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## How competence and trustworthiness inferences made by voters in the centre of Italy predicts the North Italian political elections: the impact of the city size

Come le inferenze di competenza e affidabilità espresse dagli elettori del Centro d'Italia predicono le elezioni politiche del Nord di Italia: l'effetto della dimensione della città

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### ABSTRACT

Many recent studies show that election outcomes correlate with judgments based on the first impression of a candidate's face. In our study, we showed the faces of 32 pairs of politicians from small and medium cities to 70 students, and we asked them to make judgments about competence and trustworthiness based on the candidates' faces. As an initial hypothesis, we wanted to test if competence and trustworthiness inferences based only on an image of political candidate's face, would have the same predictive power with reference to actual electoral outcomes. As a second hypothesis, we tested whether the predictive power of inferences based on candidate's face varies according to the size of the city of the actual elections. Results show that ratings of trustworthiness and competence based on facial appearance predicted the electoral outcomes for cities with more than 15.000 habitants, but that electoral outcomes of small cities were less correlated with such inferences, especially as far as trustworthiness is concerned.

**Keywords:** political candidates' faces; competence; trustworthiness; city size.

### RIASSUNTO

Molte recenti ricerche dimostrano come i risultati elettorali correlino con i giudizi basati sulle prime impressioni della faccia del candidato politico. Nel nostro studio abbiamo mostrato le facce di trentadue coppie di candidati politici di città piccole e medie a settanta studenti e abbiamo chiesto di dare dei giudizi di competenza e affidabilità alle facce dei politici. Come prima ipotesi, volevamo testare se le inferenze di competenza e affidabilità basate solo sull'immagine della faccia del candidato politico avessero simile o differente potere predittivo rispetto ai reali risultati elettorali. Come seconda ipotesi, abbiamo testato se il potere predittivo delle inferenze basate sulla faccia del politico variasse in base alla grandezza della città dove era avvenuta l'elezione. I risultati mostrano che i punteggi di affidabilità e competenza basati sui tratti facciali predicono i risultati elettorali per le città con più di 15.000 abitanti ma i risultati elettorali delle piccole città sono meno correlati con queste inferenze, soprattutto per quello che riguarda l'affidabilità.

**Parole chiave:** facce dei candidati politici; competenza; affidabilità; dimensione delle città.

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## Introduction

Because of the complexity of life, people use automatic information processing and a parsimonious way of thinking (Petty & Cacioppo 1986; Sloman, 1986; Kahneman & Frederick, 2002). In this vein, in the political domain, the use of thin-slice judgments is an efficient tool for comprehending the social world and for activating quick and automatic processes (Rule, Ambady & Hallett, 2009). In recent years, many different researchers have pointed out that automatic inferences based on political candidates' faces are predictive of actual electoral outcomes (e.g., Olivola & Todorov, 2010a; Ballew & Todorov, 2007; Todorov, Mandisodza, Goren, & Hall, 2005). Todorov et al., (2005) conducted the first study that discovered that participants used facial thin-slice of political candidates to make inferences about political candidate' competence. The participants were exposed to the faces of the candidates for one second, and their inferences predicted actual results of U.S. congressional elections. Indeed, the competence ratings based on facial appearances predicted nearly 70% percent of actual past elections.

Competence ratings inferred from faces are robust and predictive of electoral success across different countries (e.g Sussman et al., 2013), different cultures (Na et al., 2015) and ages (Antonakis & Dalgas, 2009). Antonakis and Dalgas (2009), for example, showed that judgments made from Swiss adults as well as children predicted the outcomes in French elections. In their second study, the researchers asked children, aged between 5-13, to choose from a pair of faces who would be the best captain to conduct a mission on a boat. The faces chosen with higher frequency as the best ones were faces of political candidates who had actually won the election in France.

Other than competence, other inferences based on facial appearances were studied relating with the electoral outcomes. For example, neither perceived sociability (Castelli et al., 2009) nor attractiveness were related to electoral outcomes (Mattes et al., 2010).

