "socio-demographic, transportation and locational variables" were selected to answer the research question (Teal, 1987, p.205). One important result is that the population size has only little effect on deciding for carpooling or not.

Another study is about "shareability networks" meaning to share taxi services between unrelated travellers in New York City. The benefits of such a mobility system are presented and how these could be quantified. The concept of the sharing economy is seen as a new idea also for improving current traffic situations particularly in big cities. Santi et al. figured out that there are many possibilities to share a taxi also with "minimal passenger comfort" (Santi et al., 2014, p.13293).

The theoretical part starts with explanations why the chosen theoretical approaches are useful for this study. Then, the theory of transaction costs is generally presented and the transaction cost types which are helpful for the following analysis, are exposed. In addition to that, main transaction costs and benefits will be worked out which are relevant using carpooling matching platforms.

3 Theory and conceptual framework

The research question should be answered by taking assumptions from the theory of transaction costs and the network theory.

The transaction cost approach is chosen because it gives useful explanations for dealing with contracting problems and uncertainty arising in an organisation. The transaction costs which occur when using carpooling matching platforms can be theoretically described and analysed with this approach. Economizing or ideally avoiding emerging transaction costs could be one solution to increase the use of matching platforms for carpooling (Coase, 1937; Williamson, 1998). Coase (1960) stated that studying markets, firms and governments provide information on how to deal with transaction problems. Further, this approach is applicable to a wide range of cases due to the fact that carpooling provider and their matching platforms occasionally appear as hybrid forms of organisation and some platforms are differently organised than

others. Feiock (2007) went further and pointed out that the reduction of transaction costs is feasible through "formal and informal arrangements that increase the availability of information, reduce obstacles to bargaining, and reinforce social capital" (Feiock, 2007, p.59). To reach these "formal and informal arrangements" to reduce transaction costs, a second theoretical approach is needed. If one just looks at the characteristics of a market, one must assume that for instance trust is not essential, self-interest dominates and individuals do not inevitably interact with each other. In other words, it means that people do not rely on others, because competition and prices determine and regulate the market (Powell, 1990).

Although carpooling agencies build a kind of carpooling market, additional factors describe the internal organisation, such as contextual factors which have an influence on the structure and functioning of one matching platform. They reduce transaction costs and enable collaboration (Feiock, 2007). Besides, Powell (1990) argued that the economy consists of market, hierarchy and networks and their "properties [ ] are defined by the kinds of interaction that takes place among them" (Powell, 1990, p.301). It means the combination of transaction cost approach with elements of network theory are useful to explain, what factors are relevant deciding to use carpooling matching platforms. Merging selected mechanisms provided in transaction cost and network theory build a theoretical framework for the empirical observation of matching platforms and how they should be organised so that more people decide to use carpooling facilities in the future (Feiock, 2007; Jones et al., 1997; Powell, 1990).

3.1 Theory of transaction costs

The theory of transaction costs has its origin in papers from Ronald Harry Coase and later from Oliver Eaton Williamson. With 'The Nature of the Firm' and 'The Problem of Social Cost, published in 1937 and 1960, Coase described the meaning of transaction costs in regard to the classical model of a firm. Williamson went further and explained that "transaction costs economics describes the firm as a governance structure, which is an organisational construction" rather than "a production function" (Williamson, 1998, p. 32). Important papers from Williamson are 'The Economics of Organization' (1981) and 'Transaction cost economics: how it works, where it is headed' (1998).

First of all, it is crucial to define transaction costs and explain the content of this approach more in-depth. Coase defined transaction costs as "a cost of using the price mechanism" (Coase, 1937, p. 390; Allen, 1999). Transaction costs are the costs which emerge when there is an economic exchange or transfer among parties. Williamson described it in a similar way:

"A transaction cost occurs when a good or service is transferred across a technologically separable interface" (Williamson, 1981, p. 552).

Transaction costs contain three dimensions or conditions namely frequency, uncertainty and asset specificity. Frequency is defined as the frequent exchange among actors. Frequent exchange creates structural embeddedness and can build the basis for social mechanisms for exchange such as adaptation, coordination and safeguarding (Jones et al., 1997; Williamson, 1981). Uncertainty rises when there is an exchange among parties. People have to carry out the exchange with a certain level of uncertainty, because there is a kind of information asymmetry meaning that some exchange partners are better informed about the process than others. This leads to uncertainty of participants in the transaction process (Coase, 1937; Jones et al., 1997; Williamson, 1981, 1998). The third dimension, asset specificity, is "the degree to which durable, transaction-specific investments are required to realize least cost supply" (Williamson, 1981, p. 555). It is the capital which has to be deployed for repeated transactions. Williamson argued (1981, 1998) that the last category is the most important one for analysing transaction costs, but not previously examined at large.

Regarding the structural form of an organisation, the questions are what are the factors for classifying transaction costs and how can the governance structures be organised in a more efficient and systematic way. There is a need to investigate the internal structure of any kind of organisation for emphasizing the characteristics leading to the lowest transaction costs for exchanges (Williamson, 1981, 1998).

The transaction cost approach is an interdisciplinary approach combining issues from economics, law and sociology to explain what kinds of institutional features are important for the functioning of organisations. Deriving its origin from the 'New Institutional Economics' and the 'New economics of Organisation', this theory is applicable for a wide range of questions concerning the organisational structure of one entity. Today, a variety of organisational forms exist so that an interdisciplinary approach is necessary for analysing a market, firms, networks, non-profits, public institutions but also hybrid forms of organisation (Coase, 1937, 1960; Williamson, 1981, 1998).

As Coase already stated (1937), "there is planning in our economic system which is quite different from the individual planning [ ] and which is akin to what is normally called economic planning" (Coase, 1937, p. 388). But due to the fact that organisational forms are changing and new types of organisations such as networks are developing, one has to focus on various types of transactions and their costs and benefits as well.

Carpooling matching platforms as one type of organisation contains diverse types of costs. Possible costs for the implementation are costs for the program and for financing, costs for the staff, costs for the marketing and incentives for participants, costs for monitoring and evaluations and certainly costs for the soft- and hardware to develop a matching program (Deakin et al., 2012).

The next chapter identifies different non-monetary transaction cost types which are important for the analysis of carpooling matching platforms.

3.1.1 Transaction cost types

When studying carpooling matching platforms, one needs to know the types of transaction costs which occur before and during the exchange process among parties. In this case, one need to know the types of costs rising because of the exchange between users and carpooling matching platforms.

Transaction costs can generally be divided into *ex ante costs* and *ex post costs*. Ex ante costs occur if exchange partners draft one transaction, negotiate about the agreement or want to safeguard it. Whereas ex post costs appear during or after the exchange process if there are disagreements and mistakes concerning the transaction process (Hansen et al., 2010, pp. 84–85). Alternatively, Coase (1937) has mentioned *marketing* and *organising costs* as two main costs of transactions. Marketing costs are defined as the "costs for using the price mechanism" and organising costs include all costs arising through the organisation of production conducted by different parties such as entrepreneurs (Coase, 1937, p. 403).

But as already stated, new forms of organisation require new or different transaction cost types. Therefore, five different types will be presented.

Performing an exchange, it assumes that the involved parties are informed about conditions and possible threats. If this is not the case, the process contains information asymmetries and costs occur. Feiock (2007) explained that information costs can be avoided by informing "all participants over possible outcomes and [the participants'] resources must be common knowledge" (Feiock, 2007, p. 51). For reaching common knowledge among exchange entities and avoiding disparities, information mechanisms are needed.

The second type of transaction costs is called enforcement costs. These costs can be held low if monitoring and enforcement mechanisms are deployed for reaching the agreement. The costs are high if the exchange process includes mistakes and obstacles for participants to obtain the agreement (Feiock, 2007).

For implementing the exchange, the involved parties have to define the conditions and regulations for undertaking the transaction. It means a kind of contract is necessary. Bargaining costs rise through contracting problems meaning that the bargaining among participants is not evenly distributed. There are probably "power asymmetries that advantage one of the parties and create problems for negotiating fair divisions of benefits" (Feiock, 2007, p. 54). If bargaining power is equally distributed, lower bargaining costs can be reached. Coordination and communication can be associated with bargaining costs. In regard to coordination, actors need to be informed about possible benefits before agreeing with the exchange. If the parties are informed and resources are available, cooperation is feasible. If the requirements cannot be fulfilled, coordination costs arise and make an exchange more difficult. Furthermore, communication provides on the one hand helpful information and on the other hand, improves the reliability of the exchange process itself.

In relation to bargaining, actors have to negotiate and decide how the exchange process should be organised and further, they have to negotiate about the benefits which occur. If they are divided over the benefits, division or negotiation costs arise and defer or at worst prevent an exchange.

The fifth type of transaction cost refers to knowledge and control as two crucial conditions. Control and evaluation mechanisms lead to trust relations among parties. If those involved receive information and knowledge and the transaction itself is controlled, trust can be generated and supports the exchange. Control costs develop if there is a lack of knowledge and scrutiny does not lead to the generation of trust (Feiock, 2007; Sydow & Windeler, 2004). One need to note that all transaction cost types are related to each other which should be taken into consideration when applying these theoretical assumptions to empirical phenomena.

But on the whole, high benefits and low transaction costs enable collaboration between unrelated parties.

3.1.2 Carpooling and matching platforms: Their transaction costs and benefits

The use of carpooling matching platforms is associated with the incidence of transaction costs. Hansen et al. (2010) for instance accentuated that transaction costs problems are the reason why the carpooling market is not growing. Their idea is that ICTs can solve this problem by developing matching platforms including mechanisms diminishing transaction costs. This study will proceed and observe specific transaction costs and benefits in regard to internet-based carpooling platforms. For that, various mechanisms and features are worked out which could influence carpoolers' decision to use matching platforms.

The structure or organisational form of online matching platforms is diverse. It can be a commercial organisation or profit-sharing firm, a small (informal) initiative or start-up, a non-profit firm, a partnership or at least a hybrid form meaning a blend of the mentioned types.
The provider are often organised as profit-sharing firms and structural features are composed differently, so that various provider were selected and important characteristics are pointed out (Alchian & Demsetz, 1972; Coase, 1937; Jégou et al., 2008; Williamson, 1981).
Although the use of matching platforms produces costs, users even so benefit from carpooling as one social and alternative mode of transportation. Due to the fact that transactions can be seen as a part of the production process, one has to take the importance of benefits into account while looking at possible explanatory factors. In relation to matching platforms, this means the occurring benefits of using carpooling with web-based platforms can explain why travellers make use of them.
As already described, carpooling is a form of sustainable mobility. Sustainable mobility is part of sustainable development consisting of the three dimensions: economic, environmental and social indicators. The question is what kinds and combinations of benefits lead to sustainable development concerning car use. This fragmentation is used for classifying the benefits receiving when using carpooling and matching platforms (OECD, 2005).
Starting with economic benefits, the reduction of travel costs is well known. If people decide to use carpooling, they share their travel costs. In rural areas where travellers are sometimes dependent on private transport, carpooling is a very "cost-effective [ ] mode[ ]" (Singhirunnusorn et al., 2012, p. 769; Deakin et al., 2012; Furuhata et al., 2013; Hansen et al., 2010).
Another economic benefit is the reduction of travel time. If sharing one car instead of using public transportation, it conceivably reduces travel time. But it depends on the time for reaching meeting points for carpooling and public transportation such as stations. If the local public transport system is not well constructed, it possibly takes more time to reach the carpool meeting point than going by train or bus. Sharing one car is faster when only taking the time of the car ride into account. This also depends on the current situation, because on weekends and public holidays, there is often congested traffic which extends the travel time as well. In short, the reduction of travel time is an advantage for carpooling users and is seen as economic benefit in this study (Furuhata et al., 2013).
A third economic factor is that parking costs can be reduced when using carpooling facilities. People who use their own car when driving to one place, often have to pay for a parking place. Parking in city centres can be very expensive and it is tiresome to find a suitable

parking spot. Next to sharing travel costs, drivers and passengers can also share their parking costs or do not use parking facilities at meeting points, because these are public open spaces and parking is costless or passengers only get into or off the car and do not need to park.

A last benefit is that carpooling matching platforms reduce the organisation or planning time for finding a shared ride. This advantage is based on the matching platform itself. Short-time planning between travellers can be reached by using online platforms, but it certainly depends on the size of the carpool community and the number of options provided. In the following, the importance of the scale and size of carpooling platforms will be explained more in depth. Nevertheless, reducing the planning time is regarded as economic benefit if people decide to use carpooling (Deakin et al., 2012; Jégou et al., 2008; Teal, 1987).

Carpooling is defined as environmentally friendly transportation mode. That is one important reason why carpooling must be researched: To generate knowledge how its future use can be increased. Two main environmental benefits are the reduction of CO_2-emissions and less traffic jam. Car ownership leads to congested streets and air pollution. If travellers share one vehicle, there will be less cars in use and environmental pollution will be reduced (Deakin et al., 2012; Furuhata et al., 2013; Hansen et al., 2010; Jégou et al., 2008; Santi et al., 2014).

The last type of benefit is social benefits. This type is often understudied, because carpooling agencies and their platforms are rather profit-oriented initiatives which obviously generate economic and possibly environmental benefits for users. Although, authors such as Jégou et al. (2008) pointed out that carpooling is seen as 'social innovation' which is defined as "innovation in social relations as well as new modes of satisfying needs", little is known about the social factors explaining the use of carpooling matching platforms (Moulaert & Ailenei, 2005, p. 2050; Jégou et al., 2008).

Deciding for carpooling promotes social life. Travellers meet new people and share ideas or experiences with each other. Some users make friendships and carpooling.com reported, that some users even got married after sharing a ride (Carpooling.com, 2015; Hansen et al., 2010; Teal, 1987; Teodorović & Dell' Orco, 2008). Of course, some travellers deny to use carpooling and to share one vehicle with unrelated persons, but in the following, it is seen as a social benefit (Hartwig & Buchmann, 2007).

Besides the benefits of using carpooling and matching platforms, a variety of factors exist which could explain why carpoolers make use of sharing rides and online platforms. The following factors are related to transaction costs and the most important ones are selected for the research in chapters six and seven.

Information asymmetries among parties prevent an exchange. If carpooling users are not well informed about the use of online platforms and the matching process, they probably decide to use another mode of transportation. That implies that information mechanisms have to be implemented so that users receive sufficient information to decide for carpooling matching platforms. Through information features, users receive information about carpool offers and how the matching is organised. If this is not the case, users are not sufficiently informed and uncertainty occurs. Because of these assumptions, one has to develop and select information features with the result that they lead to an increased use of online matching platforms and further, to an increased use of carpooling (Alchian & Demsetz, 1972; Furuhata et al., 2013; Hansen et al., 2010).

Today new technologies and innovations facilitate a faster matching process and an easier use of carpooling opportunities. The Internet provides a wide range of possibilities including "GPS-powered mobile devices and GSM-enabled navigation systems" (Hansen et al., 2010, p. 94). This enables users to get information about ride offers and they can directly contact other users. Regarding online platforms, carpooling providers establish different kinds of technologies for facilitating the matching process such as app or mobile web versions, the connection with social media such as Facebook and Twitter or the use of Google Maps on their website to display travel routes. These features are important for the bargaining among users. Further factors are also that platforms are presented in multiple languages. This can reduce bargaining costs such as communication costs because users, who exchange information, can use the websites in their own language. A third factor of the bargaining process is that matching platforms supply gender-segregated shared rides. Some users prefer to travel only with women or men dependent on their own gender. One could argue that some women prefer to share a car with other women.

Safety precautions are another explanation why users decide for carpooling or not. Safety and security features are differently organised by carpooling agencies. Some platforms provide insurances for driver and passengers, some place value on data privacy using their online platforms and some check users' profiles to ensure safety in their communities. This feature is related to division or negotiation costs, because if safety mechanisms are implemented on matching platforms, users are more likely to use this platform for finding a carpool. It reduces division costs and creates agreement among involved participants. But safety precautions are also connected to other types of costs such as control costs and furthermore, are linked to trust as crucial factor which is explained in chapter 3.2.

To reduce transaction costs, one has to concern time as explanatory factor as well. A low matching time is possibly important for carpooling users. If users find a suitable shared ride as quickly as possible, they decide to use this specific matching platform. Time as factor could also include the length of waiting time when passengers wait for drivers at meeting points, but this work focuses on the structural features of matching platforms and their importance so that factors such as waiting time will be left out (Deakin et al., 2012; Furuhata et al., 2013).

Some carpooling matching platforms offer a free service for their users meaning the registration for using the website is free or no registration is needed. Further, finding a shared ride does not include any fees. Whereas, there are platforms which implement a kind of obligatory booking system and drivers have to pay something for sharing their cars with other passengers. The mentioned features can positively or negatively influence the enforcement of the matching process and as a result, increase or decrease transaction costs.

A last factor which can be important for facilitating the exchange among users and matching platforms is the payment method provided by the carpooling agency. Some users prefer to pay cash and others want to use PayPal or other methods of payment. The payment method is presumably relevant for the enforcement meaning that carpool users determine to use matching platforms (Furuhata et al., 2013; Hansen et al., 2010; Jégou et al., 2008).

To conclude, selected factors were mentioned which can be decisive for carpooling users. The theory of transaction costs has supported the assumptions, but studying organisations has changed and alternative structures have risen. Below the network theory presents further structural elements and explanatory factors to explain what kinds of factors are important for the use of carpooling matching platforms.

3.2 Network theory

In addition to transaction cost theory, the network theory provides useful assumptions for analysing matching platforms. With support of the network approach, a wide range of issues can be explored. First of all, the term ‘network’ is defined, followed by a description of this approach. A short overview of the network approach helps to understand why the use of the theory increases for studying organisations and their structural elements. In the next part of this chapter, important factors are pointed out which might contribute to the explanation what factors are relevant for carpool users’ to decide to use matching platforms.

A network is defined in various ways. This study refers to definitions formulated by Williamson (1981) and Powell (1990). Networks can be described “as autonomous, cooperative and strategic” form of organisation “typified by reciprocal patterns of

communication and exchange [which] represent a viable pattern of economic organization" (Powell, 1990, p. 295; Williamson, 1981, p. 570). The term is comparable with organisational forms such as a partnership, collaboration, alliances or with a group (Hawe et al., 2004, p. 971). Traditional forms of organisation are changing and new forms emerge. One needs to take into account that hybrid forms have to be treated differently. Networks are especially developed if "there is a need for efficient, reliable information" (Powell, 1990, p. 304).

In regard to a network pattern, information can easily be allocated with support of structural elements and cooperation among parties lead to working arrangements so that uncertainty disappears and involved parties can use occurring knowledge and innovations for exchanges (Powell, 1990). If one organisation implements network mechanisms combined with mechanisms resulting from the transaction cost approach, transaction costs can be reduced and exchanges increase. One main question is if the network structure or rather network effects explain why individuals act in a specific way? With analysing the structure of matching platforms, this study tries to explain what individuals prefer for increasing the use of matching platforms (Jones et al., 1997; Provan et al., 2005).

3.2.1 Carpooling matching platforms and their network effects

Carpooling matching platforms involve characteristics of markets, firms and networks as forms of economic organisation. On the one hand, their structure is flexible and exchanges are based on "contract-property rights" and on the other hand, communication between participants leads to (reciprocal) relationships and as a result of that to mutual benefits. In this case, it leads to exchanges between carpool users and matching platforms (Powell, 1990, p. 300).

To start with structural elements of a network, the size of the network is important. Carpooling matching platforms mainly include a kind of online community for their users. The size of these online communities, which can be seen as social networks as well, ensure exchanges meaning that big networks lead to more resources. If there are many users of one specific matching platform, it is more likely that carpoolers more easily find a suitable shared ride as if the community is small with few users. The size of the community counts and probably increases the use of one carpooling provider (Jégou et al., 2008; Jones et al., 1997; Teal, 1987). Furthermore, major carpooling communities increase interactions between users because the size also influences the amount of exchange opportunities. The included communication mechanisms such as "user-to-user communication" or "text-based contributions" promote these exchange relations (Hansen et al., 2010). Moreover, this

probably leads to more ride share options of one matching platform if the size of the community increases and users more often communicate with each other.

In addition to the size and scale of the community, the frequency of use plays an important role. If carpool users make use of certain carpooling communities, it strengthens the relationship between user and matching platform and probably results in regular use (Jones et al., 1997; Teal, 1987).

A frequent use is related to trust as one crucial explanatory factor. A high level of reciprocity might explain why one person uses matching platforms. Trust in the organisational structure enables exchanges. It can be defined as "confidence in the reliability of a person or a system, regarding a given set of outcomes or events, where that confidence expresses faith in the probity or love of another, or in the correctness of abstract principles" (Giddens, 1990, p. 34; Sydow & Windeler, 2004, p. 74).

A high level of trust of users in other users and in matching platforms could be one essential factor why people decide to use carpooling. The presence of trust in an organisation is a property of a network form of organisation so that one has to observe to what extent carpooling matching platforms are trustworthy for users of carpooling.

Granovetter (1973) argued that the ties between users demonstrate the density of one network. Users with strong ties, for instance carpoolers who are friends and use same carpooling facilities on a regular basis, build a dense community. Regarding a carpooling community, carpoolers who do not know each other and are casual acquaintance have rather weak ties, but this kind of ties lead to growing of one network. Weak ties or indirect contact between network members are crucial for information exchange, idea generation and mutual influence. It means that carpooling community members are not directly connected but their acting within the community boost the growth of one platform. Strong ties can be developed through weak ties through continuous exchange among carpoolers (Furuhata et al., 2013; Granovetter, 1973; Hartwig & Buchmann, 2007; Sydow & Windeler, 2004).

In addition to transaction costs, trust must be taken into account when studying the use of matching platforms: "Trust-based relationships enable the accomplishment of tasks and activities that might not otherwise be achieved through traditional, contract-based ties" (Provan et al., 2005, p. 609).

The above mentioned factors which are based on network theory can possibly explain why carpool users decide to use matching platforms. This study only focuses on five network effects, but there are more variables which should be taken into account in future studies such as personal or psychological factors (Hansen et al., 2010).

In chapter four, the main hypotheses are formulated followed by the description of the conceptual model. Sections six and seven contain the methodology part and the data analysis.

4 Hypotheses

Based on the assumptions occurred from literature and the theoretical approaches, three hypotheses can be formulated. Williamson and Coase (1998, 1992) already pointed out that studying "positive transaction costs" leads to more clarification (Coase, 1992, p. 717; Williamson, 1998, p. 43).

In general, low transaction costs and positive benefits results in exchanges on a regular basis. Network effects additionally confirm the assumptions. Structural features and characteristics of matching platforms, the benefits of using carpooling in general and network effects are selected to formulate the following hypotheses:

***First proposition*:** If the transaction costs meaning information, enforcement, bargaining, negotiation and control costs of one matching platform are low, it is more likely that carpooling users decide to use carpooling matching platforms.

Second proposition: If the benefits for using carpooling are high, it is more likely that carpooling users decide to use carpooling matching platforms.

Third proposition: If the level of trust is high, the matching platform provides a large community with a variety of offers and friends/relatives make use of matching platforms, it is more likely that carpooling users decide to use carpooling matching platforms.

The dependent variable is the use or non-use of carpooling matching platforms. To explain what factors lead to use, different independent variables are selected. It will be tested what factors increase the probability that carpoolers decide to use matching platforms.

In the following chapter, all selected variables are explained in depth or in other words, how one could specify transaction costs, benefits and network effects.

5 Conceptual model

The following chapter contains the operationalisation of selected explanatory factors. It is argued that making transaction costs measurable is difficult and initially there were few studies testing assumptions rising from transaction cost theory. But nowadays studies concerning transaction costs are especially those, which try to understand the diversity and

functioning of organisational structures. One has to consider specific contexts where these forms are embedded. For that reason, the measurement of transaction cost types, of benefits and network effects primarily refers to carpooling and carpooling matching platforms including features which probably confirm the hypotheses (Powell, 1990; Williamson, 1998). In this work, transaction costs are not defined as monetary values rather as mechanisms which impede or avoid exchanges between carpooling users and carpooling matching platforms. This idea should be taken into account when reading the next part.

5.1 Transaction cost types

Insufficient knowledge about how to use a matching platform leads to uncertainty among users. This information asymmetry can be impeded by establishing **information features** on the carpooling websites. These features reduce risk and users are informed about the matching process. Information features are divided into contact form, direct information given on the platform, experience reports, forum, blog and assessment tool. Almost every observed platform provides a contact form so that users can write messages to the carpooling agency. Secondly, the providers give information about the use of the platform on their websites. Some describe how carpooling works and what users have to do to find a suitable shared ride. Another feature is the provision of experience reports from users. The user-to-user information is especially helpful for travellers using matching platforms for the first time. The fourth item is the forum where users generally pose questions and get answers from other users. Administrators of the matching platform also participate in discussions and control user entries. Whereas a blog is rather independent of the platform meaning it makes information available for users which are not directly related to the matching process. A blog often includes stories or reports of a specific topic, in this case, for example of carpooling and sustainable mobility in general. The last item of information features is the assessment tool. This tool affords the opportunity to evaluate a shared ride meaning drivers and passengers judge the realised shared ride and how participants behaved. Other users of this matching platform can see preceding assessments. The given information about the users might be helpful if one searches a suitable driver or passenger (Alchian & Demsetz, 1972; Chan & Shaheen, 2012).

Enforcement costs can be reduced by providing features such as free **platform registration**, costless use and the appropriate type of payment method. The majority of matching platforms require users to register if they decide to use it. For that, contact and personal information of each user are needed. Some platforms request detailed personal information, but others only

ask for name, email and password. If one has to register for a specific platform, control costs can also be reduced, because the provider receives important information of each user and can safeguard a reliable exchange within the carpooling community.

Another related feature is the **free or paid usage** of a carpooling platform. Some providers can be used for free but there are platforms where users have to pay something if they make use of a shared ride. Paid usage can increase transaction costs and avoid that carpoolers decide to use this matching platform.

In relation to free or paid usage, the type of **payment method** can be relevant for users. If a shared ride is achieved, the passengers have to pay a certain amount of money to the driver, because carpooling is based on the sharing principle. It means drivers and passengers share the travel costs consisting of petrol for the route, costs for wear and possible parking costs. In some cases, drivers have to pay something to the carpooling provider. For that, the common payment method is cash, but one could imagine that other methods such as credit card, PayPal or direct debit authorisation would be selected if the matching platform provides the opportunity. A variety of payment methods might decrease transaction costs and increase usage of selected matching platform, due to the fact that drivers and passengers select the most suitable payment method.

Bargaining among carpool users can be simplified by implementing different **communication mechanisms** on platforms. Common tools are a discussion board or forum on the matching website, a blog where users write posts and lastly that users directly write messages to other users with support of a chat function. Communication facilities are very important for carpooling matching platforms, because they reduce uncertainty and information asymmetry existing among carpoolers if they have to decide for a certain platform.

As already pointed out, ICTs and **new technologies** enable easier and faster matching processes. It is not just that innovative technologies improve current traffic situation, they also improve the matching process for carpooling with tools such as apps or mobile web versions of the carpooling provider, the connection with social media with the result that carpoolers are able to use their own community to realise a shared ride and the implementation of Google Maps so that carpoolers who search a ride can easily check meeting points and travel route.

The **matching time** is another factor influencing users' decision. Carpoolers prefer to get a ride as quickly as possible so that the matching time matters in deciding for one platform. If the matching time is too long, users probably decide to utilise another matching platform.

Some carpooling agencies provide their websites in **multiple languages**. It reduces bargaining and information costs because all users of one community receive all relevant

information given on the matching platform. If the platform is only available in one or two languages, carpoolers could feel excluded and change the matching platform. This is especially important for providers offering their services in different countries.

Safety precautions are available on almost every carpooling platform. Data privacy is most common, because agencies have to present information about data privacy for instance in the site notice. To reduce transaction costs, further features could be relevant. If carpoolers share rides, insurances must be provided either through the carpooling agency or the users themselves. Accordingly, an insured shared ride through the provider could be one advantage for carpoolers. Thus the alternative is that users of carpooling have their own insurances. A fourth feature of safety precautions is that carpooling agencies control their users' profiles to guarantee reliability and prevent malpractice of non-serious users.

The last feature for reducing transaction costs is **gender-segregated** carpooling offers provided by matching platforms. Some users possibly prefer to join a shared ride which is only offered by men or by women. Either users explicitly give this information in their quotation texts or the carpooling matching platform has implemented a kind of button or box which can be used by carpoolers offering or searching a ride.

5.2 Benefits of using carpooling

In chapter 3.1.2 the most important benefits were emphasized. This study focuses on the importance of social, economic and environmental benefits for using carpooling in general, because it demonstrates the motivation of users and could be helpful in structuring a matching platform. Starting with economic benefits, it is well-known that **travel costs** can be reduced for the simple reason that carpoolers share their costs when driving together. But sharing a car can also result in reducing **travel time** and **parking costs**. Although other modes of transportation such as using trains could be faster than make use of carpooling, the reduction of travel time and parking costs is taken into account in the empirical observation due to the fact that travel time depends on contextual factors such as the road situation and selected travel route as well. But both factors could be relevant for travellers deciding for carpooling.

Another economic benefit is the reduction of **planning time**. One idea of web-based matching platforms is that they facilitate the matching process and reduce planning time for travellers. Offers are directly accessible and communication and information tools enable a straightforward exchange among carpoolers who want to share a ride. As a result reducing planning time could be important for users and motivate to use carpooling.

For asking about the importance of environmental benefits, the reduction of greenhouse gas emissions and the reduction of **traffic jam** are consulted in the analysis. It is argued that car ownership leads to **pollution** and climate change. If travellers decide to use carpooling instead of driving alone, it reduces CO_2-emissions and plays a part in contributing to environmental protection. The question is how important are environmental benefits to carpool users for their decision.

The third benefit is related to social interaction between users. If unknown people decide to share a car, one result is that they **meet new people by using carpooling**. As already pointed out, making use of carpooling could lead to acquaintances, friendships or even to married couples. In addition to this benefit, carpoolers also **share ideas and experiences with other carpoolers**. The exchange of ideas is probably an advantage of carpooling and could be of importance for users.

5.3 Network effects

Network effects of using carpooling matching platforms could possibly influence carpoolers' decision to use this alternative mode of transportation with support of matching platforms.

Trust is one factor affecting the use of platforms for carpooling. Sydow and Windeler (2004) differentiate between personal relation and systemic or institutional relation for building trust (Sydow & Windeler, 2004, p. 94). In terms of carpooling matching platforms, one has to divide trust into trust in selected platform and trust in other travellers using the same matching platform. The latter refers to the question if users of one platform trust in other users of the same carpooling community. In that case, it would increase the usage of carpooling matching platforms, because trust is a necessary condition for facilitating exchange of information among users.

A second factor is the **frequency of use** of matching platforms. If carpoolers regularly use one specific platform, it is more likely that they are content with the organisation of that platform and prefer to use this provider in the future.

In addition to frequency of use, **the number of options** and the **number of community users** could be further influencing factors. A high number of options are useful for all carpoolers, because they definitely will find a suitable shared ride. Communities of small initiatives or start-ups often contain low numbers of options, due to the fact that they were just launched and the number of users who could offer a ride is still small. That also means that the size of the community is crucial to find a shared ride and must be taken into account in the analysis.

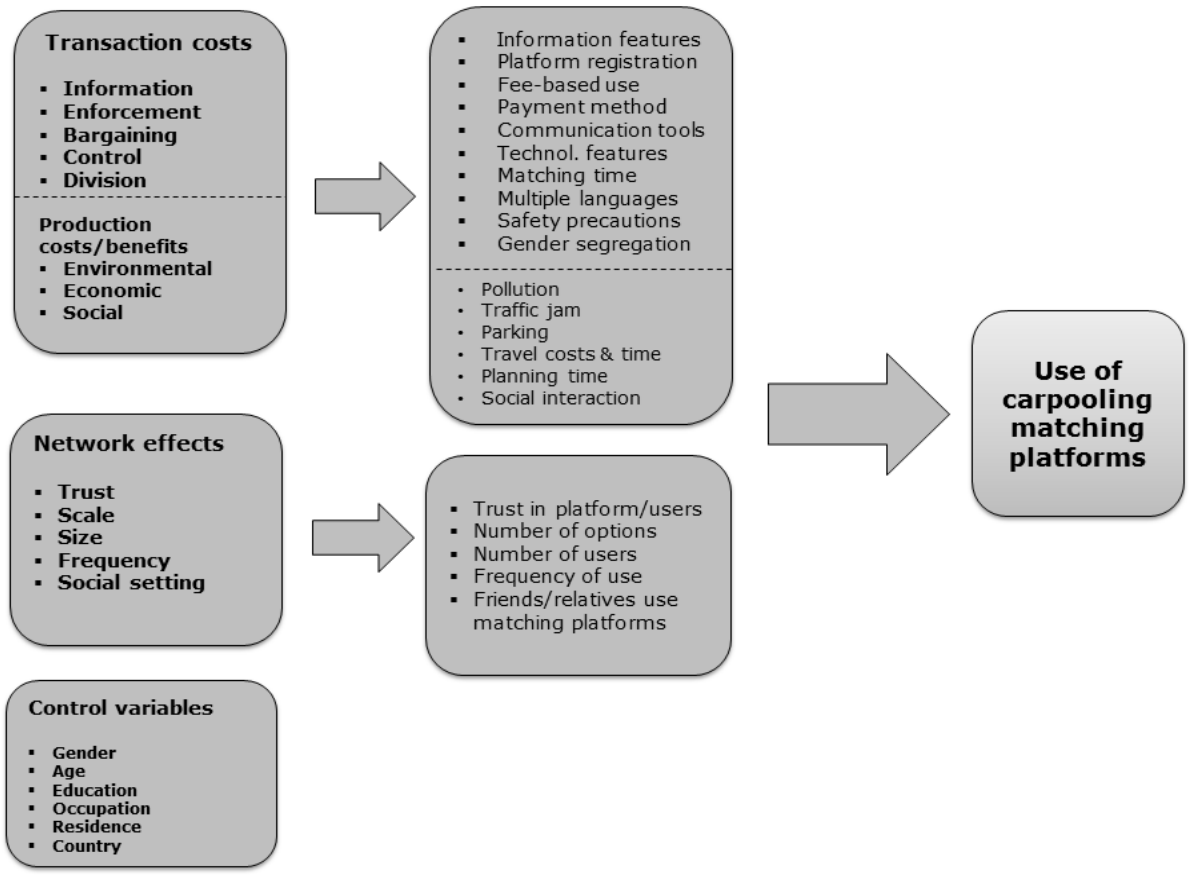
The last explanatory factor is that **friends or relatives use matching platforms**. In addition to social benefits, if friends or related persons of carpoolers make use of one carpooling matching platform, carpoolers probably decide to use matching platforms or even the same platform their friends use. The social setting can be important, because it positively influence carpoolers' decision.

5.4 Personal information

Demographic and socio-economic factors could also be relevant. Those are taken rather as control variables and to receive further information about people who make use of carpooling matching platforms and about people who do not use matching platforms for carpooling. Furthermore, it might be interesting to identify different user profiles with support of the information given by users and non-users.

Gender will be used to identify the number of males and females using matching platforms. **Age** will be grouped in seven different categories in years. The actual **level of education** and the **occupational status** provide further information about user types. **Residence** and **country** show the local distribution of carpooling users. Users will be asked to indicate actual residence and country (Buliung et al., 2010; Singhirunnusorn et al., 2012; Teal, 1987). Figure 3 summarizes the main factors for the study of carpooling matching platforms:

Figure 3: Conceptual model



Source: own development; based on transaction cost theory, network theory

6 Methods and data

In the following chapter, the research part is presented including a description of the research design, how the online survey was created and conducted and lastly, the data analysis with descriptive statistics and comparisons of means between users and non-users with selected factors. Furthermore, comparisons between three carpooling matching platforms highlight similarities and differences among web-based platforms for carpooling.

6.1 Research design

To find out the most important factors for deciding to use carpooling matching platforms, a cross sectional research design was chosen. The data are normally collected at one point in time, because "the objective is to get a "snapshot" or picture of a group" (Bourque, 2004, p. 230). This research design belongs to observational research methods. The units of analysis are often individuals, groups or institutions which present a selected population. The population studied should be heterogeneous so that the diversity of characteristics is presented

and one can draw conclusion about a larger group. Taking a cross sectional research design, different techniques to observe specific phenomena are conceivable, but the design is especially associated with survey designs and the conduction of interviews. For that, probability or systematic sampling is often chosen. The idea is to underline relationships between selected variables, develop frequencies and associations between factors. One major problem is external validity meaning to make generally applicable assumptions resulting from the study. This is often caused by low response rates (Bourque, 2004; Mann, 2003).

In this study, the units of analysis are individuals because the aggregation of individual opinions can show an optimal result how a matching platform should be structured to increase its use. Every person who knows carpooling can imagine how an online platform could be constructed. So the best way to find determining features of carpooling platforms is to ask persons who already have heard about carpooling (Hansen et al., 2010; Hawe et al., 2004; Provan et al., 2005; Sydow & Windeler, 2004).

6.2 Survey design

An online survey was developed to ask individuals about carpooling and the use of matching platforms. In contrast to paper-based surveys, online surveys are only provided through the Internet. Generally, an online questionnaire should be easy to complete and contains the most important questions. To conduct a survey with support of the Internet is usually fast and budget-friendly, because a variety of online tools give the possibility to set up surveys for free. Furthermore, authors argue that the conduction is flexible and researchers themselves decide on start and end time. Participants remain completely anonymous in contrast to conducting interviews, where researchers directly ask selected respondents (Duffy et al., 2005; Kaye & Johnson, 1999).

Kaye and Johnson (1999) formulated recommendations for developing online surveys. Firstly, to fill in the survey should be short-time and a clear wording of questions and instructions must be chosen so that participants are well-informed about research topic and aim. Secondly, researchers should take a simple design with just few graphics and tables. It is said that drop-down boxes keep the survey short so that participants can see various questions on one page and get an overview. Next it is crucial to conduct pre-tests and check functioning of the survey also with different Internet browsers. Pre-tests can help to identify content-related and functional mistakes (Kaye & Johnson, 1999).

The online survey which was conducted for this study was developed with LimeSurvey provided by the University of Twente. This online tool gives the possibility to create, conduct

and control surveys. The online survey was divided into three parts namely 'carpooling in general', 'carpooling matching platforms' and 'personal information' and consisted of 24 questions in total. It was formulated in English, German and Dutch to increase the sample size and reduce language barriers for participants. The instructions at the beginning shortly described the research aim and gave information of how to fill in the survey. Pre-tests have confirmed that the survey is easy to understand and that it can be answered within ten minutes[2]. From 22nd of January 2015 until 8th of February 2015, participants filled out the questionnaire. To attract more respondents, a raffle was used. Two participants were randomly selected and awarded with 10 € each after finishing the online questionnaire (LimeSurvey Manual, 2015; see Appendix B).

Nonprobability sampling was applied to distribute the survey among respondents, "because [if] there is no mechanism for random sampling the population of Web users, [then] nonprobability sampling is more appropriate when posting an online survey" (Kaye & Johnson, 1999, p. 326). It means that the sampling is not random due to the fact that only a specific subset of the population is addressed. Although Internet usage increases, there are still people who do not have access and cannot participate in online surveys. In 2014, 82% of citizens from the 28 EU member states have ever used the Internet, whereas 18% of EU citizens have never used it. This leads to biases in online research, but quantitative research with support of the Internet is growing so that this study has applied an online survey. Further, the topic is related to Internet usage because these platforms are only accessible with using the Internet or web-enabled mobile phones. Therefore, the population is mostly composed of people who use the Internet so that the conduction of an online survey is the most suitable method for this research topic (Duffy et al., 2005; Eurostat, 2015; Kaye & Johnson, 1999).

Users of carpooling and especially of carpooling matching platforms should be reached in this study. In the following, users are defined as people who make use of matching platforms for carpooling and non-users are those, who know carpooling, but make use of other facilities to find suitable shared rides for instance, with support of social media. Non-users are regarded as the reference group to figure out the most important features and benefits for users of matching platforms. The aim is to increase the use of carpooling by using matching platforms. Participants were mainly asked to value the importance of structural features, of the benefits occurring from using carpooling and of network effects. Next, it is described how the variables were measured.

[2] Seven persons have conducted the pre-tests. They checked the survey for wording, spelling and language mistakes. Also useful advices concerning layout and understanding of the questionnaire were given and included in the revised version.

The dependent variable is measured by asking the question: *Did you ever use a matching platform for carpooling?* This is a dichotomous nominal variable because respondents could choose *yes* or *no* as answers. The question was asked at the beginning of the survey. Respondents, who negated this question, were directly referred to question five due to the fact that questions two to four could only be answered by users of carpooling matching platforms.
The second question was referred to the type of carpooling user. Travellers can use carpooling as driver, passenger or as both. This question was important to identify different user profiles.
A third question which referred to get rather general information was what kind of matching platform respondents use most often. 13 different matching platforms were provided and respondents could also enter an additional platform. The provided platforms were selected because they primarily wanted to support the distribution of the survey. In the end, seven carpooling providers have allocated the survey within their own channels of communication[3].
Participants were further asked how they would evaluate their favourite platform. The items were usability, design, navigation, ride offers and data privacy of the selected platform. For that, a five-point Likert scale was used containing extremely poor, below average, average, above average and excellent as possible options. These two questions were relevant to get information on most used platforms and to create comparisons among users.
In regard to transaction cost types or more concrete to structural features and mechanisms reducing costs, participants received questions for each factor which were already described in chapter five of this work. Respondents decided on importance of provided information features which should be implemented on the platform to avoid information asymmetries and reduce uncertainty so that carpool users defer to use matching platforms. Six different features namely contact form, direct information on platform, experience reports, assessment tool, chat forum and blog were available and participants could rank features from very unimportant to very important[4]. In addition, respondents could select the most suitable communication tool. They chose between discussion board or forum, provision of a blog or that users could directly write messages to other community members. They could also say that no tool is important or write their most favoured tool down.

[3] 30 different carpooling providers were asked to support my online survey (Appendix A). 13 of these primarily wanted to support the research, but finally seven providers have distributed the survey with posts on their Facebook pages, on Twitter, on Google+ or in their forums. The supporters were: blablacar.de, carpoolworld.com, fahrgemeinschaft.de, berlinshuttle.de, fahrtfinder.net, mitfahr-monster.de and Ahacar.com.
[4] The measurement of importance of selected structural features was conducted using a 5-point Likert scale with items: very unimportant, unimportant, neither, important and very important. This scale was always used in this questionnaire for measuring the importance of features.

The most suitable payment method was measured asking respondents how they would evaluate the provided options (cash, credit card, PayPal and direct debit authorisation) with using a 5-point Likert scale of usefulness meaning from very useless to useful.

However, safety precautions were divided into four different features such as data privacy, insured shared ride through carpooling provider, insurance of driver/passenger is available and carpooling provider checks users' profiles. Participants were asked about importance of each feature.

Concerning the importance of matching time, people firstly were asked how quickly they usually find a suitable shared ride. Four options were provided: Under 15 minutes, between 15 and 30 minutes, between 31 and 60 minutes or over 60 minutes. Then a second question about matching time refers to the importance of a short matching time.

