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Pretty Faces, Marginal Races: Predicting Election Outcomes using Trait Assessments of British Parliamentary Candidates

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Abstract

The conventional wisdom on Western European politics leads us to believe that all the "action" lies with parties, because the unified parliamentary delegations in Western Europe draw voters' attention to parties' policies and images. Though British elections take place under a single member district plurality system, British parties, like their continental counterparts, are highly centralised and feature disciplined parliamentary delegations. Despite the strong ties between British candidates and their parties, we demonstrate that perceptions of candidates' personal attributes can be used to predict general election outcomes. Using a computer-based survey where subjects are asked to evaluate real British candidates using only rapidly determined first impressions of facial images, we successfully predict outcomes from the 2010 general election. Moreover, we find that perceptions of candidates' relative attractiveness are particularly useful for predicting outcomes in marginal constituencies.

1.0 Introduction

Studies on parties' election strategies in the US frequently focus on candidates and geo-graphically-based districts (e.g., Ansolabehere et al., 2001; Burden, 2004; Stone and Simas, 2011). In contrast, applications to Western Europe have focused almost exclusively on the parties' actions (e.g., Adams et al., 2005; Somer-Topcu, 2009, Clark and Leiter, forthcoming). The reason for this discrepancy is that the conventional wisdom on Western European politics leads us to believe that all the "action" lies with parties, because the unified parliamentary delegations in Western Europe draw voters' attention to parties' national images. Though British elections take place under a single member district plurality system, British parties, like their continental counterparts, are highly centralised and feature disciplined parliamentary delegations. Thus, the policies and images of leaders and party elites are often given priority over those of the individual candidates.

However, the prominence of party in the British system may be weakening. For example, there is evidence that voters may be relying less on partisanship as a means to determine their vote choice. Numerous studies document a significant partisan dealignment in the British electorate (Sárlvik and Crewe, 1983; Denver, 2003; Dalton, 2008; Clarke et al., 2009). Moreover, the correlation between voters' policy positions and their party support has declined (Sanders 1999; Evans and Tilly, 2011; Milazzo et al., 2012), suggesting that voters' policy beliefs exert weaker effects on their party attachments. As the ties between voters and parties' policy positions weaken, scholars of British politics increasingly point to the role of non-policy characteristics, such as competence or experience, in the electoral process (e.g., Clarke et al., 2004, 2009; Green and Hobolt, 2008; Clark, 2009). While much of the literature stresses the non-policy traits of parties, there is also an emerging literature focusing on the non-policy traits of British *candidates* (e.g., Johns and Shephard, 2007, 2011; Banducci et al., 2008; Buttice and Milazzo, 2011).

Using a computer-based survey where subjects were asked to evaluate real British candidates from the 2010 general election using only rapidly determined first impressions of facial im-

ages (e.g., Todorov, 2005; Ballew and Todorov, 2007), we demonstrate a relationship between perceptions of candidates' traits and electoral outcomes in Britain. Moreover, we provide evidence that the nature of this relationship is contingent on electoral marginality. We find that citizens' perceptions of candidates' relative attractiveness are particularly useful for predicting electoral outcomes in marginal seats. Using only subjects' perceptions of candidates' relative attractiveness, we predict the general election outcomes in 72 per cent of the marginal constituencies included in our sample, while perceptions of competence correctly predict 67 per cent of the outcomes in safe seats. We then merge our results with those from the British Election Study (BES), and find that we are still able to predict election outcomes after we control for the effects of partisanship.

While our study is the first study to connect rapidly-determined perceptions of candidate traits to general electoral outcomes in Great Britain, our findings are consistent with a growing literature documenting a relationship between perceptions of candidate traits and voting behaviour in candidate-centric systems such as Brazil (Lawson et al., 2010), Finland (Berggren, Jordahl, and Poutvaara 2010), Ireland (Buckleye et al., 2007), and the United States (e.g., Todorov et al. 2005; Benjamin and Shapiro, 2009; Hayes, 2010), as well as an increasing number of more party-centred systems, including Australia (King and Leigh, 2009), Canada (Efron and Patterson, 1974), France (Antonakis and Dalgas, 2009), Germany (Rosar et al., 2008), Great Britain (e.g., Johns and Shephard, 2007, 2011; Banducci et al., 2008), and Switzerland (Lutz, 2009).

