

**Attention Discrimination:
Theory and Field Experiments with Monitoring Information Acquisition**

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Online Appendix

Supplementary material to Section II

Proof of Proposition 1:

(A) First, let us consider the effect of a decrease in q_G in a cherry-picking market. In the first stage, the DM chooses between rejecting the applicant, inviting him or her, and acquiring information about q_1 . By definition, in a cherry picking market $payoff(reject) > payoff(invite)$, and thus the choice is between rejecting the applicant right away and acquiring more information first. A decrease in q_G does not affect $payoff(reject)$, but it decreases $payoff(info)$. Therefore, such a change weakly decreases attention. Obviously, an increase in d_G or C_2 has the same effect. Similarly, a decrease in σ_G^2 does not affect $payoff(reject)$, while it decreases $payoff(info)$, too. This is because the payoff from invitation to the second stage, see Definition on page 9 in the main text,

$$E[\max(R, E[\max(R, q - d_G) | q_1] - C_2)]$$

is due to the max-operators increasing in a mean-preserving spread; positive changes count toward a higher payoff, while some of the negative changes are filtered out by the reservation payoff R . If σ_G^2 increases, then $E[\max(R, q - d_G) | q_1] - C_2$ increases for all q_1 , and thus the distribution in Figure 1 shifts to the right in the sense of first-order stochastic dominance.

In the lemon-dropping market, the situation is only slightly more complicated. Now, $payoff(invite) > payoff(reject)$. For each realization of q_1 the corresponding positive impact of an increase in q_G is at least as high for $payoff(invite)$ as for $payoff(info)$. See the payoffs on page 9 in the main text - any increase in $E[\max(R, q - d_G) | q_1]$ contributes directly to an increase in $payoff(invite)$, while it contributes to an increase in $payoff(info)$ only when $E[\max(R, q - d_G) | q_1]$ is higher than $(R + C_2)$. Therefore, as a result of an increased q_G , $payoff(invite)$ increases more than

$payoff(info)$, which decreases attention. Arguments showing the stated effects of changes in d_G , C_2 , and σ_G^2 are completely analogous.

(B) A higher C_1 decreases $payoff(info)$, while leaving $payoff(invite)$ and $payoff(reject)$ unchanged, and thus it weakly decreases attention in either market.

Similarly, a lower $\sigma_{G,1}^2$ does not affect $payoff(reject)$ or $payoff(invite)$, but it decreases $payoff(info)$, and thus it leads to a weakly lower attention.

QED

Proof of Corollary 1:

(A) First, in a cherry-picking market, attention is a necessary prerequisite for being accepted in the selection decision, since the applicant is rejected if no additional information is acquired. Higher information acquisition in the first stage thus weakly increases the probability that the applicant is invited to the second stage. Next, the applicant's quality is observed upon invitation to the second stage, and thus acceptance in the second stage, conditional on being invited to the second stage, is for a given applicant independent of information acquisition in the first stage. Therefore, higher information acquisition in the first stage weakly increases the probability of acceptance in the second stage. Implications of information in the lemon-dropping market are analogous, and the remaining step connecting group characteristics and implications of endogenous attention is an immediate implication of Proposition 1.

(B) The steps are completely the same as in (A) except for the fact that Proposition 1 states that a group dissimilarity decreases attention in either market.

QED.

Supplementary material to Sections III-V

Wording of application email – Czech rental housing market

1] “Dear Sir/Madam, I am writing because I am very interested in renting the apartment that you have advertised. When would be a good time to come see the apartment? Best regards, Phan Quyet Nguyen”

2] Adding a link to personal website: “Dear Sir/Madam, I am writing because I am very interested in renting the apartment that you have advertised. When would be a good time to come see the apartment? Best regards, Phan Quyet Nguyen, phan.quiet.nguyen.sweb.cz”

3] Adding a sentence with applicant’s characteristics: “Dear Sir/Madam, I am writing because I am very interested in renting the apartment that you have advertised. I am a thirty-year-old man, I am single, I have a college [a high-school] degree, and I do not smoke. I have a steady job (with a regular paycheck) at a company. When would be a good time to come see the apartment? Best regards, Phan Quyet Nguyen”

Wording of application email – Czech labor market

“Dear Sir/Madam, I am writing because I am very interested in the Real Estate Agent job position advertised by your company. You can find my resume in this hyperlink: phanquyetnguyen1982.sweb.cz. Best regards, Phan Quyet Nguyen”

Wording of application email – German labor market

1] “Dear Sir/Madam, I am writing because I am very interested in the Real Estate Agent job position advertised by your company. You can find my resume in this hyperlink: fatihyildiz1982.webege.com. Best regards, Fatih Yildiz”

2] Adding information about 2 months unemployment: “Dear Sir/Madam, I have been searching for a job for two months and I am writing because I am very interested in the Real

Estate Agent job position advertised by your company. You can find my resume in this hyperlink: fatihyildiz1982.webege.com. Best regards, Fatih Yildiz”

