

Latent Demand and Attribute Insensitivity in Ride-Hailing Preferences: A Multi-City Stated Choice Study in Algeria

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Abstract: Ride-hailing is becoming part of urban travel in North Africa, but evidence about demand and governance preferences remains limited. This study examines a quota-controlled survey of 1,800 adults in Algiers, Constantine, and Batna, across three cities with distinct urban transport contexts. Participants reported recent ride-hailing use, answered twelve attitude items, and completed eight choice tasks comparing two ride-hailing profiles with their usual transport mode. The profiles varied in fare, discount, waiting time, reliability, safety provision, and price information. We use "latent demand" only as an operational hypothetical-choice margin: the respondent's share of tasks choosing ride-hailing minus the indicator of ride-hailing use during the previous 30 days. Current use was 30.0%, whereas ride-hailing was selected in 64.7% of tasks, giving a sample-descriptive margin of 34.7 percentage points (95% CI [32.4, 37.1]). Current users and non-users recorded similar hypothetical-choice shares. The twelve profile contrasts were not jointly significant against an opt-out-constant-only model (clustered Wald chi-square (12) = 17.00, $p = 0.150$), although price-information formats differed jointly ($p = 0.003$). Choice shares also varied across cities (clustered Wald chi-square (2) = 72.72, $p < 0.001$). The findings support locally tested mobility governance and auditable sustainability measures, not forecasts of market uptake.

Keywords: Algeria, discrete choice experiment, ride-hailing, sustainability governance, urban mobility.

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INTRODUCTION

Digital ride-hailing has altered how travellers and drivers find one another, agree on a trip, and exchange information about service conditions. A smartphone application can shorten the search for a vehicle, display a driver's identity, estimate pickup time, communicate a fare, and preserve a transaction record. These functions can be valuable in cities where scheduled public transport is incomplete and informal services carry a substantial share of daily travel. Their presence, however, does not make a mobility service sustainable by itself. Ride-hailing may extend access for some travellers while increasing vehicle kilometres, substituting for



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collective transport, or concentrating service in commercially attractive districts. International evidence therefore treats its sustainability consequences as contingent on modal substitution, vehicle occupancy, empty running, labour practices, accessibility, and local regulation (Tirachini, 2020).

The geographical distribution of evidence is equally important. Research in California, China, Vietnam, Ghana, and other established or rapidly growing markets has linked ride-hailing use to demographic characteristics, car access, service familiarity, perceived risk, trust, and travel circumstances (Acheampong, 2021; Alemi, Circella, Mokhtarian, & Handy, 2019; Ma, Zhang, Ding, & Wang, 2019; Nguyen-Phuoc, Oviedo-Trespalacios, Vo, Le, & Van Nguyen, 2021). Yet these relationships cannot simply be transferred to North African cities. Transport alternatives, income conditions, platform coverage, mobile-data access, and expectations about taxis and fare negotiation differ by place. A recent survey of the Yassir application in Ali Mendjeli, Constantine, provides useful local evidence on perceived transport-service improvement (Abdelmalek, Kherrou, & Guerfi, 2024), but it does not establish how preferences compare across Algerian cities or how residents respond to alternative service packages.

Algiers, Constantine, and Batna offer a purposeful contrast. Algiers is the national capital and largest urban market; Constantine is a major regional centre with a distinctive topography and transport network; Batna is a smaller inland city. Residents encounter different combinations of private cars, buses, trams, shared taxis, minibuses, and walking. Platform visibility and the convenience of competing modes may also differ. A multi-city study can therefore reveal whether an aggregate estimate conceals local variation, even when the design cannot identify every mechanism behind that variation.

This question belongs within sustainability accounting and management as well as transport research. Target 11.2 of the United Nations Sustainable Development Goals calls for safe, affordable, accessible, and sustainable transport for all (United Nations, 2026). Platform growth, app downloads, or trip counts do not show whether that goal is being advanced. Recent reviews conclude that the transportation sector's contribution to the SDGs is best tracked through explicit environmental, social, and governance indicators rather than through aggregate activity measures (Ma, Lu, Lee, Moktadir, & Ren, 2026) and that transport's role within the SDG framework remains under-specified relative to its practical importance for accessibility and equity (Aboueila, Stamos, Chaniotakis, & Antoniou, 2025). Managers and public authorities also need comparable information on fare deviations, pickup reliability, driver verification, safety incidents, complaints, service coverage, accessibility, and interaction with public transport. Bebbington and Unerman (2018) argue that accounting research can help connect organisational choices to the wider social and environmental consequences represented by the SDGs. For ride-hailing, this means translating service promises into measures that operators, regulators, drivers, and passengers can examine.

We address that problem through a survey conducted with 1,800 adults in Algiers, Constantine, and Batna. The same participants reported whether they had recently used ride-hailing, evaluated governance-related statements, and chose among hypothetical mobility alternatives. Each of eight tasks presented two generic ride-hailing profiles and the participant's usual transport mode. Fare, discount, waiting time, reliability, safety provision, and price-information format varied across the profiles. The design consequently separates three questions that are often merged: who reports current use, how often participants select ride-hailing under hypothetical conditions, and whether changes in particular attributes shift choice at the margin.

The distinction between current use and hypothetical choice is central to the title of the study. Here, "latent demand" is an operational label, not an estimate of unobserved market size. For each participant, we subtract the indicator of ride-hailing use in the previous 30 days from the proportion of eight experimental tasks in which a ride-hailing profile was chosen. The resulting hypothetical-choice margin is a within-person comparison between two measures collected in the same survey. It neither converts experimental choices into trips nor predicts how many non-users will become customers. Those stronger claims would require revealed behaviour, service-availability measures, and observation over time.

The experiment also permits a careful test of attribute sensitivity. Conventional discrete-choice analysis assumes that attributes contribute to utility and may compensate for one another (McFadden, 1974; Train, 2009). Actual decision strategies can be less elaborate. Travellers may screen alternatives against minimum requirements, focus on one dominant consideration, ignore unfamiliar information, or accept the first

satisfactory option. Gilbride and Allenby (2004) demonstrate how screening and compensatory rules can coexist in choice behaviour. At the same time, small coefficients do not reveal which cognitive rule was used. They can reflect weakly differentiated verbal levels, limited task salience, heterogeneous preferences that offset in the aggregate, or noise. We therefore use "attribute insensitivity" to describe the observed pattern and do not treat it as a diagnosis of respondent psychology.