2.0 British Candidates' Physical Attributes as a Non-Policy Heuristic

To evaluate parties based on issues, voters must possess issue preferences, and be able to perceive policy differences between parties (Campbell et al., 1960; Butler and Stokes, 1974). The ability of British voters to differentiate between parties based on policy has been hindered by the significant party policy convergence characterising the post-Thatcher period, a finding that is supported by an empirical literature documenting declines in the relationship of left-right atti-

tudes on British vote choices and on partisanship (Sanders, 1999; Green and Hobolt, 2008; Evans and Tilly, 2011; Milazzo et al., 2012). Scholars also note a parallel depolarisation in British citizens' partisan loyalties (Heath, 1991; Whiteley and Seyd, 2002; Clarke et al., 2009). Taken together, this work suggests that British voters may be relying less on traditional heuristics, such as party identification and parties' policy positions, to adjudicate between their political choices.

At the same time, citizens must be able to differentiate between parties (or candidates) on some dimension. Thus, British politics scholars increasingly point to the role of non-policy characteristics of British parties (e.g., Clarke et al., 2004, 2009; Green and Hobolt, 2008) and candidates (e.g., Johns and Shephard, 2007, 2011; Banducci et al., 2008; Buttice and Milazzo, 2011) in determining citizens' electoral choices. With respect to candidates, citizens appear to value the constituency services that MPs provide (e.g., Cain et al., 1987, Wood and Norton, 1992; Heitshusen et al., 2005), and experienced candidates possess knowledge and connections that enhance their ability to provide these services. Similarly, candidates with constituency connections may be more attractive to voters (Ranney, 1965; Rush, 1969; Denver, 1988). As a result, local party organisations frequently stress candidates' non-policy attributes in campaign leaflets.[1]

While perceptions of candidates' traits may not constitute an informed means of determining vote choice, perceptions are a particularly accessible heuristic because individuals frequently use stereotype assessments of physical and/or character traits to evaluate the people they encounter in their daily lives (Zebrowitz et al, 1996; Hassin and Trope, 2000; Haxby, Hoffman, and Gobbini, 2000; Bar, Maital, and Linz, 2006). These "first-impression" judgements help individuals determine who they consider competent or trustworthy. The research from political science is consistent with other social and behavioural science research, which finds that rapid evaluations of faces influence social decisions (e.g., Ambady and Rosenthal, 1993; Hamermesh and Biddle, 1994; Blair, Judd, and Chapleau, 2004; Olson and Marshuetz, 2005). "Snap" judgements

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[1] In addition to leaflets, parties also increasingly rely on candidate websites. Prior to the 2010 general election, approximately two-thirds of the candidates from the major parties had personal websites (Wring and Ward, 2010).

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about strangers are accurate predictors of both teacher evaluations (Ambady and Rosenthal, 1993) and election outcomes (Todorov et al., 2005); moreover, they are resistant to change (e.g., Redlawsk, 2002). In sum, scholarly research has uncovered ample evidence validating folk wisdom about the longevity and importance of first impressions.

Several recent studies link real world election results with the reflexive "first-impression" judgements of research participants in the laboratory. Participants' trait judgements, though based only on unlabelled head shots of unfamiliar candidates, nevertheless predict the real election winners (e.g., Todorov et al., 2005; Antoniakis and Dalgas, 2009; Berggren et al., 2010). Moreover, participants' exposure to the candidates' pictures need not be prolonged – election winners can be predicted from participants' trait judgements with as little as 33 milliseconds of exposure time. Indeed, such judgements appear to predict election winners with a remarkable degree of accuracy. In US Congress and gubernatorial elections, candidates judged more competent in the laboratory were real election winners about 70 per cent of the time (Todorov et al., 2005; Ballew and Todorov, 2007), and candidates judged more personally threatening were election losers about 65 per cent of the time (Spezio et al., 2008; Mattes et al., 2010).

2.1 Electoral Marginality and Perceptions of British Candidates' Attributes

If perceptions of candidates' non-policy traits factor into British voters' decision-making processes, then these perceptions may be particularly useful for predicting electoral outcomes in marginal constituencies – i.e., constituencies where minor shifts in support may alter the outcome. We present several alternative explanations for this below.

