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# **Examining Discrimination in Everyday Life: A Stated Choice Experiment on Racism in the Sharing Economy**

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**Abstract:** Prejudice and discrimination in everyday life are persistent problems for most societies but difficult to uncover and explain by empirical social research. Complementing existing approaches to study discrimination, we demonstrate the usefulness of survey-based stated choice experiments to explore everyday discrimination and its heterogeneity within a multifactorial framework. In our study German respondents ( $n = 766$ ) were asked to choose between various carpooling offers varying not only in regard to price, car type, and rating but also to the perceived ethnic background of the driver. Random parameter logit models show preference heterogeneity in the sample and that differences in choice behavior related to perceived ethnic background of the driver can be explained by xenophobic attitudes and lack of regular contact with perceived “foreigners.” We find no indication that familiarity with the situation reduces discriminatory preferences. Our survey-based approach adds to existing research by experimentally singling out main and interactions effects of discriminatory attributes and by being able to determine the correlation between personal characteristics of the decision makers and their discriminatory preferences.

**Keywords:** discrimination, racism, xenophobia, contact hypothesis, stated choice experiment

Officially, almost all democratic states guarantee legal equality irrespective of a person's gender, race, origin, religion and similar social categories. This, of course, certainly neither implies that we are living in a world where those legal frameworks are consequently enforced nor that there are not more "subtle" ways of discrimination and prejudiced behavior. Scholars from different fields of prejudice and discrimination research argue that manifestations of racism (McConahay and Hough 1976; Pettigrew and Meertens 1995; Sears and McConahay 1973), sexism (Glick and Fiske 1996; Swim et al. 1995; Tougas et al. 1995), and antisemitism (Bergmann and Erb 1997; Rensmann and Schoeps 2010) have become both more strategic and more manifold.

The theoretical concept of "symbolic racism", for example, takes into account that prejudiced individuals respond strategically to modern anti-discrimination politics. "Symbolic racism" consists of "abstract moral assertions about blacks' behavior as a group, concerning what blacks deserve, how they ought to act, whether or not they are treated equitably, and so on" (Sears and McConahay 1973: 138). It tries to counteract equal opportunity measures by using seemingly non-racist arguments which, however, have discriminatory consequences. "Benevolent sexism" (Glick and Fiske 1996), again, in a similar way tries to avoid accusations of bigotry by using alternative rhetoric tools, in this case "positive" role characteristics of females ("the good housewife"), to maintain the status quo. And in the case of antisemitism, scholars have found that camouflage (Holz 2001) and detour communication (Bergmann and Erb 1997) is used to articulate antisemitic stereotypes in presumably anti-antisemitic public environments.

Empirically, especially field experiments have been of immense help to uncover (still) existing discrimination in the job (Pager 2007; Pager, Western, and Bonikowski 2009; Tilcsik 2011) and housing market (Diehl et al. 2013; Auspurg, Hinz, and Schmid 2017; Auspurg, Schneck, and Hinz 2019) as well as in other consumer markets (Pager and Shepherd 2008). Women, ethnic minorities and gays have been found to be systematically deprived of resources supplied

by those markets. Studies using real market data and revealed choice behavior confirm those findings (e.g., Clark 1992; Wechselbaumer and Winter-Ebmer 2005; Piracha et al. 2019).

While field experiments have focused on the behavioral dimension of the more quotidian and “banal” shapes of discrimination, laboratory experiments have been applied to study their attitudinal dimension, i.e. the underlying prejudices. Implicit measures (for a review see Fazio and Olson 2003) such as the “implicit association test” (IAT; see Greenwald et al. 1998; Dovidio et al. 2002), “facial electromyography” (EMG; see Vanman et al. 1997) or “functional magnetic resonance imaging” (fMRI; see Hart et al. 2000) try to measure prejudices on a more basic and intuitional level.

Similarly, the “social desirability bias” literature (e.g., Krysan 1998; Krysan and Couper 2003; Stocké 2007) has introduced survey experiments like the “list experiment” (also “item count technique”; e.g., Kuklinski et al. 1997; Kane et al. 2004; Janus 2010) and the “randomized response technique” (e.g., Warner 1965; Krumpal 2012) to approximate what is hypothetically assumed to be the “true score” of the respective discriminatory attitude. Since a couple of years the factorial survey (“vignette experiment”; Auspurg and Hinz 2015a), which has a long tradition in sociological research (Jasso and Rossi 1977, Jasso 2006, Wallander 2009), has also gained importance for the study of discrimination (Diehl et al. 2013). This method yields great benefits because sensitive attributes can be hidden in the complex description of the situation (Auspurg et al. 2015). For example, Auspurg, Hinz and Sauer (2017) employ factorial survey experiments to investigate the criteria of justification concerning gender-related pay gaps. And Beyer, Schnabel, and Lach (2018) used factorial surveys to study antifeminist communication norms.

Our paper follows this latter line of research by applying a *Stated Choice Experiment* (SCE) to the research of everyday discrimination. SCEs are a specific type of the more general class of multifactorial survey experiments, of which the factorial survey is probably the most familiar

design for sociologists. SCEs are starting to be used more frequently in social science research including studies on immigration (Auspurg and Hinz 2015b)<sup>1</sup>. Concentrating on choice *preferences*, they complement factorial surveys by offering a (rather) *behavioral* measure of discrimination (Beyer and Liebe 2015).

In this paper, we use a SCE for uncovering discrimination against immigrants in Germany, thereby focusing on the difference between Turkish<sup>2</sup> and Italian immigrants. Turkish immigrants are the biggest migrant group in Germany and traditionally confronted with racism and Xenophobia on a constant basis (Şen 2003; Adam 2015). Italian immigrants, the fourth largest migrant group, have also been victims of Xenophobic action and speech but to a lesser degree than Turkish immigrants (Rohmann, Florack, and Piontkowski 2006).

To investigate how those groups are systematically disadvantaged, we use the example of the sharing economy and more specifically the carpooling market. Research on discrimination in the sharing economy has gained substantial attention in the last years which is unsurprising since those markets themselves have become more important (Piracha et al. 2019; Cheng and Foley 2018; Edelman, Luca, and Svirsky 2017).

Carpooling, as one very important subfield of the sharing economy, has become a widely accepted alternative mode of transportation around the world. Compared to services like *Uber* and *Lyft*, carpooling services only offer the platform where occasional private drivers and passengers are matched. The largest provider, *Blablacar*, had 65 million members around the world in December 2018, was available in 22 countries and reported 20 million travelers per quarter (<https://www.blablacar.co.uk>). Similar to carpooling websites like *Blablacar* where

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<sup>1</sup> A search in the *Web of Science* of the topic “choice experiment” in July 2019 produced 4,937 hits, most of which were economic applications. There are less than ten applications with a sociological focus (see also Auspurg and Hinz 2015b).