The study makes three contributions. First, it supplies rare multi-city evidence from Algeria by linking recent use, attitudes, and repeated choices within the same urban sample. Second, it defines the hypothetical-choice margin at participant level and reports its uncertainty without treating stated choice as realised demand. Third, it connects the tested attributes with a practical accountability agenda for sustainable urban mobility. The empirical questions are: (1) Does the average hypothetical ride-hailing choice share exceed recent use in the study sample? (2) Do the tested profile attributes materially distinguish alternatives? (3) Does the format of price information affect choice? (4) Do stated choices differ across the three cities? (5) Are safety responses or hypothetical choices associated with gender?

LITERATURE REVIEW AND HYPOTHESES

Recent Use and the Hypothetical-Choice Margin

Revealed and stated measures describe different settings. Recent use occurs under the platform coverage, prices, waiting times, knowledge, travel needs, and constraints that respondents actually faced. A hypothetical task instead holds a choice set in front of the participant and varies selected features in a controlled way. Stated-choice methods are especially useful when policy alternatives are not consistently available in the market, but their experimental control comes at the cost of hypothetical bias (Train, 2009). No payment is made, no vehicle must arrive, and no real journey depends on the answer. Recent syntheses of this evidence across transport, health, and environmental economics confirm that hypothetical bias is pervasive but heterogeneous in magnitude, and that its size depends more on survey design choices such as consequentiality scripts than on the stated-preference method itself (Haghani, Bliemer, Rose, Oppewal, & Lancsar, 2021).

The study therefore constructs the margin at the participant level. Let R_n equal one when participant n used ride-hailing in the previous 30 days and zero otherwise. Let C_{nt} equal one when the participant chose profile A or B in task t and zero when the usual mode was chosen. The operational margin is:

$$M_n = \frac{1}{8} \sum_{t=1}^8 C_{nt} - R_n$$

The mean of M_n compares the two survey measures while preserving their pairing. It does not assume that one task choice is equivalent to one trip or that the two outcomes measure the same construct. A positive mean indicates only that ride-hailing received a larger share of hypothetical selections than the share of participants reporting recent use.

H_1 : The mean hypothetical ride-hailing choice share is greater than the recent-use share within the study sample.

Attribute Sensitivity and Decision Simplification

Under random utility theory, participant n chooses alternative j in task t when its utility exceeds that of the alternatives. The systematic component of utility is represented by observed profile features and an alternative-specific constant; unobserved influences enter an error term. In a multinomial logit model, each coefficient describes the average change in utility for an attribute level relative to its reference category (McFadden, 1974; Train, 2009).

This representation is compensatory at the model level. A worse waiting time can, in principle, be offset by a better fare or safety package. Several simpler strategies are possible. Conjunctive screening discards any option that fails a minimum requirement. Disjunctive screening accepts an option that performs particularly well on at least one feature. Lexicographic choice gives priority to the most important feature, while satisficing ends the search once an acceptable option is found. Attribute non-attendance occurs when a presented

feature does not enter the decision. These processes can generate weak average coefficients, but so can preference heterogeneity, unfamiliar wording, narrow or vague levels, and response error. Foundational treatments of discrete choice behaviour caution that these processing rules sit alongside, rather than replace, the compensatory utility framework used here (Ben-Akiva & Lerman, 1985). Empirically, failing to account for attribute non-attendance can materially bias both coefficient estimates and derived willingness-to-pay values, so weak average effects should not, by themselves, be read as proof that an attribute carries no value to respondents (Hensher, Rose, & Greene, 2012). The experimental design itself can also shape estimated sensitivity, since efficient designs that place attribute levels near a respondent's indifference point are more likely to detect small effects than designs that spread levels without regard to priors (Rose & Bliemer, 2009). Where the attribute concerns passenger safety specifically, comparable discrete choice evidence from ride-hailing markets elsewhere finds that respondents do place positive value on verifiable safety features such as driver tracking and licensing, suggesting that a weak coefficient in a given study reflects the levels and framing tested rather than a general indifference to safety (Hong & Lee, 2025).

We assess the empirical pattern rather than infer an unobserved rule. Evidence of attribute insensitivity would consist of very small incremental model fit and limited separation across most level contrasts within the ranges shown to participants. The phrase does not imply indifference to safety, affordability, or reliability outside the experiment, nor does it show that standards in those areas lack social value.

H₂: Most attribute-level contrasts have small average associations with hypothetical ride-hailing choice within the tested profiles.

Price Information and Procedural Trust

Fare amount and fare communication are not the same policy lever. A fare changes the monetary cost of a trip. Price information determines when and how that amount is communicated. Negotiation leaves room for discretion; an upfront estimate reduces some uncertainty but may still imply a changeable final price; a component breakdown creates a more detailed record that can support explanation or dispute resolution. Research on ride-hailing trust associates process transparency with perceived legitimacy (Najjar & Dahabiyeh, 2021), while empirical work on surge pricing shows that fare rules can affect consumer welfare and behaviour (Xu, Anupriya, & Bansal, 2023).

The expected ordering is context-dependent. Travellers familiar with negotiated taxi fares may value flexibility, while others may prefer information before booking. A detailed breakdown may carry a different meaning from a single estimate. We therefore test the price-information formats jointly and interpret individual contrasts against negotiated pricing. We do not assume that adding information must produce a monotonic rise in choice.

H₃: Hypothetical ride-hailing choice differs across negotiated pricing, an upfront estimate, and an upfront estimate with a full breakdown.

City Context

Ride-hailing is embedded in a local transport system. Platform coverage, trip lengths, congestion, public-transport supply, taxi conventions, and smartphone access may alter both current use and the attractiveness of a hypothetical service. Studies elsewhere find that ride-hailing can complement public transport in some cities and substitute for it in others (Hall, Palsson, & Price, 2018; Tirachini, 2020). A city indicator therefore captures more than geography, although it cannot reveal which local feature is responsible for a difference. Comparable multi-attribute evidence from other middle-income settings reinforces this variability: in Ghana, adoption is shaped jointly by perceived ease of use, safety risk, and car-dependent lifestyles rather than by any single factor (Acheampong, Siiba, Okyere, & Tuffour, 2020), while in Lahore, rider satisfaction and continued use depend on coverage, accessibility, and safety attributes that vary with local transport conditions (Shah & Hisashi, 2022). Early evidence from San Francisco similarly found that ridesourcing differed from taxis mainly in wait-time reliability rather than fare level, underscoring that the attributes riders weigh most heavily are context-specific rather than universal (Rayle, Dai, Chan, Cervero, & Shaheen, 2016). Because governance arrangements for ride-hailing also vary by jurisdiction, city-level differences in stated choice may additionally

reflect the regulatory environment residents have experienced, an issue increasingly recognised in the platform-governance literature (Sáenz-Leandro & Fernández-Ardèvol, 2024).