Another question has referred to technological features. Participants have evaluated the availability of apps or mobile web versions of carpooling platforms, of Google Maps on the websites and of social media facilities. Secondly, the importance of these features was asked.

The last question for analysing importance of platform features included a variety of factors like platform registration, gender segregation, multiple languages, free use of platform, and the importance of the mentioned technological features. It was directly asked how important users find selected characteristics for using carpooling matching platforms: *For your decision to use carpooling matching platforms, how important are the following features?*

In addition, the same question wording was used for asking for importance of social, economic and environmental benefits such as the reduction of CO_2-emissions, of pollution, of traffic jam, lower parking and travel costs, shorter travel time and time of planning a trip, sharing ideas or experiences with other passengers and lastly, the importance of meeting new people by using carpooling (Allen & Seaman, 2007; Brace, 2004; Bradburn, Sudman, & Wansink, 2004; Likert, 1932; Losby & Wetmore, 2012; Appendix B).

Taking network effects into account, the significance of trust was measured asking two questions. The first one has referred to the level of trust. At first, respondents had to rank the level of trust in other travellers using the same matching platforms and secondly how much they trust in the matching platform(s) they generally use. The scale was taken from one of the SOEP papers of the DIW with 'not trust at all', 'little trust', 'quite a bit of trust', 'a lot of trust' and additionally 'I don't know', because this scale refers to the level of trust in strangers and also in institutions (SOEP, 2009, p. 7). The second question was about the importance of trust in the selected matching platform using a 5-point Likert scale for measurement.

Furthermore, participants were asked how often they use a matching platform for carpooling. The options weekly, monthly, quarterly, annually and other were provided. With a second question concerning the frequency of use, it should be ascertained how many shared rides a carpooler uses per month when using various platforms and only when using the matching platform which is used most often. Respondents could divide between 0, 1, 2-3, 4-10, 11-20 or 21 or more shared rides per month. The development of the scales is premised on personal experiences of using a carpooling matching platform, due to the fact that no similar study exists which has applied comparable factors.

A third factor of network effects is the influence of the social setting or more concrete, that friends or relatives make use of matching platforms which probably influence carpoolers' decision to use carpooling more often. Two questions have referred to the independent variable. The first one asked how often friends or relatives use a matching platform. Six different options were offered namely never, rarely meaning distributed throughout the year, sometimes (once per month), very often (once per week), always (several times a week) and I don't know if respondents had no idea. Additionally participants had to decide about the importance of this factor for their decision.

Data of size and scale were self-collected. The scale, meaning the number of options a carpooling platform offers, was observed with five carpooling providers as examples. Within four days, the number of offers was measured taking comparable routes. Lastly, the sum of offers per platform was sorted into four groups namely communities with a high number of options, with a moderate number of options, with a low number of options and communities with no options during measurement time (Appendix C).

The size of one carpooling community was observed by asking carpooling providers about actual number of users or by checking their websites to find this information. The number of members of seven platforms was used because the exact number of registered users was available and these platforms were often mentioned in the questionnaire as favourite ones. The numbers of users can be divided into a large community, a medium-sized community, a small community, a start-up community or that no community is available (Allen & Seaman, 2007; Brace, 2004; Bradburn, Sudman, & Wansink, 2004; Likert, 1932; Losby & Wetmore, 2012; Appendix C).

The third part of the online survey contained questions referring to personal information of respondents. It was asked for gender, age, level of education, occupational status, country and actual residence. These independent variables were rather seen as control variables and used to make comparisons between participants of this questionnaire.

Age was measured by providing seven different groups: Under 15, between 15-17, 18-25, 26-35, 36-45, 46-65 and over 65 years old. It was decided to take groups for comparisons, because it is easier to analyse and the difference between a 16- and 17-year old boy is probably not very significant. However, the actual level of education was measured differently in the English, German and Dutch version of the online survey. The local education systems differentiate so that names of qualification were taken from all three systems. The English version has included the following options: primary school, secondary school, high-school diploma, bachelor's degree, master's degree, other qualification and no education. The differences were only taken for facilitate to complete the questionnaire, but it was not relevant for the data analysis. There, the focus lied on the English version. Occupational status was divided into pupil, student, employee, self-employed, without work and other. Questions about country and actual residence were formulated as open questions so that respondents had to write down their answers. These two variables were useful to see distributions of carpooling users in Europe (Appendix B).

6.3 Data collection and response rate

The data were collected by distributing an online survey with support of selected carpooling providers, Facebook groups and topic-related organisations found on Twitter.

In advance, carpooling providers were asked if they would like to support the research and distribute the online survey on their website, Facebook page or on Twitter. Seven platforms have posted the online survey including a short description and the appropriate link. Additionally, and to increase the response rate, the survey was also posted in various Facebook groups which provide carpooling offers. Although Facebook groups are differently structured, the users of those groups are often familiar with using a carpooling matching platform, because various platforms are connected to social media such as Facebook or Twitter. On Twitter, a variety of topic-related organisations were identified who shared the survey meaning they favoured or 're-tweeted' the post. For that topic-related keywords such as sustainability, sustainable mobility, sharing economy, carpooling or ridesharing were used to determine interest groups and organisations.

201 participants completely filled in the online survey. In addition to 201 complete answers, 153 did not fill it in completely, due to the fact that some people only clicked on the link but did not participate. The total number of persons who saw the link of the questionnaire is unknown, because the number of persons who saw it but did not participate is never visible on the Internet (Kaye & Johnson, 1999; Appendix B.d.).

7 Data analysis

In the following, the main results are presented. First of all, results of the questionnaire are described with regard to the three hypotheses. Extensive descriptive results are presented in Appendix D. The frequencies and values were calculated with the statistic software SPSS. Additionally, means were calculated and compared for each factor to find out what factors are the most relevant ones for users of web-based carpooling platforms.
Furthermore, the matching platforms blablacar, mitfahrgelegenheit and fahrgemeinschaft are selected to emphasize differences between platforms regarding structural features, benefits and network effects. The ANOVA tests give information about the significance of the factors or in other words, whether there is a difference between users of matching platforms and non-users. Detailed results can be found in Appendix E (Field, 2009; Keller, 2014).

7.1 Descriptive statistics and comparisons of means

As already mentioned, 201 persons participated in the online survey. Of these, 151 have ever used matching platforms for carpooling. 50 respondents negated this question. Of the participants who have ever used it, 11,9% use carpooling matching platforms as driver, 54,3% as passenger or they use it as passenger and as driver (33,8%).
In terms of personal information, 42,6% of respondents were male and 57,4% were female. The majority is between 18 and 25 years old (57,7%), have a bachelor's degree and are still students (41,4% and 65,2%). It was interesting to see where respondents live at the moment when answering this online survey. They come from 15 different countries thereof eleven European countries. Most participants come from Germany (138), the Netherlands (38) and Bulgaria (5). Further, 78 different cities or places were represented. 18 respondents live in Enschede (NL), 14 in Heidelberg and eleven in Freiburg (both GER) (Appendix D.a.).

7.1.1 First hypothesis: Structural features and use of carpooling matching platforms

The first hypothesis implies that if the transaction costs meaning information, enforcement, bargaining, negotiation and control costs of one matching platform are low, it is more likely that carpooling users decide to use carpooling matching platforms. The different types of transaction costs refer to structural features and elements of carpooling matching platforms which were already presented in chapter five. Table 2 gives an overview of all structural features and whether they are important for users of matching platforms. For that, the mean scores are calculated and results of ANOVA tests were interpreted:

Table 2: Mean comparisons for users and non-users with structural features

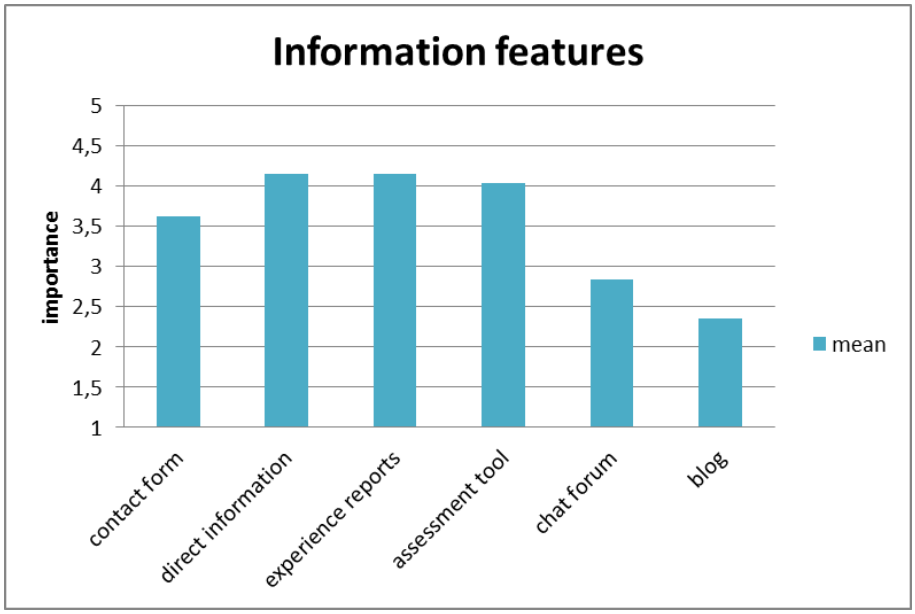
Factors	Mean of users	Mean of non-users	ANOVA
Transaction cost types			
Information features			
Contact form	3,62	3,65	F (1, 187)=0,034, p=.853
Direct information	4,13	4,24	F (1, 185)=0.583, p=.446
Experience reports	4,13	4,28	F (1, 188)=0,834, p=.362
Assessment tool	3,97	4,26	F (1, 186)=2,824, p=.095
Chat forum	2,75	3,09	F (1, 186)=3,437, p=.065
Blog	2,24*	2,68*	F (1, 185)=6,863, p=.010
Payment methods			
Cash	4,70*	4,06*	F (1, 193)=21,470, p=.000
Credit card	2,54*	3,23*	F (1, 190)=10,262, p=.002
PayPal	2,59*	3,62*	F (1, 186)=19,968, p=.000
Debit card	2,39*	3,19*	F (1, 189)=15,854, p=.000
Communication tools			
Discussion board	0,13*	0,26*	F (1, 199)=4,509, p=.035
Blog	0,01	0,06	F (1, 199)=3,409, p=.066
Messages	0,75	0,70	F (1, 199)=0,588, p=.444
No tool	0,17	0,18	F (1, 199)=0,016, p=.900
New technologies			
Apps/mobile web versions	4,16	4,27	F (1, 169)=0,310, p=.578
Google Maps	3,85	3,76	F (1, 173)=0.174, p=.677
Social Media	2,66*	3,43*	F (1, 171)=13,335, p=.000
Safety precautions			
Data privacy	4,18	4,45	F (1, 197)=3,503, p=.063
Insurance from provider	3,62*	4,14*	F (1, 189)=9,542, p=.002
Insurance of users	3,85*	4,21*	F (1, 190)=4,781,p=.030
Provider controls profiles	3,99*	4,45*	F (1, 194)=8,970, p=.003
Importance short matching time	4,18	4,32	F (1, 178)=0,953, p=.330
Short matching time	2,03	1,95	F (1, 156)=0,096, p=.757
Multiple languages	3,32	3,28	F (1, 185)=0,045, p=.832
Platform registration	3,30	2,98	F (1, 181)=2,017, p=.157
Free use	4,71*	4,34*	F (1, 188)=11,084, p=.001
Gender-segregation	2,43	2,79	F (1, 186)=3,353, p=.069

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options; communication tools could only be selected in questionnaire as most preferred one, so scale ranges between 0 for not selected tool and 1 for selection; length of matching time was measured with four options: 1= < 15 minutes, 2= 15-30 minutes, 3= 31-60 minutes, 4= > 60 minutes.

Respondents are informed about the use of one matching platform if the platform provides a contact form, show experience reports on the website, users have the possibility to use an assessment tool after a shared ride to evaluate it and give information for further users and lastly, that the website offers direct information for visitors of the website. A chat forum or a blog for stories and experiences with carpooling are not important. In particular, experience reports and the assessment tool were valued with important or very important (83,7% und 78,8%). The attendees meant that the provision of a chat forum or a blog on the carpooling websites is rather unimportant.

When looking at the mean scores of users and non-users, the values for non-users are generally higher than for users meaning that this group found the information features more important than users of matching platforms. Contact form, direct information provided on the website, experience reports and an assessment tool are important for non-users and for users, although the values for users are slightly lower. Due to the fact, that the values of these features are not significant, there are no differences between users and non-users. However, a chat forum or a blog are not crucial for both groups. The implementation of a blog is less important for users than for non-users. The mean score of 'blog' is significant so that there is a difference between people who use matching platforms and those, who do not use them regarding the unimportance of a blog.

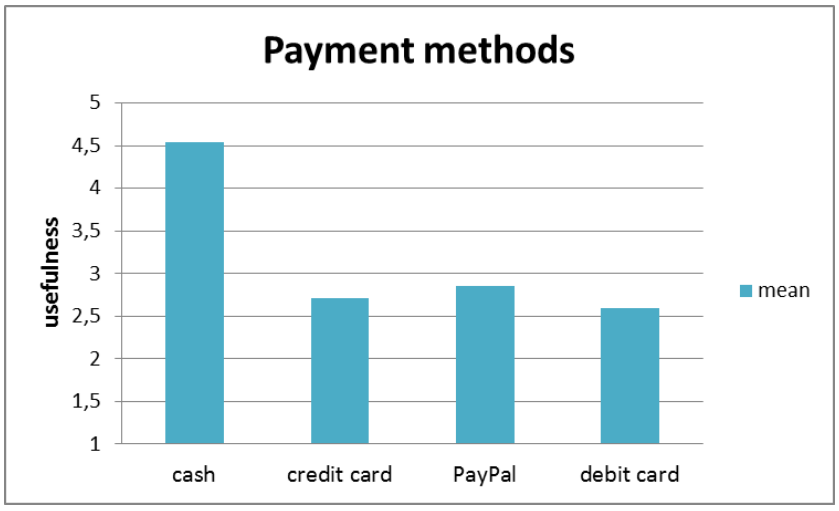
Figure 4: Mean scores of information features



Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

In terms of the payment methods, paying cash was preferred with almost 67%, whereas paying a shared ride with credit card or with PayPal was not chosen. The distribution for PayPal is not definitely assigned to one answer. However paying with debit card is not useful for respondents. 49,2% of participants stated that using a debit card is very useless or just useless. In regard to the mean scores of users and non-users, users rather prefer to pay cash than non-users, because the mean value is higher. Paying with credit card, via PayPal or with debit card is not useful respectively neither useful nor useless for users compared to non-users who found it neither useful nor useless or already useful (i.e. PayPal). In general, it implies that users of matching platforms prefer to pay their shared rides in cash in contrast to non-users. The factors are significant so that one can assume that there are differences between users and non-users concerning the usefulness of selected payment methods.

Figure 5: Mean scores of payment methods

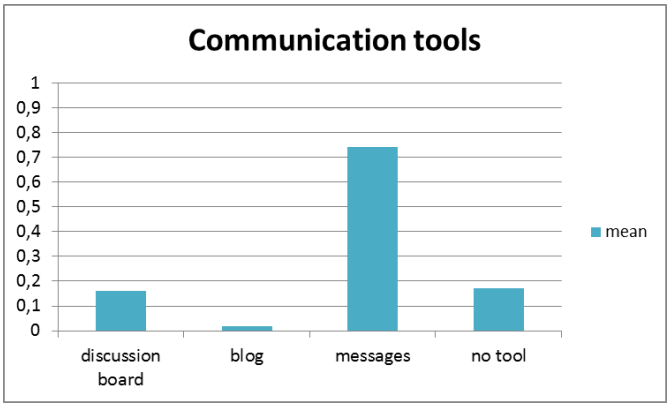


Note: 5-point Likert-Scale is used for usefulness of features: 1= very useless 2= useless, 3= neither, 4= useful, 5= very useful

Moreover, participants prefer to use 'messages' as communication tool. It means respondents prefer to communicate with writing and receiving messages via a selected platform (60%). Blog (2%) and discussion board (13%) were not favoured, whereas respondents often answered that using a phone is a good option to communicate with other carpoolers (15 respondents of 201). 14% replied that no tool is important for the communication.

In terms of the mean scores of users and non-users, the tool 'messages' has a high value which means that users and also non-users prefer to communicate with writing messages. Results of the ANOVA tests showed that there is no difference between users and non-users. However, there is a small difference between the selections of the tool 'discussion board'. The mean score for respondents who do not use carpooling platforms is higher than for users meaning that non-users rather chose a discussion board to communicate than users. The result is significant so that one can assume that there is a difference between users and non-users.

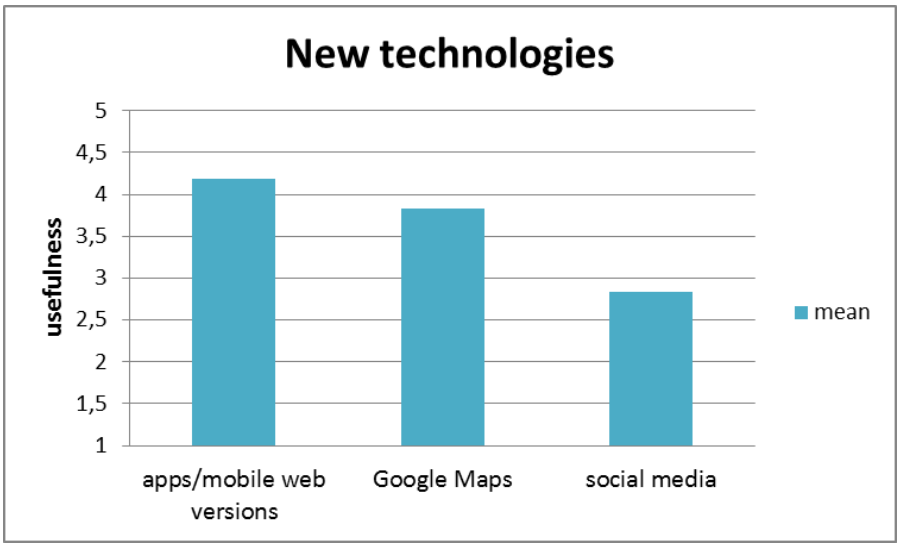
Figure 6: Mean scores of communication tools



Note: scale ranges between 0 for not selected tool and 1 for selection

The provision of new technologies and innovations on the carpooling websites could be one of the most important features for users to decide to use matching platforms. It was said that apps or mobile web versions of the provider and Google Maps are useful or also very useful, but the connection to social media is not useful. 30,1% replied that the connection to social media such as Facebook, Twitter or Google+ is neither useful nor useless and 26,6% found it rather useless. Results of question 18 confirmed that apps or mobile web versions and Google Maps provided on the carpooling platform are important for users, although 25,4% and 27,4% said that these features are neither important nor unimportant. The incorporation of social media is not important. Users of carpooling matching platforms found the connection to social media useless compared to non-users who found it rather useful than useless. Results of the ANOVA tests showed that there is a difference between people who make use of matching platforms and those who do not use these online services. One could argue that non-users found the connection to social media rather useful than users of matching platforms, because people who do not use matching platforms probably make use of social media to find a suitable shared ride. But people who use matching platforms are not dependent on social media such as Facebook groups to find carpool offers so that they found the connection between matching platforms and social media useless. The mean scores of apps or a mobile web version and of Google Maps are almost equal for both groups which imply that both groups thought that the features are useful when using matching platforms.

Figure 7: Mean scores of new technologies



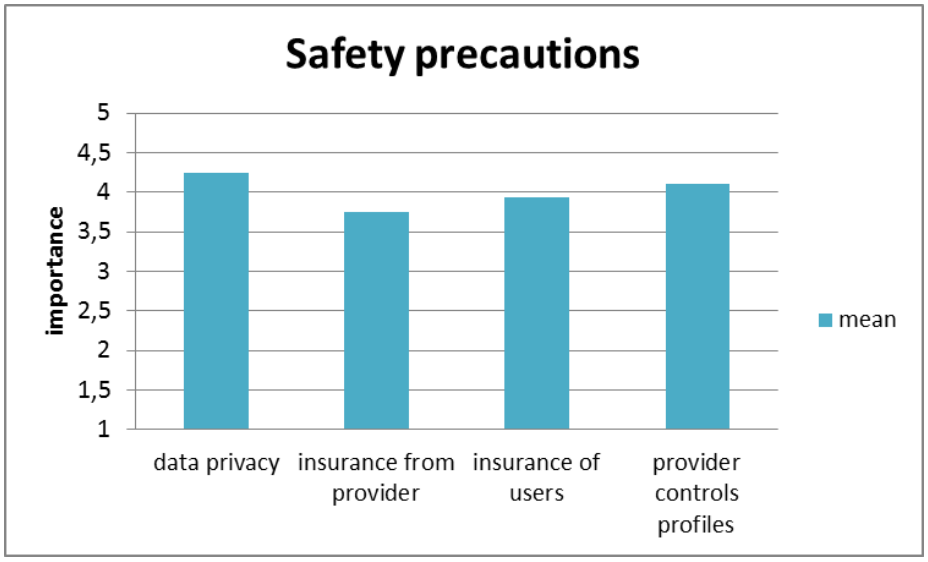
Note: 5-point Likert-Scale is used for usefulness of features: 1= very useless 2= useless, 3= neither, 4= useful, 5= very useful

The features of safety precautions were overall valued as important or very important. Data privacy is very important with 44,7% and the control of user profiles through carpooling

provider was rated with 41,8%. Similar values can be regarded for the importance of insurances from carpooling provider and of users.

Taking the mean scores of users and non-users into account, the mean scores of users are lower for all four items. Non-users found it more important than users that carpooling providers ensure the data privacy, offer insurances, carpool users have to be insured when using carpooling and lastly, that providers control users' profiles. ANOVA tests indicated that there is a difference between users and non-users in regard to insurances from the providers, insurances of the users and that the providers control profiles. One could assume that people who make use of carpooling platforms do not put much emphasis on these safety precautions, because they probably had positive experiences with the selected matching platform.

Figure 8: Mean scores of safety precautions



Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

In regard to matching time, most participants find a suitable shared ride very quickly meaning in less than 15 minutes (almost 40%). 32,3% usually find a shared ride between 15 and 30 minutes. The mean scores for users and non-users are almost equal or in other words, both groups normally find a suitable shared ride between 15 and 30 minutes.

A short matching time was valued as important when deciding to use carpooling matching platforms. The mean score of users is slightly lower than of non-users saying that non-users found it more important to find a suitable shared ride as quickly as possible than travellers who make use of matching platforms for carpooling. ANOVA tests showed that there is no difference between these two groups in regard to the importance of a short matching time.

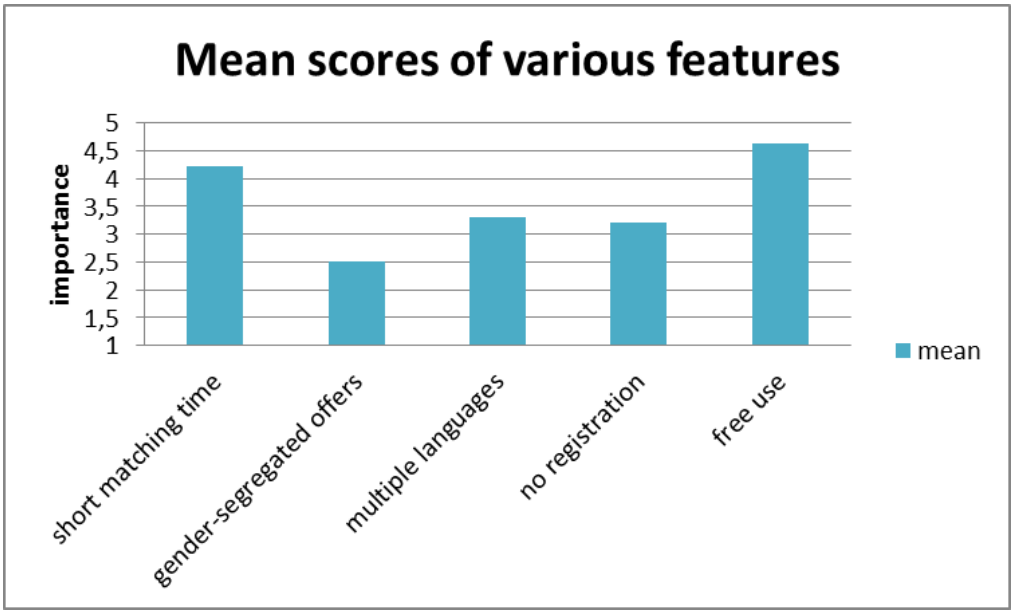
Further, gender-segregated ride offers are also not important or even very unimportant for respondents (52,2%). For users of matching platforms, gender-segregated offers are not

important compared to users who found it neither unimportant nor important. The mean score of non-users is higher than for users, but there is no difference between users and non-users when looking at the results of the ANOVA tests.

Of importance is that no registration is needed for using a platform, that the website is available in multiple languages and that the use is for free. 66,2% meant that it is very important to offer a free use of a carpooling matching platform.

Regarding the mean scores of users and non-users for these factors, free use of a matching platform is more important for users than for people who do not use these platforms for carpooling. Users found it very important that the platform can be used for free. There is a difference between the groups concerning a free use in contrast to the features 'no registration' and 'multiple languages' which were assessed as neither important nor unimportant or as slightly important in both groups.

Figure 9: Mean scores of various structural features

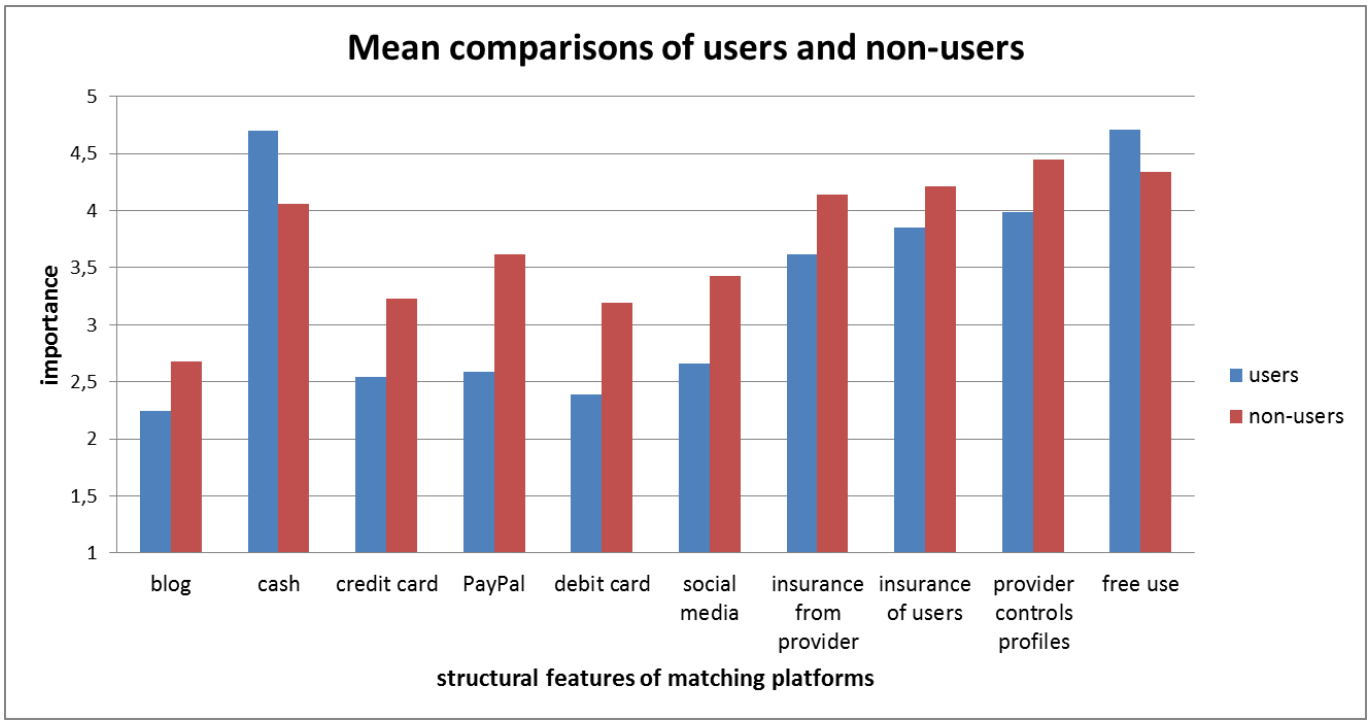


Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

Figure 10 shows differences between users and non-users. The factors are selected because the results of the ANOVA statistics showed significant results. To conclude, users found it more important to pay in cash and use a matching platform for free than non-users. Regarding the other factors, mean scores for non-users are higher than for users.

Concerning the first hypothesis, one can summarize that paying a shared ride in cash, use the matching platform for free, carpooling providers offer insurances to drivers and passengers, users themselves are insured and the providers control users' profiles are useful or important structural features for people who make use of carpooling matching platforms.

Figure 10: Mean comparisons of users and non-users with structural features



Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

7.1.2 Second hypothesis: Benefits and use of carpooling matching platforms

The second assumption is if the benefits for using carpooling are high, it is more likely that carpooling users decide to use carpooling matching platforms. Benefits are divided into economic, environmental and social benefits which can occur when people decide to use carpooling. Table 3 summarizes the benefits and whether they are important for users of matching platforms. The mean scores are calculated and results of ANOVA tests were interpreted in the following.

Table 3: Mean comparisons of benefits

Factors	Mean of users	Mean of non-users	ANOVA
Benefits			
Less CO2 emissions	3,48	3,29	F (1, 197)=0,912, p=.341
Less pollution	3,53	3,37	F (1, 196)=0,696, p=.405
Less traffic jam	3,03	3,09	F (1, 195)=0,068, p=.795
Lower parking costs	2,76*	3,38*	F (1, 194)=8,335, p=.004
Lower travel costs	4,68*	4,22*	F (1, 196)=12,270, p=.001
Lower travel time	3,87*	3,47*	F (1, 193)=4,869, p=.029
Lower planning time	3,58*	3,06*	F (1, 191)=12,190, p=.001
Sharing ideas and experiences	2,85*	2,39*	F (1, 197)=6,409, p=.012
Meeting new people	2,75	2,43	F (1, 198)=2,828, p=.094

Note: * < 0,05; ANOVA test for significance was applied; 5-point Likert Scale is used for measurement of importance

The selected benefits were differently valued by respondents. Participants answered that the reduction of CO_2-emissions (47,2%) and less pollution is important. The difference between

the mean values for users and non-users is very small saying that users found the reduction of CO_2-emissions and less pollution more important than respondents who do not use carpooling platforms. Nevertheless, the results of the ANOVA tests showed that there is no difference between users and non-users concerning the reduction of CO_2-emissions and less pollution.

Diminishing traffic jam is important for 31,5% of 197 answers for this question. Comparing non-users and platform users, there is no difference between the two groups. The reduction of traffic jam when using carpooling is neither important nor unimportant for them.

Whereas the answers for the importance of lower parking costs are almost equally distributed, meaning 20,4% thought that this benefit is very unimportant, 25% said that it is important and 24,5% meant it is neither important nor unimportant. In regard to the mean values of users and non-users, there is a difference between the groups which means that users found lower parking costs more unimportant than non-users who said that it is neither important nor unimportant.

In contrast, more than 69% of respondents answered that lower travel costs are very important for the decision to use carpooling. When looking at the means of users and non-users, the value of users is higher than of non-users meaning that users found it more important that carpooling generates lower travel costs than people who do not use web-based platforms for carpooling. There is a difference between these two groups regarding lower travel costs.

Similar answers were found for shorter travel time. 65,1% determined that this benefit is important or very important. The reduction of travel time due to carpooling is more important for users than for non-users. ANOVA statistics pointed out that there is a difference between the groups.

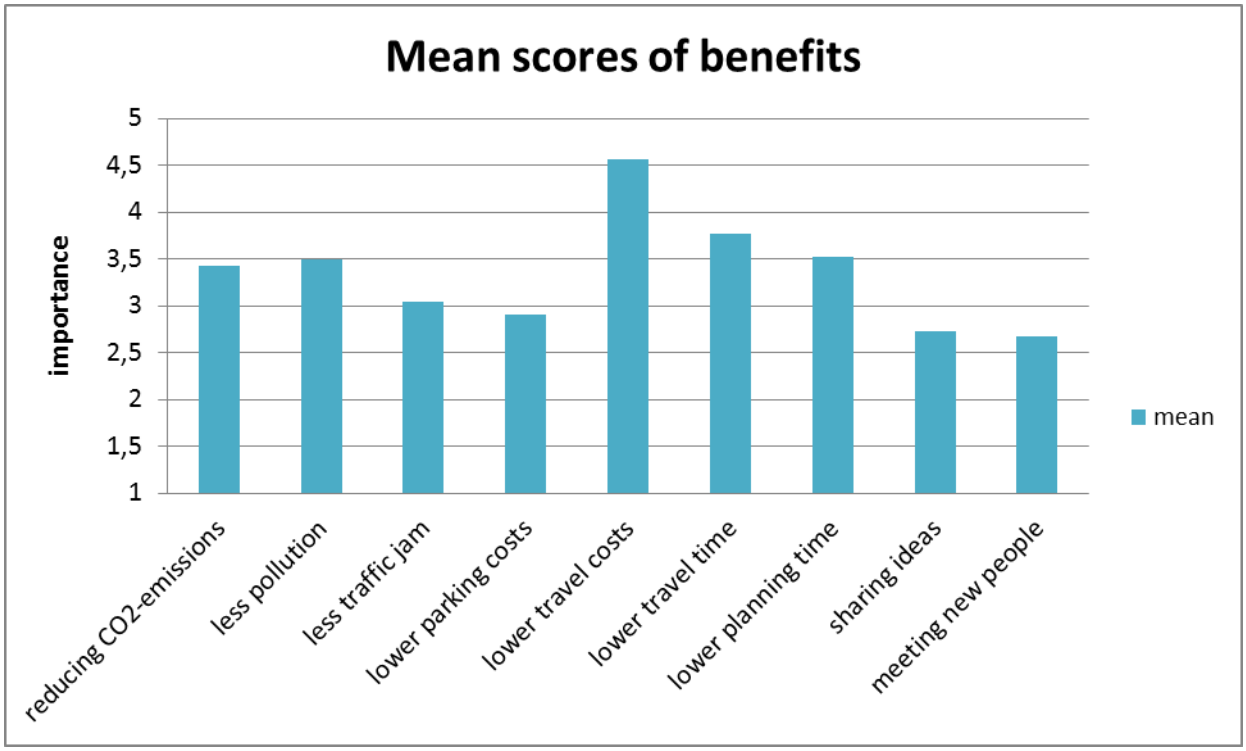
Shorter time of planning also obtained approval from respondents that it is an important benefit for deciding to use carpooling as mode of transportation (39,4%). Regarding the two groups, users and non-users, the mean score for users is higher than for non-users which signifies that the benefit ‘lower planning time’ is rather important for users than for non-users who assessed it neither as important nor as unimportant. The ANOVA tests confirmed the assumption that there is a difference between users and non-users in regard to the importance of shorter time of planning a trip.

Social benefits such as sharing ideas and experiences with unknown carpoolers and meeting new people are not important for participants. 41,1% replied that sharing ideas and experiences is unimportant and even very unimportant. Although the mean value of people who make use of matching platforms is higher than for non-users, sharing ideas and experiences with other carpoolers is neither important nor unimportant for them. More

concrete, non-users found it rather unimportant. The results of the ANOVA statistics indicated that there is a difference between users and non-users.

Further, respondents meant that meeting new people is not an important benefit if one has to decide to use carpooling. The mean score of carpool users is slightly higher than of non-users, but both groups found it rather unimportant and neither important nor unimportant to meet new people when using carpooling. There is no real difference between users and non-users and the importance of meeting new people when decide to use carpooling platforms.

Figure 11: Mean scores of benefits

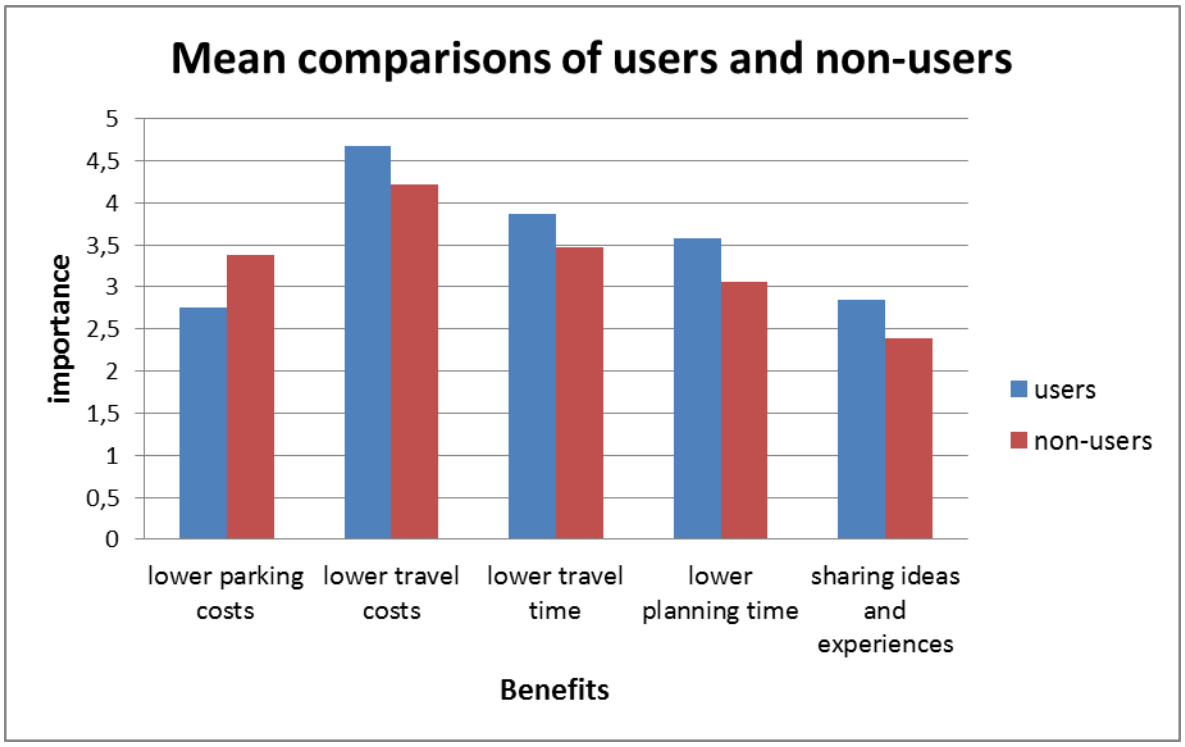


Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

Referring to the second hypothesis, lower travel costs, lower travel time and lower time for planning a trip are important benefits for people who use carpooling matching platforms. These features are also more important for users of the platforms than for non-users.

Figure 12 gives an overview of the mean scores for users and non-users. The five benefits were selected, because the ANOVA tests showed significant results for these factors meaning, that there is a difference between users of platforms and non-users in regard to these benefits.

Figure 12: Mean comparisons of users and non-users with benefits



Note: 5-point Likert-Scale is used for importance of features: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

7.1.3 Third hypothesis: Network effects and use of carpooling matching platforms

The last hypothesis refers to network effects meaning if the level of trust is high, the matching platform provides a large community with a variety of offers and friends or relatives make use of matching platforms, it is more likely that carpooling users decide to use carpooling matching platforms. The factors base on the network theory and are chosen in addition to the structural elements of matching platforms. In table 4, comparisons of the means between people who use matching platforms and those, who do not use them, are presented with results of the ANOVA statistics to identify differences between the two groups:

Table 4: Mean comparisons of network effects

Factors	Mean of users	Mean of non-users	ANOVA
Network effects			
Trust in other carpoolers using same platform	3,27	3,30	F (1, 189)=0,036, p=.849
Trust in matching platform(s)	3,34	3,39	F (1, 183)=0,108, p=.742
Importance of trust	4,12	4,26	F (1, 190)=0,746, p=.389
Size	1,1923*	1,5000*	F (1, 142)=4,075, p=.045
Scale	1,2667	1,5833	F (1, 100)=1,948, p=.166
Importance friends/relatives	2,41	2,52	F (1, 184)=0,302, p=.583
Frequency of friends/relatives	2,85	2,52	F (1, 198)=3,195, p=.075

Note: * < 0,05; ANOVA test for significance was applied; 5-point Likert Scale is used for measurement of importance; size and scale were differently measured; frequency of friends was measured with: 1= never, 2= rarely (distributed throughout the year), 3= sometimes (once per month), 4= very often (once per week), 5= always (several times a week), 6= I don't know

Concerning the frequency of use, the majority of respondents use this mode of transportation monthly or quarterly (74,2%). In addition, 65 persons who have ever used it, use one shared ride per month and 31 persons use it more often (2-3 shared rides per month).

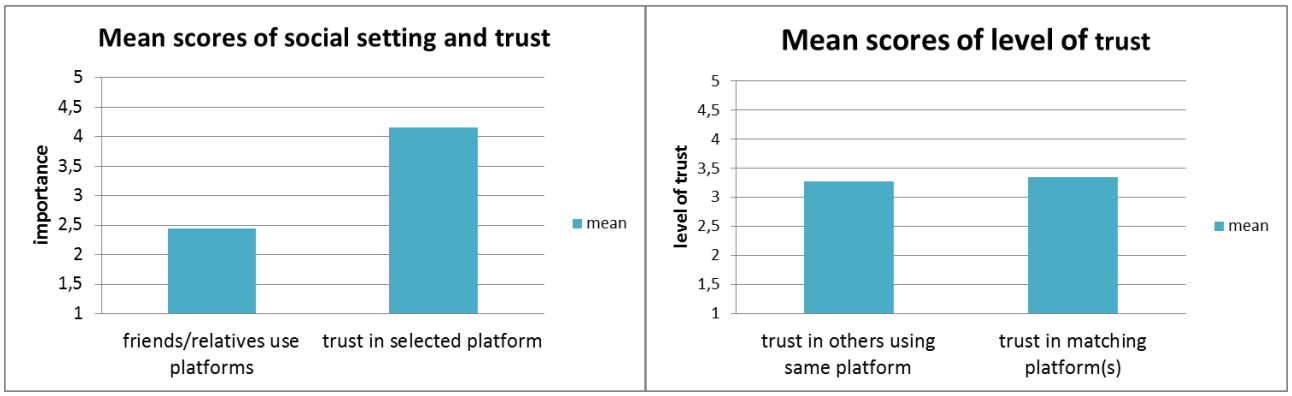
In regard to the question how many shared rides the people use if they select only one matching platform, 68 carpool users have one shared ride per month, but 29 have less than one shared ride per month or no shared ride.

Further, participants also should estimate how often their friends or relatives make use of matching platforms in general. This factor is selected because it is argued that the importance of the social setting is relevant for the decision to use carpooling matching platforms. 46,5% answered that their friends or relatives sometimes use it meaning once per month. However, 30,5% meant that friends or relatives rarely use it or in other words the use is distributed throughout the year. Only 7% thought that their friends use it very often (once per week). In addition, the mean of respondents who use matching platforms is higher than of non-users which imply that friends or relatives of platform users utilize it more often than friends or relatives of non-users. But there is no difference between users and non-users when interpreting the ANOVA statistics, because the values are not significant.