3] Adding information about 18 months unemployment: “Dear Sir/Madam, I have been searching for a job for a year and half and I am writing because I am very interested in the Real Estate Agent job position advertised by your company. You can find my resume in this hyperlink: fatihyildiz1982.webege.com. Best regards, Fatih Yildiz”

Supplementary Figures

SUPPLEMENTARY FIGURE 1 — APPLICANT'S PERSONAL WEBSITE SNAPSHOT (CZECH RENTAL HOUSING MARKET)



SUPPLEMENTARY FIGURE 2 — APPLICANT’S ONLINE RESUME, CZECH LABOR MARKET

Left Part: A Snapshot After Opening the Website (a Shorter Form), Right Part: A Snapshot After Expanding Education and Experience Categories

PHAN QUYET NGUYEN
CURRICULUM VITAE

phanquyetnguyen1982@seznam.cz
(+420) 605 174 397
[\[more\]](#)

Education [\[more\]](#) BUSINESS ACADEMY PRAGUE 6, KRUPKOVO NÁMĚSTÍ 1997-2001

Experience [\[more\]](#)

AZPIRO, LTD. 2006-2010
Administrative support of consultants, PC work

AUTO NELLY LTD. 2001-2005
International purchasing assistant

MULTIMEDIA MED, LTD. 1999-2000
Market research; customer surveys

Skills [\[more\]](#)

Language skills
English language: Fluent, passed final exam from
German language: Intermediate.

Driving licence
Type B

PHAN QUYET NGUYEN
CURRICULUM VITAE

phanquyetnguyen1982@seznam.cz
(+420) 605 174 397
[\[less\]](#)
Marital status: Single
Date of birth: July 13th, 1982

Education [\[less\]](#) BUSINESS ACADEMY PRAGUE 6, KRUPKOVO NÁMĚSTÍ 1997-2001

Final exam grades:
Accounting - B
Economics - A
Set of vocational courses - A
English language - B

Subjects studied: Written and electronic communication, accounting, economics, statistics, tourism management, English and German

Experience [\[less\]](#)

AZPIRO, LTD. 2006-2010
Administrative support of consultants, PC work

Document management; administrative support of consultants; PC work mainly with Microsoft Excel and Access; creating client databases with information about projects, project content, costs and price lists.
For references see [References section](#).

AUTO NELLY LTD. 2001-2005
International purchasing assistant

Assistance with purchases; communication with international customers; PC work, mainly with Microsoft Word and Excel on client management, purchases and price databases.

Supplementary tables

TABLE S1 — CZECH RENTAL HOUSING MARKET – DESIGN OF THE EXPERIMENT

| | No Information Treatment | Monitored Information Treatment | | Treatment with additional text in the email | |
|---------------------|---------------------------------|--|----------------|--|----------------|
| | Email: name | Email: name and hyperlink to website Website: info about education, occupation, age, marital status, smoking | | Email: name, info about education, occupation, age, marital status, smoking | |
| | | High school degree | College degree | High school degree | College degree |
| White majority name | X | X | X | X | X |
| Asian minority name | X | X | X | X | X |
| Roma minority name | X | X | X | X | X |

TABLE S2 — SURVEY III – COMPARISON OF THE NAMES USED IN THE CZECH EXPERIMENTS

| Dependent variable | Education level | | | Quality of housing | | |
|--|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|
| | High school | University | Lodging | Rented flat | Own flat | Own house |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A: Comparison of all three names (omitted majority-sounding name) | | | | | | |
| Roma-sounding name | -1.82*** (0.24) | -2.08*** (0.26) | 2.45*** (0.25) | 0.19 (0.22) | -1.37*** (0.23) | -1.31*** (0.25) |
| Asian-sounding name | -0.61** (0.24) | -0.39 (0.25) | 0.70*** (0.24) | -0.24 (0.21) | -0.53** (0.23) | -0.16 (0.24) |
| Constant | 5.06*** (0.17) | 3.71*** (0.18) | 1.63*** (0.18) | 4.42*** (0.15) | 4.00*** (0.17) | 3.14*** (0.17) |
| Observations | 246 | 246 | 246 | 245 | 246 | 246 |
| Panel B: Comparison of minority-sounding names (omitted Asian-sounding name) | | | | | | |
| Roma-sounding name | -1.21*** (0.25) | -1.68*** (0.26) | 1.75*** (0.26) | 0.44** (0.22) | -0.84*** (0.24) | -1.15*** (0.24) |
| Constant | 4.45*** (0.17) | 3.31*** (0.18) | 2.34*** (0.18) | 4.17*** (0.15) | 3.47*** (0.16) | 2.98*** (0.17) |
| Observations | 167 | 167 | 167 | 166 | 167 | 167 |