The quota structure gives each city the same recent-user proportion, so that proportion cannot be interpreted as city prevalence. Repeated hypothetical choices can nevertheless be compared across Algiers, Constantine, and Batna with uncertainty clustered by participant. A detectable difference would justify local calibration of future pilots and performance reporting.

H₄: The probability of choosing a ride-hailing profile differs across Algiers, Constantine, and Batna.

Gender and Safety

Ride-hailing introduces both potential safeguards and potential risks. Driver identification, trip tracking, and emergency functions may increase confidence, while travelling with an unknown driver may create concern. International research shows that perceptions of ride-hailing safety are heterogeneous and can be shaped by prior experience and local institutions (Acheampong, 2021; L. Ma et al., 2019; Nguyen-Phuoc et al., 2021). Gender differences are consequently plausible but should be measured rather than presumed. Female passengers in particular have been shown to weigh driver conduct, platform trust, and companionship during the trip when judging ride-hailing safety, with safety perception shaping subsequent protective behaviour (Yang, Hu, Liao, & Huang, 2022).

The survey contains three safety-related statements and experimental safety packages. Because the direction of the third statement is not empirically aligned with its coding, the three items are not treated as a single directional scale. Item-level mean differences and a clustered comparison of repeated choices provide the relevant tests. A non-significant result is described as an absence of detectable association, not as statistical equivalence, because no equivalence margin was specified.

H₅: Gender is associated with at least one safety response or with the repeated hypothetical ride-hailing choice share.

RESEARCH DESIGN AND METHODS

Survey Setting and Study Sample

Fieldwork took place from 28 October 2024 to 18 February 2025 in Algiers, Constantine, and Batna. Eligible participants were at least 18 years old and had made three or more within-city trips during the preceding seven days. The quota plan assigned 800 interviews to Algiers, 600 to Constantine, and 400 to Batna. Quota monitoring also maintained a 30:70 composition of recent ride-hailing users and non-users within each city. These targets created a study sample for controlled multi-city comparison; they were not intended to reproduce city population shares.

Recruitment combined in-person contact at bus stations, shared-taxi ranks, city squares, and other public locations with online access through QR codes circulated in community networks. The questionnaire was offered in Arabic and French. Participants received information about the study. Participation was voluntary, and consent was obtained before questions began. No direct identifiers were collected. The questionnaire covered demographic and mobility characteristics, ride-hailing experience, governance attitudes, and the choice experiment.

Before fieldwork, the attitude items underwent two rounds of expert review and a 40-person pilot. The main survey included 1,800 participants, with 800 from Algiers, 600 from Constantine, and 400 from Batna. Each participant had one survey response and eight completed choice tasks. No respondent identifier was duplicated, and all variables used in the reported models were complete.

Quota construction is important for interpretation. The study includes 540 recent users and 1,260 non-users, representing exactly 30.0% and 70.0%, respectively, of each city group. Those percentages describe the planned sample composition. They are not estimates of ride-hailing prevalence in Algiers, Constantine, Batna, or Algeria, and the analyses do not apply population weights.

Survey Measures

Recent ride-hailing use was recorded as a binary indicator of any use during the previous 30 days. Demographic measures included city, gender, age band, income band, household car ownership, and district type. Twelve statements used a five-point response scale from 1 (Strongly disagree) to 5 (Strongly agree). Three statements concerned value and promotions (V1-V3), three concerned safety and trust (S1-S3), three concerned service convenience (C1-C3), and three concerned app use and price information (D1-D3). Appendix A presents the English meanings of the attitudinal items and the corresponding score-construction details (Tables A1–A3).

The safety items require separate treatment. S1 expresses feeling safe, S2 concerns trust from verification and tracking, and S3 is documented as a safety concern that reduces willingness. The recorded S3 values correlate positively with S1 ($r = 0.733$), whereas reversing S3 produces a negative correlation of the same magnitude. The wording and numerical direction therefore do not support a defensible three-item directional score. When a combined safety/trust measure is useful, we use S1 and S2 only (inter-item $r = 0.732$; reliability coefficient = 0.845); S3 is reported separately. The current-use regression enters all twelve standardised items individually and thus does not depend on a disputed composite.

Five post-task measures were planned for comprehension, attention, realism, ignored attributes, and self-reported carefulness. None of the 1,800 participants provided a recorded response to these questions. Consequently, they created no exclusion criterion and no analytical variable. We make no claim that participants passed attention or comprehension checks, judged the tasks realistic, attended to every attribute, or answered with a particular level of care.

Choice Experiment

Each participant completed eight choice tasks. Every task contained two unlabelled ride-hailing alternatives, A and B, and a third alternative described as "my usual mode." The A and B labels had no brand or stable service identity. The usual-mode alternative acted as an opt-out and carried no experimental attribute levels.

Six attributes described each ride-hailing profile. Fare was low, medium, or high. Discount was none, -10%, or -20%. Waiting time was 3, 8, or 15 minutes. Reliability was low, medium, or high. Safety provision was basic; verified driver plus tracking; or verified driver plus tracking and SOS. Price information was negotiated; an upfront estimate; or an upfront estimate with a full breakdown. The two discount depths created moderate departures from the no-discount condition without introducing an exceptionally large promotion. They should not be read as estimates of market discount prevalence.

The questionnaire displayed the no-discount condition by leaving the discount line empty on a ride-hailing profile. We encoded such A/B entries as "none," consistent with the three-level questionnaire. An empty discount entry for the usual-mode alternative was structurally inapplicable. Among the 28,800 A/B profiles, the three discount levels occurred 9,553, 9,532, and 9,715 times for none, -10%, and -20%, respectively.

In total, the experiment produced 14,400 choice sets and 43,200 alternative observations. Every choice set contains A, B, and the usual mode, with exactly one selected alternative. The ordered A/B combinations differ across all 1,800 participants. Each level of every attribute appears close to one third of the A/B observations, and the largest absolute correlation between effect-coded attributes is .018. These properties show strong empirical balance and near-orthogonality in the profiles presented. The study protocol does not name a design generator or efficiency criterion; we therefore describe the implemented balance without claiming a particular fractional-factorial or D-efficient algorithm.