Only one study in the literature shows the effect of trustworthiness in male faces in voting behaviour (Little et al., 2012). In that study, the authors demonstrated that trustworthiness and attractiveness affect the election outcome depending on whether it was peacetime or wartime. The results suggest that attractive politicians, because they look healthier, are perceived as better leaders in wartime; meanwhile, trustworthy politicians, because they have more social traits, are perceived as better leader in peacetime.

Followers are likely to generally desire their leaders to act in the best interest of the group and not to pursue their own selfish goals while acting in a leadership capacity. An important aspect of a leader's effectiveness is related to the degree to which subordinates and coworkers trust them (Burke, Sims, Lazzara, & Salas, 2007).

Also citizens require that political candidates are trusted to adequately perform their job. Trust, then, is critical in judging candidate's leadership ability, and being perceived as trustworthy is very beneficial to political candidates.

For social and economic decisions in general, and for elections in specific, trustworthiness is an important characteristic. This is why ratings of trustworthiness based on facial appearances should also play an important role for evaluating political candidates and be predictive of actual electoral outcomes.

Neuroimaging studies have shown that evaluating someone as untrustworthy might be a spontaneous, automatic process linked to activity in the amygdala (Todorov, Baron, & Oosterhof, 2008; Winston, Strange, O'Doherty, & Dolan, 2002). To further support this notion, Adolphs, Tranel, & Damasio (1998) pointed out that patients with complete bilateral amygdala damage display impaired ability to discriminate between trustworthy and untrustworthy faces. The ability to assess someone's trustworthiness by a quick glance might be an evolutionary adaptive mechanism that was essential for human survival (e.g., Cosmides & Tooby, 1992).

In all of the above referred to studies, familiarity with the politician was controlled. These familiar stimuli are often evaluated more positively than unfamiliar ones (*mere exposure effect*, Zajonc, 1968). This is also true when we evaluate a person: familiar people as more likeable than unfamiliar ones (Moreland & Zajonc, 1982). Verosky and Todorov (2009) showed that familiarity with a face

leads to a positive evaluation of a similar face – if the association was positive in the first place. First, participants learned to associate faces with positive, neutral or negative behaviors. Afterward, they were presented with morphs combining the learned faces with novel ones. As a result, participants evaluated morphs of “positive” faces more positively than morphs of “negative” faces, showing that associating a new face with a familiar face is enough to evaluate the new face according to the familiar one.

On the whole, the above literature indicates that quick inferences of traits based only on persons’ faces have considerable impact on human decisions in several domains (Olivola, Funk, & Todorov, 2014). Unfortunately, recent research (Olivola, Funk & Todorov, 2014; Olivola, & Todorov, 2010b, study 2) shows that social attributions based on images of faces are rather inaccurate and that people are not aware of their degree of accuracy. In consideration of the potential bias introduced by inferences from faces in human decisions, research has started to investigate boundary conditions and moderators of the impact of such a bias, focusing, so far, on: a) specificity of traits for different decision domains, b) the characteristics of decision makers, and c) the conflicting impact of decision maker’s access to the relevant information.

Olivola et al. (2014) showed that different traits are considered more relevant for different decision domains: competence for political leadership, and masculinity, maturity, and low warmth for military leadership. Several studies in the political domain (Lenz, & Lawson, 2011; Olivola, & Todorov, 2010a) have indicated that voters of different political orientation (e.g., Democrats vs. Republicans), with varying degrees of political knowledge, differ in how strongly they are influenced by candidates’ facial appearances. Finally, both in the domain of financial investment (Rezlescu et al., 2012), and in the political domain (Mannetti, Brizi, Belanger, & Bufalari, 2016), it was assessed, with contrasting results, to what extent people discount facial appearances when they have access to other more relevant information, such as past behavior of partners in financial interactions or political parties that the candidates belong to.

Focusing on the political domain, to our knowledge, no one has investigated whether inferences made by research participants not belonging to the social community of the actual elections have the same predictive power independently from the dimension (number of inhabitants) of the city in which the actual election happens. In our view, this might represent an interesting boundary condition since one can reasonably assume that the smaller the city, greater is the voter’s access to firsthand information about the competing candidates, based on face-to-face interaction and word of mouth, which might significantly reduce the impact of facial appearances.