Notes: OLS in all Columns of all Panels. Standard errors in parentheses. Majority-sounding name is Jiri Hajek, Roma-sounding name is Gejza Horvath and Asian-sounding name is Phan Quyet Nguyen. The dependent variables are measured on a scale 0-7. 0 means that a respondent considered it impossible for a person with the given name to have high school (university) education and to live in lodging (in a rented flat, in an own flat, in an own house). 7 means that a respondent considered it certain.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S3 — CZECH RENTAL HOUSING MARKET – RANDOMIZATION CHECK

| Experimental manipulation: | Name of applicant | | | | | | Access to information | | |
|---|----------------------------|-----------------------------|-----------------------|----------------------------|---------------------------|-----------------------|-----------------------|------------------------------|-----------------------|
| | White majority name (1) | Ethnic minority name (2) | t-test p-value (3) | Asian minority name (4) | Roma minority name (5) | F-stat p-value (6) | No Information (7) | Monitored Information (8) | t-test p-value (9) |
| Female landlord | 0.46 (0.50) | 0.49 (0.50) | 0.26 | 0.46 (0.50) | 0.51 (0.50) | 0.15 | 0.50 (0.50) | 0.48 (0.50) | 0.49 |
| Size of the apartment (hundreds of m ²) | 0.47 (0.15) | 0.47 (0.14) | 0.83 | 0.47 (0.15) | 0.47 (0.14) | 0.96 | 0.47 (0.15) | 0.47 (0.14) | 0.79 |
| Price of the apartment (ths. CZK) | 9.03 (2.94) | 8.89 (2.86) | 0.33 | 8.79 (2.82) | 8.98 (2.89) | 0.32 | 8.87 (2.95) | 8.96 (2.98) | 0.60 |
| Apartment equipped | 0.15 (0.36) | 0.16 (0.37) | 0.53 | 0.16 (0.37) | 0.17 (0.38) | 0.74 | 0.13 (0.34) | 0.17 (0.37) | 0.12 |
| N | 606 | 1194 | | 569 | 625 | | 451 | 762 | |

Notes: Means. Standard deviations in parentheses. Column 3 reports p-value for a t-test testing the null hypothesis that the means are equal for applicants with a majority-sounding name and a minority-sounding name (Asian and Roma minority pooled together). Column 6 reports p-value for an F-test testing the null hypothesis that the means are equal across all three groups of applicants. Column 9 reports p-value for an F-test testing the null hypothesis that the means are equal in the No Information Treatment and in the Monitored Information Treatment.

TABLE S4 — CZECH RENTAL HOUSING MARKET – CALLBACK BY ETHNICITY

| | White majority name (W) (1) | Pooled Asian and Roma minority name (E) (2) | p.p. difference: W-E, (p-value) (3) | Asian minority name (A) (4) | p.p. difference: W-A, (p-value) (5) | Roma minority name (R) (6) | p.p. difference: W-R, (p-value) (7) | p.p. difference: R-A, (p-value) (8) |
|--|--------------------------------------|---|---|--------------------------------------|---|-------------------------------------|---|---|
| No Information Treatment | 0.89 | 0.58 | 32 (0.00) | 0.54 | 35 (0.00) | 0.61 | 28 (0.00) | 7 (0.19) |
| Monitored Information Treatment | 0.81 | 0.62 | 19 (0.00) | 0.60 | 21 (0.00) | 0.63 | 18 (0.00) | 3 (0.49) |
| Monitored Information Treatment ^a | 0.89 | 0.75 | 15 (0.00) | 0.75 | 14 (0.01) | 0.74 | 15 (0.01) | 0 (0.89) |

Notes: Means. The table reports the likelihood of callback across names and treatments. Columns 3, 5, 7 and 8 report differences in percentage points, in the parentheses we report p-value for a t-test testing the null hypothesis that the difference is zero. ^aThe numbers are reported for the sub-sample of landlords who opened applicant's website.