For respondents, it is not crucial that friends or relatives make use of carpooling matching platforms. More than 50% (51,6%) answered that it is unimportant and also very unimportant that friends or relatives use this alternative mode of transportation. This factor is not relevant for people when deciding to use carpooling. Regarding users of matching platforms and non-users, the mean scores of both groups are relatively low which signify that it is rather unimportant that friends or relatives use carpooling matching platforms.

Whereas trust in selected matching platform is very important (41,7%). Respondents generally have confidence in matching platforms. 47,6% responded that they have quite a bit of trust and 29,2% even have a lot of trust. Trust in others using the same matching platform was similarly assessed. For users of matching platforms and for non-users, the mean scores of both factors were almost equal meaning, that users and non-users have at least quite a bit of trust in other users who make use of the same platform and also generally in matching platforms. Additionally, both groups found it important to trust in selected platform when deciding to use carpooling.

Figure 13: Mean scores of social setting and trust



Note: 5-point Likert-Scale is used for importance of social setting and trust: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important; level of trust is measured with: 1=not trust at all, 2=little trust, 3=quite a bit of trust, 4=a lot of trust, 5= I don't know

Data for scale and size of a carpooling community were self-collected. 42,3% of platforms which were mostly selected are matching platforms with a high number of options. 16 respondents use a platform with a moderate number of options (8%). But one has to take into account that 99 answers could not be included in the measurement, because participants either chose another platform which was not included in this measurement or they chose Facebook groups or no platform as options. Facebook groups are not seen as matching platforms in this work and as a result, are excluded from measurement of this factor.

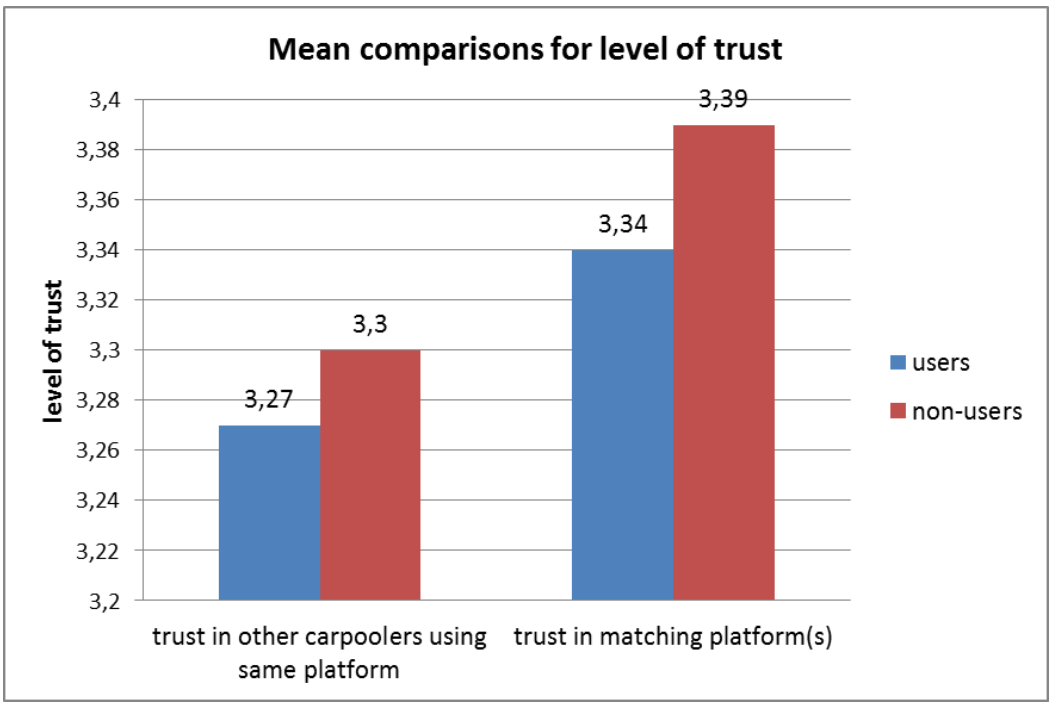
Users favour to use a platform with a high number of options or even with a very high number of options. However non-users prefer a platform with a high number of options, because the mean value is higher than for users. In other words, it means that users of matching platforms prefer to use a platform with many offers, whereas non-users prefer to use a platform with a little less offers than users. Results of the ANOVA statistics stated that there is no real difference between users and non-users in terms of the scale of a matching platform.

The same applies to the measurement of the size. 60,2% of respondents who make use of selected platforms use a large community meaning that more than a million people use this matching platform. 7% of selected platforms offer a medium-sized community and 4,5% a small community. 28,4% could not be included in measurement due to the fact that they also chose for using Facebook groups or other possibilities. Concerning the mean scores of users and non-users, the value of non-users is higher than of users. Non-users prefer to use a medium-sized community for carpooling and users favour a large community. The ANOVA statistics confirmed that there is a difference between the two groups (Appendix C, D.b.).

Figures 14 to 17 present the mean scores for users and non-users for every network effect. The ANOVA statistics showed that only the factor 'size' is significant which means that there is a difference between users of platforms and non-users. In regard to the third hypothesis,

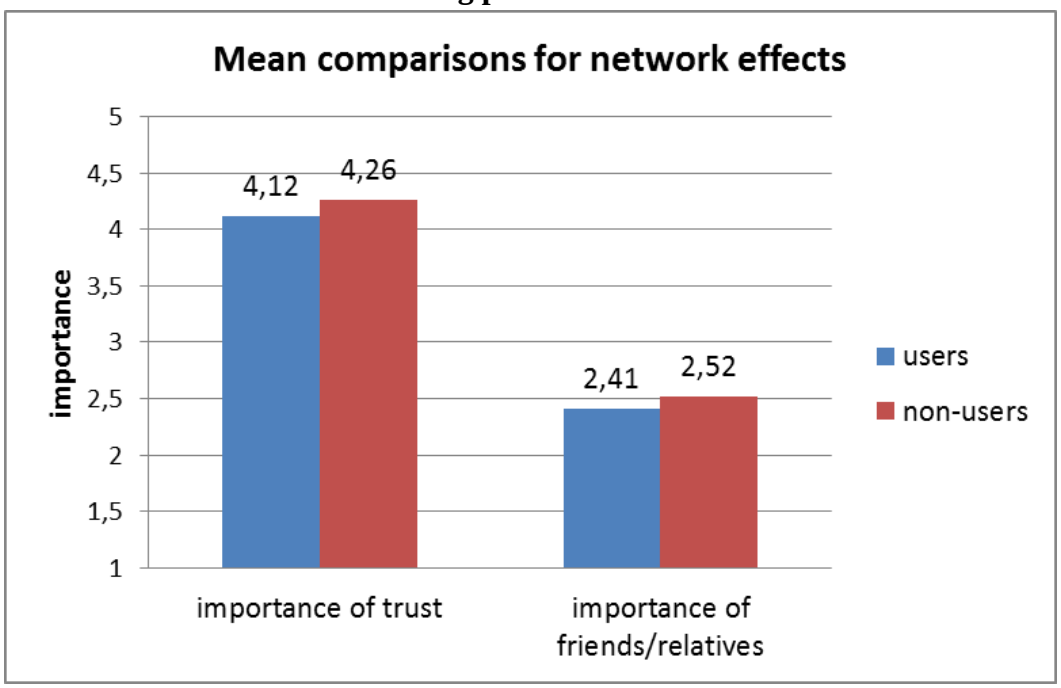
users and non-users trust in matching platforms and in other users of the same community, their friends or relatives sometimes make use of such a platform to find carpool offers and they mainly use a large community with at least a high number of options. But only the factor 'size' is significant, so that this assumption cannot be accepted.

Figure 14: Mean comparisons of users and non-users with level of trust



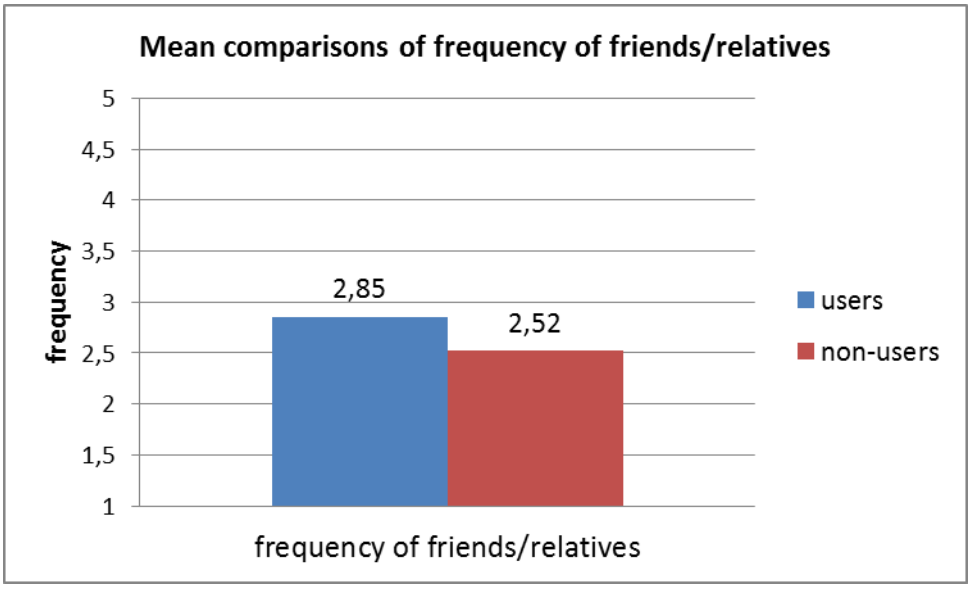
Note: Level of trust was measured with: 1= not trust at all, 2= little trust, 3= quite a bit of trust, 4= a lot of trust, 5= I don't know

Figure 15: Mean comparisons of users and non-users with importance of trust and that friends/relatives use matching platforms



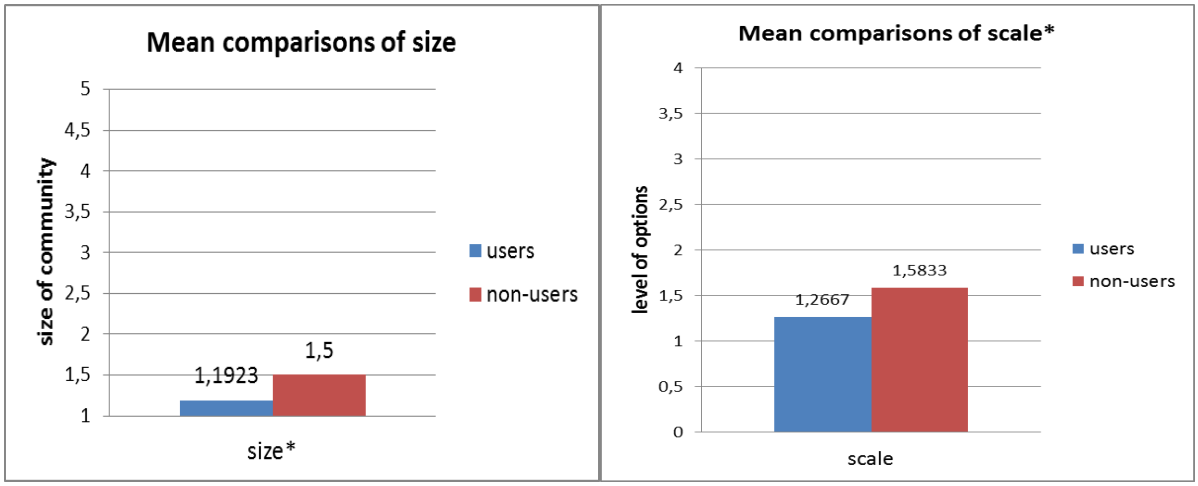
Note: 5-point Likert-Scale is used for importance: 1= very unimportant, 2= unimportant, 3= neither, 4= important, 5= very important

Figure 16: Mean comparisons of users and non-users with frequency of friends/relatives use matching platforms



Note: Frequency was measured with: 1= never, 2= rarely (distributed throughout the year), 3= sometimes (once per month), 4= very often (once per week), 5= always (several times a week), 6= I don't know

Figure 17: Mean comparisons of users and non-users with size and scale



Note: size was measured with: 1=large community, 2= medium-sized community, 3=small community, 4=start-up community, 5= no community; scale was measured with: 0= no options, 1= very high number of options, 2= high number of options, 3= moderate number of options, 4= low number of options

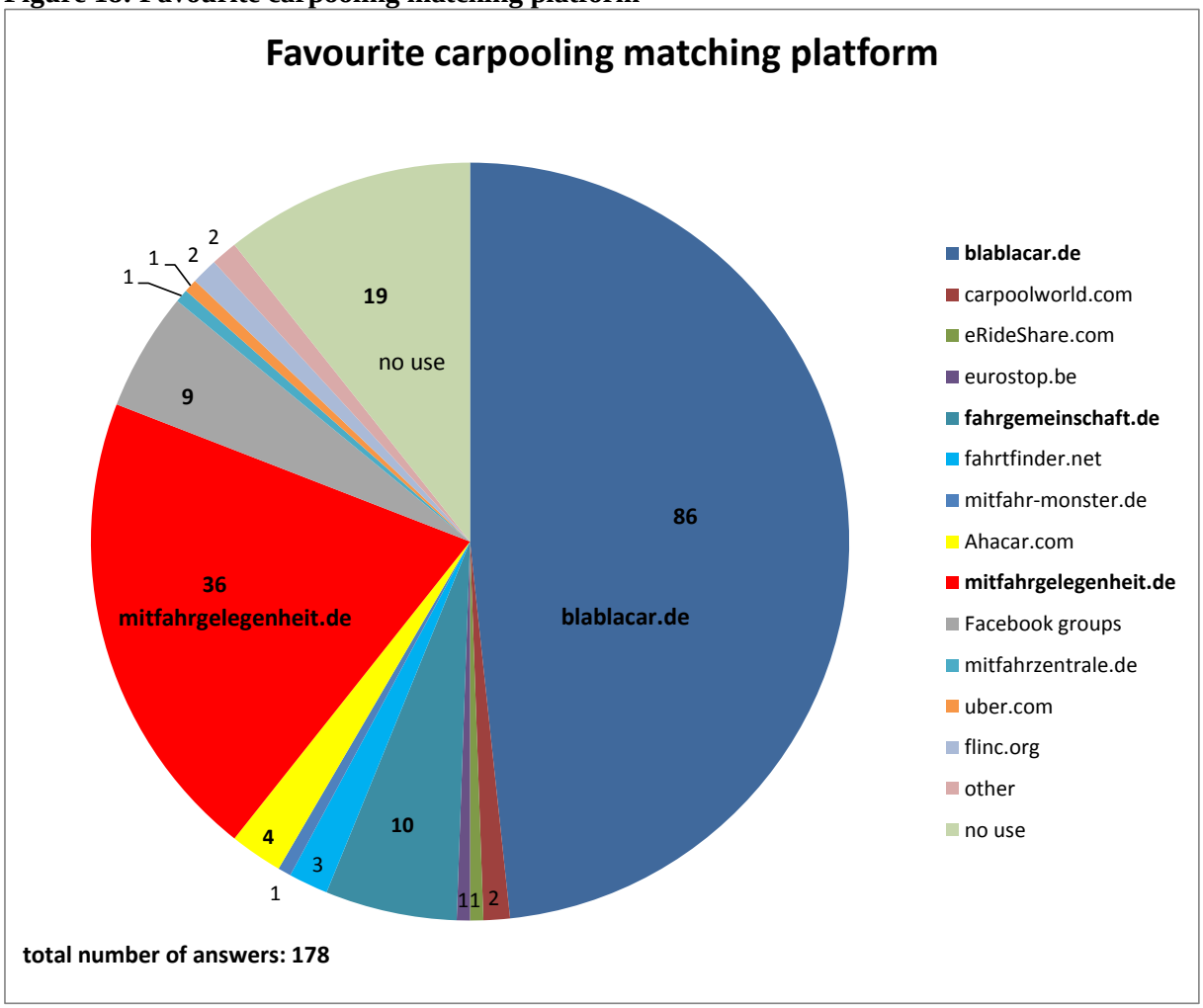
7.2 Comparison of carpooling matching platforms

In the following, three different carpooling matching platforms are selected and their features are compared with the results of the online survey to identify differences and similarities.

The most favourite used matching platform is blablacar. 86 of 201 respondents replied that they make use of this platform most often. Mitfahrgelegenheit is the second one followed by fahrgemeinschaft (36 and 10 respondents). Nine participants use carpooling with support of Facebook groups. It means that travellers inform about a shared ride by posting their offers or quests in one of the carpooling groups on Facebook. There are various groups depending on

the location. Carpoolers who are looking for a shared ride from Heidelberg to Frankfurt as example, would probably make use of a Facebook group called 'Mitfahrgelegenheiten Uni Heidelberg', because more than 4000 travellers are members of this group, so that it is more likely to find a suitable shared ride[5]. Figure 18 presents results of the question: *What matching platform do you use most often?*

Figure 18: Favourite carpooling matching platform



Source: frequency distribution from question 13; own calculation

Related to the question of the most favourite carpooling matching platform was the question: *How would you evaluate the matching platform you use most often?* Usability, navigation and ride offers were valued as above average. The design and data privacy are on average, but no characteristic was assessed either as extremely poor or as excellent. Users assessed that the navigation of the favoured matching platform is above average. People who do not use carpooling platforms estimated the navigation as on average. Non-users probably evaluated the tool they use for carpooling such as Facebook groups.

[5] More information about how to use a Facebook group for carpooling: https://www.facebook.com/groups/218069218270790/?fref=ts; Facebook group 'Mitfahrgelegenheiten Uni Heidelberg'.

The comparison of the means has emphasized the most important factors for using a carpooling matching platform. In addition to that, comparisons between the matching platforms blablacar, mitfahrgelegenheit and fahrgemeinschaft and selected factors will demonstrate whether the platforms actually have implemented the most relevant factors. These platforms were chosen due to the fact that the majority of respondents favoured to use one of the three to find suitable shared rides. In the following, the most interesting results are described and presented. Extensive results about the comparison between the platforms and chosen factors are provided in Appendix E.b.

To begin with various features of matching platforms, tables 5 to 7 give an overview of the mean comparisons for the selected carpooling platforms:

Table 5: Mean comparisons of selected structural features for blablacar

BLABLACAR			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Transaction cost types			
Free use	4,84*	4,54*	F (2, 166)=6,576, p=.002
Payment methods			
Paying cash	4,79*	4,58*	F (2, 172)= 8,120, p=.000
Credit card	2,48	2,74	F (2, 169)= 2,344, p=.098
PayPal	2,64*	2,68*	F (2, 165)= 3,741, p=.026
Debit card	2,40	2,51	F (2, 167)= 1,789, p=.170
Communication tools			
Discussion board	0,08	0,18	F (2. 175)= 1,761, p=.175
Blog	0,02	0,03	F (2, 175)= 0,210, p=.811
Messages	0,78*	0,76*	F (2, 175)= 3,533, p=.031
No tool	0,16	0,18	F (2, 175)=1,891, p= .154
Safety precautions			
Data privacy	4,30	4,11	F (2, 174)= 0,978, p=.378
Insurance from provider	3,79*	3,54*	F (2, 168)=4,146, p=.017
Insurances of users	3,90	3,88	F (2, 167)= 0,860, p=.425
Provider controls profiles	4,04	4,01	F (2, 171)= 1,454, p=.237

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options; communication tools could only be selected in questionnaire as most preferred one, so scale ranges between 0 for not selected tool and 1 for selection

Table 6: Mean comparisons of selected structural features for mitfahrgelegenheit

MITFAHRGELEGENHEIT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Transaction cost types			
Free use	4,63	4,72	F (2, 166)= 1,637, p=.198
Payment methods			
Paying cash	4,61*	4,72*	F (2, 172)= 4,507, p=.012
Credit card	3,14*	2,45*	F (2, 169)= 5,101, p=.007
PayPal	2,88*	2,62*	F (2, 165)= 3,286, p=.040
Debit card	2,66	2,42	F (2, 167)= 2,301, p=.103
Communication tools			
Discussion board	0,06	0,15	F (2, 175)= 1,213, p=.300
Blog	0,00	0,03	F (2, 175)= 0,768, p=.466
Messages	0,78*	0,77*	F (2, 175)= 4,101, p=.018
No tool	0,17	0,17	F (2, 175)= 2,184, p=.116
Safety precautions			
Data privacy	4,22	4,22	F (2, 174)=0,000, p=1
Insurance from provider	3,83*	3,64*	F (2, 166)=3,522, p=.032
Insurances of users	4,00	3,86	F (2, 167)=1,119, p=.329
Provider controls profiles	4,11	4,00	F (2, 171)=2,778,p=.065

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options; communication tools could only be selected in questionnaire as most preferred one, so scale ranges between 0 for not selected tool and 1 for selection

Table 7: Mean comparisons of selected structural features for fahrgemeinschaft

FAHRGEMEINSCHAFT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Transaction cost types			
Free use	4,78	4,69	F (2, 167)= 1,777, p=.172
Payment methods			
Paying cash	4,80	4,69	F (2, 173)= 6,467, p=.002
Credit card	2,30	2,63	F (2, 170)= 1,743, p=.178
PayPal	2,40	2,70	F (2, 166)= 3,785, p=.025
Debit card	2,40	2,48	F (2, 168)= 1,522, p=.221
Communication tools			
Discussion board	0,30	0,12	F (2, 176)= 1,318, p=.270
Blog	0,00	0,03	F (2, 176)= 0,322, p=.725
Messages	0,80	0,77	F (2, 176)= 3,583, p=.030
No tool	0,00	0,18	F (2, 176)= 2,920, p=.057
Safety precautions			
Data privacy	4,10	4,23	F (2, 175)=0,122, p=.885
Insurance from provider	3,11	3,72	F (2, 167)=4,547, p=.012
Insurances of users	3,89	3,90	F (2, 168)=0,853, p=.428
Provider controls profiles	4,20	4,01	F (2, 172)=1,637, p=.198

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options; communication tools could only be selected in questionnaire as most preferred one, so scale ranges between 0 for not selected tool and 1 for selection

Starting with structural features of the platforms, users of all three found it very important that the platform can be used for free or in other words, without paying any user charges.

Furthermore, respondents who do not use matching platforms or those who prefer other platforms also valued free usage as very important. There is a difference between blablacar-users and those, who user other options for carpooling.

Although all platform users answered that it is very important to use their services for free, only two of the three selected platforms can be used for free. Mitfahrgelegenheit has implemented a kind of agency fee, so that drivers have to pay a certain amount of money they received from the passengers to Mitfahrgelegenheit. More concrete, drivers pay 11% for each passenger to the carpooling provider when using this platform for finding fellow passengers. Besides, it means that travel costs could be higher when deciding for this carpooling platform than for blablacar or fahrgemeinschaft.

People who use one of the three matching platforms prefer to pay in cash. Respondents who use other modes to carpool also prefer other payment methods. They probably prefer other methods as well, because they are not experienced in using carpooling matching platforms. People who use blablacar, mitfahrgelegenheit or fahrgemeinschaft conceived other payment methods rather as useless or neither useful nor useless. Additionally, respondents who use other platforms also prefer to pay in cash and do not favour paying with credit- or debit card or via PayPal. Results of the ANOVA tests showed that there is a difference between users of the three selected platforms and respondents who use other options regarding the payment methods.

Users of blablacar and fahrgemeinschaft normally pay their shared rides in cash, because these platforms do not offer other payment methods such as paying with a credit card or via PayPal. Mitfahrgelegenheit in contrast has implemented two different payment methods. Firstly, users can pay in cash or they pay their shared rides in advance and use the online payment function. It means when passengers decide to join a shared ride, they have the possibility to pay before joining a carpool. For that, Mitfahrgelegenheit has developed a booking system for their community compared to the other two platforms where users can directly contact other users by writing messages or using the phone.

In addition, the most relevant communication tool for using a matching platform is writing messages with other users to arrange a trip. Users of all three platforms prefer to communicate with writing messages. However, people who use other platforms likewise prefer to use writing messages for communicating with others. The mean value for non-users is essentially lower regarding the tool ‘messages’ than for users of the three platforms and for users who are members of other carpooling websites, because non-users probably have no experiences with carpooling platforms and do not know how to organise a shared ride as easy as possible.

There is also a difference between blablacar, fahrgemeinschaft and mitfahrgelegenheit when looking at the three websites. Users of the first two platforms can directly contact other community members through writing messages or even through phoning each other. Whereas, mitfahrgelegenheit-users firstly have to confirm the booking before they receive contact information of the drivers.

In terms of safety precautions of one platform, the four items data privacy, insurance from provider, insurance of users is available and the providers control users' profiles were almost equally estimated from all groups of each platform as important. There is a difference between users of the three chosen platforms, users of other platforms and those who do not use matching platforms for carpooling concerning the factor 'insurance from provider', because the ANOVA tests showed a significant result for this factor. Non-users found it more important than users of the three platforms and users of other platforms that the carpooling provider offers insurances for drivers and passengers. One could argue that these people have no experiences with matching platforms and do not know that drivers and passengers are insured. If carpoolers have an accident, the third party insurance is responsible for instance in Germany.

Various benefits could be crucial for users of the three platforms to decide to use this mode of transportation. Tables 8 to 10 summarize the mean scores for selected benefits:

Table 8: Mean comparisons of benefits for blablacar

BLABLACAR			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Benefits			
Lower CO_2-emissions	3,56*	3,53*	F (2, 173)=5,413, p=.005
Less pollution	3,60*	3,51*	F (2, 173)=5,270, p=.006
Lower travel costs	4,72*	4,68*	F (2, 172)=12,108,p=.000
Lower planning time	3,57*	3,69*	F (2, 170)=6,191, p=.003

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options

Table 9: Mean comparisons of benefits for mitfahrgelegenheit

MITFAHRGELEGENHEIT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Benefits			
Lower CO_2-emissions	3,42*	3,57*	F (2, 173)=6,210, p=.002
Less pollution	3,47*	3,60*	F (2, 173)=6,071, p=.003
Lower travel costs	4,94*	4,63*	F (2, 172)=16,233,p=.000
Lower planning time	3,91*	3,55*	F (2, 170)=8,495, p=.000

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options

Table 10: Mean comparisons of benefits for fahrgemeinschaft

FAHRGEMEINSCHAFT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Benefits			
Lower CO_2-emissions	3,50*	3,54*	F (2, 174)=5,271, p=.006
Less pollution	3,50*	3,58*	F (2, 174)=5,246, p=.006
Lower travel costs	4,50*	4,71*	F (2, 173)=12,587,p=.000
Lower planning time	2,90*	3,68*	F (2, 171)=8,873, p=.000

Note: * < 0,05; ANOVA test for significance was applied. 5-point Likert Scale is mainly used with different options

Taking the benefits into account which occur due to using carpooling, reducing CO_2-emissions is important for users of blablacar, mitfahrgelegenheit and fahrgemeinschaft. Users of other matching platforms, in addition, also found the reduction of CO_2-emissions important. The mean scores for non-users comparing the three platforms is lower meaning that reducing CO_2-emissions is less important for people who do not use web-based platforms for carpooling. ANOVA tests showed that there is a difference between the three groups. The same applies for the importance of less pollution when using carpooling matching platforms. Users of the three platforms and other users assessed that less pollution is an important environmental benefit.

Another interesting result is, that lower travel costs is one of the most relevant factors when deciding to use carpooling. Although users of the three platforms and also users of other platforms found it important or rather very important to reduce travel costs, there is a slight difference between users of blablacar, mitfahrgelegenheit and fahrgemeinschaft. The highest mean value was calculated for users of mitfahrgelegenheit meaning that their users found it very important that the use of carpooling reduces the travel costs. Blablacar-users said that it is very important as well, but the mean score was slightly lower which implies that mitfahrgelegenheit-users found it more important to reduce travel costs when using carpooling than blablacar-users. In addition, the score of fahrgemeinschaft-users is lower than of blablacar- and mitfahrgelegenheit-users. For users of fahrgemeinschaft it is less important to reduce travel costs than for users of the other two platforms, but the mean scores of all are very high meaning that in general, this benefit is very important. The values for people who use another platform or also thought that this benefit is important were mainly lower than for users of the three platforms. ANOVA statistics confirmed that there are differences between the platforms and its users.

The same is true for the importance of lower planning time when using carpooling. Mitfahrgelegenheit-users found it more important that the time of planning a trip can be reduced than blablacar-users and fahrgemeinschaft-users. Furthermore, the difference of

values between the user groups shows that also users of other platforms assessed the lower planning time as important.

Considering the three platforms, environmental, economic and social benefits can be defined as incentives for users. In other words, blablacar, mitfahrgelegenheit and fahrgemeinschaft use the above mentioned benefits to attract more users. Especially environmental and economic benefits such as the reduction of CO_2-emissions or of travel costs are used to convince people deciding to use carpooling services.

In the following, the network effects size, scale, trust and frequency of friends or relatives use matching platforms are selected to show differences and similarities between the three platforms. Tables 11 to 13 summarize the mean scores of chosen factors:

Table 11: Mean comparisons of network effects for blablacar

BLABLACAR			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Network effects			
Size	1,0116*	1,5263*	F (2, 141)=4,845, p=.000
Scale	1,000*	2,8235*	F(1,100)=556,134,p=.000
Trust in others using same platform	3,39	3,17	F (2, 169)=2,562, p=.080
Frequency of friends/relatives	2,85*	2,90*	F 2, 174)=4,038, p=.019

Note: * < 0,05; ANOVA test for significance was applied; 5-point scale was used for level of trust: 1=not trust at all, 2=little trust, 3=quite a bit of trust, 4=a lot of trust, 5= I don't know; size and scale were differently measured; frequency of friends was measured with: 1= never, 2= rarely (distributed throughout the year), 3= sometimes (once per month), 4= very often (once per week), 5= always (several times a week), 6= I don't know

Table 12: Mean comparisons of network effects for mitfahrgelegenheit

MITFAHRGELEGENHEIT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Network effects			
Size	1, 0556*	1,2710*	F (2, 141)=3,196, p=.044
Scale	-	-	-
Trust in others using same platform	3,06*	3,38*	F (2, 169)=4,432, p=.013
Frequency of friends/relatives	2,80*	2,89*	F (2, 174)=4,331, p=.015

Note: * < 0,05; ANOVA test for significance was applied; 5-point scale was used for level of trust: 1=not trust at all, 2=little trust, 3=quite a bit of trust, 4=a lot of trust, 5= I don't know; size and scale were differently measured; frequency of friends was measured with: 1= never, 2= rarely (distributed throughout the year), 3= sometimes (once per month), 4= very often (once per week), 5= always (several times a week), 6= I don't know

Table 13: Mean comparisons of network effects for fahrgemeinschaft

FAHRGEMEINSCHAFT			
Factors	Mean of users	Mean of users of other platforms	ANOVA
Network effects			
Size	2,000*	1,1579*	F (2, 141)=14,234,p=.000
Scale	3,000*	1,1196*	F(1,100)=134,659,p=.000
Trust in others using same platform	2,90	3,33	F (2, 170)=2,567, p=.080
Frequency of friends/relatives	2,60*	2,89*	F (2, 175)=4,284, p=.015

Note: * < 0,05; ANOVA test for significance was applied; 5-point scale was used for level of trust: 1=not trust at all, 2=little trust, 3=quite a bit of trust, 4=a lot of trust, 5= I don't know; size and scale were differently measured; frequency of friends was measured with: 1= never, 2= rarely (distributed throughout the year), 3= sometimes (once per month), 4= very often (once per week), 5= always (several times a week), 6= I don't know

In regard to network effects, the level of trust in other carpoolers using the same matching platform was differently assessed by users of the three platforms. The mean score is higher for people who make use of blablacar than for users of the other two platforms. It implies that the level of trust is higher for blablacar-users than for mitfahrgelegenheit- and fahrgemeinschaft-users. In general, all users of the three platforms have at least quite a bit of trust in other carpoolers using the same matching platform.

Size and scale of the platforms were also differently evaluated. Blablacar- and mitfahrgelegenheit-users favour to use a large community, whereas fahrgemeinschaft-users preferably utilize a medium-sized community. ANOVA tests confirmed that there is a real difference between the platforms. When regarding the numbers of users, over 10 Mio. people are users of blablacar. Mifahrgelegenheit has over 5 Mio. registered users. Both platforms provide a large community. Fahrgemeinschaft in contrast, has rather a medium-sized community with approx. 150.000 users. The mean scores of users, who are members of other carpooling platforms, indicate that they generally use a large or medium-sized community to find a suitable shared ride. To conclude, results of the online survey showed that users of the platforms prefer a large or medium-sized community for carpooling. The contemporary number of members of each platform confirmed the results.

In terms of the scale, blablacar-users want to use a platform which provides very high number of options to find a carpool, whereas fahrgemeinschaft-users are content with a platform offering a moderate number of options. The results acknowledged the assumption, that a platform with a medium-sized community provides less offers than a large community such as blablacar or mitfahrgelegenheit which offers more shared rides.

The frequency that friends and relatives use matching platforms is equally estimated from users of all three platforms. In general, users of these platforms and also people who use other platforms for carpooling meant that their friends or relatives sometimes use carpooling

matching platforms meaning once per month. In general, the social setting as one network effect is not differently assessed from blablacar-, mitfahrgelegenheit- or fahrgemeinschaft-users (Blablacar, 2015, Fahrgemeinschaft, 2015, Mitfahrgelegenheit, 2015).

8 Results

The data analysis has identified the most relevant factors. In regard to the three hypotheses, one can ascertain that there are structural mechanisms of matching platforms diminishing different types of transaction costs and possibly enable collaboration between carpoolers and carpooling matching platforms.

Table 14: Overview of hypotheses

$H1_0 = 0$	If the transaction costs meaning information, enforcement, bargaining, negotiation and control costs of one matching platform are low, it is **not** more likely that carpooling users decide to use carpooling matching platforms.
$H1_1 \neq 0$	If the transaction costs meaning information, enforcement, bargaining, negotiation and control costs of one matching platform are low, it is more likely that carpooling users decide to use carpooling matching platforms.
$H2_0 = 0$	If the benefits for using carpooling are high, it is **not** more likely that carpooling users decide to use carpooling matching platforms.
$H2_1 \neq 0$	If the benefits for using carpooling are high, it is more likely that carpooling users decide to use carpooling matching platforms.
$H3_0 = 0$	If the level of trust is high, the matching platform provides a large community with a variety of offers and friends/relatives make use of matching platforms, it is **not** more likely that carpooling users decide to use carpooling matching platforms.
$H3_1 \neq 0$	If the level of trust is high, the matching platform provides a large community with a variety of offers and friends/relatives make use of matching platforms, it is more likely that carpooling users decide to use carpooling matching platforms.

Taken the mentioned factors into account which are associated with users of carpooling matching platforms, the first hypothesis can be accepted. Free use, the payment method ‘cash’ and safety precautions could decrease transaction costs and enable collaboration among users and matching platforms.

The same applies to the second hypothesis that is if the benefits are high, it is more likely that carpooling users decide to use matching platforms. The importance of lower travel time, travel costs and planning time are crucial when deciding to use carpooling meaning that the second hypothesis can be accepted as well.

The third assumption is that a high level of trust, that the matching platform provides a large community with a variety of offers and that friends or relatives make use of matching platforms lead to the probability that carpoolers decide to use carpooling platforms. Users of matching platforms prefer to use a large community for finding a shared ride so that the size of the matching platform plays a decisive role. Though, the third hypothesis cannot be accepted, because the other network effects are not crucial and there is no difference between users of carpooling platforms and non-users.

9 Conclusion and outlook

The results have showed that there are various factors which are important for people who filled in the online questionnaire. On the one hand, respondents mentioned that information features, communication tools and new technologies can support the use of a web-based carpooling platform. Additionally, a free use without any registration where users can pay a shared ride in cash and can use the platform in various languages, facilitate to use these online platforms. On the other hand, carpooling agencies should focus on the adherence of safety precautions such as data privacy to guarantee a serious and safe use, so that carpoolers decide to utilize this platform. Furthermore, users of matching platforms valued benefits such as less CO_2-emission, lower travel costs, lower travel time and less time of planning a trip as important factors. In regard to network effects, a high level of trust demonstrates that respondents generally have confidence in carpooling service provider. People who use carpooling platforms mainly utilize websites with large communities and a great number of ride offers.

The comparisons of the mean scores and the ANOVA statistics have indicated that the first and second hypothesis can be accepted. The third one only contains ‘size’ as a significant factor so that this assumption must be rejected.

To conclude, therefore, it seems that further observations need to be conducted to improve the results and to avoid threats to external validity meaning that the assumptions from the sample can be generalised to the population. For that, the size of the sample must be increased to formulate definite and general statements about selected factors and give a more concrete answer to the main research question: *What factors explain carpooler’s decision to use carpooling matching platform?*

In a next step, a correlation and regression analysis could highlight the strength or weakness of explanatory variables and it would show to what extent these factors correlate with each other.

With relation to the selection of the factors possibly explaining the use of carpooling matching platforms, additional factors could also be relevant for this study. Teal (1987) pointed out that individual factors such as the attitude towards carpooling or the convenience or inconvenience concerning this alternative mode of transportation could be explanatory factors as well. In addition psychological factors for instance whether travellers had good or bad experiences with carpooling services, should be taken into account in further empirical studies.

This study has focused on structural elements provided by different carpooling matching platforms. The research of these platforms has identified many factors and a variety of these are decisive for users of carpooling matching platforms. If the carpooling agencies implement these on their platforms and communicate them, users are probably more likely to use the matching platform to find a suitable shared ride. It is argued that a strategic developed matching platform would satisfy its users and at the best address new users. What is needed to reach this aim in the future? This empirical analysis had made a first starting point to find out, what really explains users' decision to make use of carpooling platforms. The results support the assumption that transaction problems can be avoided by implementing suitable elements on the platforms.

The idea is to develop an organisational form for carpooling agencies and their platforms so that more people decide to use this mode of transportation in the future. The use of carpooling matching platforms can decrease environmental problems resulting from the increase of car ownership and air pollution. In that sense, one should rather change and optimise already existing forms of organisation than develop new organisations which are randomly structured, but do not lead to an increased use of carpooling.

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Appendix

A. Carpooling matching platforms in Europe

Table 3: Carpooling matching platforms in Europe

Carpooling matching platforms in Europe
Mitfahrzentrale.de
Mitfahrgelegenheit.de
blablacar.de
karzoo.nl
mitfahren.de
Roadsharing.com
Hitchhikers.org
carpoolworld.com
bessermitfahren.de
Toogethr.com
sharemyfare.com
carmacarpool.com
carpoolen.nu
rideforcents.org
mitfahrangebot.com
eRideShare.com
mitfahrclub.adac.de
nochplatz.de
fahrmit.de
carpool.be
fahrgemeinschaft.de
flinc.org
joinants.com
Aha!Car.com
liftshare.com
mitfahr-monster.de
mifaz.de
vonanachb.raumobil.de
berlinshuttle.de
fahrtfinder.net

B. Questionnaire

a. Questionnaire in English

Use of European carpooling provider

Dear participant,

The following questionnaire is about the use of carpooling and European matching platforms.
A carpooling matching platform is defined as an "Internet notice board[]" used by carpooling provider to offer shared rides.
This online survey will take about 10 minutes. There are no right or wrong answers.
Of course, your answers are intended for research purposes and remain anonymous.

Among the respondents, I will give away two times 10 € as travel money for the next carpool!

Thank you for your participation

Eva Kesternich

Carpooling and its use in general

The following questions are about the general use of carpooling and ask why travelers decide to use matching platforms.

1 Did you ever use a matching platform for carpooling?

Please choose **only one** of the following:

- ○ Yes
- ○ No

2 Do you use carpooling matching platforms as driver, passenger or both?

Please choose **only one** of the following:

- ○ driver
- ○ passenger
- ○ both

3 How often do you use a matching platform for carpooling?

Please choose **only one** of the following:

○ weekly

○ monthly

○ quarterly

○ annually

○ Other

4 How many shared rides do you have per month?

Please choose the appropriate response for each item:

	0	1	2-3	4-10	11-20	21 or more
in total	○	○	○	○	○	○
with use of the matching platform you use most often	○	○	○	○	○	○

5 How often do your friends/relatives use matching platforms?

Please choose **only one** of the following:

○ never

○ rarely (distributed throughout the year)

○ sometimes (once per month)

○ very often (once per week)

○ always (several times a week)

○ I don't know

6 For your decision to use carpooling, how important are the following benefits?

Please choose the appropriate response for each item:

	very unimportant	unimportant	neither	important	very important
the reduction of CO2 emissions	○	○	○	○	○
less pollution	○	○	○	○	○
less traffic jam	○	○	○	○	○
lower parking costs	○	○	○	○	○
lower travel costs	○	○	○	○	○
shorter travel time	○	○	○	○	○
shorter time of planning a trip	○	○	○	○	○
sharing ideas/experiences with other passengers	○	○	○	○	○

	very unimportant	unimportant	neither	important	very important
meeting new people by using carpooling	○	○	○	○	○
your friends/relatives use carpooling matching platforms	○	○	○	○	○

7 How much do you trust...?

Please choose the appropriate response for each item:

	not trust at all	little trust	quite a bit of trust	a lot of trust	I don't know
...other travelers using the same matching platform?	○	○	○	○	○
...matching platform(s) you use?	○	○	○	○	○

8 For your decision to use carpooling, how important is that you can trust the selected matching platform?

Please choose **only one** of the following:

○ very unimportant

○ unimportant

○ neither

○ important

○ very important

Carpooling matching platforms

Questions about features of carpooling matching platforms and their importance for using carpooling.

9 How do you prefer to communicate with other users?

Please choose **all** that apply:

☐ discussion board/forum

☐ blog

☐ chat/messages to other users

☐ no tool is important

☐ Other:

10 How important are the listed features of safety precautions for you?

Please choose the appropriate response for each item:

	very unimportant	unimportant	neither	important	very important
data privacy	○	○	○	○	○
insured shared ride through carpooling provider	○	○	○	○	○
insurance of driver/passenger available	○	○	○	○	○
carpooling provider checks users' profiles	○	○	○	○	○

11 How would you evaluate the payment methods for using carpooling matching platforms?

Please choose the appropriate response for each item:

	very useless	useless	neither	useful	very useful
cash	○	○	○	○	○
credit card	○	○	○	○	○
PayPal	○	○	○	○	○
direct debit authorisation	○	○	○	○	○

12 How important are the listed features for you to be informed about the use of one matching platform?

Please choose the appropriate response for each item:

	very unimportant	unimportant	neither	important	very important
contact form	○	○	○	○	○
direct	○	○	○	○	○

	very unimportant	unimportant	neither	important	very important
information on platform					
experience reports	○	○	○	○	○
assessment tool	○	○	○	○	○
chat forum	○	○	○	○	○
blog	○	○	○	○	○

13 What matching platform do you use most often?

Please choose **only one** of the following:

○ blablacar.de

○ carpoolworld.com

○ Toogethr.com

○ sharemyfare.com

○ eRideShare.com

○ nochplatz.de

○ eurostop.be

○ fahrgemeinschaft.de

○ joinants.com

○ liftshare.com

○ berlinshuttle.de

○ fahrtfinder.net

○ mitfahr-monster.de

○ Other

14 How would you evaluate the matching platform you use most often?

Please choose the appropriate response for each item:

	extremely poor	below average	average	above average	excellent
usability	○	○	○	○	○
design	○	○	○	○	○
navigation	○	○	○	○	○
ride offers	○	○	○	○	○

	extremely poor	below average	average	above average	excellent
data privacy	○	○	○	○	○

15 How quickly do you usually find a suitable offer using one matching platform?

Please choose **only one** of the following:

○ < 15 minutes

○ 15-30 minutes

○ 31-60 minutes

○ > 60 minutes

16 For your decision to use carpooling matching platforms, how important is to find a shared ride as quickly as possible?