First, voters with weak party attachments may be more likely to alter the outcome of the election in marginal constituencies. Johns and Shephard (2011) find that candidate images on ballot photographs have the greatest impact on subjects who are not interested in politics. Given that such voters are also likely to have weaker party attachments, they may be less likely to concern themselves with policy differences, or with more sophisticated non-policy heuristics, such as

political experience or local connections.[2] If the group of voters relying on candidates' physical attributes as a heuristic is large enough to alter the outcome of the election, then the correlation between assessments of candidates' physical attributes and electoral outcomes will be particularly strong in marginal constituencies.[3]

Second, there may be fewer ways for voters to differentiate between candidates in marginal constituencies because local parties have an incentive to be more responsive to citizens' policy and non-policy preferences in order to attract the support of undecided voters. Buttice and Milazzo (2011) find that there is less policy contrast between British candidates in marginal constituencies – i.e., candidates appear more similar on policy dimensions. Similarly, local parties in marginal constituencies have a strong incentive to select high-quality candidates, such as those with experience and/or local connections, to attract the voters' support. If all parties behave in this manner, it will be more difficult for voters to differentiate between parties on these dimensions. Thus, candidates' physical attributes may be one of the few heuristics left to voters if candidates are similar in terms of both policy and experience.

Third, British voters may be more likely to come into contact with candidates' images in marginal constituencies. Local campaigns expose citizens to candidates' images via campaign

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[2] Using the 2010 British Election Study, we can verify that citizens who report a lack of engagement are also less likely to be attached to a party. Of the 2,071 respondents who report that they followed the campaign "very closely" or "fairly closely," 65 per cent reported that they felt "close" to a political party. By contrast, of the 711 respondents who reported they followed the campaign "not very closely" or "not closely at all," only 28 per cent indicated that they felt close to a political party.

[3] We are not suggesting that there are more voters with weak party attachment in marginal seats. In fact, a cursory evaluation of the 2010 BES data indicates that there are no significant differences between the strength of party ties in marginal vs. safe seats. We simply suggest that because the race is decided by fewer votes in a marginal seat, individuals with weak party attachments may more be important in deciding the outcome of the race.

materials such as leaflets and personal websites.[4] Previous studies suggest that the presence of photographs on ballots, posters, and other campaign materials may cause voters to rely more heavily on perceptions of physical attributes, such as attractiveness (King and Leigh, 2007; Banducci et al., 2009; Rosar et al., 2009; Johns and Shephard, 2011). Because British parties devote disproportional resources and attention to marginal constituencies (e.g., Pattie et al., 1995; Denver et al., 2004), citizens in marginal constituencies tend to receive more leaflets, which increases their exposure to the candidates' images.[5] While existing data preclude us from determining whether marginal voters actually pay attention to the campaign leaflets they receive, we do know that citizens in marginal seats follow the campaign more closely than their counterparts in safe seats. BES respondents were asked, "How closely did you follow the election campaign?" On a scale from 0 "not closely at all" to 3 "very closely", the average response for respondents in marginal seats was 2.06, compared with 1.87 for respondents in safe seats.[6] The fact that these citizens follow the campaign more closely provides tentative evidence that they may be more likely to be attentive to the materials they receive from parties. If voters in marginal constituencies are a) more likely to be attentive to the campaign, and b) are more likely to receive campaign materials, then they may be more likely to use this information when determining their vote choice.

Finally, there is reason to expect that perceptions of candidate traits may have played a particularly important role in predicting electoral outcomes for the 2010 general election. The

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[4] Baxter et al. (2011) report that both the Liberal Democrats and the SNP made candidates' photographs available for all of their Scottish candidates. Labour's website omitted only one Scottish candidate's photograph. However, missing images were more common for the Conservatives, who are a minor political party in Scotland; only 64 per cent of their candidates' photos were available on the party's website.

[5] Indeed, 48 per cent of 2010 BES respondents from marginal constituencies (where the margin of victory was less than 5 per cent) report being contacted by a party prior to the 2010 election, compared with only 33 per cent of respondents in safe constituencies. The difference in contact is statistically significant at $p < 0.01$.

[6] The difference between the groups is statistically significant at $p < 0.01$.