TABLE S5 — CZECH RENTAL HOUSING MARKET – INFORMATION SEARCH

| | All | White majority name (W) | Ethnic minority name (E) | p.p. difference: W-E, (p-value) |
|---|------|--|--------------------------|---------------------------------|
| | (1) | (2) | (3) | (4) |
| Panel A | | | | |
| Sample: | | Monitored information treatment | | |
| Opening applicant's personal website | 0.38 | 0.33 | 0.41 | -8 (0.03) |
| At least one piece of information acquired | 0.37 | 0.30 | 0.40 | -10 (0.01) |
| Number of pieces of information acquired | 1.59 | 1.29 | 1.75 | -0.46 (0.01) |
| All pieces of information acquired | 0.24 | 0.19 | 0.26 | -8 (0.02) |
| Likelihood of acquiring information about: | | | | |
| Education | 0.33 | 0.27 | 0.36 | -9 (0.01) |
| Habits | 0.31 | 0.26 | 0.34 | -8 (0.01) |
| Marital status | 0.32 | 0.27 | 0.35 | -8 (0.03) |
| Job | 0.31 | 0.24 | 0.35 | -11 (0.00) |
| Age | 0.31 | 0.25 | 0.34 | -9 (0.01) |
| Number of observations | 762 | 258 | 504 | |
| Panel B | | | | |
| Sample: | | Landlords who opened applicant's website | | |
| At least one piece of information acquired | 0.96 | 0.92 | 0.98 | -6 (0.02) |
| Number of pieces of information acquired | 4.14 | 3.91 | 4.24 | -0.33 (0.06) |
| All pieces of information acquired | 0.62 | 0.56 | 0.64 | -7 (0.23) |
| Likelihood of acquiring information about: | | | | |
| Education | 0.86 | 0.81 | 0.88 | -6 (0.16) |
| Habits | 0.82 | 0.78 | 0.83 | -6 (0.27) |
| Marital status | 0.84 | 0.82 | 0.85 | -3 (0.56) |
| Job | 0.82 | 0.73 | 0.86 | -13 (0.01) |
| Age | 0.81 | 0.76 | 0.83 | -6 (0.22) |
| Number of observations | 293 | 85 | 208 | |
| Panel C | | | | |
| Sample: | | Landlords who opened applicant's website | | |
| Likelihood of opening information about ... first | | | | |
| Education | 0.26 | 0.21 | 0.28 | -7 (0.24) |
| Habits | 0.20 | 0.22 | 0.19 | 3 (0.55) |
| Marital status | 0.26 | 0.27 | 0.25 | 2 (0.72) |
| Job | 0.15 | 0.12 | 0.16 | -5 (0.32) |
| Age | 0.09 | 0.09 | 0.09 | 0 (0.94) |
| Number of observations | 293 | 85 | 208 | |
| Panel D | | | | |
| Sample: | | Landlords who acquired all pieces of information | | |
| Order of opening information about ... | | | | |
| Education | 3.06 | 3.33 | 2.95 | 0.38 (0.15) |
| Habits | 3.07 | 2.85 | 3.14 | -0.29 (0.25) |
| Marital status | 2.60 | 2.44 | 2.66 | -0.22 (0.33) |
| Job | 2.90 | 2.88 | 2.90 | -0.03 (0.90) |
| Age | 3.38 | 3.50 | 3.34 | 0.16 (0.47) |
| Number of observations | 181 | 48 | 133 | |

Notes: Means. Column 4 reports differences in percentage points, in the parentheses we report p-value for a t-test testing the null hypothesis that the difference is zero. The differences in the number of pieces of information acquired on the website and in the order of opening a specific piece of information are reported in absolute terms, not in percentage points.

TABLE S6 — CZECH RENTAL HOUSING MARKET – RESPONSIVENESS TO INFORMATION ABOUT ASIAN AND ROMA MINORITY APPLICANTS

| Dependent variable: | Invitation rate | |
|---|----------------------------|---------------------------|
| | Asian minority name (1) | Roma minority name (2) |
| Sample: | | |
| Monitored Information Treatment | 0.09* (0.05) | 0.07 (0.05) |
| Additional text in the email - with high school | 0.02 (0.07) | 0.12** (0.06) |
| Additional text in the email - with college | 0.19*** (0.07) | 0.12** (0.06) |
| Observations | 569 | 625 |

Notes: Probit, marginal effects (dF/dx), robust standard errors in parentheses. In both Columns, we control for a dummy variable indicating a landlord being a female, a dummy variable indicating an unknown gender of a landlord (the mean of this variable in the whole sample as well as in the Information with monitoring treatment is 0.02), size of an apartment, price of an apartment rental, and a dummy variable indicating an equipped apartment.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S7 — CZECH RENTAL HOUSING MARKET – EDUCATION LEVEL AND INVITATION RATE

| Dependent variable | Invitation for an apartment viewing | | | | | | | |
|-------------------------------------|---|---------------------|----------------------|--------------------|--------------------|---|---------------------|----------------------|
| | Treatment with additional text in the email | | | | | Monitored Information Treatment, sub-sample of landlords who acquired information about education on applicant's personal webpage | | |
| | All | White majority name | Ethnic minority name | High school degree | College degree | All | White majority name | Ethnic minority name |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Ethnic minority name | -0.30*** (0.06) | | | -0.29*** (0.06) | -0.22*** (0.06) | -0.15 (0.09) | | |
| College degree | 0.01 (0.07) | 0.01 (0.06) | 0.08 (0.05) | | | 0.18* (0.11) | 0.17** (0.08) | 0.12* (0.07) |
| Ethnic minority name*College degree | 0.07 (0.08) | | | | | -0.06 (0.13) | | |
| Observations | 587 | 201 | 386 | 311 | 276 | 251 | 69 | 182 |