<sup>2</sup> Actually, the label ‘Turkish’ can be considered as a *pars pro toto* for the broader group of Arab/Turkish/Persian immigrants since there seems to be no specific pattern for each of these sub-groups which are mostly equated by Germans who do not belong to this group.

customers can search for private offers to share a ride to a specific location (the average ride distance of *blablacar* users is 301 kilometers), our SCE offered respondents a choice of ride options with different drivers. The drivers' characteristics were varied experimentally using, apart from the ethnic background, the gender of the driver as potential categories of discrimination and size of the car, rating of the driver, and price as context specific attributes.

In a small field experiment from 2013 Kauff, Issmer, and Nau (2013) contacted 98 providers of carpooling offers on a German website via e-mail and asked whether their offer was still available. The supposed passenger was either a person with a "typically German" sounding female name or a person with a "typically Turkish" sounding female name. While 35.7% of the assumingly non-immigrant "Germans" were rejected, 50.0% of the inquires with the supposed "Turkish" name suffered a similar fate – a highly significant difference.

In a more comprehensive study using real-market data of German carpooling providers, Tjaden, Schwemmer, and Khadjavi (2018) similarly have shown that Arab/Turkish/Persian names, in this case the ones' of persons offering rides, receive 13% fewer clicks than "German" drivers. Higher user ratings, a higher number of ratings, and information on the experience of the driver, however, decrease this effect.

Finally, Carol et al. (2019) published a study in which providers of carpooling offers were contacted by supposedly German or Turkish users. The researchers collected 952 cases which clearly revealed that women with German names were least likely to experience discrimination, while men with Turkish names are the most likely to be discriminated against.

While those three studies offer highly interesting insights about the degree of discrimination in the German carpooling market and illustrate the general value of market or revealed preferences data to uncover discrimination, there are crucial limitations, as Tjaden et al. (2018) admit: (1) Since no personal information about the potential drivers or passengers is available, the

underlying reasons for discriminating as well as sub-group specific peculiarities cannot be determined with certainty. (2) Since the researchers have no control over the sample and, hence, an over-sampling of comparatively small groups is impossible, it remains unclear whether the findings hold true if, for example, older people, women, and users living in rural areas are more systematically included in the analysis.

SCEs, on the other hand, are applied in controlled situations and thus are able to collect (1) *more information* from (2) a *broader sample* of research subjects and therefore can (3) uncover *mechanisms* underlying discrimination. In this regard, SCEs complement field experiments and (other) real world data collection tools which might trump SCEs when it comes to issues of *external* validity but have important shortcomings regarding their *internal* validity.

In the following, we will illustrate the advantages of SCEs and present a study on discrimination in the carpooling market. The research is guided by two substantial questions: *Are* drivers with perceived “Turkish” or “Italian” names chosen less often than those with supposedly “German” ones and if so, *why* is this the case. In the next section we will discuss potential mechanisms of discrimination addressing the why-question. Subsequently the design, execution and results of our study are described. The paper closes with a thorough discussion of our findings.

## **Theoretical Approaches and Hypotheses of Discrimination**

Acts of discrimination can be located on a continuum between “verbal abuse” and “denial of social resources” to “physical aggression” and “genocide” (Marger 2011, p. 58). We will concentrate here on the less violent forms found on the left of this scale: Behavior denying individuals certain resources because of ascribed social categories such as race, origin or gender (see also Pettigrew and Taylor 2000). In our case this is the resource of income gained by carpooling services. Such acts of discrimination can be conceptualized as microaggressions where micro refers to “the everyday, commonplace nature of [these] interactions” (Torino et al. 2019, p. 7). In contrast, macroaggressions include the “systematic and institutionalized bias” (Torino et al. 2019, p. 7) affecting a whole group of people.

In a very first step, our study investigates *if* the perceived ethnic background of the driver indeed influences the choice of a supplier. Discrimination is based on the construction of boundaries of social distance (Portes and Sensenbrenner 1993: 1329) and “homophily” (McPherson, Smith-Lovin, and Cook 2001). In this context the ascribed national, cultural, and religious identity components of the “other” are used to distinguish the degree of “foreignness” in relation to the in-group of the discriminating individual. For example, in the German majority society presumably “Turkish” persons are perceived as “more foreign” than “Italians” because not only the ascribed nationality – irrespective of the de facto citizenship – but also the supposed religious values are perceived as “different” (Wasmer and Koch 2000).

Another line of research suggests that the degree and kind of discrimination which members of ethnic and religious groups face are based on the *specific* beliefs held about those groups. The “Stereotype Content Model” (Fiske 2012) highlights two basic dimensions: warmth (interdependence) and competence (relative status). In our case, previous studies (Asbrock 2010; Froehlich and Schulte 2019) show that Italians are perceived significantly more “competent” and “warm” compared to Turkish immigrants by German respondents. Since, on the one hand, those two characteristics are positively related to trust and, on the other hand,



trust decreases discrimination in general (e.g., Fershtman and Gneezy 2001) and is an important factor when choosing a car pooling offer (Créno and Cahour 2014), we can assume that:

*Hypothesis 1 (Ethnic Discrimination):* Drivers perceived as “Turkish” are less often chosen than drivers perceived as “Italian” which again are less often chosen than drivers perceived as “German”.

The question emanating from this hypothesis is *why* people act this way. In a nutshell the literature on discrimination can be narrowed down to two basic explanatory mechanisms: (1) prejudice-based discrimination, and (2) statistical discrimination, that is: a form of discrimination where unequal behavioral decisions are based on imagined or actual average group differences (Guryan and Charles 2013).

The former theoretical approach assumes a more or less consistent attitude-behavior relationship: If actors have negative attitudes towards the target group they are more likely to discriminate against them (Quillian 2006). However, the assumption of a close correlation between attitudes and behavior has been contested by mixed results of previous studies (for an overview see Ajzen and Fishbein 2005). It is neither certain that prejudiced beliefs are a necessary condition for discrimination nor is it a given that prejudiced individuals always manifest their attitudes verbally and physically. Thus, the link between the two analytically distinguishable phenomena has to be investigated carefully. We do so in our study by testing the following hypothesis:

*Hypothesis 2 (Xenophobia):* The higher an individual’s Xenophobic attitude the less often he/she chooses a driver who is presumed to belong to an ethnic minority.