2009 expenses scandal implicated MPs from all the major parties, and as a result, an unusually large number of MPs opted to retire prior to the election – roughly one quarter of the MPs in the House of Commons (Criddle, 2010).[7] The resignations meant that more voters were faced with open races – i.e., races where there was no incumbent to contest the constituency. Incumbents tend to be a "known" quantity, meaning that citizens need only become informed about the primary challenger(s).[8] Thus, the absence of an incumbent increases a voter's informational burden. Given that many citizens are unwilling to pay the costs of becoming informed (Downs, 1957), the presence of more open races may have resulted in an unusually large number of individuals relying on unsophisticated heuristics, such as perceptions of candidates' attributes, to adjudicate between their political choices.

We limit our analyses to two traits that play a prominent role in the literature to date: attractiveness and competence. Perceptions of physical attractiveness have been shown to increase electoral success cross-nationally (e.g., Sigelman et al., 1987; King and Leigh, 2007; Rosar et al., 2008; Lutz, 2010).[9] These findings coincide with those from social psychologists, which indicate that physically attractive individuals tend to be evaluated more positively and are more successful professionally (Marlowe et al. 1996; Haas and Gregory 2005). With respect to British politics, empirical findings are mixed, and appear to depend on the electoral context. For example, Shephard and Johns (2011) find that the advantage of attractiveness is limited to mixed-gender

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[7] The scandal began when the *Daily Telegraph* published a list of expense claims made by members of Parliament. Later followed by additional coverage from *News of the World*, the stories highlighted severe cases of abuse of the allowances and expenses claimed by MPs. More than 40 per cent of the MPs implicated by the two news outlets chose to resign, compared with only 22 per cent of MPs who were not implicated (Pattie and Johnson, 2012).

[8] In fact, voters' willingness to become informed about the challenger should be a function of the expected marginality of the race. That is, as the safety of the constituency increases, voters should be less concerned with the identity of the challenger, because there is decreasing uncertainty surrounding the outcome.

[9] Moreover, Berggren et al. (2010) find that attractiveness explains electoral success better than personality evaluations such as competence, intelligence, likability, or trustworthiness.

races. However, physical attractiveness may play a stronger role in elections that are less salient to voters. For instance, Banducci et al. (2009) demonstrate that attractiveness is a strong predictor of electoral success in the New Deal for Communities partnership board elections, even when controlling for perceptions of personality traits, such as trustworthiness, leadership, and competence.

Perceptions of competence or leadership arguably constitute a more informed basis for political decision-making than attractiveness, as the former relate to the candidate's "quality" – i.e., the candidate's ability to provide competent representation. Todorov et al. (2005) demonstrate that perceptions of candidates' competence predict the outcomes of US congressional elections, even when these perceptions are based on only a brief exposure to the appearance of the candidates. Moreover, Atkinson et al. (2009) find that for US Senate candidates running in more competitive districts, a "more competent" candidate face increases support among independent voters.

3.0 Assessing the Effect of British Candidates' Traits

To assess the relationstip between candidates' traits and electoral outcomes, we conducted a computer-based study, where subjects were asked to evaluate real British candidates using only rapidly-determined first impressions of facial images.

3.1 Stimuli

Stimuli were 110x150 pixel black-and-white images of real candidates who ran in the 2010 general election. A total of 150 images were used, paired according to actual electoral races in which they ran against each other.[10] Subjects were shown two candidate images for each elec-

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[10] The actual survey comprised of a total of 200 images, with each subject (to avoid subject fatigue) judging only 33 or 34 candidate pairs. However, for this this paper, we limit our analysis to the 75 elections in which candidates were of the same gender and ethnicity.

tion: the winner and one opponent, who was always the second place candidate.[11] In gathering

the pictures, we were concerned that certain candidates (e.g., incumbent MPs or candidates from

a specific party) would have had better resources and hence taken better photos, causing subjects

to choose by photo quality rather than judge by candidate appearance. So, we carefully selected

matched candidate pairs to minimise the photographs' differences across several dimensions.

Specifically, we required that, to be included in our study, both candidate images in the pair: (a)

were frontal facing; (b) had approximately central presentation of the candidate; (c) had faces of

approximately the same size; (d) were at least 110x150 pixels; (e) were of similar resolution; and

(f) were smiling. Because the representation of faces is viewpoint dependent (Desimone et al.