Notes: OLS in all Columns, standard errors in parentheses. Robust standard errors in parentheses. In all Columns, we control for a dummy variable indicating a landlord being a female, a dummy variable indicating an unknown gender of a landlord (the mean of this variable in the whole sample as well as in the Information with monitoring treatment is 0.02), size of an apartment, price of an apartment rental, and a dummy variable indicating an equipped apartment.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S8 — CZECH RENTAL HOUSING MARKET – EDUCATION LEVEL AND INFORMATION SEARCH

| | High school degree | College degree | p.p. difference: (p-value) |
|--|--|-------------------|-------------------------------|
| Panel A | | | |
| Sample: | Landlords who opened applicant's personal website and acquired information about education | | |
| Likelihood of acquiring information about after information about education is acquired | | | |
| Habits | 0.78 | 0.76 | 2 (0.80) |
| Marital status | 0.86 | 0.76 | 10 (0.16) |
| Job | 0.86 | 0.76 | 10 (0.15) |
| Age | 0.78 | 0.77 | 2 (0.82) |
| Number of pieces of information acquired after information about education is acquired | 4.27 | 4.1 | 0.17 (0.55) |
| Panel B | | | |
| Sample: | Landlords who opened personal website of an applicant with White majority name and acquired information about education | | |
| Likelihood of acquiring information about after information about education is acquired | | | |
| Habits | 0.82 | 0.62 | 20 (0.18) |
| Marital status | 0.92 | 0.74 | 18 (0.23) |
| Job | 0.75 | 0.63 | 13 (0.42) |
| Age | 0.77 | 0.73 | 4 (0.80) |
| Number of pieces of information acquired after information about education is acquired | 3.83 | 3.75 | 0.08 (0.91) |
| Panel C | | | |
| Sample: | Landlords who opened personal website of an applicant with Ethnic minority name and acquired information about education | | |
| Likelihood of acquiring information about after information about education is acquired | | | |
| Habits | 0.77 | 0.83 | -6 (0.45) |
| Marital status | 0.84 | 0.77 | 8 (0.34) |
| Job | 0.89 | 0.83 | 5 (0.46) |
| Age | 0.79 | 0.79 | 0 (0.97) |
| Number of pieces of information acquired after information about education is acquired | 4.35 | 4.25 | 0.10 (0.75) |

TABLE S9 — SURVEYS I AND II – ETHNICITY AND EXPECTED SATISFACTION WITH AN APPLICANT

| | White majority name (W) (1) | Ethnic minority name (E) (2) | Difference: W-E p-value (3) | Asian minority name (A) (4) | Difference: W-A p-value (5) | Roma minority name (R) (6) | Difference: W-R p-value (7) | Difference: R-A p-value (8) |
|--|---|--|--------------------------------------|---|--------------------------------------|--|--------------------------------------|--------------------------------------|
| Panel A: Survey among decision-makers in the rental housing market | | | | | | | | |
| Expected applicant's overall quality | 3.57 | 3.04 | 0.53 (0.01) | 3.04 | 0.52 (0.03) | 3.03 | 0.53 (0.01) | -0.01 (0.98) |
| Standard deviation of applicant's expected overall quality | 0.63 | 0.62 | 0.01 (0.94) | 0.62 | 0.01 (0.94) | 0.62 | 0.01 (0.96) | 0.00 (0.99) |
| Expected informativeness of applicant's personal website | 2.66 | 2.62 | 0.04 (0.85) | 2.55 | 0.11 (0.63) | 2.69 | -0.03 (0.88) | 0.14 (0.54) |
| Observations | 29 | 60 | | 31 | | 29 | | |
| Panel B: Survey among decision-makers in the labor market | | | | | | | | |
| Expected applicant's overall quality | 3.35 | 2.96 | 0.39 (0.02) | 2.89 | 0.46 (0.01) | 3.02 | 0.33 (0.10) | 0.13 (0.50) |
| Standard deviation of applicant's expected overall quality | 0.55 | 0.53 | 0.02 (0.84) | 0.49 | 0.06 (0.63) | 0.57 | -0.01 (0.91) | 0.08 (0.53) |
| Expected informativeness of applicant's resume | 2.97 | 2.62 | 0.34 (0.10) | 2.62 | 0.34 (0.11) | 2.63 | 0.34 (0.17) | 0.00 (0.99) |
| Observations | 29 | 61 | | 29 | | 32 | | |

Notes: Means. Panel A reports results of the perception survey among landlords in the rental housing market, Panel B reports results of the perception survey among human resource managers in the labor market. Variable "Expected applicant's overall quality" is measured on a scale 1-5, where 1 means that the decision-maker thinks he/she would be very unsatisfied with the applicant and 5 means very satisfied. The decision-makers were asked to allocate 10 tokens, each representing 10% probability, among these five categories of expected overall quality. The variable "Standard deviation of applicant's expected overall quality" is calculated at an individual level, based on allocation of tokens to these five categories. The variable "Expected informativeness of applicant's resume/personal website" is measured on a scale 1-4, where 1 means very uninformative and 4 means very informative. Columns 3, 5 and 7 report differences between applicant's names, in the parentheses we report p-value for a t-test testing the null hypothesis that the difference is zero.