The present study aimed at assessing: a) whether in the Italian context competence and trustworthiness inferences based only on image of political candidate’s face have similar or different predictive power with reference to actual electoral outcomes, and b) whether the predictive power of inferences based on candidate’s face is moderated by the size of the city of the actual elections. First, we anticipated that inferences of competence and trustworthiness based on facial appearances of candidates would be equally predictive of electoral outcomes. Second, we anticipated that inferences of competence and trustworthiness based on facial appearances of candidates would be more predictive of actual electoral outcomes in big cities than in small cities.

## Method

*Participants.* Seventy students from “Sapienza,” University of Rome, seventeen male (24.3%) and fifty-three female (75.7%) participate in the study on voluntary basis. The mean age was 24.2 ( $SD = 3.34$ ). The students participating in the experiment were naïve to what the real purpose of the study was.

Participants were asked to rate the perceived competence and trustworthiness of politicians based on facial appearance. Specifically, we asked them to infer these characteristics after being exposed to 32 politicians’ couple pictures representing 64 real politicians of the Italian political

elections in May 2011 in northern Italy. We asked participants to select the more competent and the more trustworthy candidate out of each couple of pictures of faces and to predict the future election of these candidates. Participants ignored that actual election had already happened and who were the winners.

*Materials.* We selected 64 politicians' pictures of the Italian elections in May 15th and 16th and in May 29th and 30<sup>th</sup> (second ballot) 2011. We chose images that the politicians used for the political campaign and, specifically, we chose the winner and the loser and, when the winner had more than one opponent, we used the loser in the second ballot. The smaller cities were under 15.000 habitants while the bigger cities had more than 15.000.<sup>1</sup> We excluded major cities because their candidates' faces might have appeared on national TV programmes or newspapers and thus would be familiar to our participants in Rome and, to avoid familiarity effect, all cities were in the north of Italy. All pictures were standardized: head shot, a size of 104x147 pixels, b/w on a grey background setting. The pictures were at a distance of 6 cm. Each time, the participant could see two pictures: the winner and the loser. (Fig. 1, Fig. 2). Participants did not have any time restriction to answer (e.g. Na et al., 2015; Sussman et al., 2013).

**Fig. 1. An example of a pair of faces used in the experiment for big cities**



*Who do you think is more competent?*

**Fig. 2. An example of a pair of faces used in the experiment for small cities**



*Who do you think is more competent?*

*Procedures and Instruments.* We set the experiment on SuperLab software creating four versions. We counterbalanced the order of presentation for the cities (small cities first, big cities later vs. big cities first, small cities later) as well as for the winning or losing candidate. Participants completed one of the four versions. Participants were instructed that there are no correct or incorrect responses. For each couple of politicians, the participants were asked: “Who do you think is more competent?” and “Who do you think is more trustworthy?” Using a computer keyboard, participants indicated their selection by pressing A for the candidate on the left or L for the

<sup>1</sup> We selected the following small cities: Palmanova (UD), Villa Faraldi (IM), Castelnuovo Belbo (AT), Scurzolengo (AT), Caprauna (CN), Cibiana di Cadore (BL), Sovramonte (BL), Vigo di Cadore (BL), Ficarolo (RO), San Pietro di Morubio (VR), Gorno (BG), Castel Mella (BG), Carate Urio (CO), Grandola ed Uniti (CO), Cesana Brianza (LC), Cremona (LC). Mean of population: 2207.25, SD = 2684.87. We selected the following medium cities: Pordenone, Trieste, Rovigo, Abano Terme (PD), Cavarzere (VE), Chioggia (VE), Montebelluna (TV), Alpigiano (TO), Domodossola (VCO), Novara, Pinerolo (TO), Desio (MB), Gallarate (VA), Nerviano (MI), Rho (MI), San Giuliano Milanese (MI). Mean of population = 82.902, SD = 110941,26. All materials are available from the authors on request.

candidate on the right. Afterward, we asked them if they recognized any politicians during the experiment. No one recognized any of the politicians.