Please choose **only one** of the following:

○ very unimportant

○ unimportant

○ neither

○ important

○ very important

17 How would you evaluate the provided applications for using matching platforms?

Please choose the appropriate response for each item:

	very useless	useless	neither	useful	very useful
apps/mobile web version	○	○	○	○	○
google maps	○	○	○	○	○
connection with social media	○	○	○	○	○

18 For your decision to use carpooling matching platforms, how important are the following features?

Please choose the appropriate response for each item:

	very unimportant	unimportant	neither	important	very important
no registration for using matching platform	○	○	○	○	○
gender-segregated carpooling offers	○	○	○	○	○
platform available in various languages	○	○	○	○	○
use of platform is free	○	○	○	○	○
short matching time	○	○	○	○	○
app/mobile web version is available	○	○	○	○	○
google maps is used on platform	○	○	○	○	○
connection with social media	○	○	○	○	○

Personal information

19 What is your gender?

Please choose **only one** of the following:

○ Female

○ Male

20 How old are you?

Please choose **only one** of the following:

○ < 15

○ 15 - 17

○ 18 - 25

○ 26 - 35

○ 36 - 45

○ 46 - 65

○ > 65

21 What is your actual level of education?

Please choose **only one** of the following:

○ primary school

○ secondary school

○ high-school diploma

○ bachelor's degree

○ master's degree

○ other qualification

○ no education

22 What is your occupational status?

Please choose **only one** of the following:

○ pupil

○ student

○ employee

○ self-employed

○ without work

○ other

23 In which country do you live?

Please write your answer here:

24 In which city do you live?

Please write your answer here:

Win 10€ for your next carpool trip!

If you want to participate in the raffle, please write your e-mail address in the box:

25 If you want to participate in the raffle, please write your e-mail address in the box:

Please write your answer here:

Thank you for participating in this survey!

If you are interested in the final results or have any questions,
do not hesitate to contact me: *e.m.kesternich@student.utwente.nl*

With kind regards

Eva Kesternich

Submit your survey.

---

b. Questionnaire in German

Nutzung von Europäischen Mitfahrgelegenheitsanbietern

Sehr geehrte(r) Teilnehmer(in),

in dem folgenden Fragebogen geht es um die Nutzung von Mitfahrgelegenheiten und Europäischen webbasierten Vermittlungsplattformen.
Eine Mitfahrgelegenheitsplattform wird definiert als eine Online-Plattform, die von Mitfahrgelegenheitsanbietern genutzt wird, um Mitfahrgelegenheiten anzubieten und zu vermitteln.
Dieser Survey dauert maximal 10 Minuten. Es gibt keine richtigen oder falschen Antworten.
Ihre Antworten werden ausschließlich zu Forschungszwecken verwendet und vertraulich behandelt.

Unter allen Teilnehmern/Teilnehmerinnen werden zweimal 10 € als Reisegeld für den nächsten Mitfahrgelegenheits-Trip verlost!

Vielen Dank für Ihre Teilnahme

Eva Kesternich

Mitfahrgelegenheit und allgemeine Nutzung

Die folgenden Fragen sind über die generelle Nutzung von Mitfahrgelegenheit und wieso Reisende sich dazu entschließen webbasierte Vermittlungsplattformen zu nutzen.

1 Haben Sie schon einmal eine webbasierte Mitfahrgelegenheitsplattform genutzt? *

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ Ja

○ Nein

2 Verwenden Sie Mitfahrgelegenheitsplattformen als Fahrer, Mitfahrer oder beides?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ Fahrer/In

○ Mitfahrer/In

○ Beides

3 Wie oft nutzen Sie Online-Plattformen um eine Mitfahrgelegenheit zu finden?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ Wöchentlich

○ Monatlich

○ Vierteljährlich

○ Jährlich

○ Sonstiges

4 Wie viele Mitfahrgelegenheiten nutzen Sie pro Monat?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	0	1	2-3	4-10	11-20	21 oder mehr
Im Allgemeinen	○	○	○	○	○	○
Wenn Sie nur die Online-Plattform verwenden, die sie am häufigsten nutzen	○	○	○	○	○	○

5 Wie oft nutzen Ihre Freunde/Verwandten Mitfahrgelegenheitsanbieter?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ nie

○ selten (über das Jahr verteilt)

○ manchmal (einmal im Monat)

○ sehr oft (einmal pro Woche)

○ immer (mehrmals pro Woche)

○ ich weiß es nicht

6 Für Ihre Entscheidung Mitfahrgelegenheiten zu nutzen: Wie wichtig sind Ihnen die folgenden Vorteile?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr unwichtig	unwichtig	weder...noch	wichtig	sehr wichtig
Die Verringerung von CO2 Emissionen	○	○	○	○	○
Weniger Umweltverschmutzung	○	○	○	○	○
Weniger Verkehrsstau	○	○	○	○	○
Geringere Parkkosten	○	○	○	○	○
Geringere Reisekosten	○	○	○	○	○
Kürzere Reisezeit	○	○	○	○	○
Kürzere Zeit um die Reise zu planen	○	○	○	○	○
Ideen und Erfahrungen mit anderen Mitfahrgelegenheitsnutzern auszutauschen	○	○	○	○	○
Neue Leute durch Mitfahrgelegenheiten zu treffen	○	○	○	○	○
Ihre Freunde/Verwandten nutzen Mitfahrgelegenheitsplattformen	○	○	○	○	○

7 Wie viel Vertrauen haben Sie in...?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	Kein Vertrauen	Wenig Vertrauen	Einiges an Vertrauen	Viel Vertrauen	Ich weiß es nicht
...andere Reisende, die die gleiche Online-Plattform nutzen?	○	○	○	○	○
...die Online-Plattformen, die Sie selbst verwenden?	○	○	○	○	○

8 Wie wichtig ist Ihnen, dass Sie in den ausgewählten Mitfahrgelegenheitsanbieter vertrauen können?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ sehr unwichtig

○ unwichtig

○ weder...noch

○ wichtig

○ sehr wichtig

Webbasierte Mitfahrgelegenheitsanbieter

Fragen über Merkmale von Mitfahrgelegenheitsanbietern und ihre Bedeutung für die Nutzung von Mitfahrgelegenheiten.

9 Wie möchten Sie mit anderen Nutzern kommunizieren?

Bitte wählen Sie alle zutreffenden Antworten aus:

☐ Diskussionsforum

☐ Blog

☐ Chat/Nachrichten an andere Nutzer

☐ Kein Tool ist wichtig

☐ Sonstiges:

10 Wie wichtig finden Sie die aufgelisteten Charakteristika im Bezug auf Sicherheitsvorkehrungen?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr unwichtig	unwichtig	weder...noch	wichtig	sehr wichtig
Datenschutz	○	○	○	○	○
Mitfahrgelegenheitsanbieter versichert Fahrt	○	○	○	○	○
Versicherung von Fahrer/Mitfahrer vorhanden	○	○	○	○	○
Mitfahrgelegenheitsanbieter überprüft Nutzerprofile	○	○	○	○	○

11 Wie bewerten Sie die aufgeführten Bezahlungsmethoden, um Mitfahrgelegenheitsplattformen zu nutzen?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr nutzlos	nutzlos	weder...noch	nützlich	sehr nützlich
Bar	○	○	○	○	○
Kreditkarte	○	○	○	○	○
PayPal	○	○	○	○	○
Lastschrift	○	○	○	○	○

12 Wie wichtig Sind Ihnen die folgenden aufgelisteten Charakteristika einer Plattform, um über die Nutzung von Mitfahrgelegenheitsplattformen informiert zu sein?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr unwichtig	unwichtig	weder...noch	wichtig	sehr wichtig
Kontaktformular	○	○	○	○	○
Direkte Informationen auf der Website	○	○	○	○	○
Erfahrungsberichte	○	○	○	○	○
Bewertungs-Tool	○	○	○	○	○
Chat Forum	○	○	○	○	○
Blog	○	○	○	○	○

13 Welche Mitfahrgelegenheitsplattform nutzen Sie am häufigsten?

Bitte wählen Sie nur eine der folgenden Antworten aus:

- ○ blablacar.de
- ○ carpoolworld.com
- ○ Toogethr.com
- ○ sharemyfare.com
- ○ eRideShare.com
- ○ nochplatz.de
- ○ eurostop.be
- ○ fahrgemeinschaft.de
- ○ joinants.com
- ○ liftshare.com
- ○ berlinshuttle.de
- ○ fahrtfinder.net
- ○ mitfahr-monster.de
- ○ Sonstiges

14 Wie würden Sie die Mitfahrgelegenheitsplattform bewerten, die Sie am häufigsten nutzen?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	extrem schlecht	unterdurchschnittlich	durchschnittlich	überdurchschnittlich	ausgezeichnet
Benutzerfreundlichkeit	○	○	○	○	○
Gestaltung	○	○	○	○	○
Navigation	○	○	○	○	○
Fahrangebote	○	○	○	○	○
Datenschutz	○	○	○	○	○

15 Wie schnell finden Sie in der Regel eine passende Mitfahrgelegenheit wenn sie eine Online-Plattform verwenden?

Bitte wählen Sie nur eine der folgenden Antworten aus:

- ○ < 15 Minuten

○ 15-30 Minuten

○ 31-60 Minuten

○ > 60 Minuten

16 Wie wichtig ist Ihnen, dass Sie so schnell wie möglich eine passende Mitfahrgelegenheit finden?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ sehr unwichtig

○ unwichtig

○ weder...noch

○ wichtig

○ sehr wichtig

17 Wie würden Sie die aufgeführten Anwendungen für die Nutzung von Mitfahrgelegenheitsplattformen bewerten?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr nutzlos	nutzlos	weder...noch	nützlich	sehr nützlich
Apps/Mobile Web-Version	○	○	○	○	○
Google maps	○	○	○	○	○
Verbindung mit Social Media	○	○	○	○	○

18 Wie wichtig sind die folgenden aufgeführten Merkmale um eine Mitfahrgelegenheitsplattform zu nutzen?

Bitte wählen Sie die zutreffende Antwort für jeden Punkt aus:

	sehr unwichtig	unwichtig	weder...noch	wichtig	sehr wichtig
Keine Registrierung um Online-Plattformen zu nutzen	○	○	○	○	○
Geschlechts-getrennte Mitfahrgelegenheitsangebote	○	○	○	○	○
Online-Plattform ist in verschiedenen Sprachen	○	○	○	○	○

	sehr unwichtig	unwichtig	weder...noch	wichtig	sehr wichtig
verfügbar					
Nutzung der Plattform ist kostenlos	○	○	○	○	○
Kurze Matching Zeit	○	○	○	○	○
App ist vorhanden	○	○	○	○	○
Google Maps wird auf Website verwendet	○	○	○	○	○
Verbindung zu Social Media	○	○	○	○	○

Persönliche Daten

19 Was ist Ihr Geschlecht?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ weiblich

○ männlich

20 Wie alt sind Sie?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ < 15

○ 15 - 17

○ 18 - 25

○ 26 - 35

○ 36 - 45

○ 46 - 65

○ > 65

21 Was ist Ihr aktueller Ausbildungsstand?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ Grundschule

○ Mittlerer Bildungsabschluss

○ Allgemeine Hochschulreife

○ Bachelor

○ Master

○ Andere Qualifikation

○ Keine Ausbildung

22 Was ist Ihre aktuelle berufliche Stellung?

Bitte wählen Sie nur eine der folgenden Antworten aus:

○ SchülerIn

○ StudentIn

○ ArbeitnehmerIn

○ Selbstständig

○ Ohne Arbeit

○ Sonstiges

23 In welchem Land leben Sie?

Bitte geben Sie Ihre Antwort hier ein:

24 In welcher Stadt leben Sie?

Bitte geben Sie Ihre Antwort hier ein:

Gewinnen Sie 10€ für Ihre nächste Mitfahrgelegenheit!

Wenn Sie an der Verlosung teilnehmen möchten, schreiben Sie bitte Ihre E-Mail-Adresse in das Feld:

Wenn Sie an der Verlosung teilnehmen möchten, dann schreiben Sie bitte Ihre E-Mail-Adresse in das Feld:

Bitte geben Sie Ihre Antwort hier ein:

Vielen Dank, dass Sie an der Umfrage teilgenommen haben!

Gerne können Sie mich bei Fragen oder Anregungen kontaktieren:

e.m.kesternich@student.utwente.nl

Freundliche Grüße

Eva Kesternich
Übermittlung Ihres ausgefüllten Fragebogens:

c. Questionnaire in Dutch

Gebruik van Europese carpooling aanbieder

Beste deelnemer,

De volgende vragenlijst gaat over het gebruik van carpooling en Europese carpooling matching platforms.
Een carpooling matching platform is een soort internet "prikbord" waarop mensen ritten aan kunnen aanbieden of vinden om zo een carpooling partner te vinden.
Deze online enquête zal ongeveer 10 minuten duren. Er zijn geen goede of foute antwoorden.
Uw antwoorden zijn bedoeld voor onderzoeksdoeleinden en zullen te allen tijde anoniem blijven.

Onder de respondenten zal ik twee keer € 10 reistegoed verloten voor de volgende carpool!

Hartelijk dank voor uw deelname,

Eva Kesternich

Carpooling en algemeen gebruik

De volgende vragen gaan over het algemeen gebruik van carpooling en vragen waarom reizigers besluiten om matching platforms gebruiken.

1 Heb u ooit gebruik gemaakt van een matching platform voor carpoolen? *

Kies a.u.b. een van de volgende mogelijkheden:

○ Ja

○ Nee

2 Maakt u gebruik van carpooling matching platforms als bestuurder, passagier of beide?

Kies a.u.b. een van de volgende mogelijkheden:

○ bestuurder

○ passagier

○ beide

3 Hoe vaak heeft u een matching platform gebruikt voor carpoolen?

Kies a.u.b. een van de volgende mogelijkheden:

○ wekelijks

○ maandelijks

○ driemaandelijks

○ jaarlijks

○ Andere

4 Hoeveel gedeelde ritten heeft u per maand gebruikt?

Kies het toepasselijk antwoord voor elk onderdeel:

	0	1-5	6-10	11-20	21-30	31 of meer
in totaal	○	○	○	○	○	○
met gebruik van de bijpassende platform u het meest gebruikt	○	○	○	○	○	○

5 Hoe vaak gebruiken uw vrienden/familieleden matching platforms?

Kies a.u.b. een van de volgende mogelijkheden:

○ nooit

○ zelden

○ soms

○ heel vaak

○ altijd

○ Ik weet het niet

6 Hoe belangrijk zijn de volgende voordelen voor uw beslissing om te gaan carpoolen?

Kies het toepasselijk antwoord voor elk onderdeel:

	erg onbelangrijk	onbelangrijk	geen van beide	belangrijk	erg belangrijk
de reductie van de CO2-uitstoot	○	○	○	○	○
minder verontreiniging	○	○	○	○	○
minder file	○	○	○	○	○
lagere parkeerkosten	○	○	○	○	○
lagere reiskosten	○	○	○	○	○
kortere reistijd	○	○	○	○	○
kortere tijd van het plannen van een	○	○	○	○	○

	erg onbelangrijk	onbelangrijk	geen van beide	belangrijk	erg belangrijk
reis					
het delen van ideeën/ervaringen met andere passagiers	○	○	○	○	○
het ontmoeten van nieuwe mensen door het gebruik van carpooling	○	○	○	○	○
je vrienden/familieleden gebruiken carpooling matching platforms	○	○	○	○	○

7 Hoeveel vertrouwen van u in ...?

Kies het toepasselijk antwoord voor elk onderdeel:

	veel vertrouwen	nogal wat vertrouwen	weinig vertrouwen	helemaal niet te vertrouwen	Ik weet het niet
...andere mensen die hetzelfde online platform gebruiken?	○	○	○	○	○
...matching platform(s) ze gebruiken?	○	○	○	○	○

8 Hoe belangrijk is het voor u dat u kunt vertrouwen op geselecteerde matching platform?

Kies a.u.b. een van de volgende mogelijkheden:

○ erg onbelangrijk

○ onbelangrijk

○ geen van beide

○ belangrijk

○ erg belangrijk

Carpooling matching platforms

Vragen over kenmerken van carpooling matching platforms en hun belang voor het gebruik van carpooling.

9 Hoe wilt u communiceren met andere gebruikers?

Selecteer alle mogelijkheden:

☐ discussion board/forum

☐ blog

☐ chatten/berichten naar andere gebruikers

☐ geen instrument is belangrijk

☐ Andere:

10 Hoe belangrijk zijn de genoemde kenmerken van veiligheidsmaatregelen voor u?

Kies het toepasselijk antwoord voor elk onderdeel:

	erg onbelangrijk	onbelangrijk	geen van beide	belangrijk	erg belangrijk
gegevensbescherming	○	○	○	○	○
verzekerde gedeelde rit door carpoolen aanbieder	○	○	○	○	○
verzekering van de bestuurder/passagier beschikbaar	○	○	○	○	○
Carpool provider controleert gebruikersprofielen	○	○	○	○	○

11 Wat vindt u van de opgesomd betaalmethoden om carpool platforms gebruiken?

Kies het toepasselijk antwoord voor elk onderdeel:

	zeer nutteloze	nutteloos	geen van beide	nuttig	zeer nuttig
in contanten	○	○	○	○	○
credit card	○	○	○	○	○
PayPal	○	○	○	○	○
incassomachtiging	○	○	○	○	○

12 Hoe belangrijk zijn de volgende functies voor u als het gaat om het gebruik van een matching platform?

Kies het toepasselijk antwoord voor elk onderdeel:

	erg onbelangrijk	onbelangrijk	geen van beide	belangrijk	erg belangrijk
contact formulier	○	○	○	○	○
directe informatie op platform	○	○	○	○	○
ervaring rapporten	○	○	○	○	○
beoordelingsinstrument	○	○	○	○	○
chat forum	○	○	○	○	○
blog	○	○	○	○	○

13 Welk Carpool platform gebruikt u het meest?

Kies a.u.b. een van de volgende mogelijkheden:

○ blablacar.de

○ carpoolworld.com

○ Toogethr.com

○ sharemyfare.com

○ eRideShare.com

○ nochplatz.de

○ eurostop.be

○ fahrgemeinschaft.de

○ joinants.com

○ liftshare.com

○ berlinshuttle.de

○ fahrtfinder.net

○ mitfahr-monster.de

○ Andere

14 Hoe zou u het matching platform dat u het meest gebruikt waarderen?

Kies het toepasselijk antwoord voor elk onderdeel:

	zeer slecht	onder het gemiddelde	gemiddelde	boven gemiddeld	uitstekend
bruikbaarheid	○	○	○	○	○
ontwerpen	○	○	○	○	○
navigatie	○	○	○	○	○
lift aanbiedingen	○	○	○	○	○
gegevensbescherming	○	○	○	○	○

15 Hoe snel vindt u gewoonlijk een geschikte carpool bij het gebruik van een online platform?

Kies a.u.b. een van de volgende mogelijkheden:

○ < 15 Minuten

○ 15-30 Minuten

○ 31-60 Minuten

○ > 60 Minuten

16 Hoe belangrijk is het voor u om een gezamenlijke rit zo snel mogelijk te vinden?

Kies a.u.b. een van de volgende mogelijkheden:

○ erg onbelangrijk

○ onbelangrijk

○ geen van beide

○ belangrijk

○ erg belangrijk

17 Hoe zou u de genoemde applicaties voor het gebruik van matching platforms beoordelen?

Kies het toepasselijk antwoord voor elk onderdeel:

	erg onbruikbaar	onbruikbaar	geen van beide	bruikbaar	erg bruikbaar
apps/mobiele webversie	○	○	○	○	○

	erg onbruikbaar	onbruikbaar	geen van beide	bruikbaar	erg bruikbaar
google maps	○	○	○	○	○
verbinding met sociale media	○	○	○	○	○

18 Hoe belangrijk zijn de volgende functies om een matching platform te gebruiken?

Kies het toepasselijk antwoord voor elk onderdeel:

	erg onbelangrijk	onbelangrijk	geen van beide	belangrijk	erg belangrijk
geen registratie voor het gebruik van matching platform	○	○	○	○	○
sekse gescheiden carpooling aanbiedingen	○	○	○	○	○
platform beschikbaar in verschillende talen	○	○	○	○	○
gebruik van platform is gratis	○	○	○	○	○
korte matching tijd	○	○	○	○	○
app/mobiele webversie is beschikbaar	○	○	○	○	○
Google Maps wordt gebruikt op de site	○	○	○	○	○
verbinding met sociale media	○	○	○	○	○

Persoonlijke gegevens

19 Wat is uw geslacht?

Kies a.u.b. een van de volgende mogelijkheden:

○ Vrouw

○ Man

20 Hoe oud bent u?

Kies a.u.b. een van de volgende mogelijkheden:

○ < 15

○ 15 - 17

○ 18 - 25

○ 26 - 35

○ 36 - 45

○ 46 - 65

○ > 65

21 Wat is uw werkelijke niveau van het onderwijs?

Kies a.u.b. een van de volgende mogelijkheden:

○ Lagere school/basisonderwijs

○ middelbare school (LBO, VBO, LTS, LHNO, VMBO & MAVO, VMBO-t, MBO-kort)

○ HAVO, VWO, Gymnasium

○ HBO, HEAO, PABO, HTS

○ Universiteit

○ andere kwalificatie

○ geen opleiding

22 Wat is uw beroepsstatus?

Kies a.u.b. een van de volgende mogelijkheden:

○ scholier

○ student

○ werknemer

○ zelfstandig

○ zonder werk

○ anders

23 In welk land woont u?

Vul uw antwoord hier in:

24 In welke stad woont u?

Vul uw antwoord hier in:

Maak kans op € 10 carpooltegoed!

Als u wilt deelnemen aan deze loting vul dan in het onderstaande vak uw email adres in:
Als u wilt deelnemen aan de tombola, schrijf uw e-mailadres in het vakje:

Vul uw antwoord hier in:

Hartelijk dank voor uw deelname!

Als u geïnteresseerd bent in de eindresultaten, of vragen heeft, aarzel
dan niet om contact op te nemen met mij: e.m.kesternich@student.utwente.nl

Met vriendelijke groet

Eva Kesternich

Verstuur uw enquête

d. Posts for distributing online survey

i. Twitter

- Example of tweet on Twitter in English: *Hey people, please fill out my survey about carpooling and matching platforms - you can win 10€ for your next trip!;* Link of online survey in English

- Example of tweet on Twitter in German: *Bitte unterstützt meine kurze Umfrage über Mitfahrgelegenheiten & die Nutzung von Online-Anbietern;* Link of online survey in German

ii. Facebook

- Example of Facebook post in English (on own Facebook page): *Hey people, please fill in my survey about carpooling and matching platforms - you can win 10€ for your next trip! Feel free to share it - you do me a great favor:* Link of online survey in English.

- Example of Facebook post in English (in Facebook-carpooling group): *Hey passengers and drivers! I write my master thesis about carpooling and the use of matching platforms. It would be very nice and helpful for my work, if you fill in my online questionnaire. This takes max.10 minutes and you can win 10€ for your next shared ride*; Link of online survey in English, Dutch and/or German depending on the catchment area of the Facebook group

- Example of Facebook post in German (on own Facebook page): *Hallo zusammen, wenn ihr euch 10 Minuten Zeit für meine Umfrage nehmen könntet, würdet ihr mir einen sehr großen Gefallen tun und mit ein bisschen Glück noch 10 € für eure nächste Reise gewinnen. Teilen, Liken und dergleichen ist natürlich sehr willkommen*: Link of online survey in German.

- Example of Facebook post in German (in Facebook-carpooling group): *Hallo liebe Fahrer/Innen und Mitfahrer/Innen,ich schreibe meine Masterarbeit über Mitfahrgelegenheiten und die Nutzung von Online-Anbietern. Es wäre super hilfreich für mich, wenn ihr euch max. 10 Minuten für meine Online-Umfrage nehmen könntet. Mit ein bisschen Glück gewinnt ihr 10 € für euren nächsten Trip! Vielen Dank dafür, Eva;* Link of online survey in German

- Example of Facebook post in Dutch: *Help Eva bij bij haar Master thesis door deze survey in te vullen*: Link of online survey in Dutch

C. Scale and size of a carpooling matching platform

Scale of one community was measured by observing the number of options of carpooling matching platforms:

Table 15: Scale of community – Data collection

scale of community				
variable name	**variable description**	**variable measurement**	**question**	**scale**
network_scale	Number of options of one selected matching platform	Test offers from A to B of selected matching platforms; number of offered shared rides	How many offers does one carpooling matching platform offer when selecting one route?	no options = 0; low number of options= 1; moderate number of options=2-5; high number of options=5-10; very high number of options=10 or more
platform name	**time scale**	**departure**	**arrival**	**number of offers**
blablacar.de	10.Feb - 13.Feb; 4 days	Berlin	Frankfurt	10.Feb.: 6 11.Feb: 8 12.Feb: 14 13.Feb: 21
blablacar.nl	10.Feb - 13.Feb; 4 days	Amsterdam	Utrecht	10.Feb: 3 11.Feb: 2 12.Feb: 4 13.Feb: 3
blablacar.fr	10.Feb - 13.Feb; 4 days	Paris	Marseille	10.Feb: 4 11.Feb: 3 12.Feb: 4 13.Feb: 5
fahrgemeinschaft	10.Feb - 13.Feb; 4 days	Berlin	Frankfurt	10.Feb: 0 11.Feb: 2 12.Feb: 0 13.Feb: 1
carpoolworld	10.Feb - 13.Feb; 4 days	Amsterdam	Berlin	10.Feb: 1 11.Feb: 0 12. Feb: 2 13.Feb: 0
mitfahr-monster	10.Feb - 13.Feb; 4 days	Berlin	Frankfurt	10.Feb: 0 11.Feb: 0 12.Feb: 0 13.Feb: 0
ahacar	10.Feb - 13.Feb; 4 days	Sofia	Plovdiv	10.Feb: 1 11.Feb: 0 12.Feb: 2 13.Feb: 2

Source: own measurement; blablacar.de, fahrgemeinschaft, carpoolworld, mitfahr-monster and ahacar were chosen for measurement; blablacar.nl and blablacar.fr were observed for comparisons and for identification of scale of measurement

Size of one community was measured by asking or searching for actual number of users of each carpooling matching platform:

Table 16: Size of community – Data collection

size of community		
variable name	**variable description**	**variable measurement**
network_size	Number of registered users	Ask carpooling provider about size of community; check internet presence and given information
platform name	**number of current registrations**	**community size - groups**
blablacar	> 10 Mio. members	large community = > 1. Mio. users
fahrgemeinschaft	> 150.000 members	medium-sized community = 50.000 - 1. Mio.
carpoolworld	280.586 registered users	small community = 1000 - 50.000
fahrtfinder	1000-1500 users every day on website	start up community = 2 - 1000
mitfahr-monster	1300 users last month	no community available = 0 - 2
ahacar	2400 registered users	
mitfahrgelegenheit	> 5 Mio. registered users	

Source: own measurement; I directly asked provider per mail or checked their websites for actual number of users

D. Descriptive statistics

a. Results online survey

CARPOOLING AND ITS USE IN GENERAL

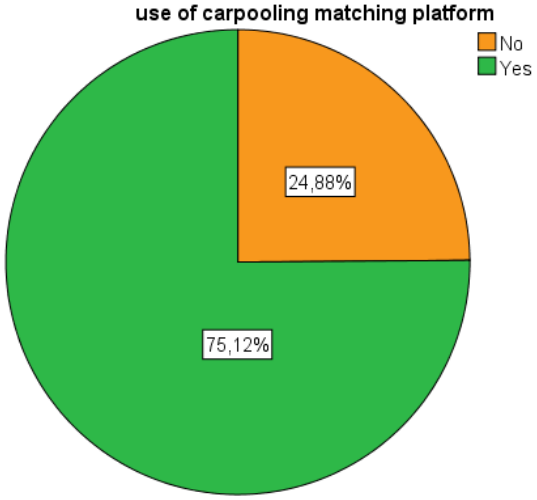
Question 1: *Did you every use a matching platform for carpooling?*

Table 17: Use of carpooling matching platform

Statistics		
use of carpooling matching platform		
N	Valid	201
	Missing	0
Std. Deviation		,433
Variance		,188
Range		1

use of carpooling matching platform					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	50	24,9	24,9	24,9
	Yes	151	75,1	75,1	100,0
	Total	201	100,0	100,0	

Figure 19: Use of carpooling matching platform



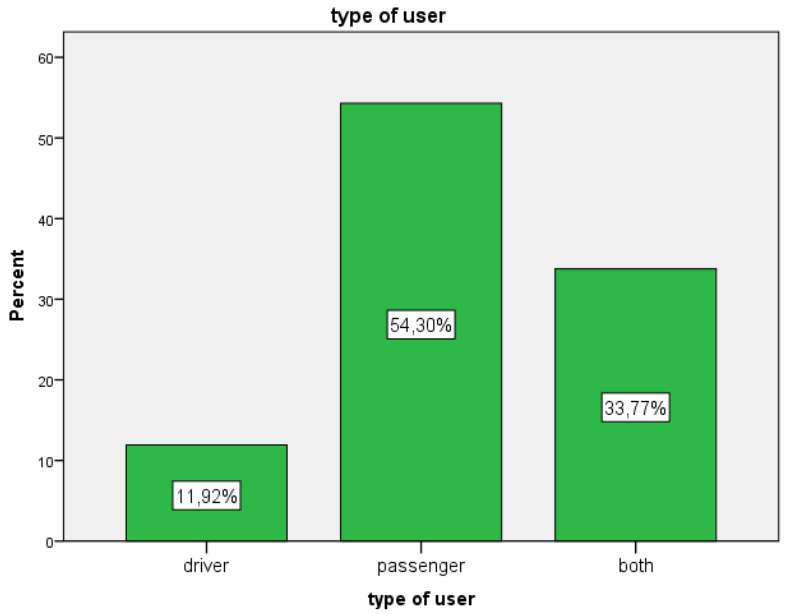
Question 2: *Do you use carpooling matching platforms as driver, passenger or both?*

Table 18: Type of user

Statistics		
type of user		
N	Valid	151
	Missing	50
Std. Deviation		,642
Variance		,412
Range		2
Percentiles	25	2,00
	50	2,00
	75	3,00

type of user					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	driver	18	9,0	11,9	11,9
	passenger	82	40,8	54,3	66,2
	both	51	25,4	33,8	100,0
	Total	151	75,1	100,0	
Missing	999	50	24,9		
Total		201	100,0		

Figure 19: Type of user



Question 3: *How often do you use a matching platform for carpooling?*

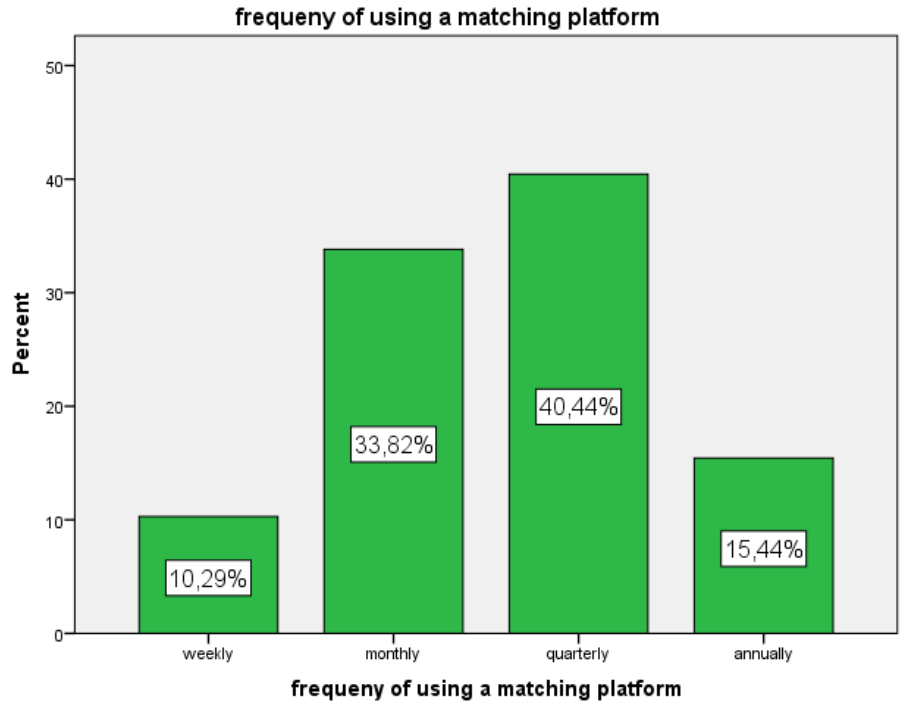
Table 19: Frequency of using a matching platform

frequency of using a matching platform					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	weekly	14	7,0	10,3	10,3
	monthly	46	22,9	33,8	44,1
	quarterly	55	27,4	40,4	84,6
	annually	21	10,4	15,4	100,0
	Total	136	67,7	100,0	
Missing	999	65	32,3		
Total		201	100,0		

Table 20: Frequency of using a matching platform - Further answers

frequency of using a matching platform					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		189	94,0	94,0	94,0
	5-10 mal im Jahr	1	,5	,5	94,5
	Ab und zu	1	,5	,5	95,0
	alle 2 Monate	1	,5	,5	95,5
	ca. alle 2 Wochen	1	,5	,5	96,0
	eher seltener	1	,5	,5	96,5
	Ein einziges Mal	1	,5	,5	97,0
	halbjährlich	1	,5	,5	97,5
	nicht regelmäßig, wenn es sich anbietet	1	,5	,5	98,0
	Seit 3 Jahren nicht mehr.	1	,5	,5	98,5
	seltener	1	,5	,5	99,0
	unregelmäßig	1	,5	,5	99,5
	Wöchentlich. Doch finden lassen sich selten welch	1	,5	,5	100,0
	Total	201	100,0	100,0	

Figure 20: Frequency of using a matching platform



Question 4: *How many shared rides do you have per month?*

Table 21: Shared rides per month

Statistics			
		shared rides per month in total	shared rides per month with use of one selected platform
N	Valid	135	127
	Missing	66	74
Median		2,00	2,00
Mode		2	2
Std. Deviation		,896	,804
Variance		,803	,647
Range		4	4
Percentiles	25	2,00	2,00
	50	2,00	2,00
	75	3,00	2,00

Figure 21: Shared rides per month in total

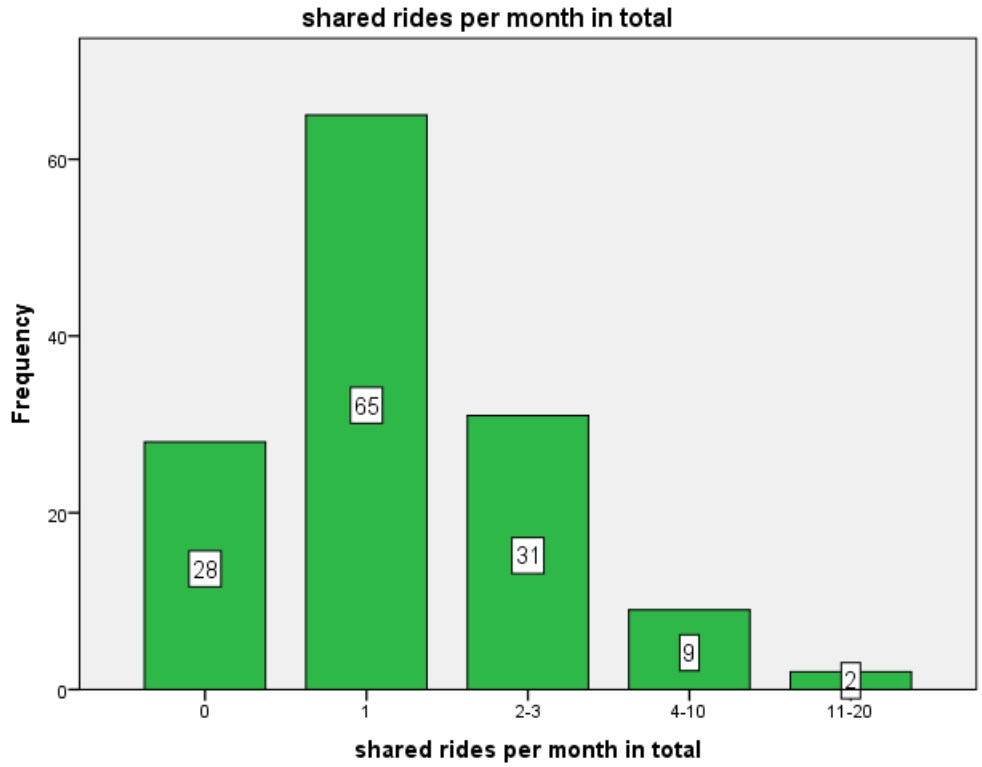
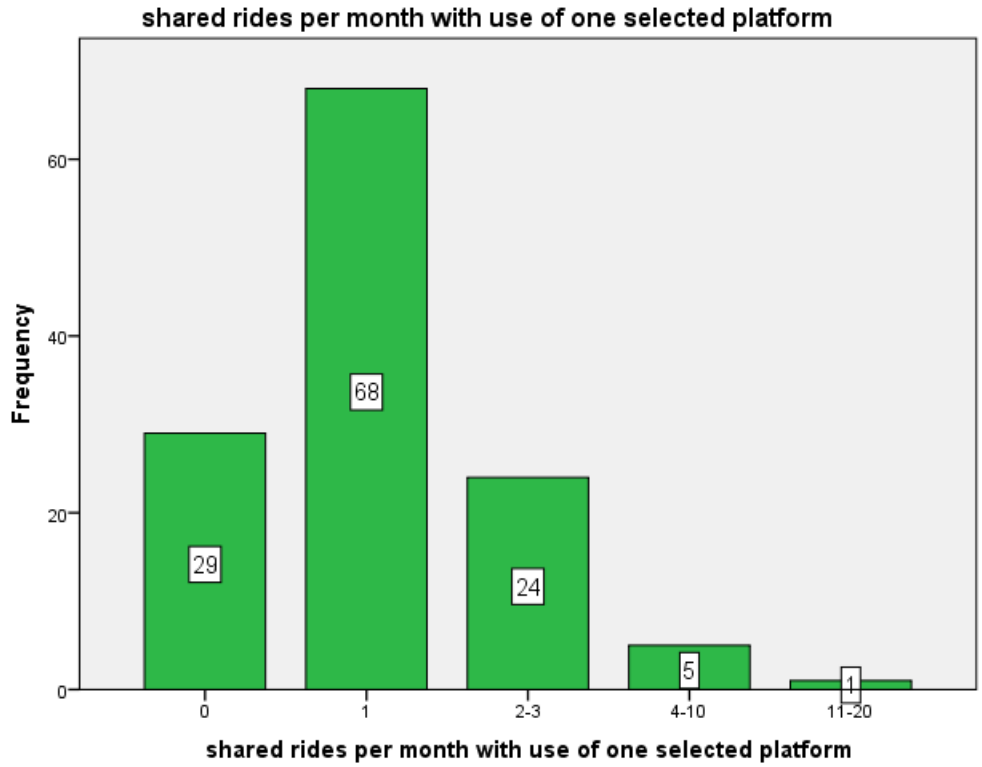


Figure 22: Shared rides per month with use of one selected platform



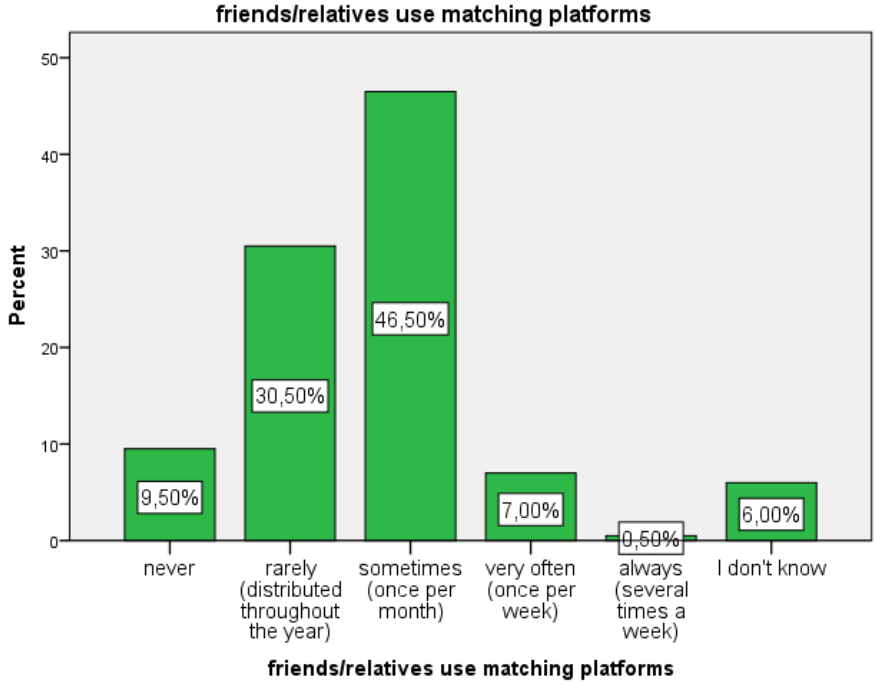
Question 5: *How often do your friends/relatives use matching platforms?*

Table 22: Friends/relatives use matching platforms

Statistics		
friends/relatives use matching platforms		
N	Valid	200
	Missing	1
Mode		3
Std. Deviation		1,125
Variance		1,266
Range		5

friends/relatives use matching platforms					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	19	9,5	9,5	9,5
	rarely (distributed throughout the year)	61	30,3	30,5	40,0
	sometimes (once per month)	93	46,3	46,5	86,5
	very often (once per week)	14	7,0	7,0	93,5
	always (several times a week)	1	,5	,5	94,0
	I don't know	12	6,0	6,0	100,0
	Total	200	99,5	100,0	
Missing	999	1	,5		
Total		201	100,0		

Figure 23: Friends/relatives use matching platforms



Question 6: *For your decision to use carpooling, how important are the following benefits?*