Selection of a ride-hailing profile by task position was 64.6%, 65.3%, 64.9%, 62.1%, 64.6%, 64.6%, 63.6%, and 68.1%. The sequence has no monotonic decline, although this descriptive check cannot rule out learning or order effects. Four participants chose their usual mode in all eight tasks; those consistent choices remain valid observations.

Statistical Analysis

At task level, ride-hailing choice equals one when A or B was selected and zero when the usual mode was selected. A participant's hypothetical-choice share is the average of this indicator across eight tasks. The operational hypothetical-choice margin subtracts the participant's recent-use indicator from that average. We

report its study-sample mean, standard error, t-based 95% confidence interval, and paired t statistic. This is a cross-measure description; the test does not establish construct equivalence or future behaviour.

City variation is estimated with a task-level binary logit containing indicators for Constantine and Batna, with Algiers as the reference. A respondent-clustered sandwich covariance allows the eight choices from one participant to be correlated. A two-degree-of-freedom Wald test evaluates both city coefficients. Gender difference in task choice is estimated as a respondent-clustered mean difference. Safety-item means are compared with Welch tests and 95% confidence intervals.

The exploratory recent-use model is a binary logit with city, gender, household car ownership, income band, age band, district type, and the twelve standardised attitude responses. Ordered demographic codes are entered linearly, and Constantine is the city reference. We assess the model with its log-likelihood, a likelihood-ratio test against an intercept-only model, McFadden's pseudo-R-squared, and classification accuracy. Because non-users constitute 70% of the quota sample, accuracy is compared with the 70% majority-class benchmark.

The profile model is a conditional multinomial logit for A, B, and the usual mode. It contains an alternative-specific constant for the usual mode and two indicator contrasts for each of the six attributes. Reference categories are low fare, no discount, a 3-minute wait, low reliability, basic safety, and negotiated pricing. Standard errors are clustered by participant over the eight tasks. The twelve attribute coefficients are compared jointly with an opt-out-constant-only model through a likelihood-ratio test and a respondent-clustered Wald test. A separate two-degree-of-freedom Wald test evaluates price-information format. We report conventional pseudo-R-squared against equal one-third shares and incremental pseudo-R-squared against the opt-out-only baseline.

All tests are two-sided. Coefficients, confidence intervals, model fit, and the repeated-measures design guide interpretation alongside p-values. Calculations were performed in Python 3.12 using pandas, NumPy, and SciPy; maximum-likelihood estimation used BFGS optimisation, and clustered covariance matrices used participants as clusters.

RESULTS

Participants and Task Choices

The three city groups account for 44.4%, 33.3%, and 22.2% of the sample. Men and women are represented in nearly equal proportions. Participants aged 25–34 form the largest age group, and more than three-quarters report a household car. Table 1 summarises the characteristics most relevant to interpretation; Appendix B presents additional study-sample information, including city-by-use composition and fuller participant characteristics (Table B1 and B2).

Table 1: Study-sample characteristics (N = 1,800)

Characteristic	Category	n	%
City	Algiers	800	44.4
	Constantine	600	33.3
	Batna	400	22.2
Gender	Men	917	50.9
	Women	883	49.1
Age	18-24	332	18.4
	25-34	569	31.6
	35-44	447	24.8
	45-54	271	15.1
	55+	181	10.1
Household car	Yes	1,417	78.7
	No	383	21.3
Recent ride-hailing use	Yes	540	30.0
	No	1,260	70.0

Participants selected one of the ride-hailing profiles in 9,320 of the 14,400 tasks (64.7%) and selected their usual mode in 5,080 tasks (35.3%). Choices between the two generic profiles were almost even. This broad willingness to choose A or B should be distinguished from sensitivity to the features that separated A from B; the conditional model addresses the latter question.

Participants' Recent Use and the Hypothetical-Choice Margin

The mean participant-level hypothetical ride-hailing share was 64.7%, compared with the quota-controlled recent-user share of 30.0%. The mean operational margin was 34.7 percentage points (SE = 1.20 percentage points; 95% CI [32.4, 37.1]), $t(1,799) = 28.84$, $p < 0.001$. H1 is supported within the study sample. Its support concerns the direction and magnitude of this paired cross-measure difference; it does not convert the margin into future users.

Current users selected ride-hailing in 64.3% of their tasks, while non-users did so in 64.9%. The difference was -0.6 percentage points and was not statistically detectable (Welch $p = 0.600$), and the correlation between recent-use status and hypothetical-choice share was -0.012 ($p = 0.598$). These results are important for interpretation: the experimental task elicited almost the same overall ride-hailing share from both groups. The 34.7-point margin therefore does not identify a distinct set of non-users who are poised to adopt.

Table 2 shows the comparison by city. The hypothetical-choice share rises from 60.9% in Algiers to 64.8% in Constantine and 72.2% in Batna. Because recent-user status was quota-controlled at 30.0% in each city, the operational margin rises in the same order. In the repeated-choice city logit, the coefficients relative to Algiers were 0.168 for Constantine and 0.508 for Batna. The city terms were jointly significant, Wald chi-square(2) = 72.72, $p < 0.001$. H4 is supported as a city association in this sample. The model does not attribute that association to transport supply, platform exposure, recruitment channel, or any other unmeasured city characteristic.

Table 2: Recent use, hypothetical choice, and the operational margin

City	n	Recent use (%)	Ride-hailing task choices (%)	Margin (Percentage points)	95% CI for margin
Algiers	800	30.0	60.9	30.9	[27.4, 34.5]
Constantine	600	30.0	64.8	34.8	[30.7, 38.9]
Batna	400	30.0	72.2	42.2	[37.2, 47.1]
Overall	1,800	30.0	64.7	34.7	[32.4, 37.1]

Note: For each participant, the margin equals the mean of eight hypothetical ride-hailing choices minus the indicator of ride-hailing use during the previous 30 days. It is a study-sample cross-sectional contrast, not a population estimate or adoption forecast. City test: respondent-clustered Wald chi-square(2) = 72.72, $p < .001$.