TABLE S10— CZECH LABOR MARKET – RANDOMIZATION CHECK

| | White majority name | Pooled Asian and Roma minority name | t-test p-value | Asian minority name | Roma minority name | F-stat p-value |
|-----------------------------------|------------------------------------|--|-------------------|------------------------------------|-----------------------------------|-------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Required high school education | 0.90 (0.30) | 0.88 (0.33) | 0.57 | 0.89 (0.32) | 0.86 (0.35) | 0.69 |
| Required previous experience | 0.31 (0.47) | 0.23 (0.42) | 0.13 | 0.25 (0.44) | 0.21 (0.41) | 0.26 |
| Sector of sales and services | 0.73 (0.44) | 0.72 (0.45) | 0.74 | 0.74 (0.44) | 0.69 (0.47) | 0.73 |
| Application in holiday period | 0.23 (0.43) | 0.32 (0.47) | 0.12 | 0.31 (0.47) | 0.34 (0.48) | 0.28 |
| N | 98 | 176 | | 99 | 77 | |

Notes: Means. Standard deviations in parentheses. Column 3 reports p-value for a t-test testing the null hypothesis that the means are equal for applicants with a majority-sounding name and a minority-sounding name (Asian and Roma minority name). Column 6 reports p-value for an F-test testing the null hypothesis that the means are equal across all three groups of applicants.

TABLE S11 — CZECH LABOR MARKET – INVITATION RATE ACROSS SECTORS

| Dependent variable: | Invitation for a job interview | | | |
|----------------------|--------------------------------|-------------------|--------------------------------|-----------------|
| | Sales and services | | Manual work and administration | |
| Sample: | (1) | (2) | (3) | (4) |
| Ethnic minority name | -0.09** (0.05) | | -0.14 (0.12) | |
| Asian minority name | | -0.09** (0.04) | | -0.12 (0.10) |
| Roma minority name | | -0.05 (0.03) | | -0.11 (0.10) |
| Observations | 198 | 198 | 51 | 51 |

Notes: Probit, marginal effects (dF/dx), robust standard errors in parentheses. In all Columns, we control for dummy variables indicating required high school education, required previous experience, and application being sent during a holiday period (August). In all Columns, the omitted variable is a White majority name.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S12 — CZECH LABOR MARKET – EDUCATION LEVEL AND INVITATION RATE

| Dependent variable | Invitation for a job interview | | |
|-------------------------------------|---|---------------------|----------------------|
| | Employers who opened applicant's resume | | |
| Sample | All | White majority name | Ethnic minority name |
| | (1) | (2) | (3) |
| Ethnic minority name | -0.10 (0.07) | | |
| College degree | 0.01 (0.09) | 0.01 (0.10) | 0.01 (0.06) |
| Ethnic minority name*College degree | 0.00 (0.11) | | |
| Observations | 160 | 62 | 98 |

Notes: OLS in all Columns, standard errors in parentheses. Robust standard errors in parentheses.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S13 — CZECH LABOR MARKET – INFORMATION ACQUISITION

| | White majority name (W) (1) | Pooled Asian and Roma minority name (E) (2) | p.p. difference: W-E, (p-value) (3) | Asian minority name (A) (4) | p.p. difference: W-A, (p-value) (5) | Roma minority name (R) (6) | p.p. difference: W-R, (p-value) (7) | p.p. difference: R-A, (p-value) (8) |
|--|---|--|---|---|---|--|---|---|
| Panel A | | | | | | | | |
| Sample: | | | | | All | | | |
| Opening applicant's resume | 0.63 | 0.56 | 8 (0.22) | 0.47 | 16 (0.03) | 0.66 | -3 (0.69) | 19 (0.01) |
| Any additional information acquired | 0.15 | 0.13 | 3 (0.52) | 0.11 | 4 (0.39) | 0.14 | 1 (0.85) | 3 (0.53) |
| Number of pieces of additional information acquired | 0.31 | 0.22 | 0.08 (0.39) | 0.16 | 0.14 (0.16) | 0.3 | 0.01 (0.96) | 0.14 (0.21) |
| All additional information acquired | 0.02 | 0.01 | 1 (0.26) | 0 | 2 (0.15) | 0.01 | 1 (0.71) | 1 (0.26) |
| Any additional information acquired (excl. contacts) | 0.10 | 0.06 | 4 (0.24) | 0.04 | 6 (0.09) | 0.09 | 1 (0.81) | 5 (0.17) |
| Number of pieces of additional information acquired (excl. contacts) | 0.19 | 0.13 | 0.07 (0.37) | 0.07 | 0.12 (0.13) | 0.19 | -0.00 (0.99) | 0.12 (0.14) |
| All additional information acquired (excl. contacts) | 0.02 | 0.01 | 1 (0.26) | 0 | 2 (0.15) | 0.01 | 1 (0.71) | 1 (0.26) |
| Number of observations | 98 | 176 | | 99 | | 77 | | |