Table 23: Benefits of using carpooling

Statistics											
		reduction of CO2 emissions	less pollution	less traffic jam	lower parking costs	lower travel costs	shorter travel time	shorter time of planning	sharing ideas and experiences	meeting new people	friends/relatives use carpooling matching platforms
N	Valid	199	198	197	196	198	195	193	199	200	186
	Missing	2	3	4	5	3	6	8	2	1	15
Median		4,00	4,00	3,00	3,00	5,00	4,00	4,00	3,00	3,00	2,00
Mode		4	4	4	4	5	4	4	3	2	3
Std. Deviation		1,170	1,143	1,188	1,317	,808	1,103	1,085	1,117	1,186	1,148
Variance		1,368	1,307	1,411	1,735	,653	1,217	1,178	1,247	1,406	1,318
Skewness		-,591	-,626	-,181	-,047	-2,431	-,683	-,616	,081	,234	,222
Std. Error of Skewness		,172	,173	,173	,174	,173	,174	,175	,172	,172	,178
Kurtosis		-,559	-,545	-,932	-1,144	6,805	-,280	-,110	-,721	-,864	-1,005
Std. Error of Kurtosis		,343	,344	,345	,346	,344	,346	,348	,343	,342	,355
Range		4	4	4	4	4	4	4	4	4	4
Percentiles	25	3,00	3,00	2,00	2,00	4,00	3,00	3,00	2,00	2,00	1,00
	50	4,00	4,00	3,00	3,00	5,00	4,00	4,00	3,00	3,00	2,00
	75	4,00	4,00	4,00	4,00	5,00	5,00	4,00	4,00	4,00	3,00

Figure 24: Reduction of CO2 emissions

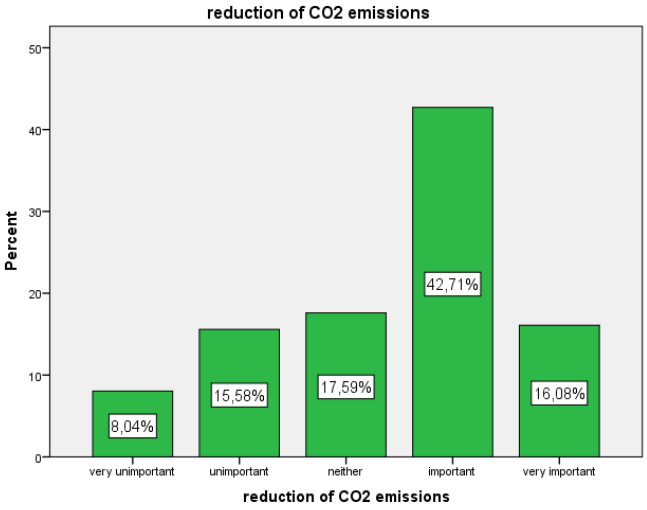


Figure 25: Less pollution

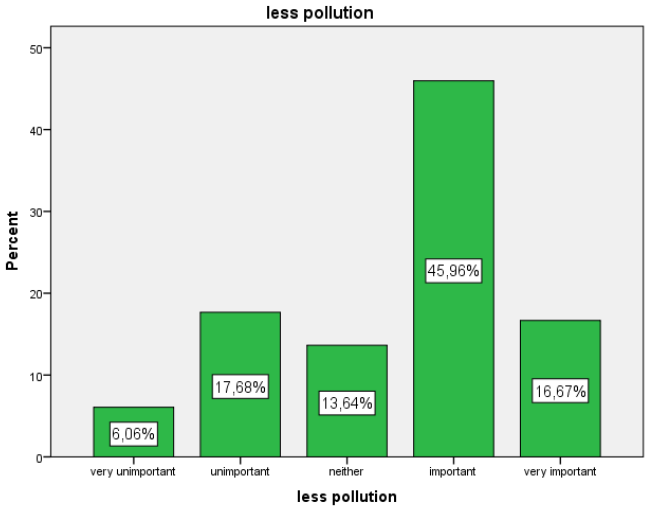


Figure 26: Less traffic jam

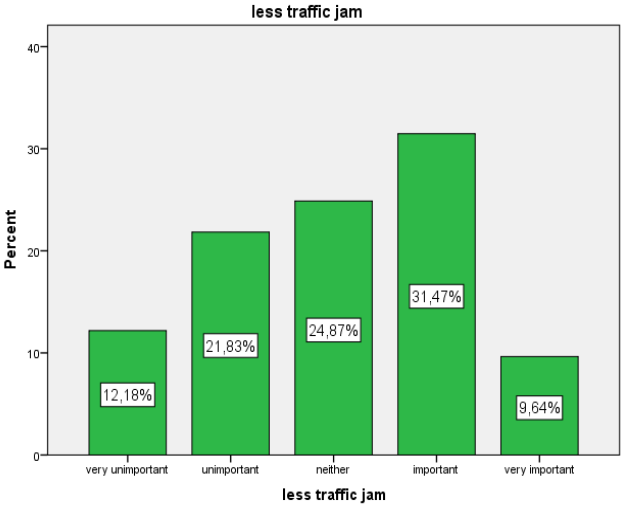


Figure 27: Lower parking costs

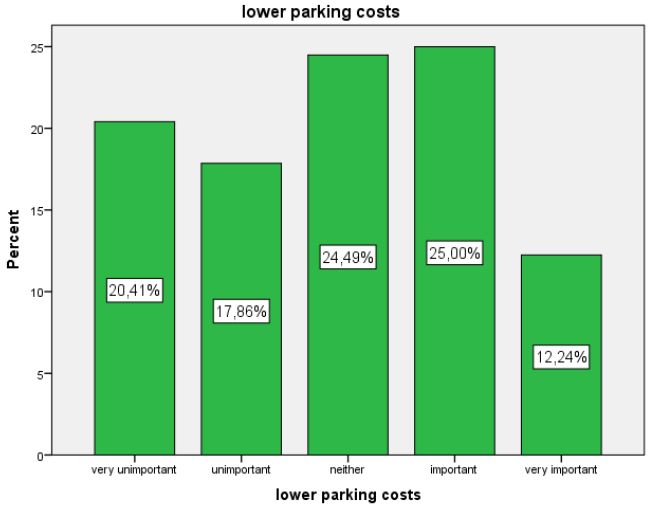


Figure 28: Lower travel costs

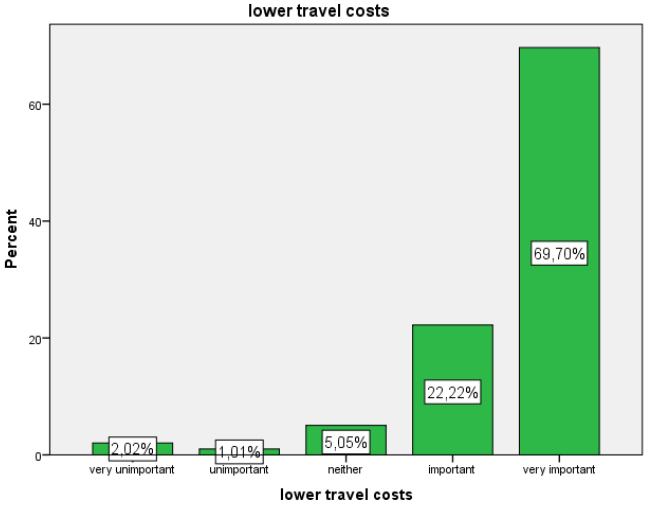


Figure 29: Shorter travel time

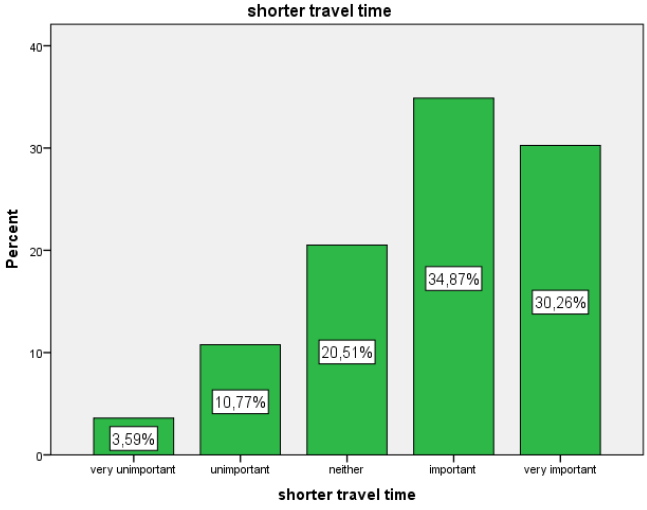


Figure 30: Shorter time of planning

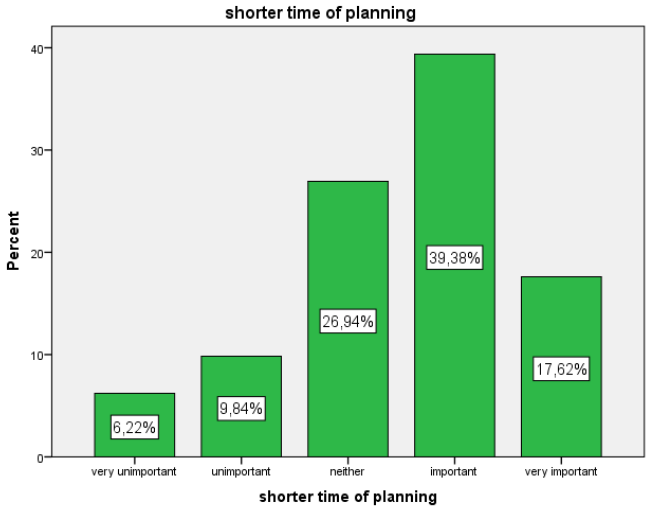


Figure 31: Sharing ideas and experiences

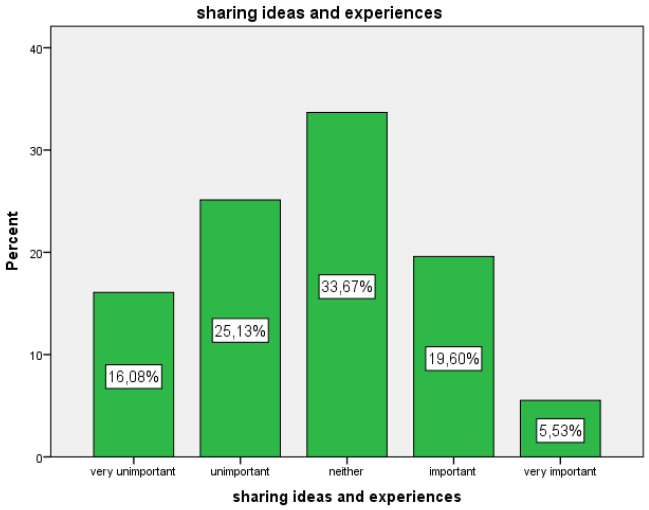


Figure 32: Meeting new people platforms

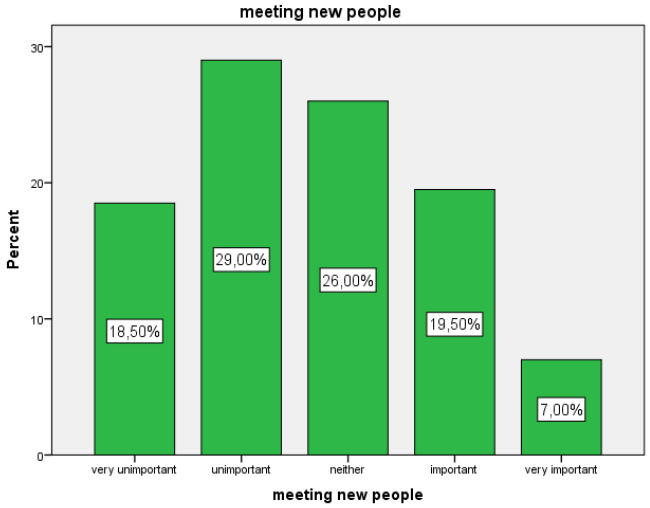
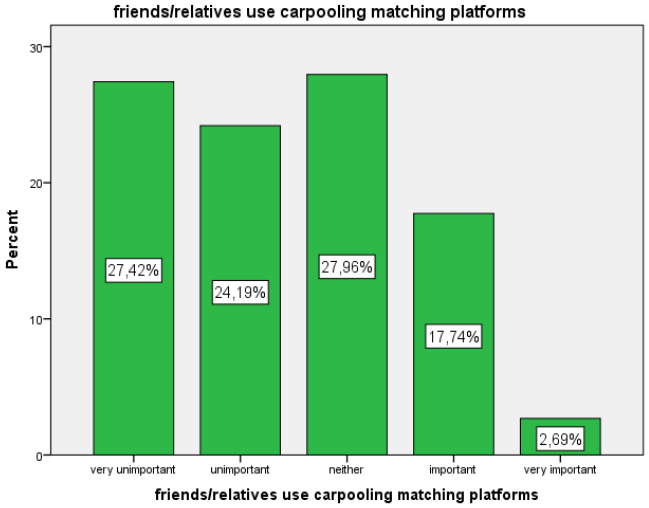


Figure 33: Importance of friends/relatives use carpooling matching



Question 7: *How much do you trust…?*

Table 24: Level of trust

Statistics			
		trust in other users using same matching platform	trust in matching platform(s)
N	Valid	191	185
	Missing	10	16
Median		3,00	3,00
Mode		3	3
Std. Deviation		,917	,909
Variance		,841	,827
Range		4	4
Percentiles	25	3,00	3,00
	50	3,00	3,00
	75	4,00	4,00

Figure 34: Trust in others using same matching platform

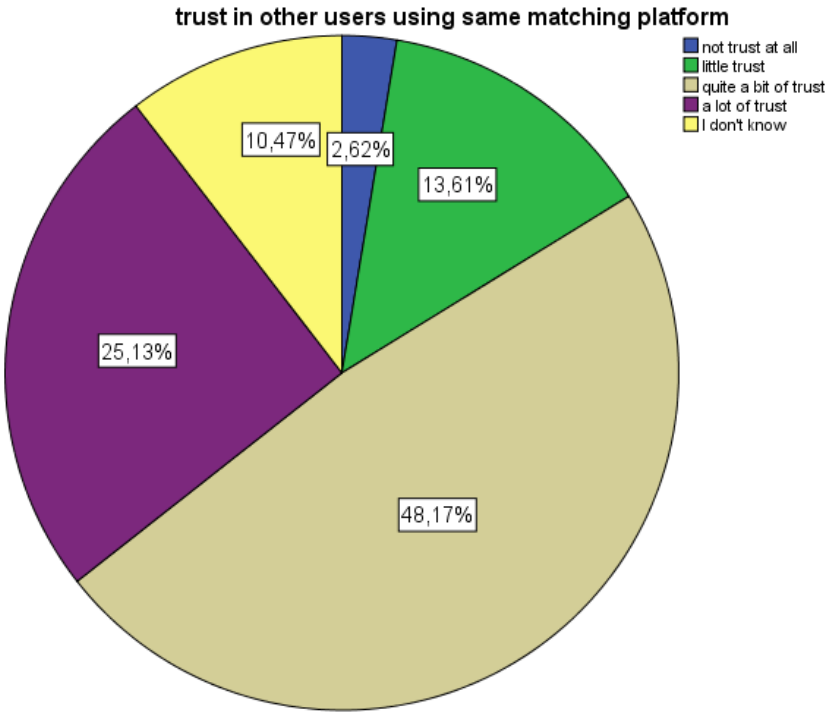
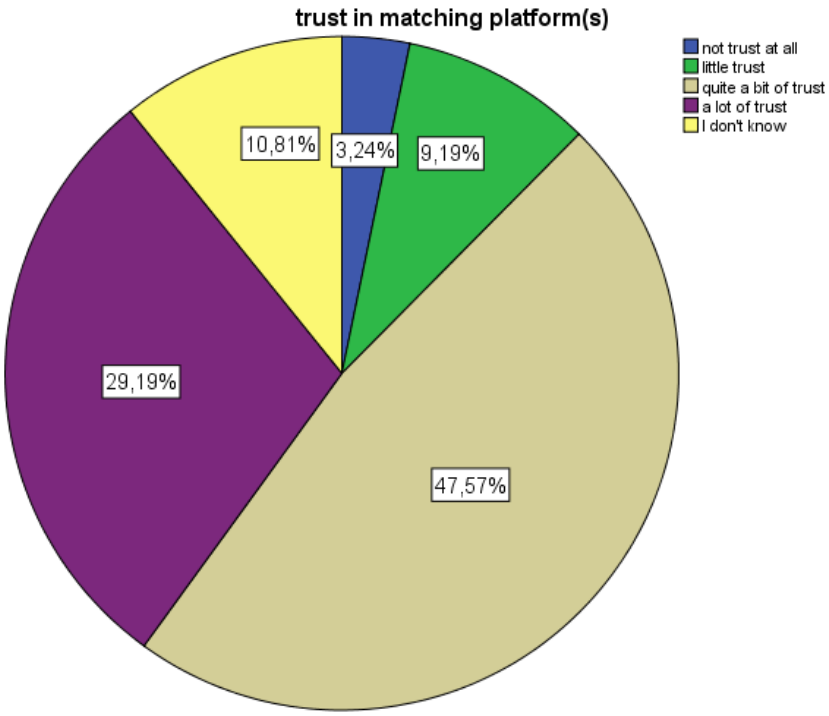


Figure 35: Trust in matching platform(s)

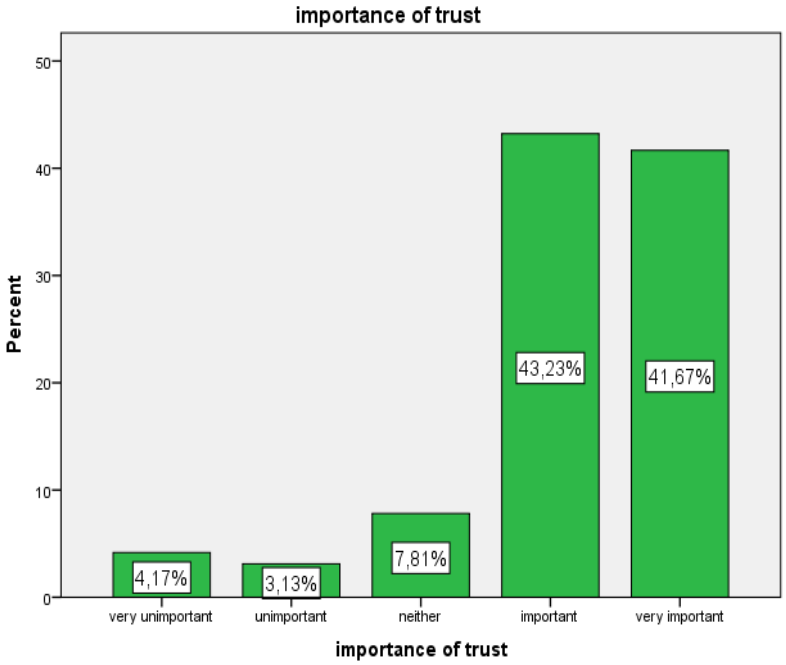


Question 8: *For your decision to use carpooling, how important is that you can trust selected matching platform?*

Table 25: Importance of trust

Statistics		
importance of trust		
N	Valid	192
	Missing	9
Median		4,00
Mode		4
Std. Deviation		,988
Variance		,977
Range		4
Percentiles	25	4,00
	50	4,00
	75	5,00

Figure 36: Importance of trust



CARPOOLING MATCHING PLATFORMS

Question 9: *How do you prefer to communicate with other users?*

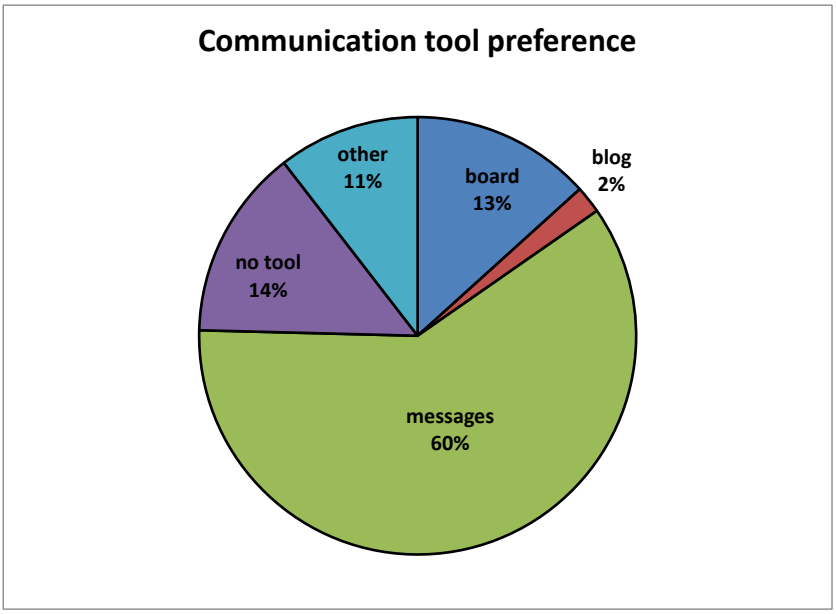
Table 26: Communication tools

Statistics						
		communication - board	communication - blog	communication - messages	communication - no tool	communication - other ideas
N	Valid	201	201	201	201	201
	Missing	0	0	0	0	0
Median		,00	,00	1,00	,00	
Mode		0	0	1	0	
Std. Deviation		,371	,156	,439	,380	
Variance		,138	,024	,193	,145	
Range		1	1	1	1	
Percentiles	25	,00	,00	,00	,00	
	50	,00	,00	1,00	,00	
	75	,00	,00	1,00	,00	

Table 27: Frequency distribution of communication tools

Type of tool	Frequency
board	33
blog	5
messages	149
no tool	35
other	26
total	248

Figure 37: Communication tool preference



Source: descriptive statistics from Question 9; multiple answers were possible

Table 28: Communication tools - Other ideas

communication - other ideas					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		175	87,1	87,1	87,1
	App	1	,5	,5	87,6
	Bewertungen	1	,5	,5	88,1
	carpooling site	1	,5	,5	88,6
	e-mail	1	,5	,5	89,1
	Handy	3	1,5	1,5	90,5
	I do not use a matching platform for carpooling.	1	,5	,5	91,0
	internal communication system	1	,5	,5	91,5
	messages and afterwards phone	1	,5	,5	92,0
	mobile phone	1	,5	,5	92,5
	Mobiltelefon	2	1,0	1,0	93,5
	Per integriertem Programm, bei dem ich auch nicht auf Menschen vertrauen muss, sondern davon ausgehen kann, uaf jeden Fall befördert zu werden!	1	,5	,5	94,0
	per telefon wie bei blablacar	1	,5	,5	94,5
	phone	3	1,5	1,5	96,0
	reputations tool ist wichtig, fahrten bewerten etc.	1	,5	,5	96,5

	Sms	1	,5	,5	97,0
	SMS/Telefonat	1	,5	,5	97,5
	telefon	1	,5	,5	98,0
	Telefon	2	1,0	1,0	99,0
	Telefonieren	1	,5	,5	99,5
	Tool für offizielle Anfrage	1	,5	,5	100,0
	Total	201	100,0	100,0	

Question 10: *How important are the listed features of safety precautions for you?*

Table 29: Safety precautions

Statistics					
		safety - data privacy	safety - insurance from provider	safety - insurance of users	safety - control profiles
N	Valid	199	191	192	196
	Missing	2	10	9	5
Median		4,00	4,00	4,00	4,00
Mode		5	4	4	4
Std. Deviation		,879	1,045	1,001	,941
Variance		,772	1,092	1,001	,886
Range		4	4	4	4
Percentiles	25	4,00	3,00	3,00	4,00
	50	4,00	4,00	4,00	4,00
	75	5,00	5,00	5,00	5,00

Figure 38: Data privacy

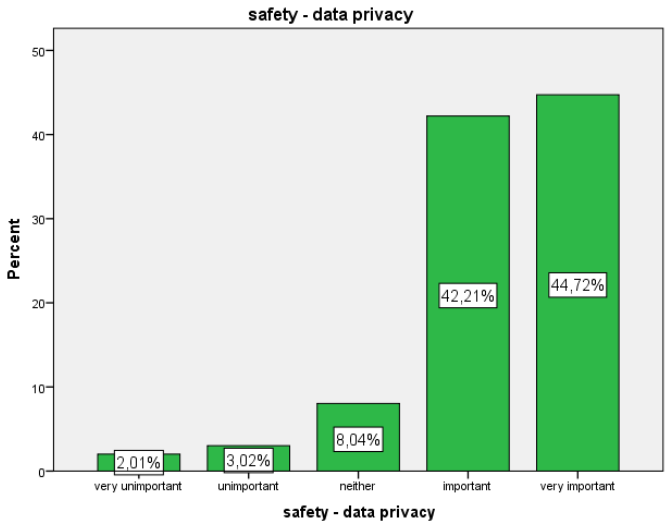


Figure 39: Insurance from carpooling provider

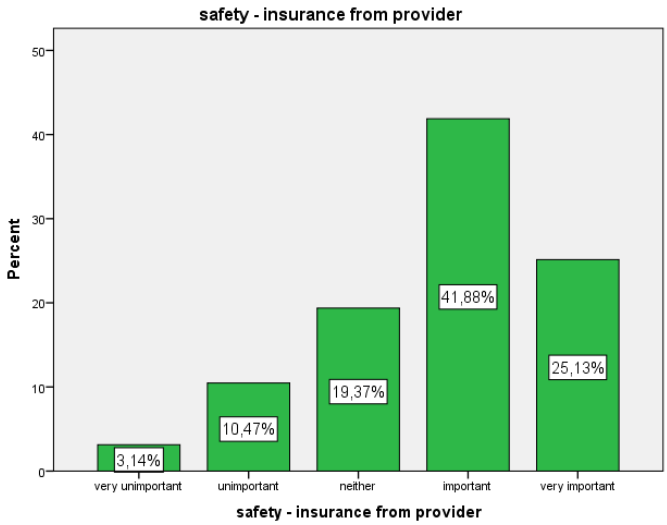


Figure 40: Insurance of users

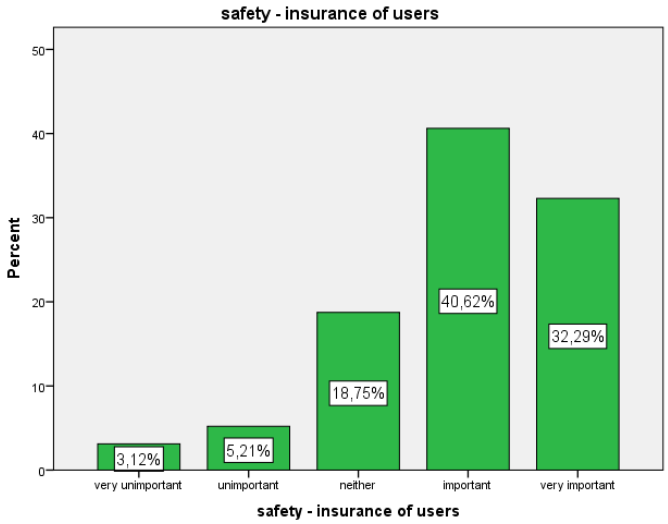


Figure 41: Provider control user profiles

Question 11: *How would you evaluate the payment methods for using carpooling matching platforms?*

Table 30: Evaluation of payment methods

Statistics					
		payment - cash	payment - creditcard	payment - paypal	payment - debit
N	Valid	195	192	188	191
	Missing	6	9	13	10
Median		5,00	3,00	3,00	3,00
Mode		5	1	1	1
Std. Deviation		,857	1,326	1,434	1,244
Variance		,734	1,757	2,056	1,548
Range		4	4	4	4
Percentiles	25	4,00	1,25	1,00	1,00
	50	5,00	3,00	3,00	3,00
	75	5,00	4,00	4,00	4,00

Figure 42: Payment method – cash

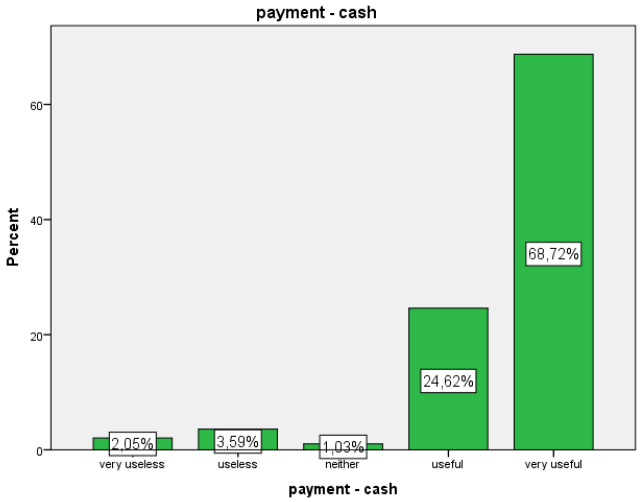


Figure 43: Payment method - credit card

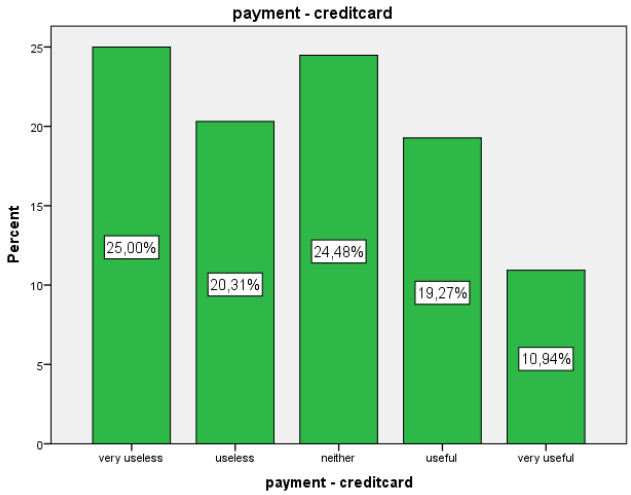


Figure 44: Payment method – PayPal

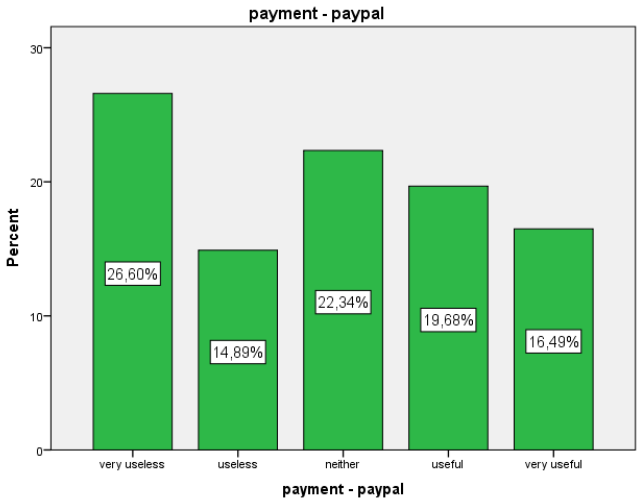
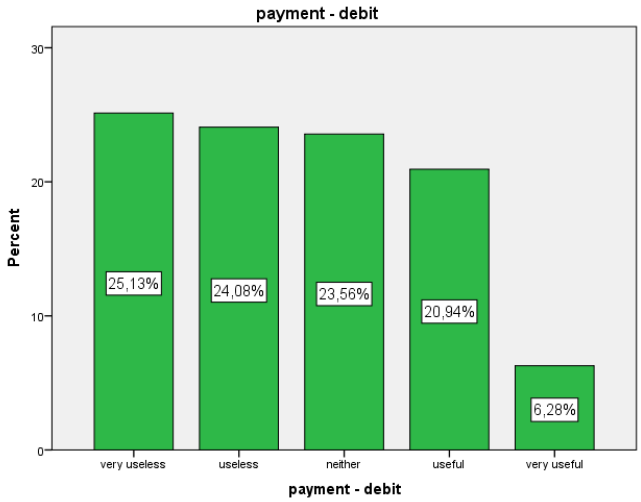


Figure 45: Payment method - Debit card



Question 12: *How important are the listed features for you to be informed about the use of one matching platform?*

Table 31: Information features

Statistics							
		information - contact form	information - direct	information - experiences	information - assessment tool	information - chat forum	information - blog
N	Valid	189	187	190	188	188	187
	Missing	12	14	11	13	13	14
Median		4,00	4,00	4,00	4,00	3,00	2,00
Mode		4	4	5	4	3	2
Std. Deviation		,946	,846	,981	1,007	1,074	1,007
Variance		,894	,716	,963	1,014	1,154	1,015
Range		4	4	4	4	4	4
Percentiles	25	3,00	4,00	4,00	4,00	2,00	2,00
	50	4,00	4,00	4,00	4,00	3,00	2,00
	75	4,00	5,00	5,00	5,00	4,00	3,00

Figure 46: Information features - contact form

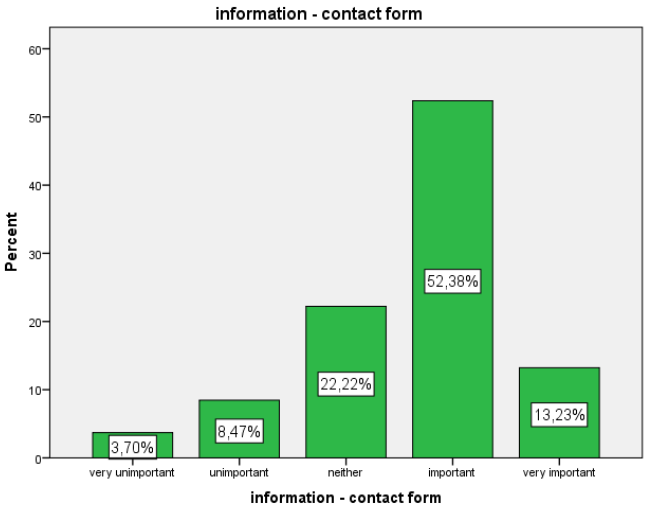


Figure 47: Information feature - direct information

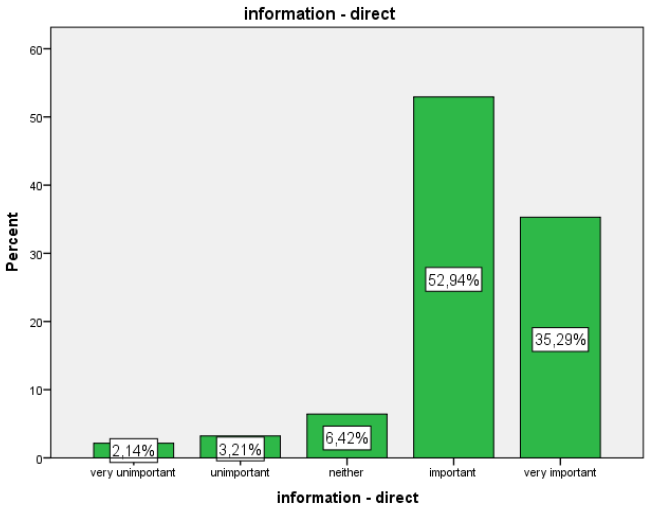


Figure 48: Information feature – Experiences

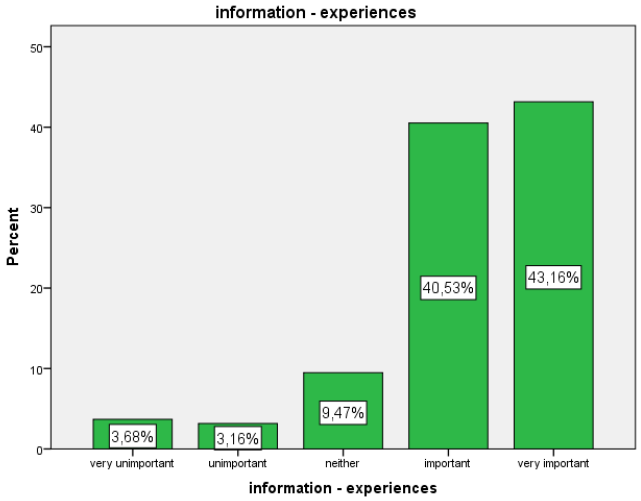


Figure 49: Information feature - Assessment tool

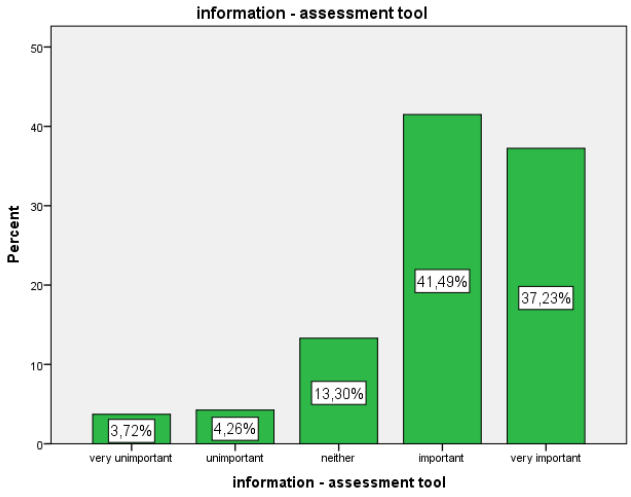


Figure 50: Information feature - Chat forum

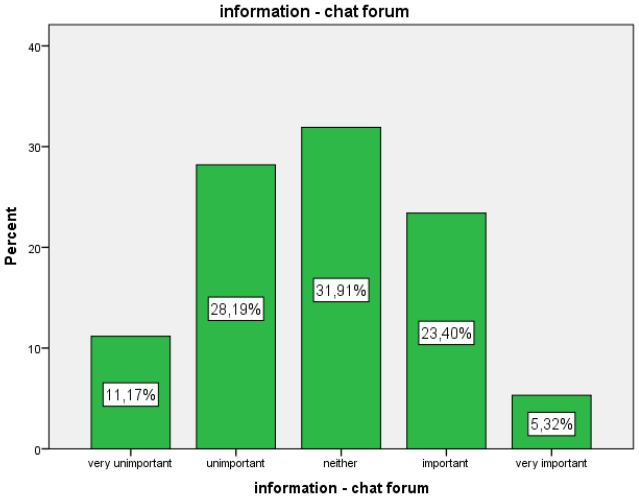
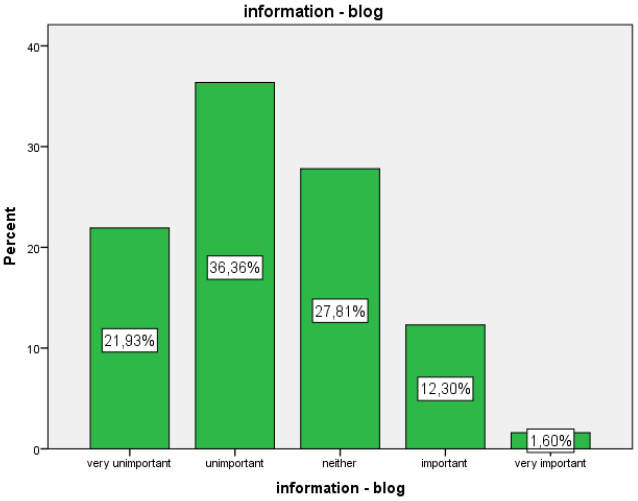
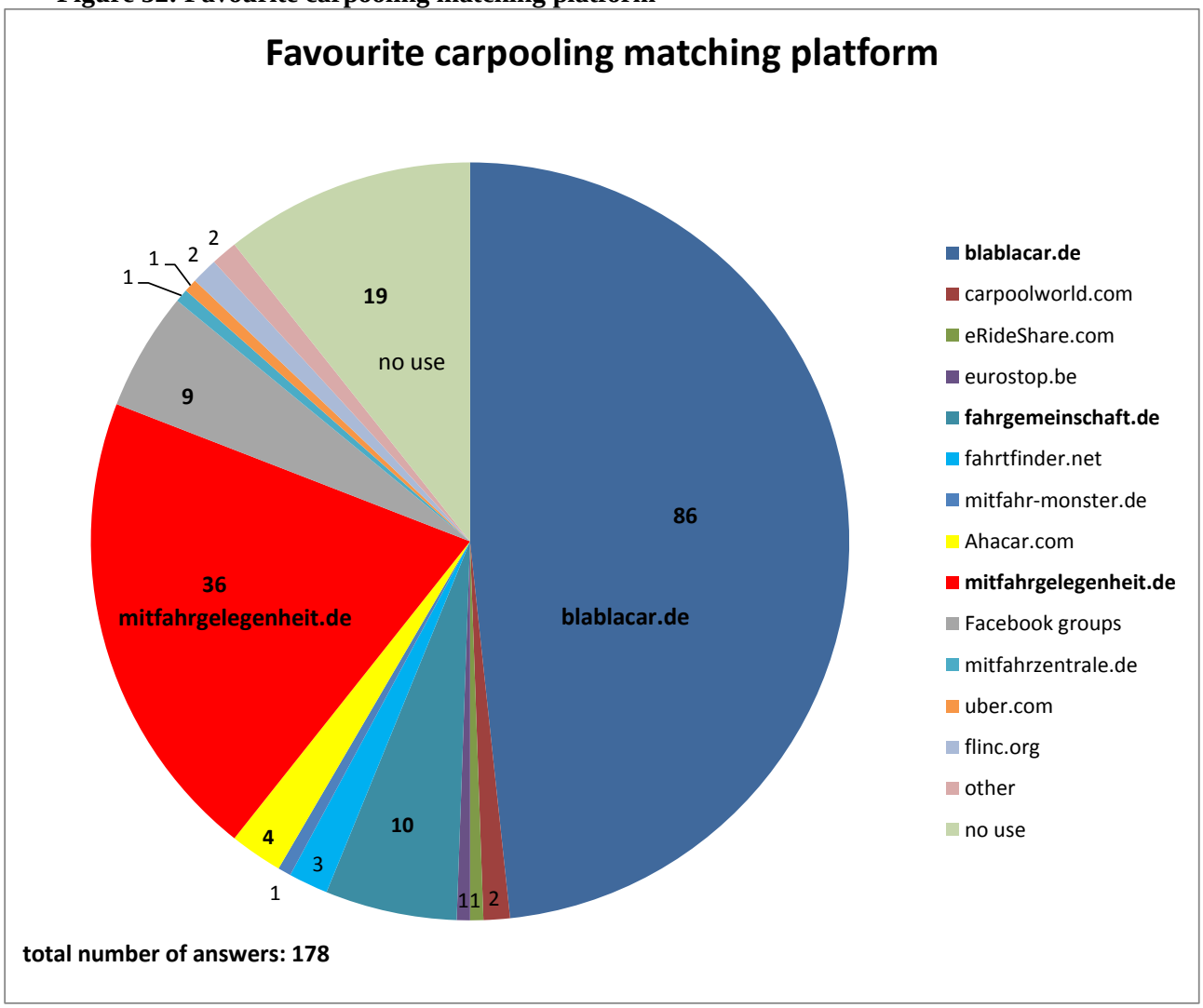


Figure 51: Information feature - Blog



Question 13: *What matching platform do you use most often?*

Figure 52: Favourite carpooling matching platform



Source: frequency distribution from question 13; own calculation

Question 14: *How would you evaluate the matching platform you use most often?*

Table 32: Evaluation of carpooling matching platform

Statistics						
		evaluation - usability	evaluation - design	evaluation - navigation	evaluation - rideoffers	evaluation - data privacy
N	Valid	160	159	159	159	128
	Missing	41	42	42	42	73
Median		4,00	4,00	4,00	4,00	3,00
Mode		4	3	4	4	3
Std. Deviation		,825	,842	,819	,860	,876
Variance		,681	,709	,671	,740	,767
Range		4	4	4	4	4
Percentiles	25	3,00	3,00	3,00	3,00	3,00
	50	4,00	4,00	4,00	4,00	3,00
	75	4,00	4,00	4,00	4,00	4,00