A popular corollary of prejudice theory is the (similarly contested; see Amir 1969, 1976; Forbes 1997; Pettigrew and Tropp 2006, 2011) contact hypothesis (Williams 1947; Allport 1979). In its most basic formulation it holds that frequent contacts with members of the target group

decrease existing prejudices and thus would also lead to less discriminatory action against this group. Pettigrew and Tropp (2011), having reviewed in total 515 studies found that contact indeed decreases prejudice, especially affective forms. Equal status, common goals, intergroup cooperation, and institutional support are important moderators, anxiety reduction and empathy for the outgroup important mediators. We will test the contact hypothesis in its basic formulation with our data and specify it in the following way:

*Hypothesis 3 (Contact):* If individuals have had (frequent) contact with ethnic minorities they are more likely to choose a driver who is presumed to belong to an ethnic minority compared to individuals without such contact.

A different approach branded “statistical discrimination” was brought forward by Phelps (1972) and Arrow (1973) according to whom even non-prejudiced actors behave in a discriminatory way if they lack necessary information of specific individuals. The average perception about the group an individual is assumingly a member of is used as a proxy value in this case to assess the characteristics of a specific person. This is especially an issue in unfamiliar and non-ordinary situations (Bertrand and Duflo 2017: 378).

The theory of frame selection (Esser and Kroneberg 2015) and risk analysis (Slovic et al. 2004) has been working on an explanation for this observation. They suggest that discriminatory behavior is less likely if individuals are familiar with the social context in which social interactions take place because it is easier for individuals to trust their judgments in familiar social situations which are less ambiguous. Hence, in such situations characteristics such as the ethnic background are expected to be less important for decision making. This leads to the following hypothesis:

*Hypothesis 4 (Context Familiarity):* If individuals are familiar with a carpooling situation they are more likely to choose a driver that is presumed to belong to an ethnic minority compared to individuals not being familiar with such a situation.

We will now test those four hypotheses with a stated choice experiment design.

### **The Method of Stated Choice Experiments**

SCEs present to respondents a certain number of “choice sets” each of which describes alternative entities (mostly products or services). Respondents are asked to choose the alternative they prefer most. Each choice alternative is described by different attributes with different levels (or values), allowing researchers to estimate the effect of each attribute on individuals’ stated preferences. The SCE method originated in marketing and transportation research to investigate consumer preferences for new products and services, which are not available, yet (Louviere, Hensher and Swait 2000). SCEs also are applied in environmental, health, and agricultural economics to measure, for example, public preferences for renewable energy resources, health care providers or food safety (Hess and Daly 2004 for a comprehensive overview). While there is an increasing number of applications of SCEs in political science and other social sciences, the method has received less attention in sociology. However, there are a couple of studies with sociological *potential* regarding the possibilities of trust when buying a car (Buskens and Weesie 2000), homeowners’ neighborhood preferences after 9/11 (Roe et al. 2005), preferences for global climate agreements (Bechtel and Sheve 2013), social context and ethical consumption preferences (Liebe et al. 2016) as well as preferences for immigration policies (Hainmueller and Hopkins 2015).

SCEs combine insights from the characteristics theory of value (Lancaster 1966) and random utility theory (McFadden 1974). The former assumes that consumers’ preferences relate to a product’s characteristics or attributes. A car for example can be described by its size,

performance, color etc. However, consumers' preferences exist as latent constructs in subjects' minds which researchers cannot directly observe. SCEs employ (repeated) choice questions that allow researchers to identify systematic patterns, single out the relative importance of each attribute, and identify predictors of respondents' preferences.

The conditional logit model (McFadden 1974) is the “workhorse model” of analyzing stated choice experiment data (Louviere, Hensher and Swait 2000). It is in line with the assumption that respondents choose one alternative over another in a choice set if the satisfaction or utility gained from that alternative exceeds the satisfaction or utility gained from other alternatives. More complex models such random parameter logit models are subsequently used to consider the panel character of choice-experiment data (i.e. repeated choice by individuals) and preference heterogeneity (i.e. not all respondents might have the same preferences; for modelling variants see Train 2003; Hensher et al. 2005).

SCE preference measures can be considered more valid than respective survey items because they model behavioural decisions more realistically. Next to this general advantage, the method can be assumed to perform well in the context of discrimination research (and research confronted with the problem of social desirability bias as such) because the social category, the act of discrimination is based on (e.g., ethnic background), is one among several other attributes of the object. Respondents who are asked to make an everyday life decision which at first glance seems unrelated to a potential act of discrimination can be expected to answer more in line with their “true” behavioural preferences. SCEs are thus expected to reduce the social desirability bias (see Diehl et al. 2013 and Auspurg et al. 2015 for factorial surveys).

## **A Stated Choice Experiment on Discrimination in Carpooling Decisions**

### *Experimental design*

We prompted respondents to imagine the following scenario: they were planning a trip to visit friends or family in a town 300 kilometers (186 miles) away and they were looking for a carpooling offer on one of the respective websites. They were asked which of two alternative offers (presented in the form of “choice sets”) they would choose. A choice set consisted of two generic alternatives (offer A and offer B) and a no-buy option (“none of these”). The alternatives are described by six attributes: name of the driver, type of car, number of free seats, membership of automobile club (“ADAC”), rating by other users, and price. All of those attributes have a certain number of levels, as shown in Table 1. Figure 1 depicts an example of a choice set used in the study. The drivers’ *names* and specific *cars* were varied throughout the questionnaire to gain a more realistic choice scenario and to avoid automatic response behavior. The names of the drivers were collected in a cognitive test with 25 undergraduate students at a German university. The students were asked to state three male and three female names they considered “typically German”, “typically Turkish”, and “typically Italian”, respectively. Based on the answers we selected five names each of which were most frequently mentioned. The names are listed in Table 1.

[Table 1 about here]

[Figure 1 about here]

Two alternatives with six attributes creates a large full factorial, that is, the number of all possible attribute combinations including the possibility of the same alternatives in a choice set:  $419,904 = (6 \times 3 \times 2 \times 3 \times 6) \times (6 \times 3 \times 2 \times 3 \times 6)$ . Since this is too large to present it to the respondents, we employed a fractional factorial design, more specifically an optimal-orthogonal-in-differences design (OOD using *Ngene*, see Burgess and Street 2005). Orthogonality ensures

that the influence of a single attribute can be determined independently from the influences of the others. Besides orthogonality, the choice design was constructed to minimize the overlap between attribute levels across alternatives in a choice set, thus forcing respondents to make trade-offs between the single attributes. We used the foldover technique (Ngene 2014: 76) in order to be able to estimate, next to the attributes' main effects, all two-way interaction effects between attributes. This way we obtained 72 choice sets. Each respondent was randomly assigned to six of them which she/he was asked to complete.