Recent-use regression

The demographic and attitude variables did not distinguish recent users from non-users in the exploratory binary logit. The fitted log-likelihood was -1,092.61, compared with -1,099.56 for the intercept-only model, LR chi-square(19) = 13.89, $p = 0.790$. McFadden's pseudo-R-squared was .0063. The model classified 70.0% of participants correctly, exactly matching a rule that classifies everyone as a non-user. No non-intercept coefficient reached $p < 0.05$. Age produced the smallest p-value ($\beta = 0.071$, $p = 0.091$), but its linear band coding and the non-significant overall model do not support a substantive age conclusion.

This null result is bounded by the variables measured. It shows that the included demographics and governance statements add almost no discrimination of the quota-defined recent-use outcome. It does not establish that attitudes never matter, nor does it identify platform availability, network effects, or service supply as the missing explanation. Appendix D presents the full statistical results, including the operational hypothetical-choice margin, recent-use regression, respondent-clustered conditional logit, and gender comparisons (Tables D1-D4).

Profile Attributes and Price Information

The conditional logit contains the usual-mode constant and twelve attribute contrasts. Its log-likelihood was -15,799.50. The opt-out-constant-only model had a log-likelihood of -15,807.88. Adding the attribute block did not produce a statistically detectable improvement: LR chi-square(12) = 16.76, $p = 0.159$; respondent-clustered Wald chi-square(12) = 17.00, $p = 0.150$. Incremental McFadden pseudo-R-squared was 0.00053, and the conventional pseudo-R-squared against equal shares was .00130.

Eleven of twelve individual contrasts had confidence intervals containing zero. Neither promotional level differed from no discount: -10% versus none, $\beta = -0.016$, 95% CI [-0.077, 0.045], $p = 0.606$; -20% versus none, $\beta = -0.011$, 95% CI [-0.072, 0.049], $p = 0.712$. Fare, waiting time, reliability, and safety contrasts were also small. Table 3 presents the complete model.

The two price-information coefficients were jointly significant, Wald chi-square(2) = 11.74, $p = 0.003$. An upfront estimate had a lower coefficient than negotiated pricing ($\beta = -0.103$, 95% CI [-0.164, -0.043], $p = 0.001$). An upfront estimate with a full breakdown was not detectably different from negotiation ($\beta = -0.034$, 95% CI [-0.093, 0.025], $p = 0.263$). H3 is therefore supported by a joint difference among formats, but the pattern does not rank the formats along a simple transparency gradient.

Table 3: Conditional logit for the three-alternative choice tasks

Parameter	beta	Clustered SE	95% CI	p
Usual-mode constant	0.045	0.049	[-0.052, 0.141]	0.364
Fare: Medium vs. low	0.030	0.031	[-0.030, 0.091]	0.327
Fare: High vs. low	-0.005	0.031	[-0.067, 0.056]	0.863
Discount: -10% vs. none	-0.016	0.031	[-0.077, 0.045]	0.606
Discount: -20% vs. none	-0.011	0.031	[-0.072, 0.049]	0.712
Wait: 8 vs 3 minutes	0.012	0.030	[-0.048, 0.072]	0.693
Wait: 15 vs 3 minutes	0.041	0.031	[-0.020, 0.103]	0.185
Reliability: Medium vs. low	0.007	0.031	[-0.054, 0.067]	0.832
Reliability: High vs. low	-0.025	0.031	[-0.086, 0.035]	0.412
Safety: Verified + tracking vs. basic	-0.010	0.030	[-0.069, 0.049]	0.750
Safety: Verified + tracking + SOS vs basic	-0.011	0.031	[-0.071, 0.049]	0.713
Price information: Upfront estimate vs negotiated	-0.103	0.031	[-0.164, -0.043]	0.001
Price information: Breakdown vs. negotiated	-0.034	0.030	[-0.093, 0.025]	0.263

Note: N = 1,800 participants, 14,400 tasks, and 43,200 alternative observations. Attribute block versus the usual-mode-constant-only model: LR chi-square(12) = 16.76, $p = 0.159$; respondent-clustered Wald chi-square(12) = 17.00, $p = 0.150$; incremental pseudo-R-squared = 0.00053. Price-information terms: Wald chi-square(2) = 11.74, $p = 0.003$.

H2 is supported as a description of limited average discrimination within these profiles. The low incremental fit and the concentration of null contrasts show that most marginal level changes did little to separate the alternatives. They do not show that every participant ignored the attributes or followed the same non-compensatory rule.

Gender and Safety Responses

None of the three safety statements showed a statistically detectable gender difference. The men-minus-women difference was -0.112 for S1 (feeling safe), 95% CI [-0.246, 0.022], $p = 0.102$; 0.008 for S2 (trust from verification and tracking), 95% CI [-0.127, 0.143], $p = 0.907$; and -0.042 for S3, 95% CI [-0.179, 0.095], $p = 0.544$. For repeated task choice, the respondent-clustered women-minus-men difference was 0.0033 (SE = 0.0104, $p = 0.747$). H5 is not supported at the 0.05 level. Since no equivalence margin was defined, the appropriate conclusion is that the study detected no association, not that men and women have identical safety perceptions or choices.

DISCUSSION

Interpreting the Hypothetical-Choice Margin

The main descriptive result is a large difference between recent use and hypothetical selection: 30.0% of participants were quota-classified as recent users, while ride-hailing was chosen in 64.7% of experimental tasks. Computing the 34.7-point margin within participants respects the repeated structure and provides an uncertainty interval. It does not solve the conceptual difference between the measures. Recent use is a person-level event under actual service conditions; experimental selection is an average over eight constructed situations.

The almost identical choice shares of recent users and non-users sharpen this boundary. If the experiment had isolated a pool of likely new adopters, non-users who were receptive to ride-hailing might have stood out from current users in a meaningful way. They did not. Instead, both groups selected ride-hailing in roughly two-thirds of tasks. One plausible explanation is that the exercise captured general acceptance of the service concept more strongly than market readiness. Another is that the usual-mode option and generic verbal profiles simplified the comparison. The data do not determine which explanation is correct.

For policy, the margin is best used as a reason to test revealed behaviour. A pilot can follow the sequence from information exposure to account creation, booking attempt, completed trip, repeat use, complaint, and opt-out. Such a funnel would show whether hypothetical acceptance survives real fares, pickup conditions, payment, and service availability. Until that evidence exists, the task share should not be multiplied by a city population or described as a forecast of additional customers.