Figure 53: Evaluation – Usability

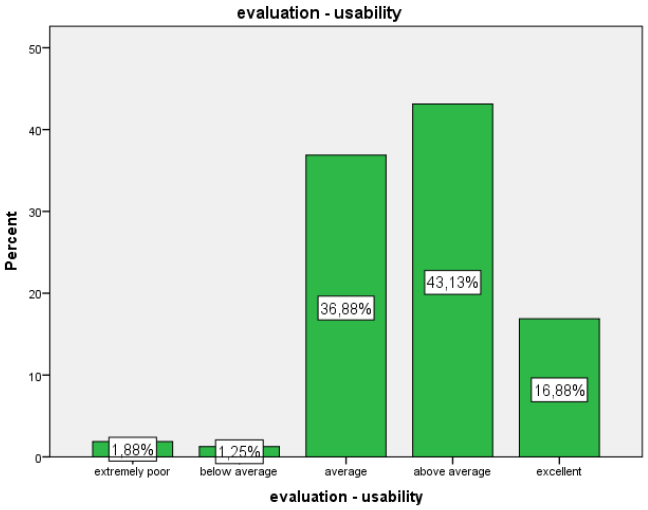


Figure 54: Evaluation - Design

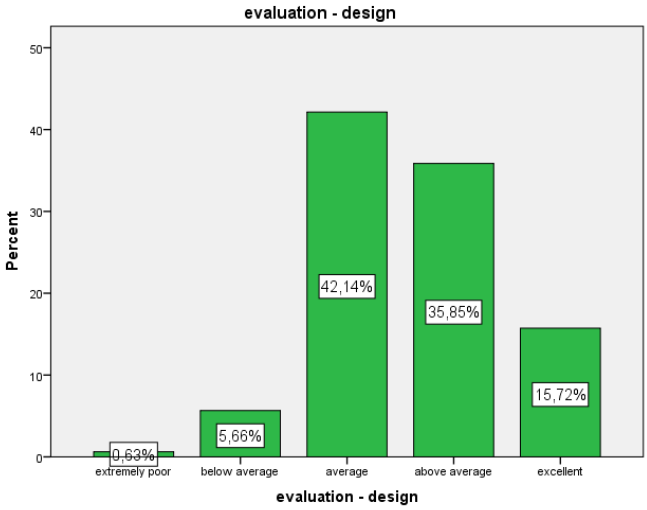


Figure 55: Evaluation – Navigation

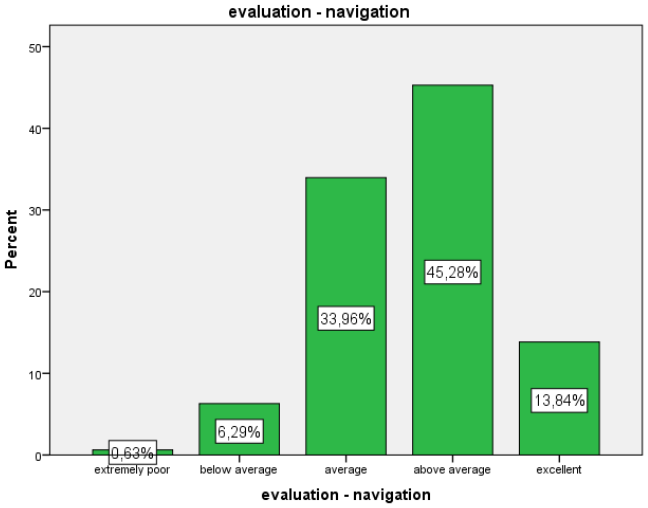


Figure 56: Evaluation - Ride offers

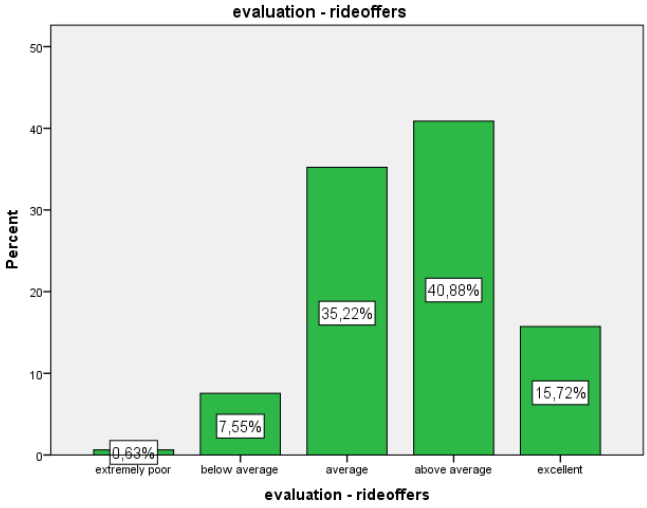
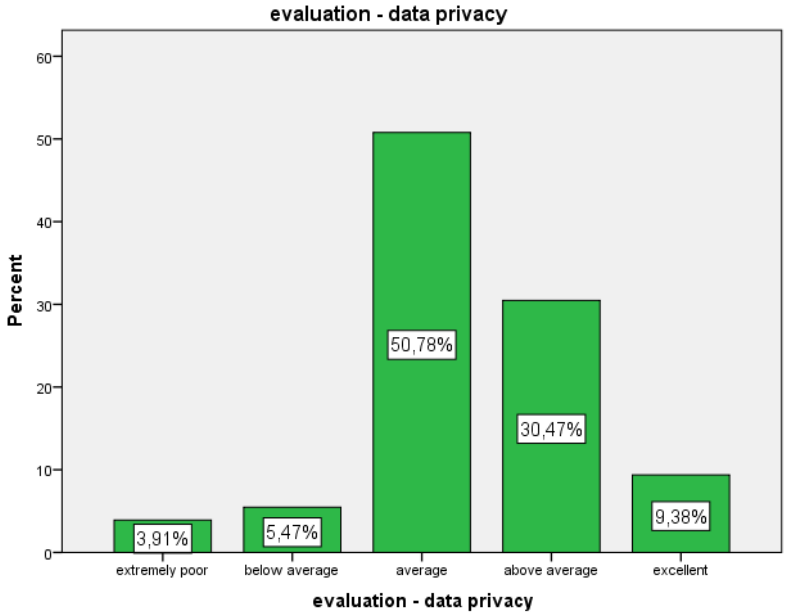


Figure 57: Evaluation - Data privacy

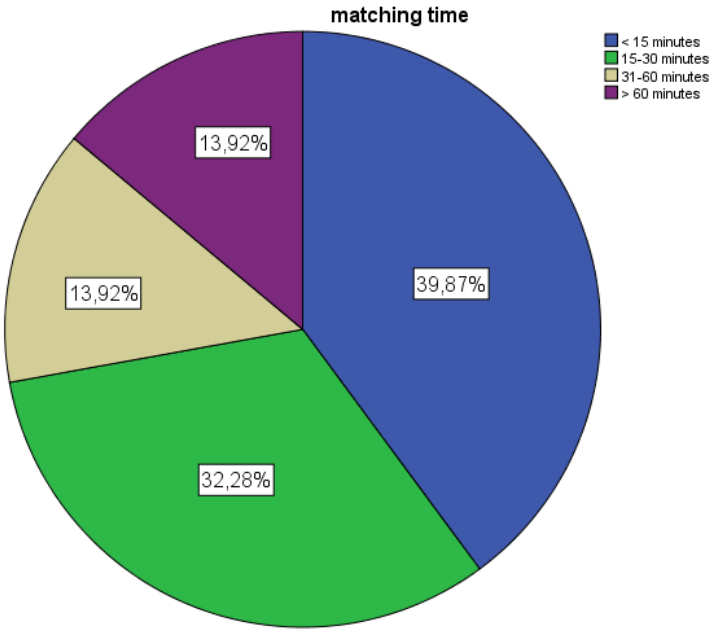


Question 15: *How quickly do you usually find a suitable offer using one matching platform?*

Table 33: Matching time

Statistics		
matching time		
N	Valid	158
	Missing	43
Median		2,00
Mode		1
Std. Deviation		1,050
Variance		1,102
Range		3

Figure 58: Matching time

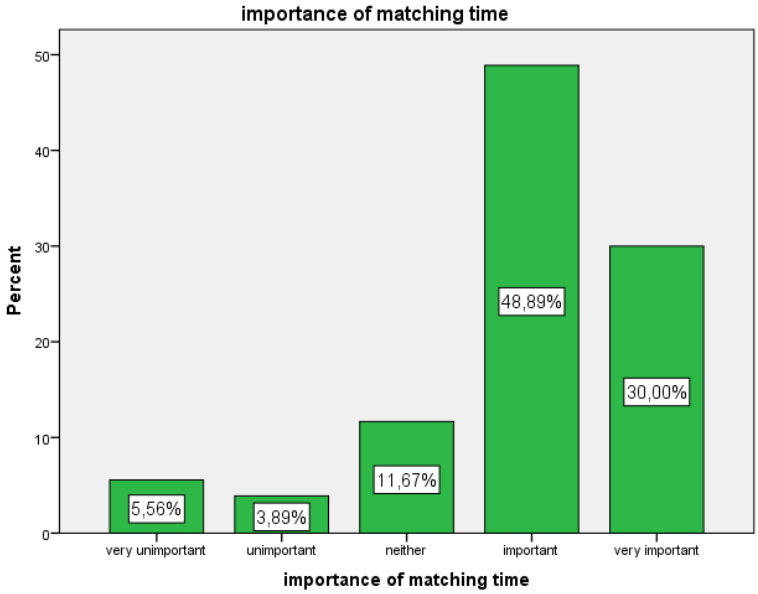


Question 16: *For your decision to use carpooling matching platforms, how important is to find a shared ride as quickly as possible?*

Table 34: Importance of matching time

Statistics		
importance of matching time		
N	Valid	180
	Missing	21
Median		4,00
Mode		4
Std. Deviation		1,037
Variance		1,074
Range		4

Figure 59: Importance of matching time



Question 17: *How would you evaluate the provided applications for using matching platforms?*

Table 35: Evaluation of new technologies

Statistics				
		new technologies - apps	new technologies - google maps	new technologies - social media
N	Valid	171	175	173
	Missing	30	26	28
Median		4,00	4,00	3,00
Mode		5	4	3
Std. Deviation		1,023	1,090	1,178
Variance		1,047	1,189	1,388
Range		4	4	4
Percentiles	25	4,00	3,00	2,00
	50	4,00	4,00	3,00
	75	5,00	5,00	4,00

Figure 60: Apps/mobile web version

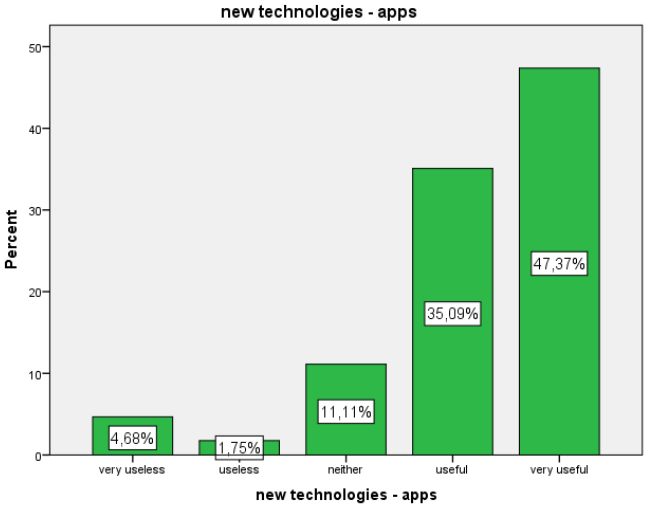


Figure 61: Google Maps

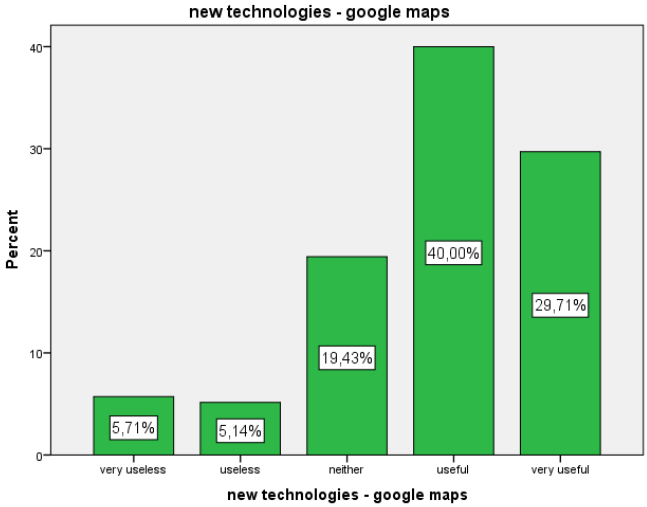
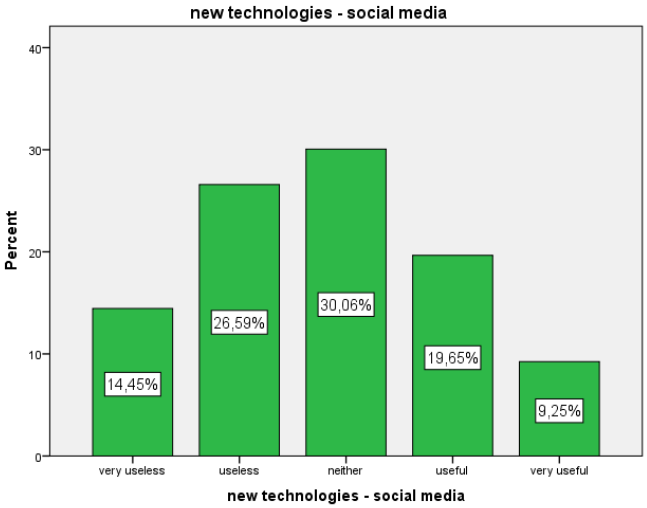


Figure 62: Social Media



Question 18: *For your decision to use carpooling matching platforms, how important are the following features?*

Table 36: Importance of various features

Statistics									
		registration	gender segregation	multiple languages	free use	matching time importance	apps importance	google maps importance	social media importance
N	Valid	183	188	187	190	180	188	186	187
	Missing	18	13	14	11	21	13	15	14
Median		3,00	2,00	4,00	5,00	4,00	4,00	3,00	2,00
Mode		4	2	4	5	4	4	4	1
Std. Deviation		1,292	1,149	1,093	,654	,791	1,201	1,146	1,198
Variance		1,669	1,321	1,194	,427	,626	1,444	1,314	1,434
Range		4	4	4	3	4	4	4	4
Percentiles	25	2,00	2,00	2,00	4,00	4,00	3,00	2,75	1,00
	50	3,00	2,00	4,00	5,00	4,00	4,00	3,00	2,00
	75	4,00	3,00	4,00	5,00	5,00	4,00	4,00	3,00

Table 37: Importance of no registration

registration					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	20	10,0	10,9	10,9
	unimportant	40	19,9	21,9	32,8
	neither	38	18,9	20,8	53,6
	important	49	24,4	26,8	80,3
	very important	36	17,9	19,7	100,0
	Total	183	91,0	100,0	
Missing	999	18	9,0		
Total		201	100,0		

Table 38: Importance of gender-segregated shared rides

gender segregation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	40	19,9	21,3	21,3
	unimportant	65	32,3	34,6	55,9
	neither	37	18,4	19,7	75,5
	important	39	19,4	20,7	96,3
	very important	7	3,5	3,7	100,0
	Total	188	93,5	100,0	
Missing	999	13	6,5		
Total		201	100,0		

Table 39: Importance of multiple languages

multiple languages					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	9	4,5	4,8	4,8
	unimportant	42	20,9	22,5	27,3
	neither	40	19,9	21,4	48,7
	important	74	36,8	39,6	88,2
	very important	22	10,9	11,8	100,0
	Total	187	93,0	100,0	
Missing	999	14	7,0		
Total		201	100,0		

Table 40: Importance of free use of platform

free use					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	unimportant	3	1,5	1,6	1,6
	neither	9	4,5	4,7	6,3
	important	45	22,4	23,7	30,0
	very important	133	66,2	70,0	100,0
	Total	190	94,5	100,0	
Missing	999	11	5,5		
Total		201	100,0		

Table 41: Importance of short matching time

matching time importance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	1	,5	,6	,6
	unimportant	5	2,5	2,8	3,3
	neither	20	10,0	11,1	14,4
	important	83	41,3	46,1	60,6
	very important	71	35,3	39,4	100,0
	Total	180	89,6	100,0	
Missing	999	20	10,0		
	System	1	,5		
	Total	21	10,4		
Total		201	100,0		

Table 42: Importance of app/mobile web version

apps importance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	18	9,0	9,6	9,6
	unimportant	24	11,9	12,8	22,3
	neither	51	25,4	27,1	49,5
	important	60	29,9	31,9	81,4
	very important	35	17,4	18,6	100,0
	Total	188	93,5	100,0	
Missing	999	13	6,5		
Total		201	100,0		

Table 43: Importance of Google Maps on platform

google maps importance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	15	7,5	8,1	8,1
	unimportant	31	15,4	16,7	24,7
	neither	55	27,4	29,6	54,3
	important	58	28,9	31,2	85,5
	very important	27	13,4	14,5	100,0
	Total	186	92,5	100,0	
Missing	999	15	7,5		
Total		201	100,0		

Table 44: Importance of connection to social media

social media importance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very unimportant	59	29,4	31,6	31,6
	unimportant	53	26,4	28,3	59,9
	neither	41	20,4	21,9	81,8
	important	24	11,9	12,8	94,7
	very important	10	5,0	5,3	100,0
	Total	187	93,0	100,0	
Missing	999	14	7,0		
Total		201	100,0		

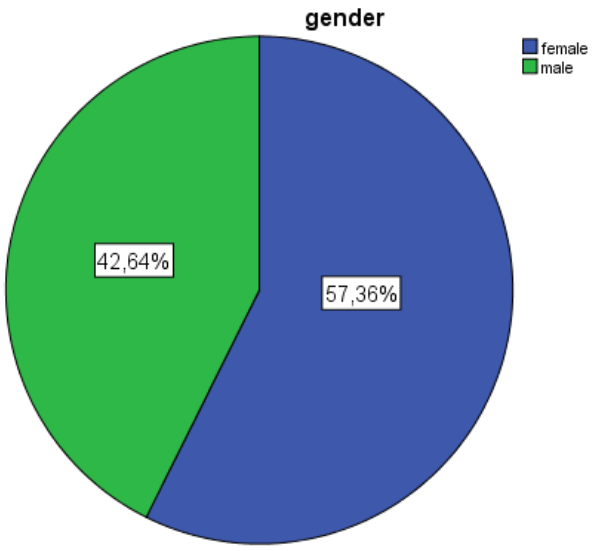
PERSONAL INFORMATION

Question 19: *What is your gender?*

Table 45: Gender

Statistics		
gender		
N	Valid	197
	Missing	4
Mode		1
Std. Deviation		,496
Variance		,246
Range		1

Figure 63: Gender

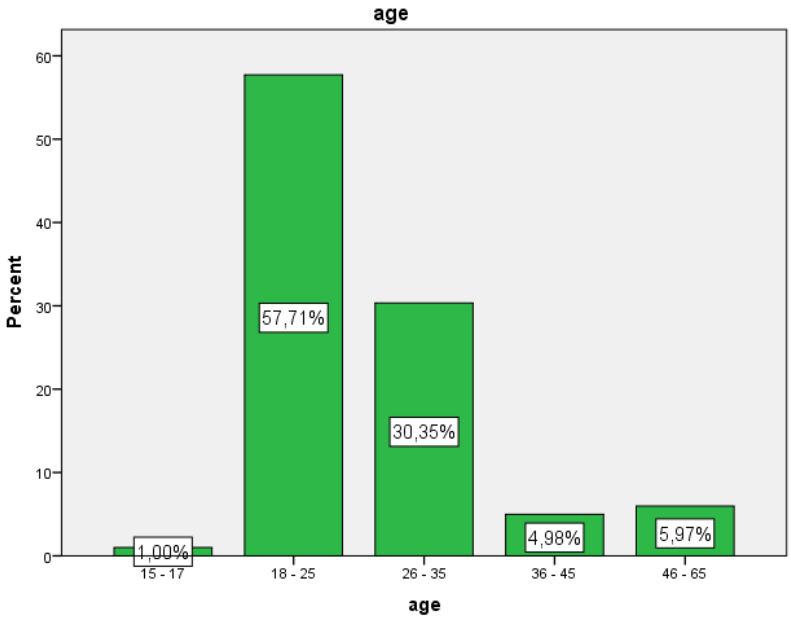


Question 20: *How old are you?*

Table 46: Age

Statistics		
age		
N	Valid	201
	Missing	0
Median		3,00
Mode		3
Std. Deviation		,852
Variance		,726
Range		4
Percentiles	25	3,00
	50	3,00
	75	4,00

Figure 64: Age

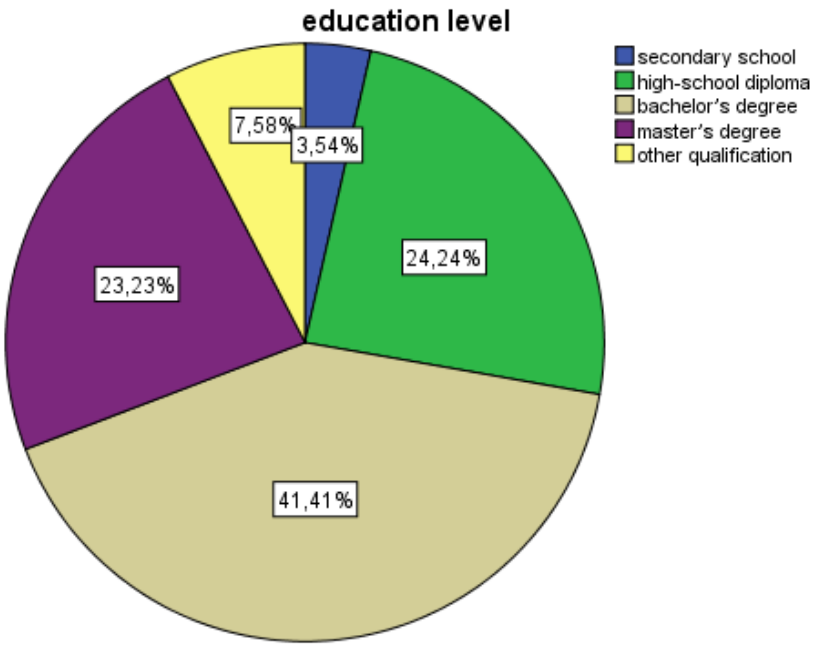


Question 21: *What is your actual level of education?*

Table 47: Level of education

Statistics		
education level		
N	Valid	198
	Missing	3
Mode		4
Std. Deviation		,959
Variance		,919
Range		4

Figure 65: Level of education



Question 22: *What is your occupational status?*

Table 48: Occupational status

Statistics		
occupational status		
N	Valid	200
	Missing	1
Mode		2
Std. Deviation		,825
Variance		,681
Range		5

occupational status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	pupil	2	1,0	1,0	1,0
	student	131	65,2	65,5	66,5
	employee	53	26,4	26,5	93,0
	self-employed	8	4,0	4,0	97,0
	without work	1	,5	,5	97,5
	other	5	2,5	2,5	100,0
	Total	200	99,5	100,0	
Missing	999	1	,5		
Total		201	100,0		

Question 23: *In which country do you live?*

Table 49: Country

Statistics		
country		
N	Valid	197
	Missing	4

country					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Austria	2	1,0	1,0	1,0
	Bulgaria	5	2,5	2,5	3,6
	Germany	138	68,7	70,1	73,6
	Mexico	1	,5	,5	74,1
	Netherlands	38	18,9	19,3	93,4
	Pakistan	1	,5	,5	93,9
	Philippines	1	,5	,5	94,4
	Poland	2	1,0	1,0	95,4
	Romania	2	1,0	1,0	96,4
	Scotland	1	,5	,5	97,0

	South Africa	1	,5	,5	97,5
	Spain	1	,5	,5	98,0
	Sweden	1	,5	,5	98,5
	Switzerland	1	,5	,5	99,0
	United Kingdom	2	1,0	1,0	100,0
	Total	197	98,0	100,0	
Missing	999	4	2,0		
Total		201	100,0		

Question 24: *In which city do you live?*

Table 50: City

Statistics		
city		
N	Valid	190
	Missing	11

city					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aachen	4	2,0	2,1	2,1
	Aalten	1	,5	,5	2,6
	Amsterdam	1	,5	,5	3,2
	Bamberg	1	,5	,5	3,7
	Berlin	11	5,5	5,8	9,5
	Bern	1	,5	,5	10,0
	Bielefeld	3	1,5	1,6	11,6
	Bonn	3	1,5	1,6	13,2
	Bottrop	1	,5	,5	13,7
	Braunschweig	1	,5	,5	14,2
	Bucharest	1	,5	,5	14,7
	Cluj Napoca	1	,5	,5	15,3
	Coburg	1	,5	,5	15,8
	Darmstadt	3	1,5	1,6	17,4
	Den Haag	1	,5	,5	17,9
	Dortmund	3	1,5	1,6	19,5
	Dresden	1	,5	,5	20,0
	Düsseldorf	1	,5	,5	20,5
	Edinburgh	1	,5	,5	21,1
	Eindhoven	1	,5	,5	21,6
	Enschede	18	9,0	9,5	31,1
	Erfurt	1	,5	,5	31,6
	Essen	2	1,0	1,1	32,6

	Frankfurt	3	1,5	1,6	34,2
	Frankfurt am Main	2	1,0	1,1	35,3
	Freiburg	11	5,5	5,8	41,1
	Friedberg	2	1,0	1,1	42,1
	Geseke	1	,5	,5	42,6
	Gießen	2	1,0	1,1	43,7
	Gothenburg	1	,5	,5	44,2
	Göttingen	1	,5	,5	44,7
	Greifswald	1	,5	,5	45,3
	Gronau	6	3,0	3,2	48,4
	Groningen	5	2,5	2,6	51,1
	Haaksbergen	1	,5	,5	51,6
	Hamburg	3	1,5	1,6	53,2
	Hannover	2	1,0	1,1	54,2
	Heidelberg	14	7,0	7,4	61,6
	Herne	1	,5	,5	62,1
	Jena	1	,5	,5	62,6
	Johannesburg	1	,5	,5	63,2
	Kleve	1	,5	,5	63,7
	Köln	7	3,5	3,7	67,4
	Laatzen	1	,5	,5	67,9
	Leeuwarden	5	2,5	2,6	70,5
	London	1	,5	,5	71,1
	Ludwigshafen	1	,5	,5	71,6
	Lüneburg	1	,5	,5	72,1
	Maastricht	1	,5	,5	72,6
	Madrid	1	,5	,5	73,2
	Mainz	1	,5	,5	73,7
	Mannheim	1	,5	,5	74,2
	Mexico- Stadt	1	,5	,5	74,7
	Milton Keynes	1	,5	,5	75,3
	Mülheim	1	,5	,5	75,8
	München	2	1,0	1,1	76,8
	Münster	2	1,0	1,1	77,9
	Nürnberg	1	,5	,5	78,4
	Oldenburg	1	,5	,5	78,9
	Paderborn	5	2,5	2,6	81,6
	Quaidabad khushab	1	,5	,5	82,1
	Regensburg	2	1,0	1,1	83,2
	Rosbach	1	,5	,5	83,7
	Salzkotten	5	2,5	2,6	86,3
	Schmalkalden	1	,5	,5	86,8
	Sofia	5	2,5	2,6	89,5

	Stuttgart	5	2,5	2,6	92,1
	Tacloban City	1	,5	,5	92,6
	Trebur	1	,5	,5	93,2
	Tübingen	3	1,5	1,6	94,7
	Ulm	1	,5	,5	95,3
	Vorden	1	,5	,5	95,8
	Wachtberg (bei Bonn)	1	,5	,5	96,3
	Wageningen	1	,5	,5	96,8
	Warschau	1	,5	,5	97,4
	Wien	2	1,0	1,1	98,4
	Wittenberg	1	,5	,5	98,9
	Wsrsaw	1	,5	,5	99,5
	Würzburg	1	,5	,5	100,0
	Total	190	94,5	100,0	
Missing	999	11	5,5		
Total		201	100,0		

b. Results scale and size of communities

Table 51: Scale of community

Statistics		
scale - number of options		
N	Valid	102
	Missing	99
Median		1,0000
Mode		1,00
Std. Deviation		,74181
Variance		,550
Range		3,00

scale - number of options					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no options	1	,5	1,0	1,0
	very high number of options	85	42,3	83,3	84,3
	moderate number of options	16	8,0	15,7	100,0
	Total	102	50,7	100,0	
Missing	999,00	99	49,3		
Total		201	100,0		

Table 52: Size of community

Statistics		
size - number of users		
N	Valid	144
	Missing	57
Median		1,0000
Mode		1,00
Std. Deviation		,54765
Variance		,300
Range		2,00

size - number of users					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	large community	121	60,2	84,0	84,0
	medium-sized community	14	7,0	9,7	93,8
	small community	9	4,5	6,3	100,0
	Total	144	71,6	100,0	
Missing	999,00	57	28,4		
Total		201	100,0		

E. Further statistical outputs

a. Comparison of means: All factors with use/non-use of carpooling matching platforms

TRANSACTION COST TYPES

Table 53: Importance of information features for users and non-users

Report							
use of carpooling matching platform		information - contact form	information - direct	information - experiences	information - assessment tool	information - chat forum	information - blog
No	Mean	3,65	4,24	4,28	4,26	3,09	2,68
	N	46	45	47	47	47	47
	Std. Deviation	,924	,830	,713	,820	1,060	1,086
	Minimum	very unimportant	very unimportant	unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important	very important	important
	Std. Error of Mean	,136	,124	,104	,120	,155	,158
	Range	4	4	3	4	4	3
Yes	Mean	3,62	4,13	4,13	3,97	2,75	2,24
	N	143	142	143	141	141	140
	Std. Deviation	,955	,852	1,054	1,055	1,070	,959
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important	very important	very important
	Std. Error of Mean	,080	,072	,088	,089	,090	,081
	Range	4	4	4	4	4	4
Total	Mean	3,63	4,16	4,16	4,04	2,84	2,35
	N	189	187	190	188	188	187
	Std. Deviation	,946	,846	,981	1,007	1,074	1,007
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important	very important	very important
	Std. Error of Mean	,069	,062	,071	,073	,078	,074
	Range	4	4	4	4	4	4

Table 54: ANOVA tests of users and non-users with information features

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
information - contact form * use of carpooling matching platform	Between Groups	(Combined)	,031	1	,031	,034	,853
	Within Groups		168,043	187	,899		
	Total		168,074	188			
information - direct * use of carpooling matching platform	Between Groups	(Combined)	,418	1	,418	,583	,446
	Within Groups		132,769	185	,718		
	Total		133,187	186			
information - experiences * use of carpooling matching platform	Between Groups	(Combined)	,804	1	,804	,834	,362
	Within Groups		181,139	188	,964		
	Total		181,942	189			
information - assessment tool * use of carpooling matching platform	Between Groups	(Combined)	2,837	1	2,837	2,824	,095
	Within Groups		186,823	186	1,004		
	Total		189,660	187			
information - chat forum * use of carpooling matching platform	Between Groups	(Combined)	3,917	1	3,917	3,437	,065
	Within Groups		211,972	186	1,140		
	Total		215,888	187			
information - blog * use of carpooling matching platform	Between Groups	(Combined)	6,750	1	6,750	6,863	,010
	Within Groups		181,956	185	,984		
	Total		188,706	186			

Table 55: Importance of no registration for users and non-users

Report							
registration							
use of carpooling matching platform	Mean	N	Std. Deviation	Range	Std. Error of Mean	Maximum	Minimum
No	2,98	42	1,093	4	,169	very important	very unimportant
Yes	3,30	141	1,340	4	,113	very important	very unimportant
Total	3,22	183	1,292	4	,096	very important	very unimportant

Table 56: ANOVA tests of users and non-users with no registration

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
registration * use of carpooling matching platform	Between Groups	(Combined)	3,349	1	3,349	2,017	,157
	Within Groups		300,466	181	1,660		
	Total		303,814	182			

Table 57: Importance of free usage of platform for users and non-users

Report							
free use							
use of carpooling matching platform	Mean	N	Std. Deviation	Range	Std. Error of Mean	Maximum	Minimum
No	4,34	44	,680	2	,103	very important	neither
Yes	4,71	146	,623	3	,052	very important	unimportant
Total	4,62	190	,654	3	,047	very important	unimportant

Table 58: ANOVA tests of users and non-users with free usage of platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
free use * use of carpooling matching platform	Between Groups	(Combined)	4,494	1	4,494	11,084	,001
	Within Groups		76,222	188	,405		
	Total		80,716	189			

Table 59: Usefulness of payment methods for users and non-users

Report					
use of carpooling matching platform		payment - cash	payment - creditcard	payment - paypal	payment - debit
No	Mean	4,06	3,23	3,62	3,19
	N	47	47	47	48
	Std. Deviation	1,092	1,220	1,278	1,232
	Range	4	4	4	4
	Std. Error of Mean	,159	,178	,186	,178
	Maximum	very useful	very useful	very useful	very useful
	Minimum	very useless	very useless	very useless	very useless
Yes	Mean	4,70	2,54	2,59	2,39
	N	148	145	141	143

	Std. Deviation	,706	1,318	1,394	1,187
	Range	4	4	4	4
	Std. Error of Mean	,058	,109	,117	,099
	Maximum	very useful	very useful	very useful	very useful
	Minimum	very useless	very useless	very useless	very useless
Total	Mean	4,54	2,71	2,85	2,59
	N	195	192	188	191
	Std. Deviation	,857	1,326	1,434	1,244
	Range	4	4	4	4
	Std. Error of Mean	,061	,096	,105	,090
	Maximum	very useful	very useful	very useful	very useful
	Minimum	very useless	very useless	very useless	very useless

Table 60: ANOVA tests of users and non-users with payment methods

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
payment - cash * use of carpooling matching platform	Between Groups	(Combined)	14,253	1	14,253	21,470	,000
	Within Groups		128,126	193	,664		
	Total		142,379	194			
payment - creditcard * use of carpooling matching platform	Between Groups	(Combined)	17,200	1	17,200	10,262	,002
	Within Groups		318,467	190	1,676		
	Total		335,667	191			
payment - paypal * use of carpooling matching platform	Between Groups	(Combined)	37,278	1	37,278	19,968	,000
	Within Groups		347,248	186	1,867		
	Total		384,527	187			
payment - debit * use of carpooling matching platform	Between Groups	(Combined)	22,764	1	22,764	15,854	,000
	Within Groups		271,382	189	1,436		
	Total		294,147	190			

Table 61: Importance of communication tools for users and non-users

Report					
use of carpooling matching platform		communication - board	communication - blog	communication - messages	communication - no tool
No	Mean	,26	,06	,70	,18
	N	50	50	50	50
	Std. Deviation	,443	,240	,463	,388
	Range	1	1	1	1
	Std. Error of Mean	,063	,034	,065	,055
	Maximum	Yes	Yes	Yes	Yes
	Minimum	Not selected	Not selected	Not selected	Not selected
	Median	,00	,00	1,00	,00
Yes	Mean	,13	,01	,75	,17
	N	151	151	151	151
	Std. Deviation	,340	,115	,432	,379
	Range	1	1	1	1
	Std. Error of Mean	,028	,009	,035	,031
	Maximum	Yes	Yes	Yes	Yes
	Minimum	Not selected	Not selected	Not selected	Not selected
	Median	,00	,00	1,00	,00
Total	Mean	,16	,02	,74	,17
	N	201	201	201	201
	Std. Deviation	,371	,156	,439	,380
	Range	1	1	1	1
	Std. Error of Mean	,026	,011	,031	,027
	Maximum	Yes	Yes	Yes	Yes
	Minimum	Not selected	Not selected	Not selected	Not selected
	Median	,00	,00	1,00	,00

Table 62: ANOVA tests of users and non-users with communication tools

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
communication - board * use of carpooling matching platform	Between Groups	(Combined)	,611	1	,611	4,509	,035
	Within Groups		26,971	199	,136		
	Total		27,582	200			
communication - blog * use of carpooling matching platform	Between Groups	(Combined)	,082	1	,082	3,409	,066
	Within Groups		4,794	199	,024		
	Total		4,876	200			
communication - messages * use of	Between Groups	(Combined)	,113	1	,113	,588	,444

carpooling matching platform	Within Groups		38,434	199	,193		
	Total		38,547	200			
communication - no tool * use of carpooling matching platform	Between Groups	(Combined)	,002	1	,002	,016	,900
	Within Groups		28,903	199	,145		
	Total		28,905	200			

Table 63: Usefulness of new technologies for users and non-users

Report				
use of carpooling matching platform		new technologies - apps	new technologies - google maps	new technologies - social media
No	Mean	4,27	3,76	3,43
	N	37	38	37
	Std. Deviation	,871	1,240	1,214
	Std. Error of Mean	,143	,201	,200
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
Yes	Mean	4,16	3,85	2,66
	N	134	137	136
	Std. Deviation	1,063	1,049	1,117
	Std. Error of Mean	,092	,090	,096
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
Total	Mean	4,19	3,83	2,83
	N	171	175	173
	Std. Deviation	1,023	1,090	1,178
	Std. Error of Mean	,078	,082	,090
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4

Table 64: ANOVA tests of users and non-users with new technologies

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
new technologies - apps * use of carpooling matching platform	Between Groups	(Combined)	,326	1	,326	,310	,578
	Within Groups		177,685	169	1,051		
	Total		178,012	170			
new technologies - google maps * use of	Between Groups	(Combined)	,208	1	,208	,174	,677

carpooling matching platform	Within Groups		206,649	173	1,195		
	Total		206,857	174			
new technologies - social media * use of carpooling matching platform	Between Groups	(Combined)	17,275	1	17,275	13,335	,000
	Within Groups		221,522	171	1,295		
	Total		238,798	172			

Table 65: Importance of short matching time for users and non-users

Report							
matching time importance							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	4,32	41	,722	,113	unimportant	very important	3
Yes	4,18	139	,810	,069	very unimportant	very important	4
Total	4,21	180	,791	,059	very unimportant	very important	4

Table 66: ANOVA tests for users and non-users with short matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time importance * use of carpooling matching platform	Between Groups	(Combined)	,596	1	,596	,953	,330
	Within Groups		111,382	178	,626		
	Total		111,978	179			

Table 67: Length of matching time for users and non-users

Report							
matching time							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	1,95	22	1,090	,232	< 15 minutes	> 60 minutes	3
Yes	2,03	136	1,047	,090	< 15 minutes	> 60 minutes	3
Total	2,02	158	1,050	,083	< 15 minutes	> 60 minutes	3

Table 68: ANOVA tests for users and non-users with length of matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time * use of carpooling matching platform	Between Groups	(Combined)	,106	1	,106	,096	,757
	Within Groups		172,837	156	1,108		
	Total		172,943	157			

Table 69: Importance of multiple languages for users and non-users

Report							
multiple languages							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,28	43	1,098	,167	very unimportant	very important	4
Yes	3,32	144	1,095	,091	very unimportant	very important	4
Total	3,31	187	1,093	,080	very unimportant	very important	4

Table 70: ANOVA tests for users and non-users with multiple languages

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
multiple languages * use of carpooling matching platform	Between Groups	(Combined)	,054	1	,054	,045	,832
	Within Groups		221,957	185	1,200		
	Total		222,011	186			

Table 71: Importance of safety precautions for users and non-users

Report					
use of carpooling matching platform		safety - data privacy	safety - insurance from provider	safety - insurance of users	safety - control profiles
No	Mean	4,45	4,14	4,21	4,45
	N	49	49	48	49
	Std. Deviation	,765	,842	,944	,679
	Std. Error of Mean	,109	,120	,136	,097
	Minimum	very unimportant	very unimportant	very unimportant	unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	3
Yes	Mean	4,18	3,62	3,85	3,99

	N	150	142	144	147
	Std. Deviation	,905	1,077	1,006	,990
	Std. Error of Mean	,074	,090	,084	,082
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4
Total	Mean	4,25	3,75	3,94	4,11
	N	199	191	192	196
	Std. Deviation	,879	1,045	1,001	,941
	Std. Error of Mean	,062	,076	,072	,067
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4

Table 72: ANOVA tests for users and non-users with safety precautions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
safety - data privacy * use of carpooling matching platform	Between Groups	(Combined)	2,672	1	2,672	3,503	,063
	Within Groups		150,262	197	,763		
	Total		152,935	198			
safety - insurance from provider * use of carpooling matching platform	Between Groups	(Combined)	9,970	1	9,970	9,542	,002
	Within Groups		197,465	189	1,045		
	Total		207,435	190			
safety - insurance of users * use of carpooling matching platform	Between Groups	(Combined)	4,694	1	4,694	4,781	,030
	Within Groups		186,556	190	,982		
	Total		191,250	191			
safety - control profiles * use of carpooling matching platform	Between Groups	(Combined)	7,634	1	7,634	8,970	,003
	Within Groups		165,116	194	,851		
	Total		172,750	195			

Table 73: Importance of gender-segregated offers for users and non-users

Report							
gender segregation							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,79	43	1,103	,168	very unimportant	important	3
Yes	2,43	145	1,153	,096	very unimportant	very important	4
Total	2,51	188	1,149	,084	very unimportant	very important	4

Table 74: ANOVA tests for users and non-users with gender-segregated offers

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender segregation * use of carpooling matching platform	Between Groups	(Combined)	4,373	1	4,373	3,353	,069
	Within Groups		242,606	186	1,304		
	Total		246,979	187			

BENEFITS

Table 75: Importance of reducing CO_2-emissions for users and non-users

Report							
reduction of CO2 emissions							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,29	48	1,288	,186	very unimportant	very important	4
Yes	3,48	151	1,130	,092	very unimportant	very important	4
Total	3,43	199	1,170	,083	very unimportant	very important	4

Table 76: ANOVA tests for users and non-users with reducing CO_2-emissions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
reduction of CO2 emissions * use of carpooling matching platform	Between Groups	(Combined)	1,249	1	1,249	,912	,341
	Within Groups		269,586	197	1,368		
	Total		270,834	198			

Table 77: Importance of less pollution for users and non-users

Report							
less pollution							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,37	48	1,231	,178	very unimportant	very important	4
Yes	3,53	150	1,115	,091	very unimportant	very important	4
Total	3,49	198	1,143	,081	very unimportant	very important	4

Table 78: ANOVA tests for users and non-users with less pollution

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less pollution * use of carpooling matching platform	Between Groups	(Combined)	,912	1	,912	,696	,405
	Within Groups		256,583	196	1,309		
	Total		257,495	197			

Table 79: Importance of less traffic jam for users and non-users

Report							
less traffic jam							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,09	47	1,299	,190	very unimportant	very important	4
Yes	3,03	150	1,155	,094	very unimportant	very important	4
Total	3,05	197	1,188	,085	very unimportant	very important	4

Table 80: ANOVA tests for users and non-users with less traffic jam

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less traffic jam * use of carpooling matching platform	Between Groups	(Combined)	,096	1	,096	,068	,795
	Within Groups		276,493	195	1,418		
	Total		276,589	196			