### *Data and Variables*

The web survey was conducted in April 2016 in collaboration with a German access panel provider. Panel members are actively recruited both online and offline and are motivated with monetary incentives. The quality of the data is checked on a regular basis according to the ISO norm 26362. For sampling, we used German population quota for the variables gender, age, and education. Although experimental designs often allow for substantial conclusions based on small and homogenous samples, we wanted to make sure that our findings account for socio-demographic heterogeneity within the population. The panel provider invited 3,708 panel members to participate in the survey, of whom 890 members took part (there were 56 screen-outs and 14 break-offs, resulting in a response rate of 24%).

Of all respondents, 766 completed all choice sets and questions; their responses were used for further analyses. Of those respondents, 44% were female and 33% held at least a secondary school degree ("Abitur"). The mean age of the respondents amounts to 44 years (sd = 13.83, min = 18, max = 69). The individual financial situation was measured on a four-point response scale (1 = very bad, 4 = very good) using the question: "How do you perceive your current personal financial situation?" The mean value of this variable is 2.55 (sd = .71). Furthermore, 94% of the respondents have a German citizenship, four respondents an Italian citizenship and

three respondents a Turkish citizenship (based on overall  $n=747$  valid responses). With regard to parents' immigration background, 22% have at least one parent who was not born in Germany, and of these nine and seven respondents have at least one parent who was born in Italy and Turkey, respectively (other migration origins include Greece, Poland, and Russia/former Soviet Union). The number of respondents with an immigration background regarding Italy and Turkey are too low to warrant subgroup analyses. Yet, we will come back to the relevance of immigration background in the discussion of our empirical results. In the following we will present results for all respondents.

Among other variables three important explanatory factors of discrimination were captured in the questionnaire: xenophobic attitudes (Hypothesis H2), contacts with "foreigners" (Hypothesis 3), and familiarity with carpooling situations (Hypothesis H4). Table 2 gives an overview of items used to measure xenophobic attitudes. If necessary, items were recoded so that higher values indicate higher rates of xenophobia.

[Table 2 about here]

The Xenophobia index (see Allbus 2006) consists of four items, two hostile and two benevolent ones. The latter state that foreigners contribute to a positive cultural climate in Germany and suggest that politicians should do more for them. The other two items on the contrary claim that foreigners are a burden for the welfare system and that they should be more willing to integrate into German society. The second of those two items shows the highest approval rate ( $m=4.39$ ) whereas the first one shows the lowest one ( $m=3.09$ ). A principal component factor analysis with orthogonal varimax rotation results in a one factor solution with an Eigenvalue of 2.16 and explained variance of 54%. All factor loadings exceed the value of 0.62, and Cronbach's alpha is 0.71 ( $n = 766$ ).

The contact hypothesis was tested using the item “I have friends and acquaintances who are foreigners”. 75% reported that they do. Familiarity with carpooling situations was measured with the statement “Have you ever used carpooling?”: 29% of the sample responded affirmatively to this question. In the next section we show to what extent the variables introduced in this section influence the specific choice of a carpooling offer.

## **Results**

To test our theoretical hypotheses on discrimination in the carpooling market, we use a conditional logit (CL) model and random parameter logit (RPL) model. The CL model estimates the likelihood that an alternative will be chosen from the set of choice alternatives. This is assumed to be influenced by attributes of the choice alternatives, e.g. the price and driver’s origin of carpooling alternatives. While a multinomial logit model is concerned with individuals’ characteristics such as respondents’ gender and education, the CL model takes into account characteristics of choice alternatives as well as individuals’ characteristics. It is therefore considered as a “starting point” of choice modelling (Louviere, Hensher and Swait 2000). However, as the CL model rests on some restrictive assumptions such as preference homogeneity in a population, in addition less restrictive models are often employed. In this regard, we use the RPL model which, among others, considers the panel character of the data (i.e. repeated choices by individuals) and heterogeneity of preferences (i.e. variation of the parameter estimates, see also Train 2003; Hensher et al. 2005).

The CL and RPL model in this study include the alternative specific constant (ASC) which captures respondents’ tastes which are not reflected in the attributes. In our study, it can be interpreted as a general tendency to choose one of the carpooling offers over the no-buy option. In the RPL models we specify the ASC as a random variable with normal distribution. Therefore, we assume that some respondents might have a positive and others a negative general tendency for carpooling. Our theoretical hypotheses suggest specific patterns of



preference heterogeneity in the population. For example, individuals with Xenophobic attitudes are expected to have a lower likelihood to choose a “Turkish” driver. To account for such heterogeneity and to test our corresponding hypotheses, we include interaction terms between choice attributes, which are relevant for discrimination (i.e. driver’s origin), and respondents’ characteristics such as xenophobic attitudes and contact to foreigners.

The results are presented in Table 3. We present, firstly, models including the main effects of choice attributes (models CL and RPL I), secondly, a model including two-way interactions between choice attributes (model RPL II), and, thirdly, a model that captures interaction effects between the theoretical determinants of discrimination and corresponding choice attributes (model RPL III). For reasons of clarity, in Table 3 we only display statistically significant interaction effects at the 5% level or smaller; full models including all interaction effects tested can be found in the appendix, Table A1.

[Table 3 about here]

The results of the (baseline) models CL and RPL I indicate that, independent of the other choice attributes, the respondents prefer German drivers over drivers from Italy and Turkey. Since the effect for Turkish drivers is greater than the one for Italian drivers (model CL, Wald test,  $\text{CHI}^2(1)=12.19, p=0.0005$ ) the models support *Hypothesis 1 (Ethnic Discrimination)* and hence the theoretical considerations made earlier: Perceived cultural distance seems indeed to be an important factor when choosing a carpooling offer and thus a cause for discriminatory behavior.

Our experiment also included other (control) factors, which provide more information about the social situation and might therefore affect decision making. These factors include *gender*, *type of car* as an indicator of social status (Eastman et al. 1999; Diekmann et al. 1996), *ratings of the driver* which may lead to a reputation premium and a positive reciprocity effect (Resnick et al. 2000; Diekmann et al. 2014), *membership of an automobile club* which might signal

safety, and finally *price* for which we expect that higher prices result in a lower demand. Especially the attribute for signaling the social status of the driver via the type of car is very important in order to distinguish effects of ethnic discrimination from status discrimination.