1984; Lee and Wilson 2006) and affects the viewer's level of perceived threat (Straube et al.

2009), we viewed the frontal-facing criterion as especially important. When necessary, we

cropped and resized the photographs in order to meet criteria (b)-(d). To avoid distracting sub-

jects, we manipulated the backgrounds in the photographs to have a uniform, neutral colour.

Figure 1 displays a sample pair of photos. We considered every constituency that was a

battleground between the Conservatives, Labour, and/or the Liberal Democrats, and for which

pictures were available via the candidates' or parties' website. Given that we are particularly in-

terested in the effect of traits in marginal constituencies, we oversampled these constituencies; 30

per cent of the constituencies included were decided by a margin of less than 5 per cent. Howev-

er, our sample is representative on a number of other dimensions, including the location of the

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[11] Johnston and Pattie (2011) demonstrate that even though Great Britain is classified as a three-
party system nationally, the majority of constituency races are two-party contests (i.e., Labour vs.
Conservative, Conservative vs. Liberal Democrat, or Labour vs. Liberal Democrat). While three-
way marginal seats – seats where votes are divided relatively evenly across the candidates of
three parties – do exist, an investigation of election results from 2010 indicates that they are, in
fact, quite rare. Of the 86 seats with a margin of victory of less than 5 per cent, there were only
13 seats where the third place candidate was within 10 percentage points of the second place can-
didate. Therefore, only 15 per cent of marginal seats (and 2 per cent of the total seats) can actual-
ly be viewed as legitimate three-way marginals.

constituencies and the party of the election winner; 53 per cent of the real election winners were

members of the Conservative party, 38 per cent were from Labour, and 9 per cent were from the

Liberal Democrats. Full results of the representativeness checks are presented in the appendix.[12]

[Figure 1 here]

3.2 Procedure

Stimuli were presented on an LCD monitor in a computer laboratory using DirectRT

software. The participants in our study were first given an instruction screen that explained the

task and stressed the importance of taking sufficient time to make accurate decisions. Partici-

pants were asked to make binary judgements about the candidate images – for two traits (attrac-

tiveness and competence) and for which candidate they would be more likely to vote.[13] We fol-

lowed the TED protocol (Kim et al., 2007), which shows the candidate pictures one at a time ra-

ther than contemporaneously, thus forcing an encoding of the face into working memory for the

comparison. They were shown each of a pair of pictures for 75ms each, alternating, with an in-

ter-image interval of one second. Research participants indicated their choice – which of the two

images better fit the trait being judged – by pressing the appropriate key. Image pairs continued

repeating for up to sixty seconds, and the next image pair was not shown until the subject had

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[12] To determine the representativeness of our sample of constituencies, we conducted a series of
difference of means tests using a number of variables related to constituency-level characteristics,
candidate demographics, and location to determine whether our sample differed from those con-
stituencies that were not included. We first compared the constituencies included in our study to
those that were omitted. We then compared our pool of marginal constituencies to the marginal
that were not included. The results (presented in the appendix) indicate that in both cases our
sample is broadly similar to the constituencies omitted from our study.

[13] Wording of the tasks read as follows: For competence, subjects were told "Your task is to de-
cide which candidate seems more competent to hold political office." The attractiveness prompt
read, "Your task is to decide which candidate seems more attractive to you. Finally, for vote
choice, subjects were told that, "Your task is to choose which candidate you would be more likely
to vote for."

chosen a picture from the previous pair. Participants were asked to judge every image pair on one question at a time before moving on to the next assessment block; the order of the pairs and the order of the two pictures comprising each pair were counterbalanced among participants. The assessment blocks for competence and attractiveness were counterbalanced and asked prior to the vote choice question.

3.3 Participants

All procedures were carried out at [reference removed] University in November 2010. Participants (N = 153) were paid undergraduates attending [reference removed] University (88 female, 65 male, age (M ± SD): 20.3 ± 3.5 years).