## Results

Data were analyzed both at the level of candidates and at the level of participants, as is common in this type of study.

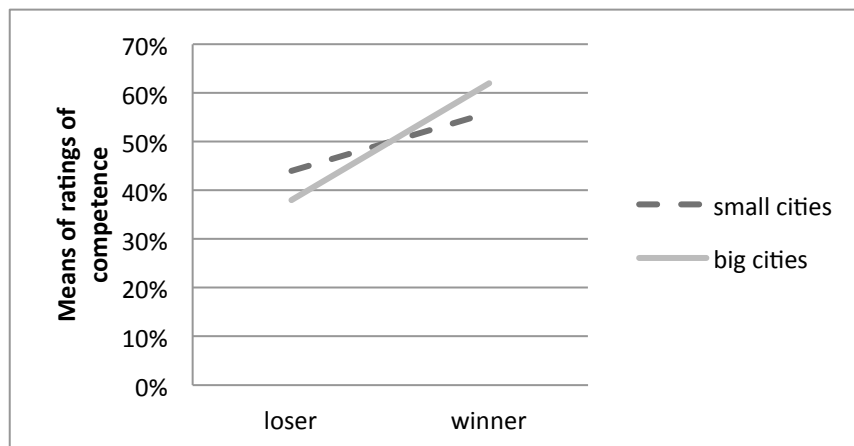
### *Analysis at Candidate Level*

In this analysis, we followed the procedure described by Willis and Todorov (2006) and used the candidate as the unit of analysis; in other words, we counted the number of participants that had chosen each of the 64 candidates as the most competent in a pair, and then divided this number by the number of participants, thus obtaining competence and trustworthiness ratings (a percentage) for each candidate. As suggested by Rosenthal (2005), we used Cronbach's alpha coefficient to estimate the reliability of the two ratings: competence Cronbach's  $\alpha = .94$ , trustworthiness Cronbach's  $\alpha = .89$ .

Then we ran 2 (Actual election outcome: winner vs. loser) x 2 (dimension of the city: small vs. big) Anovas on competence and trustworthiness ratings.

Results of the analysis for competence ratings showed that the only significant effect is that of the election outcome ( $F_{1,60} = 11,895$ ,  $p < .001$ ): the winners on average are selected 59% of times as the more competent, while the losers are selected only 41% of times. There is no significant effect of dimension of the city ( $F_{1,60} = .00$ ,  $p < 1.0$ ) nor of the interaction ( $F_{1,60} = 1,429$ ,  $p < .237$ ). However, as can be seen from Figure 3, the differences between the times the loser and the winner are selected as the more competent is larger in big cities than in small cities.

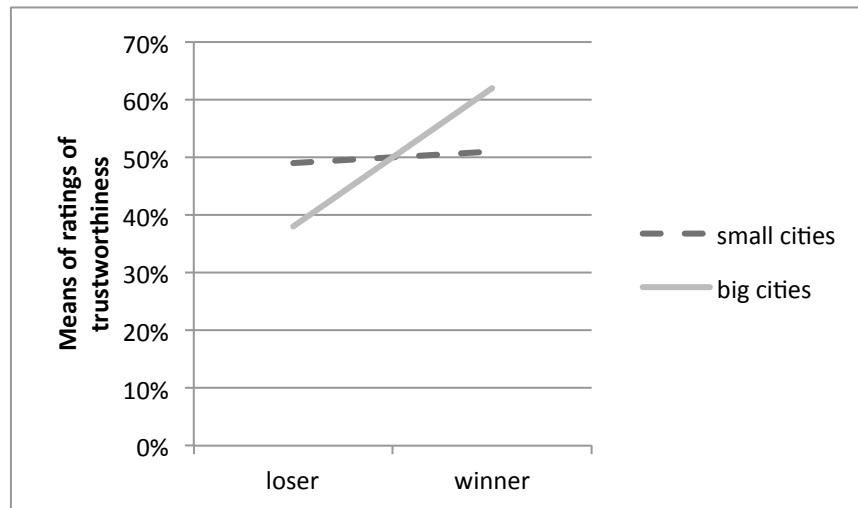
**Fig. 3. Means of ratings of competence as a function of election outcome and dimension of the city**