As can be seen in Table 3, the gender of the driver is also an important factor in our scenario (model RPL I): respondents prefer women as drivers over men. The reason for this tendency might be twofold: On the one hand, especially women might feel safer with other women as drivers. On the other hand, this could also be a sign of “positive discrimination” (i.e. “benevolent sexism”, Glick and Fiske 1996). Women might be imagined to be more social, caring, and attractive – the latter especially by men. Since we found no interaction effect concerning the gender of the driver and the gender of the respondent (see the model RPL II in Table 3), both mechanisms might be at work here and cancel each other out.

With regard to the type of the car, we found that respondents have a preference for medium-sized and large cars over small cars. The effect for larger cars is greater than that for medium-sized cars (model CL, Wald test,  $\text{CHI}^2(1)=10.70$ ,  $p=0.0011$ ) which might show the relevance of car size as a status indicator. Yet, larger cars might also be perceived as being safer than smaller ones (Thomas 2008). Further, respondents prefer offers with more seats (i.e. space) available in the car. The strongest effect, however, is observed for the reputation of the driver, which can be interpreted as an indicator of a reciprocity mechanism that is at work here (Diekmann et al. 2014). As expected, the price coefficient is negative, that is, the higher the price the lower the likelihood to choose a respective carpooling offer.

To put these results into perspective, we can look at trade-off values – marginal rates of substitutions – between the choice attributes. These can be calculated by  $\frac{\beta_{\text{non-monetary attribute}}}{\beta_{\text{monetary attribute}}}$  and indicate how much money respondents are prepared to sacrifice in order to get a product which has the desired attribute level. On average, the respondents are prepared to pay a premium

of 1.26 Euro (95% CI: 1.79 Euro ↔ 0.74 Euro)<sup>3</sup> to drive with a “German” instead of a “Turkish” driver, and of 0.48 Euro (95% CI: 0.89 Euro ↔ 0.02 Euro) to drive with a “German” instead of an “Italian” driver. Thus, discrimination is obviously an issue in our data. However, other attributes such as the reputation of the driver [2.71 Euro (95% CI: 2.35 Euro ↔ 3.16 Euro)] and a high-status car [1.75 Euro (95% CI: 1.26 Euro ↔ 2.28 Euro)] are more or at least equally important as the perceived ethnic background.

Now, it seems reasonable to assume that those attributes do not only have direct effects on the choice of a carpooling offer but they also interact with each other. Focusing on potential intersectional discrimination patterns, we included interaction terms between gender and ethnicity of the driver, as well as between gender and all other attributes, and ethnicity and all other attributes. The results are shown in the RPL II model in Table 3. They indicate that women drivers with Italian sounding names are more discriminated against than women drivers with typical German names. This is not the case for Turkish names. Intersectional discrimination based on the categories gender and perceived ethnicity (Crenshaw 1990; Grabham et al. 2008; Nash 2008) seems to be an issue in our sample; yet, it is only directed towards Italians. The results of the RPL II model also show that for women drivers price is valued significantly less negatively than for men drivers. Compared with “German” drivers, the rating/reputation of the driver matters less to the respondents if the driver is perceived to be “Turkish”. We also find a positive interaction effect between the attributes “price” and “Turkish”. This means that, similar to the effect of a driver’s rating, the price is less important if the offer is by a “Turkish” driver. The negative main effect of the price is reduced in this case. This can be interpreted as evidence for rather direct discrimination: the perceived ethnicity of the driver is considered more important than the price or the rating.

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<sup>3</sup> Confidence intervals for the premium – mean marginal willingness-to-pay estimates – were calculated using the Krinsky and Robb (1986) bootstrapping procedure with 2000 repetitions.

After having tested the basic hypotheses regarding ethnic discrimination and the interaction effects between choice attributes, we now proceed with answering the research question of *why* individuals discriminate (or do not discriminate), or more generally: which groups of respondents chose which carpooling offer for what reason?

The random parameter logit model RPL III which includes interaction terms between choice attributes and respondents' characteristics shows observed preference heterogeneity in the data that supports some of our theoretical hypotheses. In support of *Hypothesis 2* (Xenophobia) higher levels of xenophobic attitudes decrease the likelihood to choose drivers who supposedly have a Turkish immigration background. This does not apply to drivers with "Italian" names. Our findings also support *Hypothesis 3* (Contact): respondents who have frequent contact with foreigners compared with respondents without such contacts have a higher likelihood to choose drivers with "Turkish sounding" names (the effect for drivers with "Italian" names is statistically significant at the 10% level, see the appendix). However, we cannot support *Hypothesis 4* (Context Familiarity) with our data. We do not find that respondents with carpooling experience compared to respondents without carpooling experience are significantly more likely to choose "Italian" or "Turkish" names. This indicates that "statistical discrimination" is not apparent in our data since here non-familiarity does not translate into avoiding supposedly "foreign" drivers.

The RPL III model in Table 3 further reveals a statistically significant and negative interaction effect between education and "Turkish drivers". Higher educated respondents are less likely to choose a carpooling offer by a driver who supposedly has a Turkish immigration background (the corresponding interaction effect for Italian drivers is also negative and statistically significant at the 10% level, see the appendix).

## **Discussion and Conclusion**

Using an access-panel sample of 766 respondents whose socio-demographic distribution indicates heterogeneity regarding basic categories such as gender, age, and education, our survey experiment revealed a clear tendency of discrimination against individuals who are typically perceived as belonging to the migrant group of Turkish and Italian immigrants, respectively. On average the respondents were willing to pay 1.26 Euro more (approximately 6-12% of the total price) to not ride with a person presumed to be “Turkish” and 0.48 Euro more to not ride with a person presumed to be “Italian”. However, women with “Italian” names were chosen less often than their male counterparts indicating a tendency towards intersectional discrimination here. It is unclear why this is only apparent in the case of Italian names and not Turkish names but one explanation could be the higher base rate of discrimination against individuals perceived as “Turkish”. However, gendered racial microaggressions and other forms of intersectional microaggressions (Lewis et al. 2019) as well as their social-context dependence are important topics for future research on everyday discrimination employing both qualitative and quantitative methods. Also, the choice of ethnic groups under consideration might have affected our results. We chose Italian drivers as a type of control group; Italians are perceived significantly more “competent” and “warm” (“Stereotype Content Model”, Fiske 2012) compared to Turkish immigrants by German respondents. In future research, other comparison groups can be considered, for example groups that are similar in their characteristics regarding interdependence and relative status (Fiske 2012) but differ in ethnic background (e.g. corresponding groups from Europe and Asia). This can help to clarify to what extent, for example, cultural or social distance are important for every discrimination.