What Attribute Insensitivity Does and Does Not Mean

The broad ride-hailing share coexists with almost no incremental explanatory power from the six attribute dimensions. This is not a contradiction. Participants may have responded chiefly to the availability of a ride-hailing option rather than to fine distinctions between the A and B profiles. The verbal levels may also have lacked a common quantitative meaning. A "high" fare is not a single amount across income groups or cities, and "high" reliability can invoke different expectations among experienced and inexperienced users.

The pattern is compatible with decision simplification, including screening, lexicographic attention, or satisficing. It is equally compatible with unobserved preference classes whose effects offset in a pooled coefficient. For example, one group might favour verified-driver features while another assumes that verification is standard and gives the attribute no extra weight. The resulting average could be near zero even when both groups care about safety in different ways. Because the post-task ignored-attribute and comprehension questions received no answers, the study cannot distinguish among these mechanisms.

This limitation matters for management. A non-significant coefficient is not permission to remove safety, reliability, or fare protections. Choice experiments estimate marginal preference within presented ranges; they do not define minimum obligations. Regulators may require driver verification, complaint handling, or price records because of rights, risk control, and public value even when those features do not increase average experimental choice. The practical lesson is to separate baseline standards from features intended to attract demand.

Future experiments can increase diagnostic power by using city-calibrated monetary fares, objective reliability probabilities, and explicitly defined pickup performance. They can record comprehension and attention to attributes, randomise task order through documented blocks, and pre-specify effects of practical interest. Mixed-logit or latent-class models may then reveal whether pooled null coefficients conceal distinct groups, provided those models are theoretically motivated and validated rather than selected only for statistical significance.

The Non-Monotonic Price-Information Result

Price information was the only dimension with a detectable joint association, but its direction resists a simple policy slogan. A single upfront estimate performed worse than negotiated pricing, while a full breakdown did

not differ from negotiation. It would therefore be inaccurate to conclude that transparency generally lowers demand or that negotiation is universally preferred.

The wording may carry procedural meanings. Negotiation can signal flexibility and a familiar exchange, whereas the word "estimate" may suggest that the final amount can change. A breakdown may offset that uncertainty by making components visible. These interpretations are plausible, not measured. A field test should compare screens that specify whether the fare is fixed, which components may change, and how a passenger can challenge a discrepancy. Outcomes should include comprehension, perceived fairness, booking completion, cancellation, fare deviation, and complaints, not only clicks or stated preferences.

For sustainability governance, the results emphasise that disclosure quality is multidimensional. More information is not automatically more understandable, and an auditable breakdown may serve accountability even when it does not raise choice. Operators and authorities should evaluate whether passengers can interpret the information and whether the displayed amount matches the charge. That moves transparency from a design label to a measurable service commitment.

City Variation and Local Calibration

The clearest observed separator is city. The hypothetical ride-hailing share increased from Algiers to Constantine to Batna, and the difference remained strong after clustering the eight tasks within participants. Because each city was constructed using quotas with the same proportion of recent users, this gradient reflects hypothetical choice rather than measured prevalence.

The result supports city-level testing but not a causal story. Batna's higher share could reflect the quality of alternative modes, trip needs, recruitment composition, prior platform knowledge, or a different interpretation of the profiles. None of these mechanisms was measured closely enough to assign responsibility. A pooled national strategy would therefore be premature. Local pilots should pair participant choices with indicators of platform coverage, public-transport accessibility, actual waiting times, fare levels, district, time of day, smartphone access, and recruitment channel.

Disaggregated reporting is also an accounting issue. An operator can meet a national average while leaving a particular city or peripheral district underserved. City and district measures should therefore accompany aggregate figures. Comparable definitions would allow authorities to identify whether service quality, safety, and access improve together or whether growth in one market conceals weak performance elsewhere.

Sustainability Accounting and Management Implications

Ride-hailing's contribution to SDG 11 cannot be inferred from demand alone. Safe and accessible mobility requires information about who can use the service, where vehicles are available, what passengers pay, how incidents are managed, and whether platform trips add to or substitute for other motorised travel. Tirachini (2020) shows that accessibility benefits and traffic externalities must be assessed together. A governance system should therefore link user-facing service standards with social and environmental outcomes.

The six experimental attributes provide a practical starting map. Fare and discounts relate to affordability, but assessing affordability requires observed prices, fare deviations, and the distribution of costs across districts and user groups. Waiting time and reliability require time-stamped pickup requests, accepted rides, cancellations, and completed trips. Safety provision requires evidence that verification, tracking, and emergency procedures operate as described, together with incident rates and response times. Price information requires a comparison of the amount shown, the amount charged, and the resolution of disputes.

These indicators should be accompanied by measures that the experiment did not contain. Coverage by district and time of day is needed for accessibility. Empty vehicle kilometres, vehicle occupancy, and substitution from public transport are needed for environmental assessment. Accessibility for people with disabilities and service outcomes for women, older people, and lower-income travellers are needed for equity. Each indicator should have a stable definition, denominator, reporting period, and responsible data owner. Without those features, a sustainability dashboard becomes promotion rather than accountability.

Stakeholder participation is necessary when setting the measures. Passengers can identify what must be visible before booking and what evidence is needed after a dispute. Drivers can describe whether pricing, verification, and safety requirements create unintended risks or costs. Municipal transport authorities can connect platform activity with network performance, and consumer-protection bodies can monitor fairness and complaint handling. Public reporting should present city and district results rather than relying only on an overall average.

A staged pilot offers a proportionate management response to the evidence. An operator and city authority can agree on minimum protections, choose a limited service area, publish indicator definitions in advance, and review performance after a fixed period. Price-information formats can be randomised within the pilot, while actual booking and service outcomes are observed. Expansion can then depend on evidence of reliability, safety, equitable coverage, and network impact. This approach treats the present experiment as input to learning, not as a substitute for operational accountability.

Study Limitations

Several boundaries shape the conclusions. First, quota control supports comparison within the urban study sample but not estimates of city or national prevalence. The exact 30.0% recent-user share in every city is a feature of sample construction. Second, the planned comprehension, attention, realism, ignored-attribute, and carefulness questions yielded no responses. The study cannot use them to validate task engagement or explain the choice pattern.

Third, recent use and hypothetical choice are different outcomes. A paired calculation does not make them interchangeable, and the operational margin is not a market-demand estimate. Fourth, fare and reliability were expressed as verbal levels. Participants may have assigned different numerical meanings to the same descriptions. Fifth, profile sequences varied across participants, and the realised design was balanced, but the protocol does not establish a named generator, blocking rule, or efficiency criterion. The task-position pattern does not suggest a monotonic decline, yet learning and order effects remain possible. Appendix C presents additional choice-design diagnostics, including attribute-level balance and choice shares by task position (Table C1 and C2).