TABLE S13 — CZECH LABOR MARKET – INFORMATION ACQUISITION (CONTINUED)

| | White majority name (W) (1) | Pooled Asian and Roma minority name (E) (2) | p.p. difference: W-E, (p-value) (3) | Asian minority name (A) (4) | p.p. difference: W-A, (p-value) (5) | Roma minority name (R) (6) | p.p. difference: W-R, (p-value) (7) | p.p. difference: R-A, (p-value) (8) |
|--|--------------------------------|--|--|--------------------------------|--|-------------------------------|--|--|
| Panel B | | | | | | | | |
| Sample: Employers who opened applicant's resume | | | | | | | | |
| Any additional information acquired | 0.24 | 0.22 | 2 (0.80) | 0.23 | 1 (0.92) | 0.22 | 3 (0.74) | -1 (0.83) |
| Number of pieces of additional information acquired | 0.48 | 0.40 | 0.09 (0.59) | 0.34 | 0.14 (0.43) | 0.45 | 0.3 (0.87) | 0.11 (0.55) |
| All additional information acquired | 0.03 | 0.01 | 2 (0.32) | 0 | 3 (0.22) | 0.02 | 1 (0.68) | 2 (0.34) |
| Any additional information acquired (excl. contacts) | 0.16 | 0.11 | 5 (0.37) | 0.09 | 7 (0.24) | 0.14 | 2 (0.73) | 5 (0.42) |
| Number of pieces of additional information acquired (excl. contacts) | 0.31 | 0.22 | 0.08 (0.52) | 0.15 | 0.16 (0.28) | 0.29 | 0.01 (0.94) | 0.15 (0.32) |
| All additional information acquired (excl. contacts) | 0.03 | 0.01 | 2 (0.32) | 0 | 3 (0.22) | 0.02 | 1 (0.68) | 2 (0.34) |
| Likelihood of acquiring information about | | | | | | | | |
| Education | 0.08 | 0.05 | 3 (0.45) | 0.06 | 2 (0.74) | 0.04 | 4 (0.37) | -2 (0.58) |
| Job experience | 0.13 | 0.08 | 5 (0.33) | 0.04 | 9 (0.12) | 0.12 | 1 (0.86) | 8 (0.18) |
| Skills | 0.06 | 0.04 | 2 (0.51) | 0.02 | 4 (0.29) | 0.06 | 1 (0.90) | 4 (0.35) |
| Hobbies | 0.03 | 0.05 | -2 (0.57) | 0.02 | 1 (0.73) | 0.08 | -5 (0.28) | 6 (0.20) |
| Contacts | 0.18 | 0.17 | 0 (0.95) | 0.19 | -1 (0.85) | 0.16 | 2 (0.77) | -3 (0.66) |
| Qualification | 0.16 | 0.10 | 6 (0.27) | 0.06 | 10 (0.12) | 0.14 | 2 (0.73) | 7 (0.23) |
| Other characteristics | 0.18 | 0.18 | -1 (0.92) | 0.19 | 1 (0.85) | 0.18 | 0 (0.99) | -2 (0.85) |
| Number of observations | 62 | 98 | | 47 | | 51 | | |

Notes: Means. Columns 3, 5, 7 and 8 report differences in percentage points, in the parentheses we report p-value for a t-test testing the null hypothesis that the difference is zero. Acquiring more information about qualification is a dummy variable indicating whether an employer clicked on "learn more" buttons on a resume to acquire more information about education, experience, and skills. Acquiring more information about other characteristics is a dummy variable indicating whether she/he acquired more information about hobbies and contact information. The differences in the number of pieces of additional information acquired are reported in absolute terms, not in percentage points.

TABLE S14 — SURVEY ON PERCEPTIONS (SURVEY III)—COMPARISON OF THE NAMES USED IN THE CZECH EXPERIMENTS WITH OTHER ETHNICITY-SIGNALING NAMES