The discrimination against drivers with a supposed “Turkish” background is clearly based on Xenophobic attitudes, a finding supporting a prejudice-theoretical explanation of discrimination. More proof for the latter is offered by the results that respondents with

infrequent contact with foreigners are more likely to discriminate against drivers with “Turkish sounding” names. The rivalling hypothesis on the other hand, *Hypothesis of Context Familiarity*, was not supported by our data, indicating that “statistical discrimination” is less an issue than Xenophobic resentment: The carpooling experience did not interact with the supposed ethnic background of the drivers. Another empirical indicator supporting this interpretation is the negative interaction effect between the rating of the driver and “Turkish sounding” names. Since the respective interaction term reveals that for “Turkish” names better ratings are *less* instead of more important than for drivers with “German” names, we can assume that information about potential skills or reliability of the driver is not the main reason why individuals might choose “German” over “Turkish” drivers. In case of “statistical discrimination”, we should find that higher ratings cancel out the negative effect of the ethnic background, that is the interaction effect should be positive.

Stated Choice Experiments have the major advantage over field experiment to be able to test for such rivalling theoretical explanations. Further, they allow for in-depth analyses of subgroup-specific mechanisms. In our case, for example, we found that especially higher educated respondents discriminate against Turkish immigrants. But why is this the case? It is possible that, similar to the phenomenon of racial segregation in neighborhoods or school choice (e.g., Clark and Ledwith 2007; Sikkink and Emerson 2008), higher educated individuals have the economic resources to avoid contact with foreigners (i.e. to move to another neighborhood or choose a different school for their children). Our data tend to support this supposition. Comparing willingness-to-pay values for higher and less educated respondents (based on separate conditional logit models for both groups, see Table A2 in the appendix), we find that higher educated respondents were willing to pay, on average, 1.80 Euro (95% CI: 0.88 Euro ↔ 2.86 Euro) more to drive with a “German” instead of a “Turkish” driver. The corresponding value for less educated respondents is 1.01 Euro (95% CI: 0.38 Euro ↔ 1.63 Euro) and hence lower. The complete combinatorial test proposed by Poe et al. (2005) indicates that mean

marginal willingness-to-pay estimates for the two education groups are not significantly different at the 5% level, but at the 10% level (p-value = 0.084).

This education effect might be counterintuitive and it can be questioned whether it is driven by respondents who are less educated and have some kind of immigration background. Yet, our data indicate that the positive education effect is present for respondents with (22%) and without immigration background (78%). For respondents who have at least one parent with an immigration background or immigrated themselves and have less education, we estimated a marginal willingness to pay of 0.53 Euro (95% CI: 1.68 Euro ↔ -0.67 Euro) to drive with a “German” instead of “Turkish” driver. Taking lower case numbers into account (n = 53), the value for respondents with immigration background and higher education amounts to 3.63 Euro (95% CI: 1.15 Euro ↔ 10.98 Euro). For respondents with no immigration background, we estimate a marginal willingness to pay of 1.14 Euro (95% CI: 0.38 Euro ↔ 1.93 Euro) for less educated respondents and 1.44 Euro (95% CI: 0.45 Euro ↔ 2.55 Euro) for higher educated ones. While the magnitude of the education effect clearly differs between subgroups, the positive direction of the effect remains. By interpreting these figures, it has to be kept in mind that the overwhelming majority of our respondents with some kind of immigration background have a non-Turkish origin. The results might look different for Turkish immigrants but the case numbers are too low to estimate respective models. Nonetheless, regarding carpooling preferences there is a tendency in our data that, controlling for ethnic background, higher educated individuals discriminate more towards “Turkish” drivers than less educated individuals. This needs to be replicated in future studies, together with the argument that higher educated individuals have more economic resources to avoid contact with foreigners. The additional subgroup analyses also indicate that carpooling preferences seem rather similar for respondents with and without immigration background (see Table A2 in the appendix).

Despite the benefits of applying SCEs in research on discrimination one could object that the higher internal validity and additional findings gained from the survey-based design are achieved at the expense of the lower degree of external validity, compared to field experiments and real-world observations. Indeed “hypothetical bias” is a well-known issue with SCEs, and most studies find a tendency towards higher willingness-to-pay values in the hypothetical scenario compared with a real-life scenario (Murphy et al. 2005). But the bias is usually lower for (private) goods that respondents know compared to hypothetical (public) goods that do not exist, yet. Further, there is still a strong and positive association between hypothetical and real values, and in a study on naturalization, a choice-experiment design revealed behavioral measures which were almost identical with actual voting behavior (Hainmueller, Yamamoto, and Hangartner 2014).

Further, we can in fact relate our findings to a validation study, namely the one we already mentioned in the beginning: Tjaden et al. (2018) looked at carpooling choices at an online platform and found that, similar to our study, drivers with Arab/Turkish/Persian names were chosen less frequently than “German drivers” – measured by actual clicks on carpooling offers. Further, the market data revealed a discriminatory price premium of 32% which is even above the range of the value we obtained in our choice experiment. This can be seen as an indication that we do not overestimate willingness-to-pay values, which is typically the case in the presence of a hypothetical bias (Murphy et al. 2005, Liebe et al. 2018). By comparing these values, it has to be kept in mind that Tjaden et al. (2018) did not measure actual transactions but clicks and, hence, actual price premiums might differ from the ones based on the clicks data. Our results are not fully in line with the study by Tjaden et al. (2018). They found that ethnic discrimination almost disappears if individuals have (more) positive information about the target person. We were not able to test this particular effect, as we did not vary the amount of information provided across choice sets, that is, the number of attributes. However, our experimental design included all two-way interaction effects between choice attributes, and we



found that specifically for “Turkish” drivers both the price attribute and a driver’s rating are less important, that is, their effects are weaker, compared with “German” drivers. This rather speaks for strong discriminatory preference towards “Turkish” drivers in our study. Using a SCE design has the advantage that in our study we were able to experimentally single out the effects of relevant main and interaction effects of carpooling characteristics.