Sixth, the wording and recorded direction of S3 do not support a three-item safety scale, so item-level results carry more weight than a composite. Seventh, the conditional logit assumes homogeneous coefficients and independence of irrelevant alternatives. Preference heterogeneity may be hidden in the pooled estimates. Finally, the cross-sectional survey cannot establish causal effects of attitudes, city context, platform exposure, or service supply. Longitudinal observation and field experimentation are needed before the hypothetical-choice margin can be connected with actual uptake or sustainable transport outcomes.

CONCLUSION

The survey shows that ride-hailing was selected more often in hypothetical tasks than was reported as a recently used service, producing an operational margin of 34.7 percentage points in the quota-controlled study sample. That margin is a descriptive comparison between two measures, not a forecast of adopters. The experiment also reveals that broad selection of ride-hailing did not translate into strong average sensitivity to the tested fare, discount, waiting-time, reliability, and safety levels. Price-information formats differed jointly, but not along a monotonic transparency scale, and city was the strongest observed separator of hypothetical choice.

For sustainability accounting and management, the evidence supports local pilots with pre-defined measures of affordability, reliability, safety, fare integrity, accessibility, and network effects. Such measures allow passenger preferences to inform governance while keeping operational performance, equity, and environmental consequences visible to regulators, operators, drivers, and the public.

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INFORMED CONSENT STATEMENT: Informed consent was obtained from all participants prior to their participation in the study. Before beginning the questionnaire, participants were provided with information about the purpose and nature of the study and were informed that their participation was voluntary. No direct personal identifiers were collected, and participant confidentiality was maintained throughout the study.

TRANSPARENCY: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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Supplementary Appendices

Latent Demand and Attribute Insensitivity in Ride-Hailing Preferences: A Multi-City Stated Choice Study in Algeria

These appendices provide additional detail on the survey measures, study sample, choice design, and statistical results for the multi-city study in Algiers, Constantine, and Batna.

Appendix A. Survey measures and score construction

The questionnaire was administered in Arabic and French. Table A1 gives the corresponding English item meanings. Responses use a five-point scale from 1 (Strongly disagree) to 5 (Strongly agree).

Table A1: Attitudinal items

Construct	Code	English item meaning
Value	V1	Ride-hailing apps offer good value for money.
Value	V2	Promotions and discounts influence my choice.
Value	V3	Ride-hailing is reasonably priced compared with alternatives.
Safety	S1	I feel safe using ride-hailing apps.
Safety	S2	Driver verification and tracking increase my trust.
Safety	S3	Safety concerns reduce my willingness to use ride-hailing.
Convenience	C1	Short waiting time is crucial.
Convenience	C2	Cancellations or unreliable pickup discourage me.
Convenience	C3	Ride-hailing is more convenient than shared taxis or minibuses.
Digital information	D1	Using transport apps is easy.
Digital information	D2	Seeing the price before booking increases willingness.
Digital information	D3	I prefer services that show a fare breakdown.

Note: S3 is worded negatively relative to S1 and S2, yet the recorded S3 response correlates positively with S1 ($r = 0.733$); reverse-coding S3 produces a negative correlation of the same magnitude. Because covariance alone cannot establish the intended direction, S1 and S2 form the two-item safety/trust measure ($r = 0.732$; Reliability coefficient = 0.845), and S3 is reported separately.

Table A2: Scale reliability

Item set	Items	Reliability	Treatment
Value	V1-V3	0.889	Descriptive reliability
Safety/trust	S1-S2	0.845	S3 reported separately
Convenience	C1-C3	0.896	Descriptive reliability
Digital information	D1-D3	0.894	Descriptive reliability

Table A3: Planned post-task measures without recorded responses

Measure	Question code	Recorded responses	Analytical treatment
Comprehension	Q6_Check	0 / 1,800	No recorded responses; not analysed
Attention	AC1_AttentionCheck	0 / 1,800	No recorded responses; no screening
Realism	RealismRating	0 / 1,800	No recorded responses; not analysed
Ignored attributes	IgnoredAttributes	0 / 1,800	No recorded responses; not analysed
Carefulness	CarefulAnswer	0 / 1,800	No recorded responses; not analysed

Note: None of the 1,800 participants provided a recorded answer to these five post-task questions. They created no exclusion criterion and no analytical variable. The study therefore makes no claim that the corresponding checks were passed.

Appendix B. Study sample

Table B1: City by recent ride-hailing use

City	Non-users	Users	Total	User share (%)
Algiers	560	240	800	30.0
Constantine	420	180	600	30.0
Batna	280	120	400	30.0
Total	1260	540	1800	30.0

Note: The quota plan assigned 800 participants to Algiers, 600 to Constantine, and 400 to Batna, with an exact 30.0% recent-user share in each city. These percentages describe sample composition and are not city or national prevalence estimates.

Table B2: Principal study-sample characteristics

Characteristic	Category	n	%
Gender	Men	917	50.9
	Women	883	49.1
Age	18-24	332	18.4
	25-34	569	31.6
	35-44	447	24.8
	45-54	271	15.1
	55+	181	10.1
Household car	Yes	1,417	78.7
	No	383	21.3
District	Central	691	38.4
	Intermediate	653	36.3
	Peripheral	456	25.3

Appendix C. Choice-design characteristics

The survey produced 43,200 alternative observations in 14,400 choice sets. Every set contains two ride-hailing profiles and the usual-mode alternative, with exactly one selected option. The 1,800 participants received distinct ordered profile sequences. The largest absolute cross-attribute correlation among effect-coded ride-hailing attributes is .018.

Table C1: Attribute-level balance across ride-hailing profiles

Attribute	Level	Profile observations	% of 28,800
Fare level	High	9,760	33.9
Fare level	Medium	9,543	33.1
Fare level	Low	9,497	33.0
Discount	-20%	9,715	33.7
Discount	None (blank-coded)	9,553	33.2
Discount	-10%	9,532	33.1
Waiting time	15 min	9,675	33.6
Waiting time	3 min	9,582	33.3
Waiting time	8 min	9,543	33.1
Reliability	High	9,747	33.8
Reliability	Medium	9,575	33.2
Reliability	Low	9,478	32.9
Safety package	Verified+Tracking+SOS	9,630	33.4
Safety package	Verified+Tracking	9,617	33.4
Safety package	Basic	9,553	33.2
Price information	Upfront + breakdown	9,636	33.5
Price information	Negotiated	9,608	33.4
Price information	Upfront estimate	9,556	33.2

Note: Discount used three levels: none, -10%, and -20%. A blank discount line on a ride-hailing profile represented the designed no-discount level; a blank entry for the usual-mode alternative was structurally inapplicable.