| Dependent variable | Education level | | Quality of housing | | | |
|--|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| | High school | University | Lodging | Rented flat | Own flat | Own house |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A: Majority-sounding names (omitted Jiri Hajek) | | | | | | |
| Jan Novotny | 0.13 (0.20) | 0.01 (0.23) | 0.15 (0.21) | -0.02 (0.21) | 0.24 (0.20) | 0.25 (0.24) |
| Tomas Svoboda | 0.04 (0.20) | 0.29 (0.22) | 0.17 (0.21) | 0.03 (0.21) | 0.11 (0.20) | 0.27 (0.24) |
| Jakub Dvorak | 0.01 (0.19) | 0.13 (0.22) | -0.17 (0.21) | 0.07 (0.20) | 0.08 (0.20) | 0.16 (0.23) |
| Constant | 5.06*** (0.14) | 3.71*** (0.16) | 1.63*** (0.15) | 4.42*** (0.15) | 4.00*** (0.14) | 3.14*** (0.17) |
| Observations | 324 | 324 | 324 | 324 | 324 | 324 |
| Panel B: Asian-sounding names (omitted Phan Quyet Nguyen) | | | | | | |
| Pham Hai Xuan | 0.14 (0.24) | -0.09 (0.28) | -0.16 (0.26) | 0.51** (0.23) | 0.28 (0.23) | -0.22 (0.26) |
| Le Anh Khoi Nguyen | 0.05 (0.23) | -0.06 (0.27) | -0.00 (0.26) | 0.10 (0.22) | -0.10 (0.23) | -0.30 (0.26) |
| Hoang Ca Sinh | 0.09 (0.24) | 0.38 (0.28) | 0.14 (0.26) | -0.01 (0.23) | 0.03 (0.23) | -0.29 (0.26) |
| Constant | 4.45*** (0.17) | 3.31*** (0.19) | 2.34*** (0.18) | 4.17*** (0.16) | 3.47*** (0.16) | 2.98*** (0.18) |
| Observations | 330 | 330 | 330 | 329 | 330 | 330 |
| Panel C: Roma-sounding names (omitted Gejza Horvath) | | | | | | |
| Tibor Farkas | 0.94*** (0.27) | 0.84*** (0.26) | -0.95*** (0.30) | -0.15 (0.23) | 0.48* (0.25) | 0.34 (0.23) |
| Tibor Demeter | 0.51* (0.27) | 0.63** (0.26) | -0.67** (0.29) | -0.24 (0.22) | -0.09 (0.24) | 0.06 (0.23) |
| Koloman Lakatos | 0.16 (0.27) | 0.40 (0.27) | -0.18 (0.30) | -0.38 (0.23) | -0.34 (0.25) | 0.07 (0.24) |
| Constant | 3.25*** (0.19) | 1.63*** (0.19) | 4.09*** (0.21) | 4.61*** (0.16) | 2.63*** (0.17) | 1.83*** (0.16) |
| Observations | 322 | 322 | 322 | 320 | 322 | 322 |

Notes: The table reports results of the perception survey about SES among students. OLS in all Columns of all Panels. Standard errors in parentheses. In Panel A, the omitted variable is the name Jiri Hajek, in Panel B it is Phan Quyet Nguyen and in Panel C it is Gejza Horvath. The dependent variables are measured on a scale 0-7. 0 means that a respondent considered it impossible for a person with the given name to have high school (university) education and to live in lodging (in a rented flat, in an own flat, in an own house). 7 means that a respondent considered it certain.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE S15 — GERMAN LABOR MARKET – RANDOMIZATION CHECK

| Experimental manipulation: | Name of applicant | | | Information about unemployment | | | |
|---|---------------------|-----------------------|----------------|--------------------------------|---------------------|----------------------|----------------|
| | White majority name | Turkish minority name | t-test p-value | No Information | 2 months unemployed | 18 months unemployed | F-stat p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Required high school education | 0.28 (0.45) | 0.30 (0.46) | 0.67 | 0.29 (0.45) | 0.25 (0.44) | 0.33 (0.47) | 0.21 |
| Required previous experience | 0.57 (0.50) | 0.54 (0.50) | 0.45 | 0.53 (0.50) | 0.59 (0.49) | 0.55 (0.50) | 0.39 |
| City with more than 1 million inhabitants | 0.18 (0.38) | 0.20 (0.40) | 0.37 | 0.18 (0.38) | 0.21 (0.41) | 0.19 (0.40) | 0.61 |
| Application in holiday period | 0.17 (0.38) | 0.24 (0.43) | 0.02 | 0.21 (0.41) | 0.20 (0.40) | 0.22 (0.41) | 0.92 |
| Sector: manufacturing and construction | 0.11 (0.31) | 0.09 (0.29) | 0.44 | 0.09 (0.29) | 0.10 (0.30) | 0.11 (0.32) | 0.65 |
| Sector: information and communication | 0.17 (0.38) | 0.17 (0.37) | 0.91 | 0.19 (0.39) | 0.16 (0.36) | 0.15 (0.35) | 0.42 |
| Sector: administration | 0.19 (0.39) | 0.15 (0.36) | 0.23 | 0.16 (0.37) | 0.20 (0.40) | 0.16 (0.36) | 0.36 |
| Sector: professional, scientific and technical activities | 0.32 (0.47) | 0.36 (0.48) | 0.20 | 0.35 (0.48) | 0.29 (0.46) | 0.37 (0.48) | 0.30 |
| Other sector | 0.22 (0.42) | 0.23 (0.42) | 0.79 | 0.22 (0.41) | 0.25 (0.43) | 0.22 (0.42) | 0.74 |
| N | 366 | 379 | | 372 | 187 | 186 | |

Notes: Means. Standard deviations in parentheses. Column 3 reports p-value for a t-test testing the null hypothesis that the means are equal for applicants with a majority-sounding name and a Turkish minority-sounding name. Column 7 reports p-value for an F-test testing the null hypothesis that the means are equal for applicants who do not provide any information about unemployment, for those who say they have been two months unemployed and for those who say they have been a year and a half unemployed.