Table 81: Importance of lower parking costs for users and non-users

Report							
lower parking costs							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,38	47	1,171	,171	very unimportant	very important	4
Yes	2,76	149	1,329	,109	very unimportant	very important	4
Total	2,91	196	1,317	,094	very unimportant	very important	4

Table 82: ANOVA tests for users and non-users with lower parking costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower parking costs * use of carpooling matching platform	Between Groups	(Combined)	13,939	1	13,939	8,335	,004
	Within Groups		324,408	194	1,672		
	Total		338,347	195			

Table 83: Importance of lower travel costs for users and non-users

Report							
lower travel costs							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	4,22	49	1,006	,144	very unimportant	very important	4
Yes	4,68	149	,700	,057	very unimportant	very important	4
Total	4,57	198	,808	,057	very unimportant	very important	4

Table 84: ANOVA tests for users and non-users with lower travel costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower travel costs * use of carpooling matching platform	Between Groups	(Combined)	7,579	1	7,579	12,270	,001
	Within Groups		121,068	196	,618		
	Total		128,646	197			

Table 85: Importance of lower travel time for users and non-users

Report							
shorter travel time							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,47	47	1,080	,158	very unimportant	very important	4
Yes	3,87	148	1,096	,090	very unimportant	very important	4
Total	3,77	195	1,103	,079	very unimportant	very important	4

Table 86: ANOVA tests for users and non-users with lower travel time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter travel time * use of carpooling matching platform	Between Groups	(Combined)	5,809	1	5,809	4,869	,029
	Within Groups		230,263	193	1,193		
	Total		236,072	194			

Table 87: Importance of lower planning time for users and non-users

Report							
shorter time of planning							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,06	48	1,174	,169	very unimportant	very important	4
Yes	3,68	145	1,013	,084	very unimportant	very important	4
Total	3,52	193	1,085	,078	very unimportant	very important	4

Table 88: ANOVA tests for users and non-users with shorter time of planning

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter time of planning * use of carpooling matching platform	Between Groups	(Combined)	13,567	1	13,567	12,190	,001
	Within Groups		212,578	191	1,113		
	Total		226,145	192			

Table 89: Importance of sharing ideas and experiences with others for users and non-users

Report							
sharing ideas and experiences							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,39	49	1,115	,159	very unimportant	very important	4
Yes	2,85	150	1,098	,090	very unimportant	very important	4
Total	2,73	199	1,117	,079	very unimportant	very important	4

Table 90: ANOVA tests for users and non-users with sharing ideas and experiences

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
sharing ideas and experiences * use of carpooling matching platform	Between Groups	(Combined)	7,778	1	7,778	6,409	,012
	Within Groups		239,106	197	1,214		
	Total		246,884	198			

Table 91: Importance of meeting new people for users and non-users

Report							
meeting new people							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,43	49	1,080	,154	very unimportant	very important	4
Yes	2,75	151	1,211	,099	very unimportant	very important	4
Total	2,68	200	1,186	,084	very unimportant	very important	4

Table 92: ANOVA tests for users and non-users with meeting new people

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
meeting new people * use of carpooling matching platform	Between Groups	(Combined)	3,941	1	3,941	2,828	,094
	Within Groups		275,934	198	1,394		
	Total		279,875	199			

Table 93: Trust in other carpoolers using same matching platform for users and non-users

Report							
trust in other users using same matching platform							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,30	44	1,374	,207	not trust at all	I don't know	4
Yes	3,27	147	,734	,061	not trust at all	I don't know	4
Total	3,27	191	,917	,066	not trust at all	I don't know	4

Table 94: ANOVA tests for users and non-users with trust in other carpoolers using same matching platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in other users using same matching platform * use of carpooling matching platform	Between Groups	(Combined)	,031	1	,031	,036	,849
	Within Groups		159,812	189	,846		
	Total		159,843	190			

Table 95: Trust in matching platform(s) for users and non-users

Report							
trust in matching platform(s)							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,39	38	1,405	,228	not trust at all	I don't know	4
Yes	3,34	147	,736	,061	not trust at all	I don't know	4
Total	3,35	185	,909	,067	not trust at all	I don't know	4

Table 96: ANOVA tests for users and non-users with trust in matching platform(s)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in matching platform(s) * use of carpooling matching platform	Between Groups	(Combined)	,090	1	,090	,108	,742
	Within Groups		152,072	183	,831		
	Total		152,162	184			

Table 97: Importance of trust in selected matching platform for users and non-users

Report							
importance of trust							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	4,26	46	1,163	,171	very unimportant	very important	4
Yes	4,12	146	,929	,077	very unimportant	very important	4
Total	4,15	192	,988	,071	very unimportant	very important	4

Table 98: ANOVA tests for users and non-users with importance of trust

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
importance of trust * use of carpooling matching platform	Between Groups	(Combined)	,730	1	,730	,746	,389
	Within Groups		185,890	190	,978		
	Total		186,620	191			

Table 99: Size of platforms for users and non-users

Report							
size - number of users							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	1,5000	14	,65044	,17384	large community	small community	2,00
Yes	1,1923	130	,52968	,04646	large community	small community	2,00
Total	1,2222	144	,54765	,04564	large community	small community	2,00

Table 100: ANOVA tests for users and non-users with size of platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
size - number of users * use of carpooling matching platform	Between Groups	(Combined)	1,197	1	1,197	4,075	,045
	Within Groups		41,692	142	,294		
	Total		42,889	143			

Table 101: Scale of platforms for users and non-users

Report							
scale - number of options							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	1,5833	12	1,08362	,31282	no options	moderate number of options	3,00
Yes	1,2667	90	,68368	,07207	very high number of options	moderate number of options	2,00
Total	1,3039	102	,74181	,07345	no options	moderate number of options	3,00

Table 102: ANOVA tests for users and non-users with scale of platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
scale - number of options * use of carpooling matching platform	Between Groups	(Combined)	1,062	1	1,062	1,948	,166
	Within Groups		54,517	100	,545		
	Total		55,578	101			

Table 103: Importance of friends/relatives use of matching platforms for users and non-users

Report							
friends/relatives use carpooling matching platforms							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,52	46	1,260	,186	very unimportant	very important	4
Yes	2,41	140	1,112	,094	very unimportant	very important	4
Total	2,44	186	1,148	,084	very unimportant	very important	4

Table 104: ANOVA tests for users and non-users with friends/relatives use matching platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
friends/relatives use carpooling matching platforms * use of carpooling matching platform	Between Groups	(Combined)	,400	1	,400	,302	,583
	Within Groups		243,450	184	1,323		
	Total		243,849	185			

Table 105: Frequency of friends/relatives use matching platforms for users and non-users

Report							
frequency of friends/relatives use matching platforms							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,52	50	1,488	,210	never	I don't know	5
Yes	2,85	150	,968	,079	never	I don't know	5
Total	2,76	200	1,125	,080	never	I don't know	5

Table 106: ANOVA tests for users and non-users with frequency of friends/relatives use matching platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequency of friends/relatives use matching platforms * use of carpooling matching platform	Between Groups	(Combined)	4,002	1	4,002	3,195	,075
	Within Groups		247,953	198	1,252		
	Total		251,955	199			

PERSONAL AND FURTHER INFORMATION

Table 107: Gender of users and non-users

Report							
gender							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	1,48	48	,505	,073	female	male	1
Yes	1,41	149	,493	,040	female	male	1
Total	1,43	197	,496	,035	female	male	1

Table 108: ANOVA tests for users and non-users with gender

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender * use of carpooling matching platform	Between Groups	(Combined)	,177	1	,177	,718	,398
	Within Groups		48,006	195	,246		
	Total		48,183	196			

Table 109: Age of users and non-users

Report							
age							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	3,76	50	1,117	,158	15 - 17	46 - 65	4
Yes	3,51	151	,738	,060	18 - 25	46 - 65	3
Total	3,57	201	,852	,060	15 - 17	46 - 65	4

Table 110: ANOVA tests for users and non-users with age

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
age * use of carpooling matching platform	Between Groups	(Combined)	2,349	1	2,349	3,272	,072
	Within Groups		142,855	199	,718		
	Total		145,204	200			

Table 111: Educational level of users and non-users

Report							
education level							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	4,28	50	1,089	,154	secondary school	other qualification	4
Yes	4,00	148	,904	,074	secondary school	other qualification	4
Total	4,07	198	,959	,068	secondary school	other qualification	4

Table 112: ANOVA tests for users and non-users with educational level

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
education level * use of carpooling matching platform	Between Groups	(Combined)	2,930	1	2,930	3,225	,074
	Within Groups		178,080	196	,909		
	Total		181,010	197			

Table 113: Occupational status of users and non-users

Report							
occupational status							
use of carpooling matching platform	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
No	2,51	49	,845	,121	pupil	other	5
Yes	2,43	151	,821	,067	student	other	4
Total	2,45	200	,825	,058	pupil	other	5

Table 114: ANOVA tests for users and non-users with occupational status

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
occupational status * use of carpooling matching platform	Between Groups	(Combined)	,235	1	,235	,344	,558
	Within Groups		135,265	198	,683		
	Total		135,500	199			

Table 115: Evaluation of preferred platform for users and non-users

Report						
use of carpooling matching platform		evaluation - usability	evaluation - data privacy	evaluation - rideoffers	evaluation - navigation	evaluation - design
No	Mean	3,48	3,42	3,45	3,25	3,14
	N	21	19	20	20	21
	Std. Deviation	,602	,838	,887	,967	,854
	Std. Error of Mean	,131	,192	,198	,216	,186
	Minimum	average	below average	below average	extremely poor	below average
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	2	3	3	4	3
Yes	Mean	3,76	3,35	3,66	3,71	3,67
	N	139	109	139	139	138
	Std. Deviation	,850	,886	,856	,782	,821

	Std. Error of Mean	,072	,085	,073	,066	,070
	Minimum	extremely poor	extremely poor	extremely poor	below average	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	3	4
Total	Mean	3,72	3,36	3,64	3,65	3,60
	N	160	128	159	159	159
	Std. Deviation	,825	,876	,860	,819	,842
	Std. Error of Mean	,065	,077	,068	,065	,067
	Minimum	extremely poor	extremely poor	extremely poor	extremely poor	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	4	4

Table 116: ANOVA tests for users and non-users with evaluation of preferred platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
evaluation - usability * use of carpooling matching platform	Between Groups	(Combined)	1,422	1	1,422	2,102	,149
	Within Groups		106,922	158	,677		
	Total		108,344	159			
evaluation - data privacy * use of carpooling matching platform	Between Groups	(Combined)	,085	1	,085	,110	,741
	Within Groups		97,384	126	,773		
	Total		97,469	127			
evaluation - rideoffers * use of carpooling matching platform	Between Groups	(Combined)	,785	1	,785	1,062	,304
	Within Groups		116,058	157	,739		
	Total		116,843	158			
evaluation - navigation * use of carpooling matching platform	Between Groups	(Combined)	3,736	1	3,736	5,736	,018
	Within Groups		102,239	157	,651		
	Total		105,975	158			
evaluation - design * use of carpooling matching platform	Between Groups	(Combined)	5,140	1	5,140	7,549	,007
	Within Groups		106,898	157	,681		
	Total		112,038	158			

b. Comparison of means of matching platforms with all factors

Table 117: Comparison of means of blablacar with information features

information - direct information - experiences information - assessment tool information - chat forum information - blog information - contact form * favourite platform - blablacar							
favourite platform - blablacar		information - direct	information - experiences	information - assessment tool	information - chat forum	information - blog	information - contact form
yes	Mean	4,17	4,22	4,04	2,74	2,32	3,63
	N	81	82	81	81	79	83
	Std. Deviation	,803	1,031	1,078	1,058	1,020	,933
none	Mean	4,12	4,18	4,18	2,76	2,29	3,41
	N	17	17	17	17	17	17
	Std. Deviation	1,111	,809	,728	1,033	,985	1,004
other	Mean	4,16	4,07	3,99	2,82	2,26	3,63
	N	69	69	68	68	69	68
	Std. Deviation	,851	1,062	1,015	1,119	,965	,976
Total	Mean	4,16	4,15	4,03	2,78	2,29	3,61
	N	167	168	166	166	165	168
	Std. Deviation	,852	1,021	1,018	1,075	,988	,954

Table 118: Comparison of means of mitfahrgelegenheit with information features

information - direct information - experiences information - assessment tool information - chat forum information - blog information - contact form * favourite platform - mitfahrgelegenheit							
favourite platform - mitfahrgelegenheit		information - direct	information - experiences	information - assessment tool	information - chat forum	information - blog	information - contact form
yes	Mean	4,31	4,22	4,11	2,60	2,06	3,86
	N	36	36	36	35	36	35
	Std. Deviation	,710	,898	,854	1,063	,924	,733
none	Mean	4,12	4,18	4,18	2,76	2,29	3,41
	N	17	17	17	17	17	17
	Std. Deviation	1,111	,809	,728	1,033	,985	1,004
other	Mean	4,12	4,12	3,99	2,84	2,37	3,57
	N	115	116	114	115	113	117
	Std. Deviation	,850	1,089	1,101	1,089	1,002	1,003
Total	Mean	4,16	4,15	4,04	2,78	2,30	3,62
	N	168	169	167	167	166	169
	Std. Deviation	,850	1,022	1,017	1,076	,986	,957

Table 119: Comparison of means of fahrgemeinschaft with information features

information - direct information - experiences information - assessment tool information - chat forum information - blog information - contact form * favourite platform - fahrgemeinschaft							
favourite platform - fahrgemeinschaft		information - direct	information - experiences	information - assessment tool	information - chat forum	information - blog	information - contact form
yes	Mean	4,20	4,30	4,00	3,00	2,20	3,80
	N	10	10	10	10	10	10
	Std. Deviation	,632	,675	,816	1,054	,789	,919
none	Mean	4,12	4,18	4,18	2,76	2,29	3,41
	N	17	17	17	17	17	17
	Std. Deviation	1,111	,809	,728	1,033	,985	1,004
other	Mean	4,16	4,13	4,02	2,77	2,30	3,63
	N	141	142	140	140	139	142
	Std. Deviation	,833	1,067	1,063	1,088	1,005	,957
Total	Mean	4,16	4,15	4,04	2,78	2,30	3,62
	N	168	169	167	167	166	169
	Std. Deviation	,850	1,022	1,017	1,076	,986	,957

Table 120: ANOVA tests for blablacar with information features

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
information - direct * favourite platform - blablacar	Between Groups	(Combined)	,043	2	,022	,030	,971
	Within Groups		120,591	164	,735		
	Total		120,635	166			
information - experiences * favourite platform - blablacar	Between Groups	(Combined)	,819	2	,410	,390	,677
	Within Groups		173,157	165	1,049		
	Total		173,976	167			
information - assessment tool * favourite platform - blablacar	Between Groups	(Combined)	,505	2	,252	,241	,786
	Within Groups		170,345	163	1,045		
	Total		170,849	165			
information - chat forum * favourite platform - blablacar	Between Groups	(Combined)	,256	2	,128	,110	,896
	Within Groups		190,497	163	1,169		
	Total		190,753	165			
information - blog * favourite platform - blablacar	Between Groups	(Combined)	,114	2	,057	,058	,944
	Within Groups		159,922	162	,987		

	Total		160,036	164			
information - contact form * favourite platform - blablacar	Between Groups	(Combined)	,723	2	,362	,394	,675
	Within Groups		151,348	165	,917		
	Total		152,071	167			

Table 121: ANOVA tests for mitfahrgelegenheit with information features

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
information - direct * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,961	2	,481	,663	,517
	Within Groups		119,699	165	,725		
	Total		120,661	167			
information - experiences * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,299	2	,149	,142	,868
	Within Groups		175,003	166	1,054		
	Total		175,302	168			
information - assessment tool * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,767	2	,384	,368	,693
	Within Groups		171,017	164	1,043		
	Total		171,784	166			
information - chat forum * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,598	2	,799	,687	,504
	Within Groups		190,641	164	1,162		
	Total		192,240	166			
information - blog * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,728	2	1,364	1,409	,247
	Within Groups		157,808	163	,968		
	Total		160,536	165			
information - contact form * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,964	2	1,482	1,629	,199
	Within Groups		151,036	166	,910		
	Total		154,000	168			

Table 122: ANOVA tests for fahrgemeinschaft with information features

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
information - direct * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,048	2	,024	,033	,968
	Within Groups		120,613	165	,731		
	Total		120,661	167			
information - experiences * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,273	2	,137	,130	,878
	Within Groups		175,028	166	1,054		
	Total		175,302	168			
information - assessment tool * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,378	2	,189	,181	,835
	Within Groups		171,406	164	1,045		
	Total		171,784	166			
information - chat forum * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,495	2	,247	,212	,809
	Within Groups		191,745	164	1,169		
	Total		192,240	166			
information - blog * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,097	2	,049	,049	,952
	Within Groups		160,439	163	,984		
	Total		160,536	165			
information - contact form * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,064	2	,532	,577	,562
	Within Groups		152,936	166	,921		
	Total		154,000	168			

Table 123: Comparisons of means of blablacar with importance of no platform registration

Report							
registration							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,24	82	1,311	,145	very unimportant	very important	4
none	3,24	17	1,200	,291	very unimportant	very important	4
other	3,34	65	1,278	,159	very unimportant	very important	4
Total	3,28	164	1,280	,100	very unimportant	very important	4

Table 124: ANOVA tests for blablacar with importance of no platform registration

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
registration * favourite platform - blablacar	Between Groups	(Combined)	,363	2	,181	,110	,896
	Within Groups		266,735	161	1,657		
	Total		267,098	163			

Table 125: Comparison of means of mitfahrgelegenheit with importance of no registration

Report							
registration							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,34	35	1,474	,249	very unimportant	very important	4
none	3,38	16	1,088	,272	very unimportant	very important	4
other	3,26	113	1,238	,116	very unimportant	very important	4
Total	3,29	164	1,272	,099	very unimportant	very important	4

Table 126: ANOVA tests for mitfahrgelegenheit with importance of no registration

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
registration * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,337	2	,169	,103	,902
	Within Groups		263,193	161	1,635		
	Total		263,530	163			

Table 127: Comparison of means of fahrgemeinschaft with importance of no registration

Report							
registration							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,44	9	1,130	,377	unimportant	very important	3
none	3,24	17	1,200	,291	very unimportant	very important	4
other	3,27	139	1,305	,111	very unimportant	very important	4
Total	3,27	165	1,280	,100	very unimportant	very important	4

Table 128: ANOVA tests for fahrgemeinschaft with importance of no registration

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
registration * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,295	2	,148	,089	,915
	Within Groups		268,432	162	1,657		
	Total		268,727	164			

Table 129: Comparisons of means of blablacar with free usage

Report							
free use							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,84	85	,404	,044	neither	very important	2
none	4,41	17	,618	,150	neither	very important	2
other	4,54	67	,765	,093	unimportant	very important	3
Total	4,67	169	,613	,047	unimportant	very important	3

Table 130: ANOVA tests for blablacar with free usage

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
free use * favourite platform - blablacar	Between Groups	(Combined)	4,632	2	2,316	6,576	,002
	Within Groups		58,468	166	,352		
	Total		63,101	168			

Table 131: Comparison of means of mitfahrgelegenheit with free usage

Report							
free use							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,63	35	,690	,117	unimportant	very important	3
none	4,44	16	,629	,157	neither	very important	2
other	4,72	118	,583	,054	unimportant	very important	3
Total	4,67	169	,613	,047	unimportant	very important	3

Table 132: ANOVA tests for mitfahrgelegenheit with free usage

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
free use * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,220	2	,610	1,637	,198
	Within Groups		61,880	166	,373		
	Total		63,101	168			

Table 133: Comparison of means of fahrgemeinschaft with free usage

Report							
free use							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,78	9	,441	,147	important	very important	1
none	4,41	17	,618	,150	neither	very important	2
other	4,69	144	,618	,051	unimportant	very important	3
Total	4,67	170	,613	,047	unimportant	very important	3

Table 134: ANOVA tests for fahrgemeinschaft with free usage

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
free use * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,324	2	,662	1,777	,172
	Within Groups		62,229	167	,373		
	Total		63,553	169			

Table 135: Comparison of means of blablacar with payment methods

Report					
favourite platform - blablacar		payment - cash	payment - creditcard	payment - paypal	payment - debit
yes	Mean	4,79	2,48	2,64	2,40
	N	86	84	84	84
	Std. Deviation	,488	1,312	1,437	1,243
	Std. Error of Mean	,053	,143	,157	,136
	Minimum	useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	3	4	4	4
none	Mean	4,06	3,17	3,61	3,00
	N	18	18	18	18
	Std. Deviation	1,056	1,200	1,092	1,188
	Std. Error of Mean	,249	,283	,257	,280
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
other	Mean	4,58	2,74	2,68	2,51
	N	71	70	66	68
	Std. Deviation	,839	1,304	1,416	1,178
	Std. Error of Mean	,100	,156	,174	,143
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
Total	Mean	4,63	2,66	2,76	2,51
	N	175	172	168	170
	Std. Deviation	,746	1,308	1,419	1,217
	Std. Error of Mean	,056	,100	,110	,093
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4

Table 136: ANOVA tests for blablacar with payment methods

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
payment - cash * favourite platform - blablacar	Between Groups	(Combined)	8,356	2	4,178	8,120	,000
	Within Groups		88,501	172	,515		
	Total		96,857	174			
payment - creditcard * favourite platform - blablacar	Between Groups	(Combined)	7,938	2	3,969	2,355	,098
	Within Groups		284,824	169	1,685		

	Total		292,762	171			
payment - paypal * favourite platform - blablacar	Between Groups	(Combined)	14,595	2	7,297	3,741	,026
	Within Groups		321,882	165	1,951		
	Total		336,476	167			
payment - debit * favourite platform - blablacar	Between Groups	(Combined)	5,253	2	2,627	1,789	,170
	Within Groups		245,223	167	1,468		
	Total		250,476	169			

Table 137: Comparison of means of mitfahrgelegenheit with payment methods

Report					
favourite platform - mitfahrgelegenheit		payment - cash	payment - creditcard	payment - paypal	payment - debit
yes	Mean	4,61	3,14	2,88	2,66
	N	36	36	33	35
	Std. Deviation	,645	1,222	1,576	1,162
	Std. Error of Mean	,107	,204	,274	,196
	Minimum	useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	3	4	4	4
none	Mean	4,18	3,12	3,53	3,06
	N	17	17	17	17
	Std. Deviation	,951	1,219	1,068	1,197
	Std. Error of Mean	,231	,296	,259	,290
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
other	Mean	4,72	2,45	2,62	2,42
	N	122	119	118	118
	Std. Deviation	,683	1,313	1,389	1,243
	Std. Error of Mean	,062	,120	,128	,114
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
Total	Mean	4,65	2,66	2,76	2,53
	N	175	172	168	170
	Std. Deviation	,719	1,317	1,419	1,232
	Std. Error of Mean	,054	,100	,110	,094
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4

Table 138: ANOVA tests for mitfahrgelegenheit with payment methods

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
payment - cash * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	4,484	2	2,242	4,507	,012
	Within Groups		85,551	172	,497		
	Total		90,034	174			
payment - creditcard * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	16,876	2	8,438	5,101	,007
	Within Groups		279,566	169	1,654		
	Total		296,442	171			
payment - paypal * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	12,887	2	6,443	3,286	,040
	Within Groups		323,589	165	1,961		
	Total		336,476	167			
payment - debit * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	6,874	2	3,437	2,301	,103
	Within Groups		249,479	167	1,494		
	Total		256,353	169			

Table 139: Comparison of means of fahrgemeinschaft with payment methods

Report					
favourite platform - fahrgemeinschaft		payment - cash	payment - creditcard	payment - paypal	payment - debit
yes	Mean	4,80	2,30	2,40	2,40
	N	10	10	10	10
	Std. Deviation	,422	1,160	1,174	1,265
	Std. Error of Mean	,133	,367	,371	,400
	Minimum	useful	very useless	very useless	very useless
	Maximum	very useful	useful	useful	useful
	Range	1	3	3	3
none	Mean	4,06	3,17	3,61	3,00
	N	18	18	18	18
	Std. Deviation	1,056	1,200	1,092	1,188
	Std. Error of Mean	,249	,283	,257	,280
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
other	Mean	4,69	2,63	2,70	2,48
	N	148	145	141	143
	Std. Deviation	,689	1,332	1,449	1,227
	Std. Error of Mean	,057	,111	,122	,103

	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4
Total	Mean	4,63	2,67	2,78	2,53
	N	176	173	169	171
	Std. Deviation	,744	1,317	1,426	1,229
	Std. Error of Mean	,056	,100	,110	,094
	Minimum	very useless	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful	very useful
	Range	4	4	4	4

Table 140: ANOVA tests for fahrgemeinschaft with payment methods

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
payment - cash * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	6,747	2	3,374	6,467	,002
	Within Groups		90,247	173	,522		
	Total		96,994	175			
payment - creditcard * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	5,992	2	2,996	1,743	,178
	Within Groups		292,228	170	1,719		
	Total		298,220	172			
payment - paypal * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	14,891	2	7,446	3,785	,025
	Within Groups		326,564	166	1,967		
	Total		341,456	168			
payment - debit * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	4,567	2	2,284	1,522	,221
	Within Groups		252,064	168	1,500		
	Total		256,632	170			

Table 141: Comparison of means of blablacar with communication tools

Report					
favourite platform - blablacar		communication - board	communication - blog	communication - messages	communication - no tool
yes	Mean	,08	,02	,78	,16
	N	86	86	86	86
	Std. Deviation	,275	,152	,417	,371
	Std. Error of Mean	,030	,016	,045	,040
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
none	Mean	,15	,05	,50	,35
	N	20	20	20	20
	Std. Deviation	,366	,224	,513	,489
	Std. Error of Mean	,082	,050	,115	,109
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
other	Mean	,18	,03	,76	,18
	N	72	72	72	72
	Std. Deviation	,387	,165	,428	,387
	Std. Error of Mean	,046	,020	,050	,046
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
Total	Mean	,13	,03	,74	,19
	N	178	178	178	178
	Std. Deviation	,336	,166	,439	,394
	Std. Error of Mean	,025	,012	,033	,030
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1

Table 142: ANOVA tests for blablacar with communication tools

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
communication - board * favourite platform - blablacar	Between Groups	(Combined)	,395	2	,198	1,761	,175
	Within Groups		19,633	175	,112		
	Total		20,028	177			
communication - blog * favourite platform - blablacar	Between Groups	(Combined)	,012	2	,006	,210	,811
	Within Groups		4,848	175	,028		

	Total		4,860	177			
communication - messages * favourite platform - blablacar	Between Groups	(Combined)	1,324	2	,662	3,533	,031
	Within Groups		32,788	175	,187		
	Total		34,112	177			
communication - no tool * favourite platform - blablacar	Between Groups	(Combined)	,582	2	,291	1,891	,154
	Within Groups		26,924	175	,154		
	Total		27,506	177			

Table 143: Comparison of means of mitfahrgelegenheit with communication tools

Report					
favourite platform - mitfahrgelegenheit		communication - board	communication - blog	communication - messages	communication - no tool
yes	Mean	,06	,00	,78	,17
	N	36	36	36	36
	Std. Deviation	,232	,000	,422	,378
	Std. Error of Mean	,039	,000	,070	,063
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Not selected	Yes	Yes
	Range	1	0	1	1
none	Mean	,16	,05	,47	,37
	N	19	19	19	19
	Std. Deviation	,375	,229	,513	,496
	Std. Error of Mean	,086	,053	,118	,114
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
other	Mean	,15	,03	,77	,17
	N	123	123	123	123
	Std. Deviation	,363	,178	,421	,378
	Std. Error of Mean	,033	,016	,038	,034
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
Total	Mean	,13	,03	,74	,19
	N	178	178	178	178
	Std. Deviation	,343	,166	,439	,394
	Std. Error of Mean	,026	,012	,033	,030
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1

Table 144: ANOVA tests for mitfahrgelegenheit with communication tools

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
communication - board * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,284	2	,142	1,213	,300
	Within Groups		20,480	175	,117		
	Total		20,764	177			
communication - blog * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,042	2	,021	,768	,466
	Within Groups		4,817	175	,028		
	Total		4,860	177			
communication - messages * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,527	2	,764	4,101	,018
	Within Groups		32,585	175	,186		
	Total		34,112	177			
communication - no tool * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,670	2	,335	2,184	,116
	Within Groups		26,836	175	,153		
	Total		27,506	177			

Table 145: Comparison of means of fahrgemeinschaft with communication tools

Report					
favourite platform - fahrgemeinschaft		communication - board	communication - blog	communication - messages	communication - no tool
yes	Mean	,30	,00	,80	,00
	N	10	10	10	10
	Std. Deviation	,483	,000	,422	,000
	Std. Error of Mean	,153	,000	,133	,000
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Not selected	Yes	Not selected
	Range	1	0	1	0
none	Mean	,15	,05	,50	,35
	N	20	20	20	20
	Std. Deviation	,366	,224	,513	,489
	Std. Error of Mean	,082	,050	,115	,109
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
other	Mean	,12	,03	,77	,18
	N	149	149	149	149
	Std. Deviation	,327	,162	,421	,386
	Std. Error of Mean	,027	,013	,034	,032

	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1
Total	Mean	,13	,03	,74	,19
	N	179	179	179	179
	Std. Deviation	,342	,165	,438	,393
	Std. Error of Mean	,026	,012	,033	,029
	Minimum	Not selected	Not selected	Not selected	Not selected
	Maximum	Yes	Yes	Yes	Yes
	Range	1	1	1	1

Table 146: ANOVA tests for fahrgemeinschaft with communication tools

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
communication - board * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,307	2	,153	1,318	,270
	Within Groups		20,476	176	,116		
	Total		20,782	178			
communication - blog * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,018	2	,009	,322	,725
	Within Groups		4,843	176	,028		
	Total		4,860	178			
communication - messages * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,337	2	,669	3,583	,030
	Within Groups		32,842	176	,187		
	Total		34,179	178			
communication - no tool * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,885	2	,442	2,920	,057
	Within Groups		26,657	176	,151		
	Total		27,542	178			

Table 147: Comparison of means of blablacar with new technologies

Report				
favourite platform - blablacar		new technologies - apps	new technologies - google maps	new technologies - social media
yes	Mean	4,20	3,88	2,62
	N	79	82	82
	Std. Deviation	,979	1,093	1,118
	Std. Error of Mean	,110	,121	,123
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
none	Mean	4,07	3,60	3,33
	N	15	15	15
	Std. Deviation	1,100	1,242	1,113
	Std. Error of Mean	,284	,321	,287
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
other	Mean	4,13	3,74	2,89
	N	61	61	61
	Std. Deviation	1,072	1,063	1,253
	Std. Error of Mean	,137	,136	,160
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
Total	Mean	4,16	3,80	2,79
	N	155	158	158
	Std. Deviation	1,022	1,093	1,184
	Std. Error of Mean	,082	,087	,094
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4

Table 148: ANOVA tests for blablacar with new technologies

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
new technologies - apps * favourite platform - blablacar	Between Groups	(Combined)	,324	2	,162	,153	,858
	Within Groups		160,644	152	1,057		
	Total		160,968	154			
new technologies - google maps * favourite platform -	Between Groups	(Combined)	1,335	2	,668	,556	,575
	Within Groups		186,184	155	1,201		

blablacar	Total		187,519	157			
new technologies - social media * favourite platform - blablacar	Between Groups	(Combined)	7,297	2	3,649	2,657	,073
	Within Groups		212,811	155	1,373		
	Total		220,108	157			

Table 149: Comparison of means of mitfahrgelegenheit with new technologies

Report				
favourite platform - mitfahrgelegenheit		new technologies - apps	new technologies - google maps	new technologies - social media
yes	Mean	4,31	3,77	2,42
	N	32	31	31
	Std. Deviation	,896	,884	1,089
	Std. Error of Mean	,158	,159	,196
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
none	Mean	4,07	3,71	3,29
	N	14	14	14
	Std. Deviation	1,141	1,204	1,139
	Std. Error of Mean	,305	,322	,304
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
other	Mean	4,14	3,84	2,83
	N	109	113	113
	Std. Deviation	1,049	1,130	1,195
	Std. Error of Mean	,101	,106	,112
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
Total	Mean	4,17	3,82	2,79
	N	155	158	158
	Std. Deviation	1,025	1,088	1,184
	Std. Error of Mean	,082	,087	,094
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4

Table 150: ANOVA tests for mitfahrgelegenheit with new technologies

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
new technologies - apps * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,899	2	,450	,425	,654
	Within Groups		160,739	152	1,057		
	Total		161,639	154			
new technologies - google maps * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,268	2	,134	,112	,894
	Within Groups		185,409	155	1,196		
	Total		185,677	157			
new technologies - social media * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	7,897	2	3,948	2,884	,059
	Within Groups		212,211	155	1,369		
	Total		220,108	157			

Table 151: Comparison of means of fahrgemeinschaft with new technologies

Report				
favourite platform - fahrgemeinschaft		new technologies - apps	new technologies - google maps	new technologies - social media
yes	Mean	4,25	3,78	3,11
	N	8	9	9
	Std. Deviation	,707	,833	1,167
	Std. Error of Mean	,250	,278	,389
	Minimum	neither	useless	very useless
	Maximum	very useful	very useful	very useful
	Range	2	3	4
none	Mean	4,07	3,60	3,33
	N	15	15	15
	Std. Deviation	1,100	1,242	1,113
	Std. Error of Mean	,284	,321	,287
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
other	Mean	4,17	3,83	2,72
	N	133	135	135
	Std. Deviation	1,034	1,096	1,182
	Std. Error of Mean	,090	,094	,102
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4
Total	Mean	4,17	3,81	2,80
	N	156	159	159

	Std. Deviation	1,021	1,094	1,184
	Std. Error of Mean	,082	,087	,094
	Minimum	very useless	very useless	very useless
	Maximum	very useful	very useful	very useful
	Range	4	4	4

Table 152: ANOVA tests for fahrgemeinschaft with new technologies

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
new technologies - apps * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,211	2	,105	,100	,905
	Within Groups		161,456	153	1,055		
	Total		161,667	155			
new technologies - google maps * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,719	2	,359	,298	,743
	Within Groups		188,237	156	1,207		
	Total		188,956	158			
new technologies - social media * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	6,034	2	3,017	2,184	,116
	Within Groups		215,526	156	1,382		
	Total		221,560	158			

Table 153: Comparison of means of blablacar with importance of short matching time

Report							
matching time importance							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,34	80	,745	,083	unimportant	very important	3
none	4,25	16	,683	,171	neither	very important	2
other	4,09	65	,765	,095	unimportant	very important	3
Total	4,23	161	,752	,059	unimportant	very important	3

Table 154: ANOVA tests for blablacar with short matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time importance * favourite platform - blablacar	Between Groups	(Combined)	2,163	2	1,082	1,935	,148
	Within Groups		88,334	158	,559		
	Total		90,497	160			

Table 155: Comparison of means of mitfahrgelegenheit with importance of short matching time

Report							
matching time importance							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,15	34	,657	,113	unimportant	very important	3
none	4,25	16	,683	,171	neither	very important	2
other	4,25	112	,788	,074	unimportant	very important	3
Total	4,23	162	,750	,059	unimportant	very important	3

Table 156: ANOVA tests for mitfahrgelegenheit with short matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time importance * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,285	2	,142	,251	,779
	Within Groups		90,265	159	,568		
	Total		90,549	161			

Table 157: Comparison of means of fahrgemeinschaft with importance of short matching time

Report							
matching time importance							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,89	9	,928	,309	unimportant	very important	3
none	4,25	16	,683	,171	neither	very important	2
other	4,25	137	,745	,064	unimportant	very important	3
Total	4,23	162	,750	,059	unimportant	very important	3

Table 158: ANOVA tests for fahrgemeinschaft with short matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time importance * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,098	2	,549	,976	,379
	Within Groups		89,451	159	,563		
	Total		90,549	161			

Table 159: Comparison of means of blablacar with matching time length

Report							
matching time							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	1,98	81	1,049	,117	< 15 minutes	> 60 minutes	3
none	1,67	6	1,211	,494	< 15 minutes	> 60 minutes	3
other	2,06	62	1,084	,138	< 15 minutes	> 60 minutes	3
Total	2,00	149	1,065	,087	< 15 minutes	> 60 minutes	3

Table 160: ANOVA tests for blablacar with matching time length

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time * favourite platform - blablacar	Between Groups	(Combined)	,974	2	,487	,426	,654
	Within Groups		167,026	146	1,144		
	Total		168,000	148			

Table 161: Comparison of means of mitfahrgelegenheit with matching time length

Report							
matching time							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	1,94	32	,948	,168	< 15 minutes	> 60 minutes	3
none	1,67	6	1,211	,494	< 15 minutes	> 60 minutes	3
other	2,04	111	1,095	,104	< 15 minutes	> 60 minutes	3
Total	2,00	149	1,065	,087	< 15 minutes	> 60 minutes	3

Table 162: ANOVA tests for mitfahrgelegenheit with matching time length

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,936	2	,468	,409	,665
	Within Groups		167,064	146	1,144		
	Total		168,000	148			

Table 163: Comparison of means of fahrgemeinschaft with importance of short matching time

Report							
matching time							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,13	8	1,126	,398	< 15 minutes	> 60 minutes	3
none	1,67	6	1,211	,494	< 15 minutes	> 60 minutes	3
other	2,01	135	1,062	,091	< 15 minutes	> 60 minutes	3
Total	2,00	149	1,065	,087	< 15 minutes	> 60 minutes	3

Table 164: ANOVA tests for fahrgemeinschaft with short matching time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
matching time * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,799	2	,400	,349	,706
	Within Groups		167,201	146	1,145		
	Total		168,000	148			

Table 165: Comparison of means of blablacar with importance of multiple languages

Report							
multiple languages							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,54	85	1,041	,113	very unimportant	very important	4
none	3,18	17	1,131	,274	very unimportant	very important	4
other	3,14	65	1,059	,131	very unimportant	very important	4
Total	3,35	167	1,069	,083	very unimportant	very important	4

Table 166: ANOVA tests for blablacar with multiple languages

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
multiple languages * favourite platform - blablacar	Between Groups	(Combined)	6,526	2	3,263	2,919	,057
	Within Groups		183,330	164	1,118		
	Total		189,856	166			

Table 167: Comparison of means of mitfahrgelegenheit with importance of multiple languages

Report							
multiple languages							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,06	35	1,056	,178	very unimportant	very important	4
none	3,13	16	1,147	,287	very unimportant	very important	4
other	3,47	116	1,059	,098	very unimportant	very important	4
Total	3,35	167	1,076	,083	very unimportant	very important	4

Table 168: ANOVA tests for mitfahrgelegenheit with multiple languages

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
multiple languages * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	5,598	2	2,799	2,460	,089
	Within Groups		186,558	164	1,138		
	Total		192,156	166			

Table 169: Comparison of means of fahrgemeinschaft with importance of multiple languages

Report							
multiple languages							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,78	9	,833	,278	unimportant	important	2
none	3,18	17	1,131	,274	very unimportant	very important	4
other	3,42	142	1,073	,090	very unimportant	very important	4
Total	3,36	168	1,074	,083	very unimportant	very important	4

Table 170: ANOVA tests for fahrgemeinschaft with multiple languages

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
multiple languages * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	4,059	2	2,030	1,777	,172
	Within Groups		188,512	165	1,142		
	Total		192,571	167			

Table 171: Comparison of means of blablacar with importance of safety precautions

Report					
favourite platform - blablacar		safety - data privacy	safety - insurance from provider	safety - insurance of users	safety - control profiles
yes	Mean	4,30	3,79	3,90	4,04
	N	86	82	84	85
	Std. Deviation	,882	1,003	,952	,932
	Std. Error of Mean	,095	,111	,104	,101
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4
none	Mean	4,26	4,32	4,22	4,42
	N	19	19	18	19
	Std. Deviation	,933	1,003	1,003	,769
	Std. Error of Mean	,214	,230	,236	,176
	Minimum	very unimportant	very unimportant	very unimportant	unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	3
other	Mean	4,11	3,54	3,88	4,01
	N	72	68	68	70
	Std. Deviation	,832	1,112	1,072	1,028
	Std. Error of Mean	,098	,135	,130	,123
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4
Total	Mean	4,22	3,75	3,93	4,07
	N	177	169	170	174
	Std. Deviation	,867	1,068	1,006	,959
	Std. Error of Mean	,065	,082	,077	,073
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4

Table 172: ANOVA tests for blablacar with safety precautions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
safety - data privacy * favourite platform - blablacar	Between Groups	(Combined)	1,472	2	,736	,978	,378
	Within Groups		130,935	174	,752		
	Total		132,407	176			
safety - insurance from provider *	Between Groups	(Combined)	9,114	2	4,557	4,146	,017

favourite platform - blablacar	Within Groups		182,449	166	1,099		
	Total		191,562	168			
safety - insurance of users * favourite platform - blablacar	Between Groups	(Combined)	1,745	2	,872	,860	,425
	Within Groups		169,408	167	1,014		
	Total		171,153	169			
safety - control profiles * favourite platform - blablacar	Between Groups	(Combined)	2,661	2	1,331	1,454	,237
	Within Groups		156,511	171	,915		
	Total		159,172	173			

Table 173: Comparison of means of mitfahrgelegenheit with importance of safety precautions

Report					
favourite platform - mitfahrgelegenheit		safety - data privacy	safety - insurance from provider	safety - insurance of users	safety - control profiles
yes	Mean	4,22	3,83	4,00	4,11
	N	36	35	35	36
	Std. Deviation	,722	,923	,874	,950
	Std. Error of Mean	,120	,156	,148	,158
	Minimum	unimportant	unimportant	unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	3	3	3	4
none	Mean	4,22	4,33	4,24	4,56
	N	18	18	17	18
	Std. Deviation	,943	1,029	1,033	,511
	Std. Error of Mean	,222	,243	,250	,121
	Minimum	very unimportant	very unimportant	very unimportant	important
	Maximum	very important	very important	very important	very important
	Range	4	4	4	1
other	Mean	4,22	3,64	3,86	4,00
	N	123	116	118	120
	Std. Deviation	,901	1,091	1,037	,979
	Std. Error of Mean	,081	,101	,095	,089
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4
Total	Mean	4,22	3,75	3,93	4,08
	N	177	169	170	174
	Std. Deviation	,867	1,068	1,006	,946
	Std. Error of Mean	,065	,082	,077	,072
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4

Table 174: ANOVA tests for mitfahrgelegenheit with safety precautions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
safety - data privacy * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,000	2	,000	,000	1,000
	Within Groups		132,407	174	,761		
	Total		132,407	176			
safety - insurance from provider * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	7,798	2	3,899	3,522	,032
	Within Groups		183,765	166	1,107		
	Total		191,562	168			
safety - insurance of users * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,264	2	1,132	1,119	,329
	Within Groups		168,889	167	1,011		
	Total		171,153	169			
safety - control profiles * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	4,874	2	2,437	2,778	,065
	Within Groups		150,000	171	,877		
	Total		154,874	173			

Table 175: Comparison of means of fahrgemeinschaft with importance of safety precautions