Results of the analysis for trustworthiness ratings show the significant effect of the election outcome ( $F_{1,60} = 8,031$ ,  $p < .006$ ): the winners on average are selected 56% of times as the more trustworthy, while the losers are selected only 44% of times. What is more interesting, however, is that also the dimension of city by election outcome interaction is significant ( $F_{1,60} = 4,804$ ,  $p < .05$ ) and qualifies the main effect of the election outcome.

As can be seen in Figure 4, trustworthiness ratings are not predictive of actual electoral outcomes in small cities (49% for the loser and 51% for the winner), while they are predictive of these results in big cities, where the winners are selected as the more trustworthy 62% of times and the loser 38% of times.

**Fig. 4. Means of ratings of trustworthiness as a function of election outcome and dimension of the city**



#### *Analysis at level of participants*

Data were analyzed also following the procedure described by Na, Kim, Oh, Choi, and O'Toole (2015). We counted the number of times that participants chose the election winner as the most competent and the most trustworthy candidate of the pair and calculated correct choice scores (range: 0-16). Each participant got 4 such scores: a correct choice for competence and for trustworthiness in small cities, and a correct choice for competence and for trustworthiness in big cities. All the 4 scores were transformed in percentages out of the total of the stimuli (16 couples in small cities, 16 couples in big cities).

Then we ran 2 repeated measure Anovas on the percentage of correct choices for competence and for trustworthiness in small and big cities.

From the repeated measure Anova for competence emerged that the percentage of correct choices was significantly ( $F_{1,69} = 8.487, p < .005$ ) higher when participants choose between candidates in big cities (62%) than in small cities (55%).

From the repeated measure Anova for trustworthiness emerged that the percentage of correct choices was significantly ( $F_{1,69} = 29,155, p < .000$ ) higher when participants choose between candidates in big cities (61%) than in small cities (52%).

#### **Discussion**

On the whole, the results of the study show that: a) trustworthiness inferences are not significantly predictive of electoral outcomes in small cities; and b) inferences of competence and trustworthiness are less predictive of actual electoral outcomes in small cities than in big cities.

These results are the first to suggest that the so far robust predictive power of inferences made on the basis of first impression of candidate's face cannot be generalized to election outcomes everywhere. The dimension of the city has its impact, and it is interesting that this impact is stronger for the dimension of trustworthiness. What present results suggest is that if judgments of trustworthiness contribute to the election of a candidate, then in small cities, these judgments are not based on impression of faces. In small cities, voters are likely to have firsthand information about how trustworthy a candidate is; they can rely on the reputation of a candidate and of his/her family, and

they may even remember previous events and gossip. All of this information can attenuate and make irrelevant spontaneous inferences based on faces only. Further studies should directly test the above tentative explanations, both by means of field studies with actual voters as participants and in laboratory studies in which candidate's face would be presented along with other reliable information concerning the candidate.

At the same time, these results show that, at least in the Italian cities with an average population of about 83.000 inhabitants, trustworthiness inferences made by participants who have no other information on candidates can reliably predict actual electoral outcomes. These suggest that in the Italian contemporary political context, citizens vote for candidates who appear to be trustworthy and when, as in big cities, they do not have better information, they base their judgments on a candidate's face. These results deserve careful attention by political parties in the selection of candidates, on one side, and by citizens at the moment when they are voting: to what extent are they taking into account the political project of the candidate more than his/her appearance?

Future studies should investigate whether there exist other boundary conditions that can reduce predictive power of inferences based on faces. For example, using reliable exit poll, it might be interesting to assess whether the vote of more politically informed citizens correlates to inferences based on faces as much as the vote of less informed ones.

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