What can be learned from these results? Since the discrimination against drivers with a supposed migration background rather is based on prejudiced beliefs than on the lack of information about the situation and the reputation of the driver, it seems important to address not only the discriminatory act as such but also the attitudes leading to it. This could be achieved by more diverse advertising images and slogans but also by offers not using names and pictures of the driver. SCEs have the advantage that preferences for new product characteristics can be studied, and we included automobile club membership as an attribute in our experiment. In fact, respondents had a strong positive preference for this novel attribute. Yet, while the interaction effect between “Turkish” and automobile club membership is positive and hence decreases discriminatory preferences, the effect is not statistically significant (see appendix Table A1). Future research might reveal if there is any kind of information that is able to reduce discrimination tendencies in the sharing economy. The main problem, however, obviously transcends the carpooling or sharing market: It is the social resentment against immigrants and “others” which is still at the core of manifest discrimination. As long as people believe in the inferiority of foreigners and minorities the dilemma persists. Not even better education, as indicated in our study, seems a universal means against discrimination. Frequent contacts with “others”, however, seem a more promising path.

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Table 1: Attributes and levels in the Stated Choice Experiment

Attribute	Levels
Name of the driver	Male German ( <i>Lukas, Alexander, Markus, Sebastian, Christian</i> ) Female German ( <i>Charlotte, Sabine, Marie, Steffi, Annika</i> ) Male Turkish ( <i>Hamid, Deniz, Kemal, Ismail, Yasar</i> ) Female Turkish ( <i>Meryem, Aytüre, Ayse, Fatma, Özlem</i> ) Male Italian ( <i>Pietro, Francesco, Claudio, Giuseppe, Paolo</i> ) Female Italian ( <i>Vittoria, Chiara, Francesca, Arianna, Giulia</i> )
Car type	Small ( <i>Ford Fiesta, VW Polo</i> ) Medium ( <i>Ford Focus, VW Golf</i> ) Large ( <i>Ford Mondeo, VW Passat</i> )
Number of free seats	1, 2, 3
Membership of automobile club ( <i>ADAC</i> )	No, yes
Rating by other users	1 Star, 3 Stars, 5 Stars
Price for the trip (300km)	11, 13, 15, 17, 19, 21 Euro



Table 2: Items used to measure xenophobia

	mean	sd	min	max
<i>Xenophobia index</i>	3.66	1.06	1	6
The foreigners living in Germany are an enrichment for German culture. (reversed scale)	3.38	1.50	1	6
The foreigners living in Germany are a burden for the welfare system.	3.06	1.54	1	6
Politicians in Germany should care more about the needs of foreigners living here. (reversed scale)	3.17	1.42	1	6
The foreigners living in Germany should adapt better to the way of life of Germans.	4.39	1.38	1	6

Notes: n=766; all items were measured on a six-point response scale ranging from 1 = do not agree at all to 6 = totally agree; source: Allbus 2006

Table 3: Results of a conditional logit (CL) and random parameter logit (RPL) models

	CL	RPLI	RPLII	RPLIII
<i>Attribute main effects</i>				
ASC <sub>opt-out</sub>	0.640*** (4.30)	-0.529** (-2.62)	-0.164 (-0.55)	-0.153 (-0.51)
Standard deviation ASC <sub>opt-out</sub>		3.038*** (17.77)	3.053*** (17.76)	3.003*** (17.67)
Gender (1 = female)	0.102 (1.89)	0.128* (2.14)	0.302 (1.13)	0.241 (0.88)
Driver Turkish	-0.338*** (-4.99)	-0.344*** (-5.01)	-0.00138 (-0.00)	-0.344 (-0.73)
Driver Italian	-0.128* (-2.28)	-0.118 (-1.76)	0.332 (1.22)	0.367 (0.93)
Car Type Medium	0.284*** (4.82)	0.359*** (5.50)	0.450** (2.71)	0.444** (2.66)
Car Type Large	0.470*** (7.40)	0.594*** (8.71)	0.666*** (3.91)	0.680*** (3.98)
Number of Free Seats	0.182*** (5.96)	0.202*** (6.43)	0.285*** (4.87)	0.288*** (4.89)
Automobile Club	0.462*** (9.33)	0.548*** (10.11)	0.460*** (3.72)	0.495*** (3.98)
Rating by Other Users	0.728*** (19.05)	0.828*** (24.00)	0.975*** (13.87)	0.975*** (13.83)
Price in Euro	-0.268*** (-16.19)	-0.314*** (-19.28)	-0.378*** (-11.28)	-0.386*** (-11.44)
<i>Attribute interaction effects</i>				
Gender x Italian driver			-0.494** (-3.11)	-0.491** (-3.07)
Gender x Free seats			-0.129* (-2.01)	-0.122 (-1.90)
Gender x Price			0.0953** (2.68)	0.0981** (2.74)
Turkish driver x rating			-0.194* (-2.07)	-0.174 (-1.84)
Turkish driver x price			0.124** (2.93)	0.124** (2.91)
<i>Respondent Interaction effects</i>				
Xenophobic attitudes x Turkish driver				-0.298*** (-4.66)

Contact with foreigners x Turkish driver				0.606*** (3.71)
Higher education respondent x Turkish driver				-0.379* (-2.55)

LL	-4,276.8902	-3,659.5607	-3,630.7488	-3,600.623
Observations (respondents)	13,788 (766)	13,788 (766)	13,788 (766)	13,788 (766)

Note: unstandardized logit coefficients; z-values in parentheses; +  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed test). CL models with robust standard errors based on the Huber-White procedure. Reported are only statistically significant interaction effects at the 5% level or smaller. Full models including all interaction effects tested can be found in the appendix, Table A1.

Figure 1: Example of a Choice Set

	<b>Offer A</b>	<b>Offer B</b>	
Driver	Francesca T.	Christian J.	
Car type	VW Polo	Ford Mondeo	
Number of free seats	3	2	
Membership of automobile club (ADAC)	Yes	No	
Rating by other users	5 Stars	3 Stars	
Price in Euro	19.00 €	17.00 €	
Which carpooling offer would you choose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None of these

Table A1: Results of a conditional logit (CL) and random parameter logit (RPL) models