Table C2: Choice share by task position

Task position	Ride-hailing profiles (%)	Usual mode (%)
1	64.6	35.4
2	65.3	34.7
3	64.9	35.1
4	62.1	37.9
5	64.6	35.4
6	64.6	35.4
7	63.6	36.4
8	68.1	31.9

Note: The task-position series has no monotonic decline. This descriptive pattern cannot exclude learning or order effects because the survey protocol does not document a task-order randomisation log. Four participants selected the usual mode in all eight tasks.

Appendix D. Full statistical results

Table D1: Operational hypothetical-choice margin

City	n	Recent use (%)	Ride-hailing choice (%)	Margin (pp)	95% CI (pp)
Algiers	800	30.0	60.9	30.9	[27.4, 34.5]
Constantine	600	30.0	64.8	34.8	[30.7, 38.9]
Batna	400	30.0	72.2	42.2	[37.2, 47.1]
Overall	1800	30.0	64.7	34.7	[32.4, 37.1]

Note: The margin is a sample-descriptive contrast between different measures, not an adoption forecast. Overall paired test: $t(1,799) = 28.84$, $p < 0.001$. Mean ride-hailing choice was 64.3% among recent users and 64.9% among non-users (Welch $p = 0.600$). City heterogeneity: Respondent-clustered Wald chi-square (2) = 72.72, $p < 0.001$.

Table D2: Exploratory binary logit for recent use

Predictor	beta	SE	z	p	OR
Intercept	-0.911	0.179	-5.100	<0.001	0.402
City: Algiers vs Constantine	-0.009	0.119	-0.077	0.939	0.991
City: Batna vs Constantine	-0.011	0.142	-0.079	0.937	0.989
Gender code	-0.015	0.104	-0.146	0.884	0.985
Household car ownership	-0.018	0.127	-0.145	0.884	0.982
Income-band code	-0.047	0.045	-1.041	0.298	0.954
Age-band code	0.071	0.042	1.689	0.091	1.074
District-type code	0.038	0.066	0.577	0.564	1.039
V1 value (z)	-0.107	0.084	-1.267	0.205	0.899
V2 promotions (z)	0.035	0.083	0.417	0.677	1.035
V3 comparative price (z)	0.045	0.083	0.549	0.583	1.046
S1 feel safe (z)	-0.106	0.085	-1.249	0.212	0.900
S2 verification (z)	0.095	0.083	1.147	0.252	1.100
S3 safety concerns (z)	0.014	0.083	0.167	0.867	1.014
C1 waiting time (z)	-0.050	0.085	-0.588	0.557	0.951
C2 cancellations (z)	0.004	0.087	0.045	0.964	1.004
C3 convenience (z)	0.009	0.085	0.103	0.918	1.009
D1 app ease (z)	-0.108	0.087	-1.248	0.212	0.897
D2 price information (z)	0.105	0.084	1.247	0.212	1.111
D3 fare breakdown (z)	-0.084	0.084	-0.994	0.320	0.920

Note: Log likelihood = -1092.61; null log likelihood = -1099.56; LR chi-square (19) = 13.89, $p = 0.790$; McFadden pseudo-R-squared = 0.0063; accuracy = 70.0% (equal to the majority-class benchmark). Ordered demographic codes enter linearly.

Table D3: Respondent-clustered conditional logit

Parameter	beta	Cluster SE	z	p	95% CI
Usual-mode constant	0.045	0.049	0.907	0.364	[-0.052, 0.141]
Fare: Med. vs low	0.030	0.031	0.981	0.327	[-0.030, 0.091]
Fare: High vs low	-0.005	0.031	-0.173	0.863	[-0.067, 0.056]
Discount: -10% vs none	-0.016	0.031	-0.516	0.606	[-0.077, 0.045]
Discount: -20% vs none	-0.011	0.031	-0.369	0.712	[-0.072, 0.049]
Wait: 8 vs 3 min	0.012	0.030	0.394	0.693	[-0.048, 0.072]
Wait: 15 vs 3 min	0.041	0.031	1.325	0.185	[-0.020, 0.103]
Reliability: Med. vs low	0.007	0.031	0.212	0.832	[-0.054, 0.067]
Reliability: High vs low	-0.025	0.031	-0.820	0.412	[-0.086, 0.035]
Safety: Verified/Tracking vs basic	-0.010	0.030	-0.319	0.750	[-0.069, 0.049]
Safety: Verified/Tracking/SOS vs basic	-0.011	0.031	-0.368	0.713	[-0.071, 0.049]
Price info: Upfront vs negotiated	-0.103	0.031	-3.370	<0.001	[-0.164, -0.043]
Price info: Breakdown vs negotiated	-0.034	0.030	-1.120	0.263	[-0.093, 0.025]

Note: N = 1,800 participants; 14,400 tasks; 43,200 alternative observations. Log likelihood = -15799.50. Against a usual-mode-constant-only model, the attribute block gives LR chi-square (12) = 16.76, $p = 0.159$, and respondent-clustered Wald chi-square (12) = 17.00, $p = 0.150$. Incremental McFadden pseudo-R-squared = 0.00053; conventional pseudo-R-squared = 0.00130. Price-information terms jointly: Wald chi-square (2) = 11.74, $p = 0.003$.

Table D4: Gender comparisons

Outcome	Men mean	Women mean	Men - women	95% CI	p
S1 feel safe	2.933	3.045	-0.112	[-0.246, 0.022]	0.102
S2 verification	2.998	2.990	0.008	[-0.127, 0.143]	0.907
S3 safety concerns	3.011	3.053	-0.042	[-0.179, 0.095]	0.544
Repeated ride-hailing choice share	-	-	-0.003	-	0.747

Note: Safety items use Welch tests; the repeated-choice comparison uses respondent-clustered uncertainty. The absence of $p < 0.05$ is not an equivalence test because no equivalence margin was specified.

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