Report					
favourite platform - fahrgemeinschaft		safety - data privacy	safety - insurance from provider	safety - insurance of users	safety - control profiles
yes	Mean	4,10	3,11	3,89	4,20
	N	10	9	9	10
	Std. Deviation	,738	,928	1,537	,632
	Std. Error of Mean	,233	,309	,512	,200
	Minimum	neither	unimportant	very unimportant	neither
	Maximum	very important	important	very important	very important
	Range	2	2	4	2
none	Mean	4,26	4,32	4,22	4,42
	N	19	19	18	19
	Std. Deviation	,933	1,003	1,003	,769
	Std. Error of Mean	,214	,230	,236	,176
	Minimum	very unimportant	very unimportant	very unimportant	unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	3
other	Mean	4,23	3,72	3,90	4,01
	N	149	142	144	146
	Std. Deviation	,871	1,054	,966	,990
	Std. Error of Mean	,071	,088	,080	,082

	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4
Total	Mean	4,22	3,75	3,93	4,07
	N	178	170	171	175
	Std. Deviation	,867	1,065	1,003	,956
	Std. Error of Mean	,065	,082	,077	,072
	Minimum	very unimportant	very unimportant	very unimportant	very unimportant
	Maximum	very important	very important	very important	very important
	Range	4	4	4	4

Table 176: ANOVA tests for fahrgemeinschaft with safety precautions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
safety - data privacy * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,185	2	,093	,122	,885
	Within Groups		132,826	175	,759		
	Total		133,011	177			
safety - insurance from provider * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	9,897	2	4,948	4,547	,012
	Within Groups		181,727	167	1,088		
	Total		191,624	169			
safety - insurance of users * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,720	2	,860	,853	,428
	Within Groups		169,437	168	1,009		
	Total		171,158	170			
safety - control profiles * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	2,973	2	1,486	1,637	,198
	Within Groups		156,204	172	,908		
	Total		159,177	174			

Table 178: Comparison of means of blablacar with importance of gender-segregation

Report							
gender segregation							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,54	85	1,075	,117	very unimportant	very important	4
none	2,41	17	1,004	,243	very unimportant	important	3
other	2,45	67	1,222	,149	very unimportant	very important	4
Total	2,49	169	1,124	,086	very unimportant	very important	4

Table 179: ANOVA tests for blablacar with gender-segregation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender segregation * favourite platform - blablacar	Between Groups	(Combined)	,446	2	,223	,175	,840
	Within Groups		211,791	166	1,276		
	Total		212,237	168			

Table 180: Comparison of means of mitfahrgelegenheit with importance of gender-segregation

Report							
gender segregation							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,40	35	1,265	,214	very unimportant	very important	4
none	2,44	16	1,031	,258	very unimportant	important	3
other	2,54	118	1,107	,102	very unimportant	very important	4
Total	2,50	169	1,129	,087	very unimportant	very important	4

Table 181: ANOVA tests for mitfahrgelegenheit with gender-segregation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender segregation * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,623	2	,311	,242	,785
	Within Groups		213,626	166	1,287		
	Total		214,249	168			

Table 182: Comparison of means of fahrgemeinschaft with importance of gender-segregation

Report							
gender segregation							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,78	9	1,093	,364	very unimportant	important	3
none	2,41	17	1,004	,243	very unimportant	important	3
other	2,49	144	1,147	,096	very unimportant	very important	4
Total	2,50	170	1,127	,086	very unimportant	very important	4

Table 183: ANOVA tests for fahrgemeinschaft with gender-segregation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender segregation * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,834	2	,417	,326	,722
	Within Groups		213,666	167	1,279		
	Total		214,500	169			

BENEFITS

Table 184: Comparison of means of blablacar with importance of reducing CO_2-emissions

Report							
reduction of CO2 emissions							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,56	86	1,123	,121	very unimportant	very important	4
none	2,61	18	1,335	,315	very unimportant	very important	4
other	3,53	72	1,113	,131	very unimportant	very important	4
Total	3,45	176	1,170	,088	very unimportant	very important	4

Table 185: ANOVA tests for blablacar with reduction of CO_2-emissions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
reduction of CO2 emissions * favourite platform - blablacar	Between Groups	(Combined)	14,108	2	7,054	5,413	,005
	Within Groups		225,432	173	1,303		
	Total		239,540	175			

Table 186: Comparison of means of mitfahrgelegenheit with importance of reducing CO_2-emissions

Report							
reduction of CO2 emissions							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,42	36	1,105	,184	very unimportant	very important	4
none	2,53	17	1,328	,322	very unimportant	very important	4
other	3,57	123	1,124	,101	very unimportant	very important	4
Total	3,44	176	1,174	,089	very unimportant	very important	4

Table 187: ANOVA tests for mitfahrgelegenheit with reduction of CO_2-emissions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
reduction of CO2 emissions * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	16,165	2	8,082	6,210	,002
	Within Groups		225,148	173	1,301		
	Total		241,312	175			

Table 188: Comparison of means of fahrgemeinschaft with importance of reducing CO_2-emissions

Report							
reduction of CO2 emissions							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,50	10	1,080	,342	unimportant	very important	3
none	2,61	18	1,335	,315	very unimportant	very important	4
other	3,54	149	1,124	,092	very unimportant	very important	4
Total	3,44	177	1,172	,088	very unimportant	very important	4

Table 189: ANOVA tests for fahrgemeinschaft with reducing CO_2-emissions

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
reduction of CO2 emissions * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	13,802	2	6,901	5,271	,006
	Within Groups		227,825	174	1,309		
	Total		241,627	176			

Table 190: Comparison of means of blablacar with importance of less pollution

Report							
less pollution							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,60	86	1,120	,121	very unimportant	very important	4
none	2,67	18	1,283	,302	very unimportant	very important	4
other	3,51	72	1,088	,128	very unimportant	very important	4
Total	3,47	176	1,151	,087	very unimportant	very important	4

Table 191: ANOVA tests for blablacar with less pollution

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less pollution * favourite platform - blablacar	Between Groups	(Combined)	13,314	2	6,657	5,270	,006
	Within Groups		218,544	173	1,263		
	Total		231,858	175			

Table 192: Comparison of means of mitfahrgelegenheit with importance of less pollution

Report							
less pollution							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,47	36	1,082	,180	very unimportant	very important	4
none	2,59	17	1,278	,310	very unimportant	very important	4
other	3,60	123	1,114	,100	very unimportant	very important	4
Total	3,48	176	1,156	,087	very unimportant	very important	4

Table 193: ANOVA tests for mitfahrgelegenheit with less pollution

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less pollution * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	15,340	2	7,670	6,071	,003
	Within Groups		218,570	173	1,263		
	Total		233,909	175			

Table 194: Comparison of means of fahrgemeinschaft with importance of less pollution

Report							
less pollution							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,50	10	1,080	,342	unimportant	very important	3
none	2,67	18	1,283	,302	very unimportant	very important	4
other	3,58	149	1,110	,091	very unimportant	very important	4
Total	3,48	177	1,154	,087	very unimportant	very important	4

Table 195: ANOVA tests for fahrgemeinschaft with less pollution

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less pollution * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	13,318	2	6,659	5,246	,006
	Within Groups		220,862	174	1,269		
	Total		234,181	176			

Table 196: Comparison of means of blablacar with importance of less traffic jam

Report							
less traffic jam							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,09	85	1,140	,124	very unimportant	very important	4
none	2,83	18	1,339	,316	very unimportant	very important	4
other	3,01	71	1,189	,141	very unimportant	very important	4
Total	3,03	174	1,177	,089	very unimportant	very important	4

Table 197: ANOVA tests for blablacar with less traffic jam

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less traffic jam * favourite platform - blablacar	Between Groups	(Combined)	1,060	2	,530	,380	,685
	Within Groups		238,733	171	1,396		
	Total		239,793	173			

Table 198: Comparison of mitfahrgelegenheit with importance of less traffic jam

Report							
less traffic jam							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,74	35	1,172	,198	very unimportant	very important	4
none	2,88	17	1,364	,331	very unimportant	very important	4
other	3,16	122	1,153	,104	very unimportant	very important	4
Total	3,05	174	1,184	,090	very unimportant	very important	4

Table 199: ANOVA tests for mitfahrgelegenheit with less traffic jam

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less traffic jam * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	5,363	2	2,681	1,933	,148
	Within Groups		237,172	171	1,387		
	Total		242,534	173			

Table 200: Comparison of means of fahrgemeinschaft with importance of less traffic jam

Report							
less traffic jam							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,20	10	1,033	,327	unimportant	very important	3
none	2,83	18	1,339	,316	very unimportant	very important	4
other	3,06	147	1,178	,097	very unimportant	very important	4
Total	3,05	175	1,183	,089	very unimportant	very important	4

Table 201: ANOVA tests for fahrgemeinschaft with less traffic jam

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
less traffic jam * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,085	2	,543	,385	,681
	Within Groups		242,549	172	1,410		
	Total		243,634	174			

Table 202: Comparison of means of blablacar with importance of lower parking costs

Report							
lower parking costs							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,75	84	1,352	,148	very unimportant	very important	4
none	3,33	18	1,138	,268	very unimportant	very important	4
other	2,85	72	1,360	,160	very unimportant	very important	4
Total	2,85	174	1,339	,101	very unimportant	very important	4

Table 203: ANOVA tests for blablacar with lower parking costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower parking costs * favourite platform - blablacar	Between Groups	(Combined)	5,045	2	2,523	1,414	,246
	Within Groups		305,069	171	1,784		
	Total		310,115	173			

Table 204: Comparison of means of mitfahrgelegenheit with importance of lower parking costs

Report							
lower parking costs							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,64	36	1,376	,229	very unimportant	very important	4
none	3,35	17	1,169	,284	very unimportant	very important	4
other	2,86	121	1,356	,123	very unimportant	very important	4
Total	2,86	174	1,349	,102	very unimportant	very important	4

Table 205: ANOVA tests for mitfahrgelegenheit with lower parking costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower parking costs * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	5,890	2	2,945	1,631	,199
	Within Groups		308,799	171	1,806		
	Total		314,690	173			

Table 206: Comparison of means of fahrgemeinschaft with importance of lower parking costs

Report							
lower parking costs							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,60	10	1,647	,521	very unimportant	very important	4
none	3,33	18	1,138	,268	very unimportant	very important	4
other	2,82	147	1,343	,111	very unimportant	very important	4
Total	2,86	175	1,345	,102	very unimportant	very important	4

Table 207: ANOVA tests for fahrgemeinschaft with lower parking costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower parking costs * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	4,907	2	2,454	1,362	,259
	Within Groups		309,801	172	1,801		
	Total		314,709	174			

Table 208: Comparison of means of blablacar with importance of lower travel costs

Report							
lower travel costs							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,72	85	,610	,066	very unimportant	very important	4
none	3,79	19	1,273	,292	very unimportant	very important	4
other	4,68	71	,752	,089	very unimportant	very important	4
Total	4,60	175	,809	,061	very unimportant	very important	4

Table 209: ANOVA tests for blablacar with lower travel costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower travel costs * favourite platform - blablacar	Between Groups	(Combined)	14,069	2	7,035	12,108	,000
	Within Groups		99,931	172	,581		
	Total		114,000	174			

Table 210: Comparison of means of mitfahrgelegenheit with importance of lower travel costs

Report							
lower travel costs							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,94	35	,236	,040	important	very important	1
none	3,72	18	1,274	,300	very unimportant	very important	4
other	4,63	122	,741	,067	very unimportant	very important	4
Total	4,60	175	,809	,061	very unimportant	very important	4

Table 211: ANOVA tests for mitfahrgelegenheit with lower travel costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower travel costs * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	18,102	2	9,051	16,233	,000
	Within Groups		95,898	172	,558		
	Total		114,000	174			

Table 212: Comparison of means of fahrgemeinschaft with importance of lower travel costs

Report							
lower travel costs							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,50	10	,707	,224	neither	very important	2
none	3,79	19	1,273	,292	very unimportant	very important	4
other	4,71	147	,672	,055	very unimportant	very important	4
Total	4,60	176	,808	,061	very unimportant	very important	4

Table 213: ANOVA tests for fahrgemeinschaft with lower travel costs

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
lower travel costs * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	14,501	2	7,251	12,587	,000
	Within Groups		99,658	173	,576		
	Total		114,159	175			

Table 214: Comparison of means of blablacar with importance of shorter travel time

Report							
shorter travel time							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,73	84	1,112	,121	very unimportant	very important	4
none	3,58	19	1,261	,289	very unimportant	very important	4
other	3,90	71	1,071	,127	very unimportant	very important	4
Total	3,78	174	1,111	,084	very unimportant	very important	4

Table 215: ANOVA tests for blablacar with shorter travel time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter travel time * favourite platform - blablacar	Between Groups	(Combined)	2,057	2	1,029	,831	,437
	Within Groups		211,644	171	1,238		
	Total		213,701	173			

Table 216: Comparison of means of mitfahrgelegenheit with importance of shorter travel time

Report							
shorter travel time							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,97	36	1,028	,171	unimportant	very important	3
none	3,61	18	1,290	,304	very unimportant	very important	4
other	3,75	120	1,110	,101	very unimportant	very important	4
Total	3,78	174	1,111	,084	very unimportant	very important	4

Table 217: ANOVA tests for mitfahrgelegenheit with shorter travel time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter travel time * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,951	2	,976	,788	,456
	Within Groups		211,750	171	1,238		
	Total		213,701	173			

Table 218: Comparison of means of fahrgemeinschaft with shorter travel time

Report							
shorter travel time							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,80	10	1,033	,327	unimportant	very important	3
none	3,58	19	1,261	,289	very unimportant	very important	4
other	3,80	146	1,099	,091	very unimportant	very important	4
Total	3,78	175	1,110	,084	very unimportant	very important	4

Table 219: ANOVA tests for fahrgemeinschaft with shorter travel time

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter travel time * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,837	2	,419	,337	,714
	Within Groups		213,471	172	1,241		
	Total		214,309	174			

Table 220: Comparison of means of blablacar with importance of lower planning time

Report							
shorter time of planning							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,57	84	1,056	,115	very unimportant	very important	4
none	2,74	19	1,195	,274	very unimportant	important	3
other	3,69	70	1,015	,121	very unimportant	very important	4
Total	3,53	173	1,087	,083	very unimportant	very important	4

Table 221: ANOVA tests for blablacar with shorter time of planning

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter time of planning * favourite platform - blablacar	Between Groups	(Combined)	13,792	2	6,896	6,191	,003
	Within Groups		189,341	170	1,114		
	Total		203,133	172			

Table 222: Comparison of means of mitfahrgelegenheit with importance of lower planning time

Report							
shorter time of planning							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,91	35	,919	,155	very unimportant	very important	4
none	2,67	18	1,188	,280	very unimportant	important	3
other	3,55	120	1,060	,097	very unimportant	very important	4
Total	3,53	173	1,092	,083	very unimportant	very important	4

Table 223: ANOVA tests for mitfahrgelegenheit with shorter time of planning

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter time of planning * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	18,632	2	9,316	8,495	,000
	Within Groups		186,443	170	1,097		
	Total		205,075	172			

Table 224: Comparison of means of fahrgemeinschaft with importance of lower planning time

Report							
shorter time of planning							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,90	10	,994	,314	very unimportant	important	3
none	2,74	19	1,195	,274	very unimportant	important	3
other	3,68	145	1,025	,085	very unimportant	very important	4
Total	3,53	174	1,089	,083	very unimportant	very important	4

Table 225: ANOVA tests for fahrgemeinschaft with shorter time of planning

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
shorter time of planning * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	19,302	2	9,651	8,873	,000
	Within Groups		185,991	171	1,088		
	Total		205,293	173			

Table 226: Comparison of means of blablacar with importance of sharing ideas and experiences with others

Report							
sharing ideas and experiences							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,69	85	1,035	,112	very unimportant	very important	4
none	2,21	19	1,134	,260	very unimportant	important	3
other	2,83	72	1,126	,133	very unimportant	very important	4
Total	2,70	176	1,093	,082	very unimportant	very important	4

Table 227: ANOVA tests for blablacar with sharing ideas and experiences with others

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
sharing ideas and experiences * favourite platform - blablacar	Between Groups	(Combined)	5,835	2	2,917	2,484	,086
	Within Groups		203,205	173	1,175		
	Total		209,040	175			

Table 228: Comparison of means of mitfahrgelegenheit with importance of sharing ideas and experiences with others

Report							
sharing ideas and experiences							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,50	36	1,000	,167	very unimportant	important	3
none	2,17	18	1,150	,271	very unimportant	important	3
other	2,84	122	1,086	,098	very unimportant	very important	4

Total	2,70	176	1,093	,082	very unimportant	very important	4

Table 229: ANOVA tests for mitfahrgelegenheit with sharing ideas and experiences with others

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
sharing ideas and experiences * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	8,818	2	4,409	3,810	,024
	Within Groups		200,221	173	1,157		
	Total		209,040	175			

Table 230: Comparison of means of fahrgemeinschaft with importance of sharing ideas and experiences with others

Report							
sharing ideas and experiences							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,70	10	1,337	,423	very unimportant	very important	4
none	2,21	19	1,134	,260	very unimportant	important	3
other	2,76	148	1,059	,087	very unimportant	very important	4
Total	2,70	177	1,090	,082	very unimportant	very important	4

Table 231: ANOVA tests for fahrgemeinschaft with sharing ideas and experiences with others

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
sharing ideas and experiences * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	5,149	2	2,575	2,196	,114
	Within Groups		203,981	174	1,172		
	Total		209,130	176			

Table 232: Comparison of means of blablacar with importance of meeting new people

Report							
meeting new people							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,60	86	1,109	,120	very unimportant	very important	4
none	2,21	19	1,134	,260	very unimportant	important	3
other	2,83	72	1,256	,148	very unimportant	very important	4
Total	2,66	177	1,182	,089	very unimportant	very important	4

Table 233: ANOVA tests for blablacar with meeting new people

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
meeting new people * favourite platform - blablacar	Between Groups	(Combined)	6,261	2	3,131	2,272	,106
	Within Groups		239,716	174	1,378		
	Total		245,977	176			

Table 234: Comparison of means of mitfahrgelegenheit with importance of meeting new people

Report							
meeting new people							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,39	36	1,153	,192	very unimportant	very important	4
none	2,11	18	1,079	,254	very unimportant	important	3
other	2,80	123	1,173	,106	very unimportant	very important	4
Total	2,64	177	1,179	,089	very unimportant	very important	4

Table 235: ANOVA tests for mitfahrgelegenheit with meeting new people

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
meeting new people * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	10,324	2	5,162	3,834	,023
	Within Groups		234,252	174	1,346		
	Total		244,576	176			

Table 236: Comparison of means of fahrgemeinschaft with importance of meeting new people

Report							
meeting new people							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,00	10	1,155	,365	very unimportant	very important	4
none	2,21	19	1,134	,260	very unimportant	important	3
other	2,68	149	1,180	,097	very unimportant	very important	4
Total	2,65	178	1,180	,088	very unimportant	very important	4

Table 237: ANOVA tests for fahrgemeinschaft with meeting new people

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
meeting new people * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	5,072	2	2,536	1,839	,162
	Within Groups		241,332	175	1,379		
	Total		246,404	177			

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Table 238: Comparison of means of blablacar with trust in other carpoolers using same platform

Report							
trust in other users using same matching platform							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,39	84	,712	,078	little trust	I don't know	3
none	2,95	19	1,580	,363	not trust at all	I don't know	4
other	3,17	69	,766	,092	not trust at all	I don't know	4
Total	3,26	172	,874	,067	not trust at all	I don't know	4

Table 239: ANOVA tests for blablacar with trust in other users using same platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in other users using same matching platform * favourite platform - blablacar	Between Groups	(Combined)	3,848	2	1,924	2,562	,080
	Within Groups		126,896	169	,751		
	Total		130,744	171			

Table 240: Comparison of means of mitfahrgelegenheit with trust in other users using same matching platform

Report							
trust in other users using same matching platform							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,06	36	,791	,132	not trust at all	I don't know	4
none	2,83	18	1,543	,364	not trust at all	I don't know	4
other	3,38	118	,727	,067	little trust	I don't know	3
Total	3,26	172	,874	,067	not trust at all	I don't know	4

Table 241: ANOVA tests for mitfahrgelegenheit with trust in other users using same matching platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in other users using same matching platform * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	6,516	2	3,258	4,432	,013
	Within Groups		124,228	169	,735		
	Total		130,744	171			

Table 242: Comparison of means of fahrgemeinschaft with trust in other users using same matching platform

Report							
trust in other users using same matching platform							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,90	10	,568	,180	little trust	a lot of trust	2
none	2,95	19	1,580	,363	not trust at all	I don't know	4

other	3,33	144	,757	,063	not trust at all	I don't know	4
Total	3,27	173	,882	,067	not trust at all	I don't know	4

Table 243: ANOVA tests for fahrgemeinschaft with trust in other users using same platform

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in other users using same matching platform * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	3,921	2	1,961	2,567	,080
	Within Groups		129,847	170	,764		
	Total		133,769	172			

Table 244: Comparison of means of blablacar with trust in matching platform(s)

Report							
trust in matching platform(s)							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,37	84	,741	,081	not trust at all	I don't know	4
none	3,35	17	1,693	,411	not trust at all	I don't know	4
other	3,26	68	,803	,097	not trust at all	I don't know	4
Total	3,33	169	,897	,069	not trust at all	I don't know	4

Table 245: ANOVA tests for blablacar with trust in matching platform(s)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in matching platform(s) * favourite platform - blablacar	Between Groups	(Combined)	,423	2	,212	,261	,771
	Within Groups		134,677	166	,811		
	Total		135,101	168			

Table 246: Comparison of means of mitfahrgelegenheit with trust in matching platform(s)

Report							
trust in matching platform(s)							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,22	36	,898	,150	not trust at all	I don't know	4

none	3,25	16	1,693	,423	not trust at all	I don't know	4
other	3,37	117	,738	,068	not trust at all	I don't know	4
Total	3,33	169	,897	,069	not trust at all	I don't know	4

Table 247: ANOVA tests for mitfahrgelegenheit with trust in matching platform(s)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in matching platform(s) * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,682	2	,341	,421	,657
	Within Groups		134,419	166	,810		
	Total		135,101	168			

Table 248: Comparison of means of fahrgemeinschaft with trust in matching platform(s)

Report							
trust in matching platform(s)							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,25	8	,463	,164	quite a bit of trust	a lot of trust	1
none	3,35	17	1,693	,411	not trust at all	I don't know	4
other	3,34	145	,793	,066	not trust at all	I don't know	4
Total	3,34	170	,903	,069	not trust at all	I don't know	4

Table 249: ANOVA tests for fahrgemeinschaft with trust in matching platform(s)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
trust in matching platform(s) * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,065	2	,032	,039	,962
	Within Groups		137,824	167	,825		
	Total		137,888	169			

Table 250: Comparison of means of blablacar with trust importance of trust

Report							
importance of trust							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,21	85	,788	,085	very unimportant	very important	4
none	4,15	20	1,348	,302	very unimportant	very important	4
other	4,08	65	1,080	,134	very unimportant	very important	4
Total	4,15	170	,979	,075	very unimportant	very important	4

Table 251: ANOVA tests for blablacar with importance of trust

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
importance of trust * favourite platform - blablacar	Between Groups	(Combined)	,670	2	,335	,347	,708
	Within Groups		161,354	167	,966		
	Total		162,024	169			

Table 252: Comparison of means of mitfahrgelegenheit with importance of trust

Report							
importance of trust							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,30	33	,918	,160	very unimportant	very important	4
none	4,11	19	1,370	,314	very unimportant	very important	4
other	4,12	118	,926	,085	very unimportant	very important	4
Total	4,15	170	,979	,075	very unimportant	very important	4

Table 253: ANOVA tests for mitfahrgelegenheit with importance of trust

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
importance of trust * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,925	2	,463	,480	,620
	Within Groups		161,098	167	,965		
	Total		162,024	169			

Table 254: Comparison of means of fahrgemeinschaft with importance of trust

Report							
importance of trust							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,22	9	,667	,222	neither	very important	2
none	4,15	20	1,348	,302	very unimportant	very important	4
other	4,15	142	,940	,079	very unimportant	very important	4
Total	4,16	171	,978	,075	very unimportant	very important	4

Table 255: ANOVA tests for fahrgemeinschaft with importance of trust

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
importance of trust * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,040	2	,020	,021	,980
	Within Groups		162,697	168	,968		
	Total		162,737	170			

Table 256: Comparison of means of blablacar with importance of friends/relatives use it

Report							
friends/relatives use carpooling matching platforms							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,59	79	1,193	,134	very unimportant	very important	4
none	2,17	18	1,249	,294	very unimportant	important	3
other	2,25	68	1,056	,128	very unimportant	very important	4
Total	2,41	165	1,152	,090	very unimportant	very important	4

Table 257: ANOVA tests for blablacar with friends/relatives use matching platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
friends/relatives use carpooling matching platforms * favourite platform - blablacar	Between Groups	(Combined)	5,506	2	2,753	2,101	,126
	Within Groups		212,288	162	1,310		
	Total		217,794	164			

Table 258: Comparison of means of mitfahrgelegenheit with importance of friends/relatives use it

Report							
friends/relatives use carpooling matching platforms							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,09	35	,919	,155	very unimportant	important	3
none	2,24	17	1,251	,304	very unimportant	important	3
other	2,55	113	1,180	,111	very unimportant	very important	4
Total	2,42	165	1,148	,089	very unimportant	very important	4

Table 259: ANOVA tests for mitfahrgelegenheit with friends/relatives use matching platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
friends/relatives use carpooling matching platforms * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	6,361	2	3,181	2,456	,089
	Within Groups		209,784	162	1,295		
	Total		216,145	164			

Table 260: Comparison of means of fahrgemeinschaft with importance of friends/relatives use it

Report							
friends/relatives use carpooling matching platforms							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,40	10	,843	,267	very unimportant	neither	2
none	2,17	18	1,249	,294	very unimportant	important	3
other	2,44	138	1,159	,099	very unimportant	very important	4
Total	2,41	166	1,150	,089	very unimportant	very important	4

Table 261: ANOVA tests for fahrgemeinschaft with friends/relatives use matching platforms

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
friends/relatives use carpooling matching platforms * favourite	Between Groups	(Combined)	1,208	2	,604	,454	,636
	Within Groups		216,936	163	1,331		

platform - fahrgemeinschaft	Total	218,145	165			

Table 262: Comparison of means of blablacar with frequency of use

Report							
frequeny of using a matching platform							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,60	73	,846	,099	weekly	annually	3
other	2,73	55	,870	,117	weekly	annually	3
Total	2,66	128	,855	,076	weekly	annually	3

Table 263: ANOVA tests for blablacar with frequency of use

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequeny of using a matching platform * favourite platform - blablacar	Between Groups	(Combined)	,486	1	,486	,663	,417
	Within Groups		92,389	126	,733		
	Total		92,875	127			

Table 264: Comparison of means of mitfahrgelegenheit with frequency of use

Report							
frequeny of using a matching platform							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,07	29	,704	,131	monthly	annually	2
other	2,54	99	,861	,087	weekly	annually	3
Total	2,66	128	,855	,076	weekly	annually	3

Table 265: ANOVA tests for mitfahrgelegenheit with frequency of use

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequeny of using a matching platform * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	6,387	1	6,387	9,304	,003
	Within Groups		86,488	126	,686		
	Total		92,875	127			

Table 266: Comparison of means of fahrgemeinschaft with frequency of use

Report							
frequeny of using a matching platform							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,86	7	1,069	,404	weekly	annually	3
other	2,64	121	,845	,077	weekly	annually	3
Total	2,66	128	,855	,076	weekly	annually	3

Table 267: ANOVA tests for fahrgemeinschaft with frequency of use

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequeny of using a matching platform * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	,299	1	,299	,407	,525
	Within Groups		92,576	126	,735		
	Total		92,875	127			

Table 268: Comparison of means of blablacar with frequency of friends/relatives using it

Report							
frequency of friends/relatives use matching platforms							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,85	86	,976	,105	never	I don't know	5
none	2,15	20	1,496	,335	never	I don't know	5
other	2,90	71	1,058	,126	never	I don't know	5
Total	2,79	177	1,096	,082	never	I don't know	5

Table 269: ANOVA tests for blablacar with frequency of friends/relatives

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequency of friends/relatives use matching platforms * favourite platform - blablacar	Between Groups	(Combined)	9,371	2	4,685	4,038	,019
	Within Groups		201,895	174	1,160		
	Total		211,266	176			

Table 270: Comparison of means of mitfahrgelegenheit with frequency of friends/relatives using it

Report							
frequency of friends/relatives use matching platforms							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,80	35	1,052	,178	never	I don't know	5
none	2,11	19	1,524	,350	never	I don't know	5
other	2,89	123	1,002	,090	never	I don't know	5

Total	2,79	177	1,097	,082	never	I don't know	5

Table 271: ANOVA tests for mitfahrgelegenheit with frequency of friends/relatives

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequency of friends/relatives use matching platforms * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	10,046	2	5,023	4,331	,015
	Within Groups		201,796	174	1,160		
	Total		211,842	176			

Table 272: Comparison of means of fahrgemeinschaft with frequency of friends/relatives using it

Report							
frequency of friends/relatives use matching platforms							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	2,60	10	,699	,221	rarely (distributed throughout the year)	very often (once per week)	2
none	2,15	20	1,496	,335	never	I don't know	5
other	2,89	148	1,027	,084	never	I don't know	5
Total	2,79	178	1,094	,082	never	I don't know	5

Table 273: ANOVA tests for fahrgemeinschaft with frequency of friends/relatives

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
frequency of friends/relatives use matching platforms * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	9,890	2	4,945	4,284	,015
	Within Groups		201,997	175	1,154		
	Total		211,888	177			

Table 274: Comparisons of means of blablacar with size

Report								
size - number of users								
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Sum	Minimum	Maximum	Range
yes	1,0116	86	,10783	,01163	87,00	large community	medium-sized community	1,00

none	2,0000	1	.	.	2,00	medium-sized community	medium-sized community	,00
other	1,5263	57	,75841	,10045	87,00	large community	small community	2,00
Total	1,2222	144	,54765	,04564	176,00	large community	small community	2,00

Table 275: ANOVA tests for blablacar with size

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
size - number of users * favourite platform - blablacar	Between Groups	(Combined)	9,690	2	4,845	20,577	,000
	Within Groups		33,199	141	,235		
	Total		42,889	143			

Table 276: Comparisons of means of mitfahrgelegenheit with size

Report								
size - number of users								
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Sum	Minimum	Maximum	Range
yes	1,0556	36	,33333	,05556	38,00	large community	small community	2,00
none	2,0000	1	.	.	2,00	medium-sized community	medium-sized community	,00
other	1,2710	107	,59193	,05722	136,00	large community	small community	2,00
Total	1,2222	144	,54765	,04564	176,00	large community	small community	2,00

Table 277: ANOVA tests for mitfahrgelegenheit with size

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
size - number of users * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,860	2	,930	3,196	,044
	Within Groups		41,029	141	,291		
	Total		42,889	143			

Table 278: Comparisons of means of fahrgemeinschaft with size

Report								
size - number of users								
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Sum	Minimum	Maximum	Range
yes	2,0000	10	,00000	,00000	20,00	medium-sized community	medium-sized community	,00
none	2,0000	1	.	.	2,00	medium-sized community	medium-sized community	,00
other	1,1579	133	,51994	,04508	154,00	large community	small community	2,00
Total	1,2222	144	,54765	,04564	176,00	large community	small community	2,00

Table 279: ANOVA tests for fahrgemeinschaft with size

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
size - number of users * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	7,205	2	3,602	14,234	,000
	Within Groups		35,684	141	,253		
	Total		42,889	143			

Table 280: Comparisons of means of blablacar with scale

Report								
scale - number of options								
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Sum	Minimum	Maximum	Range
yes	1,0000	85	,00000	,00000	85,00	very high number of options	very high number of options	,00
other	2,8235	17	,72761	,17647	48,00	no options	moderate number of options	3,00
Total	1,3039	102	,74181	,07345	133,00	no options	moderate number of options	3,00

Table 281: ANOVA tests for blablacar with scale

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
scale - number of options * favourite platform - blablacar	Between Groups	(Combined)	47,108	1	47,108	556,134	,000
	Within Groups		8,471	100	,085		
	Total		55,578	101			

Table 282: Comparisons of means of fahrgemeinschaft with scale

Report								
scale - number of options								
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Sum	Minimum	Maximum	Range
yes	3,0000	10	,00000	,00000	30,00	moderate number of options	moderate number of options	,00
other	1,1196	92	,51017	,05319	103,00	no options	moderate number of options	3,00
Total	1,3039	102	,74181	,07345	133,00	no options	moderate number of options	3,00

Table 283: ANOVA tests for fahrgemeinschaft with scale

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
scale - number of options * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	31,894	1	31,894	134,659	,000
	Within Groups		23,685	100	,237		
	Total		55,578	101			

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Table 284: Comparison of means of blablacar with age

Report							
age							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,38	86	,654	,071	18 - 25	46 - 65	3
none	3,90	20	1,210	,270	18 - 25	46 - 65	3
other	3,64	72	,810	,095	18 - 25	46 - 65	3
Total	3,54	178	,810	,061	18 - 25	46 - 65	3

Table 285: ANOVA tests for blablacar with age

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
age * favourite platform - blablacar	Between Groups	(Combined)	5,392	2	2,696	4,260	,016
	Within Groups		110,748	175	,633		
	Total		116,140	177			

Table 286: Comparison of means of mitfahrgelegenheit with age

Report							
age							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	3,44	36	,558	,093	18 - 25	36 - 45	2
none	3,89	19	1,243	,285	18 - 25	46 - 65	3
other	3,51	123	,783	,071	18 - 25	46 - 65	3
Total	3,54	178	,810	,061	18 - 25	46 - 65	3

Table 287: ANOVA tests for mitfahrgelegenheit with age

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
age * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,815	2	1,407	2,172	,117
	Within Groups		113,410	175	,648		
	Total		116,225	177			

Table 288: Comparison of means of fahrgemeinschaft with age

Report							
age							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	4,00	10	,943	,298	18 - 25	46 - 65	3
none	3,90	20	1,210	,270	18 - 25	46 - 65	3
other	3,46	149	,712	,058	18 - 25	46 - 65	3
Total	3,54	179	,809	,060	18 - 25	46 - 65	3

Table 289: ANOVA tests for fahrgemeinschaft with age

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
age * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	5,589	2	2,794	4,437	,013
	Within Groups		110,847	176	,630		
	Total		116,436	178			

Table 290: Comparison of means of blablacar with gender

Report							
gender							
favourite platform - blablacar	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	1,31	84	,465	,051	female	male	1
none	1,60	20	,503	,112	female	male	1
other	1,50	70	,504	,060	female	male	1
Total	1,42	174	,495	,038	female	male	1

Table 291: ANOVA tests for blablacar with gender

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender * favourite platform - blablacar	Between Groups	(Combined)	2,121	2	1,061	4,506	,012
	Within Groups		40,252	171	,235		
	Total		42,374	173			

Table 292: Comparison of means of mitfahrgelegenheit with gender

Report							
gender							
favourite platform - mitfahrgelegenheit	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	1,40	35	,497	,084	female	male	1
none	1,58	19	,507	,116	female	male	1
other	1,40	120	,492	,045	female	male	1
Total	1,42	174	,495	,038	female	male	1

Table 293: ANOVA tests for mitfahrgelegenheit with gender

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	,542	2	,271	1,108	,333
	Within Groups		41,832	171	,245		
	Total		42,374	173			

Table 294: Comparison of means of fahrgemeinschaft with gender

Report							
gender							
favourite platform - fahrgemeinschaft	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	Range
yes	1,60	10	,516	,163	female	male	1
none	1,60	20	,503	,112	female	male	1
other	1,39	145	,489	,041	female	male	1

Total	1,42	175	,495	,037	female	male	1

Table 295: ANOVA tests for fahrgemeinschaft with gender

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
gender * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,136	2	,568	2,350	,098
	Within Groups		41,572	172	,242		
	Total		42,709	174			

Table 296: Comparison of means of blablacar with evaluation of platform

Report						
favourite platform - blablacar		evaluation - usability	evaluation - data privacy	evaluation - rideoffers	evaluation - navigation	evaluation - design
yes	Mean	3,86	3,42	3,72	3,60	3,63
	N	81	62	82	81	81
	Std. Deviation	,703	,666	,790	,847	,798
	Std. Error of Mean	,078	,085	,087	,094	,089
	Minimum	average	below average	extremely poor	below average	below average
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	2	3	4	3	3
none	Mean	3,14	3,00	3,00	2,86	2,86
	N	7	7	7	7	7
	Std. Deviation	,378	,577	,577	,900	,378
	Std. Error of Mean	,143	,218	,218	,340	,143
	Minimum	average	below average	below average	extremely poor	below average
	Maximum	above average	above average	above average	above average	average
	Range	1	2	2	3	1
other	Mean	3,69	3,33	3,56	3,78	3,62
	N	65	52	64	64	65
	Std. Deviation	,846	1,043	,941	,745	,896
	Std. Error of Mean	,105	,145	,118	,093	,111
	Minimum	extremely poor	extremely poor	below average	below average	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	3	3	4
Total	Mean	3,76	3,36	3,62	3,64	3,59

	N	153	121	153	152	153
	Std. Deviation	,770	,845	,858	,825	,839
	Std. Error of Mean	,062	,077	,069	,067	,068
	Minimum	extremely poor	extremely poor	extremely poor	extremely poor	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	4	4

Table 297: ANOVA tests for blablacar with evaluation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
evaluation - usability * favourite platform - blablacar	Between Groups	(Combined)	3,843	2	1,921	3,343	,038
	Within Groups		86,209	150	,575		
	Total		90,052	152			
evaluation - data privacy * favourite platform - blablacar	Between Groups	(Combined)	1,180	2	,590	,823	,441
	Within Groups		84,539	118	,716		
	Total		85,719	120			
evaluation - rideoffers * favourite platform - blablacar	Between Groups	(Combined)	3,714	2	1,857	2,572	,080
	Within Groups		108,299	150	,722		
	Total		112,013	152			
evaluation - navigation * favourite platform - blablacar	Between Groups	(Combined)	5,663	2	2,832	4,343	,015
	Within Groups		97,153	149	,652		
	Total		102,816	151			
evaluation - design * favourite platform - blablacar	Between Groups	(Combined)	3,928	2	1,964	2,857	,061
	Within Groups		103,131	150	,688		
	Total		107,059	152			

Table 298: Comparison of means of mitfahrgelegenheit with evaluation of platform

Report						
favourite platform - mitfahrgelegenheit		evaluation - usability	evaluation - data privacy	evaluation - rideoffers	evaluation - navigation	evaluation - design
yes	Mean	3,59	3,50	3,82	3,79	3,62
	N	34	24	33	33	34
	Std. Deviation	,783	,780	,917	,650	,817
	Std. Error of Mean	,134	,159	,160	,113	,140

	Minimum	below average	below average	below average	below average	below average
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	3	3	3	3	3
none	Mean	3,17	3,00	3,00	3,17	3,00
	N	6	6	6	6	6
	Std. Deviation	,408	,632	,632	,408	,000
	Std. Error of Mean	,167	,258	,258	,167	,000
	Minimum	average	below average	below average	average	average
	Maximum	above average	above average	above average	above average	average
	Range	1	2	2	1	0
other	Mean	3,85	3,34	3,60	3,65	3,63
	N	112	90	113	112	112
	Std. Deviation	,762	,876	,840	,846	,850
	Std. Error of Mean	,072	,092	,079	,080	,080
	Minimum	extremely poor	extremely poor	extremely poor	below average	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	3	4
Total	Mean	3,76	3,36	3,63	3,66	3,60
	N	152	120	152	151	152
	Std. Deviation	,770	,848	,860	,799	,832
	Std. Error of Mean	,062	,077	,070	,065	,067
	Minimum	extremely poor	extremely poor	extremely poor	below average	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	3	4

Table 299: ANOVA tests for mitfahrgelegenheit with evaluation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
evaluation - usability * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	3,985	2	1,993	3,473	,034
	Within Groups		85,488	149	,574		
	Total		89,474	151			
evaluation - data privacy * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	1,269	2	,635	,881	,417
	Within Groups		84,322	117	,721		
	Total		85,592	119			
evaluation - rideoffers * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	3,636	2	1,818	2,509	,085
	Within Groups		107,989	149	,725		
	Total		111,625	151			
evaluation - navigation * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,007	2	1,003	1,584	,209
	Within Groups		93,768	148	,634		
	Total		95,775	150			
evaluation - design * favourite platform - mitfahrgelegenheit	Between Groups	(Combined)	2,240	2	1,120	1,632	,199
	Within Groups		102,279	149	,686		
	Total		104,520	151			

Table 300: Comparison of means of fahrgemeinschaft with evaluation of platform

Report						
favourite platform - fahrgemeinschaft		evaluation - usability	evaluation - data privacy	evaluation - rideoffers	evaluation - navigation	evaluation - design
yes	Mean	3,75	3,67	3,00	3,88	3,63
	N	8	6	8	8	8
	Std. Deviation	,886	,816	,535	,835	,744
	Std. Error of Mean	,313	,333	,189	,295	,263
	Minimum	average	average	below average	average	average
	Maximum	excellent	excellent	above average	excellent	excellent
	Range	2	2	2	2	2
none	Mean	3,14	3,00	3,00	2,86	2,86
	N	7	7	7	7	7
	Std. Deviation	,378	,577	,577	,900	,378
	Std. Error of Mean	,143	,218	,218	,340	,143

	Minimum	average	below average	below average	extremely poor	below average
	Maximum	above average	above average	above average	above average	average
	Range	1	2	2	3	1
other	Mean	3,79	3,36	3,69	3,67	3,62
	N	138	108	138	137	138
	Std. Deviation	,768	,859	,861	,805	,848
	Std. Error of Mean	,065	,083	,073	,069	,072
	Minimum	extremely poor	extremely poor	extremely poor	below average	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	3	4
Total	Mean	3,76	3,36	3,62	3,64	3,59
	N	153	121	153	152	153
	Std. Deviation	,770	,845	,858	,825	,839
	Std. Error of Mean	,062	,077	,069	,067	,068
	Minimum	extremely poor	extremely poor	extremely poor	extremely poor	extremely poor
	Maximum	excellent	excellent	excellent	excellent	excellent
	Range	4	4	4	4	4

Table 301: ANOVA tests for fahrgemeinschaft with evaluation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
evaluation - usability * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	2,789	2	1,395	2,397	,094
	Within Groups		87,263	150	,582		
	Total		90,052	152			
evaluation - data privacy * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	1,469	2	,735	1,029	,361
	Within Groups		84,250	118	,714		
	Total		85,719	120			
evaluation - rideoffers * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	6,412	2	3,206	4,554	,012
	Within Groups		105,601	150	,704		
	Total		112,013	152			
evaluation - navigation * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	4,865	2	2,432	3,700	,027
	Within Groups		97,951	149	,657		
	Total		102,816	151			

evaluation - design * favourite platform - fahrgemeinschaft	Between Groups	(Combined)	3,921	2	1,960	2,851	,061
	Within Groups		103,138	150	,688		
	Total		107,059	152			