	CL	RPLI	RPLII	RPLIII
<i>Attribute main effects</i>				
ASC <sub>opt-out</sub>	0.640*** (4.30)	-0.529** (-2.62)	-0.164 (-0.55)	-0.153 (-0.51)
Standard deviation ASC <sub>opt-out</sub>		3.038*** (17.77)	3.053*** (17.76)	3.003*** (17.67)
Gender (1 = female)	0.102+ (1.89)	0.128* (2.14)	0.302 (1.13)	0.241 (0.88)
Driver Turkish	-0.338*** (-4.99)	-0.344*** (-5.01)	-0.00138 (-0.00)	-0.344 (-0.73)
Driver Italian	-0.128* (-2.28)	-0.118 (-1.76)	0.332 (1.22)	0.367 (0.93)
Car Type Medium	0.284*** (4.82)	0.359*** (5.50)	0.450** (2.71)	0.444** (2.66)
Car Type Large	0.470*** (7.40)	0.594*** (8.71)	0.666*** (3.91)	0.680*** (3.98)
Number of Free Seats	0.182*** (5.96)	0.202*** (6.43)	0.285*** (4.87)	0.288*** (4.89)
Automobile Club	0.462*** (9.33)	0.548*** (10.11)	0.460*** (3.72)	0.495*** (3.98)
Rating by Other Users	0.728*** (19.05)	0.828*** (24.00)	0.975*** (13.87)	0.975*** (13.83)
Price in Euro	-0.268*** (-16.19)	-0.314*** (-19.28)	-0.378*** (-11.28)	-0.386*** (-11.44)
<i>Attribute interaction effects</i>				
Gender x Turkish driver			-0.198 (-1.37)	-0.213 (-1.47)
Gender x Italian driver			-0.494** (-3.11)	-0.491** (-3.07)
Gender x Car medium			-0.0204 (-0.15)	-0.0127 (-0.09)
Gender x Car large			0.214 (1.37)	0.213 (1.36)
Gender x Free seats			-0.129* (-2.01)	-0.122+ (-1.90)
Gender x Automobile club			0.0811 (0.63)	0.0576 (0.45)
Gender x Rating			-0.0425	-0.0361

	(-0.62)	(-0.53)
Gender x Price	0.0953** (2.68)	0.0981** (2.74)
Turkish driver x car medium	-0.176 (-0.90)	-0.163 (-0.83)
Turkish driver x car large	-0.316 (-1.65)	-0.361+ (-1.87)
Turkish driver x free seats	-0.0991 (-1.17)	-0.0904 (-1.06)
Turkish driver x automobile club	0.133 (0.88)	0.138 (0.91)
Turkish driver x rating	-0.194* (-2.07)	-0.174 (-1.84)
Turkish driver x price	0.124** (2.93)	0.124** (2.91)
Italian driver x car medium	0.0292 (0.14)	0.0164 (0.08)
Italian driver x car large	-0.0962 (-0.44)	-0.126 (-0.58)
Italian driver x free seats	0.127 (0.80)	0.109 (0.69)
Italian driver x automobile club	-0.0287 (-0.35)	-0.0338 (-0.41)
Italian driver x rating	-0.0667 (-1.46)	-0.0593 (-1.29)
<i>Respondent interaction effects</i>		
Xenophobic attitudes x Turkish driver		-0.298*** (-4.66)
Xenophobic attitudes x Italian driver		-0.0738 (-1.16)
Contact with foreigners x Turkish driver		0.606*** (3.71)
Contact with foreigners x Italian driver		0.276+ (1.69)
Experience carpooling x Turkish driver		0.145 (0.97)
Experience carpooling x Italian driver		0.00598 (0.04)

Women respondent x Women driver	0.0603 (0.52)
Women respondent x Turkish driver	-0.0287 (-0.21)
Women respondent x Italian driver	0.0352 (0.26)
Age x Turkish driver	-0.00418 (-0.84)
Age x Italian driver	-0.00565 (-1.18)
Higher education respondent x Turkish driver	-0.379* (-2.55)
Higher education respondent x Italian driver	-0.265+ (-1.83)
Financial situation respondent x Turkish driver	0.0133 (0.14)
Financial situation respondent x Italian driver	-0.0429 (-0.46)
Residing in large city x Turkish driver	-0.253+ (-1.84)
Residing in large city x Italian driver	-0.130 (-0.97)

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LL	-4,276.8902	-3,659.5607	-3,630.7488	-3,600.623
Observations (respondents)	13,788 (766)	13,788 (766)	13,788 (766)	13,788 (766)

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Note: unstandardized logit coefficients; z-values in parentheses; +  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed test). CL models with robust standard errors based on the Huber-White procedure.

Table A2: Results of a conditional logit models for subgroups in the sample

	All respondents		With immigration background		Without immigration background	
	Less education	Higher education	Less education	Higher education	Less education	Higher education
<i>Attribute main effects</i>						
ASC <sub>opt-out</sub>	0.716*** (3.88)	0.528* (2.07)	0.707 (1.84)	0.435 (0.72)	0.724*** (3.44)	0.544 (1.93)
Gender (1 = female)	0.148* (2.22)	-0.00485 (-0.05)	-0.00155 (-0.01)	-0.0199 (-0.09)	0.192* (2.56)	0.00249 (0.02)
Driver Turkish	-0.268** (-3.23)	-0.485*** (-3.99)	-0.164 (-0.94)	-0.720** (-3.05)	-0.292** (-3.10)	-0.422** (-2.99)
Driver Italian	-0.0515 (-0.75)	-0.301** (-2.96)	0.0852 (0.58)	-0.675** (-3.12)	-0.0886 (-1.13)	-0.203 (-1.77)
Car Type Medium	0.296*** (4.05)	0.288** (2.79)	0.366* (2.33)	0.274 (1.15)	0.280*** (3.39)	0.298* (2.57)
Car Type Large	0.420*** (5.33)	0.537*** (4.90)	0.492** (2.75)	0.557* (2.02)	0.404*** (4.58)	0.536*** (4.57)
Number of Free Seats	0.211*** (5.43)	0.132** (2.61)	0.292*** (3.41)	0.140 (1.28)	0.190*** (4.37)	0.127* (2.18)
Automobile Club	0.519*** (8.72)	0.359*** (3.84)	0.664*** (4.75)	0.411* (2.36)	0.482*** (7.32)	0.339** (3.10)
Rating by Other Users	0.681*** (14.66)	0.822*** (11.82)	0.707*** (8.04)	0.749*** (5.66)	0.673*** (12.40)	0.848*** (10.54)
Price in Euro	-0.266*** (-13.19)	-0.270*** (-9.04)	-0.310*** (-6.90)	-0.198** (-2.91)	-0.255*** (-11.23)	-0.293*** (-9.02)
LL	-2822.6476	-1346.811	-591.36941	-292.82883	-2225.3783	-1050.675
Observations (resp.)	9,036 (502)	4,410 (245)	2,016 (112)	954 (53)	7,020 (390)	3,456 (192)

Note: unstandardized logit coefficients; z-values in parentheses; + p < .10; \* p < .05; \*\* p < .01; \*\*\* p < .001 (two-tailed test). CL models with robust standard errors based on the Huber-White procedure.