We used US participants partially because of convenience, but also to mitigate the potential effects of familiarity and/or partisanship. Since it is unlikely that participants recognized the candidates, let alone identified them with a particular political party, it allows us to better isolate the predictive effect of the trait assessments. Put differently, using US subjects allows us to acquire trait assessments that are unbiased by partisanship.[14] Furthermore, even though notions of attractiveness and competence may vary across cultures, several recent studies demonstrate a cross-cultural relationship between candidate appearance and election outcomes by using subjects from one country to evaluate the candidates of another. For example, Lawson et al. (2010) use American and Indian participants to rate both Mexican and Brazilian candidates; Antoniakis and Dalgas (2009) use Swiss children to evaluate French candidates; Rule et al. (2010) have Japanese

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[14] The participants received no information about the candidates other than the photographs, so they had no knowledge of which two parties' candidates were being shown. We also excluded high-profile candidates from our sample. At the conclusion of the experiment we asked subjects if they recognized any of the candidates, and none were able to identify any specific candidate. Also, we tested whether Republicans were more likely to choose Conservative candidates, and similarly for Democrats choosing Labor candidates; we found no significant differences.

subjects rating American candidates and vice versa; and Berggren et al. (2010) ask subjects from a number of countries to rate Finnish candidates.

4.0 Predicting Election Outcomes Using Trait Judgements

Preliminary analysis of the data indicates that a) participants appeared to make meaningful (i.e., distinct) judgements, and b) that they did not tend to choose candidates at random. To confirm that participants made meaningful judgements, we checked the correlation between judgements on the traits.[15] The correlation between judgements of attractiveness and competence was 0.15. Looking at correlations between vote choice and two traits, we find that vote choice is correlated more with competence (0.32), than with attractiveness (.27).[16] With respect to the distribution of selection across parties, we compared the rate of picture occurrence with the rate of laboratory choices; if candidate traits have no effect on election outcomes, we would expect that subjects would choose candidates' pictures at random, such that the distribution of their choices across parties would mirror the party ratio in the data set. Overall, 19 per cent of the candidates in the sample were Liberal Democrats, 40 per cent were from Labour, and 41 per cent were Conservatives. Table 1 presents our subjects' candidate choices, by political party, for each of the three decisions. Despite the fact that Conservative and Labour candidates occur as stimuli with equal frequency, subjects were more likely to choose the Conservative candidate for every judgement.

[Table 1 here]

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[15] We report Pearson's phi coefficient; as all of these are associations between two binary variables, this statistic is equivalent to Pearson's correlation coefficient.

[16] All correlations are significant with $p < 0.01$, including after Bonferroni correction. In supplementary analyses, we confirm this relationship using multivariate models. These analyses (not presented here) demonstrate that laboratory vote choice is a nearly equal combination of attractiveness and competence judgments.

As the last column of Table 1 shows, all of the judgments had selection rates significantly different from the pictures' occurrence rate. Of the three judgements, the largest differential between the rate of selection and the rate of occurrence was with attractiveness judgements. Conservative candidates were rated as more attractive 50 per cent of the time, but consisted of only 41 per cent of the total candidate pictures. Because the Conservatives won 53 per cent of the real-world elections in our sample, our laboratory choices more closely resemble the electoral outcomes than the distribution of pictures in the study. In our sample of constituencies, Labour and Lib Dem candidates were real election winners 38 per cent and 9 per cent of the time, respectively. Labour candidates comprised 40 per cent of the pictures, but they were rated the more attractive candidate 33 per cent of the time, while subjects chose Liberal Democrats 17 per cent of the time, which was slightly less often than the 19 per cent occurrence of Liberal Democrat pictures. Therefore, even though the differences are more muted for Labour and the Liberal Democrats, the subjects' choice percentages continue to deviate in the direction of the real election winner in the sample.

4.1 Election Outcomes and Majority Group Judgements

Next, we investigated whether subjects' judgements from the candidates' faces had any direct relationship to outcomes of the corresponding elections in which the candidates participated. First, we made election predictions by using the majority group judgement of the subjects – that is, we aggregated the subjects' choices for each of the three questions (attractiveness, competence, and laboratory vote). Then for each judgement, we compared the candidate chosen by the majority of subjects in the laboratory to the actual general election winner. For example, if a candidate was chosen by 65% of subjects as being the more attractive candidate in a given pair, and that same candidate was in fact the real election winner, then we counted this as a correct

election prediction.[17] All of the predictions were tested using a two-tailed binomial test against the null hypothesis of random choice (i.e., predicting 50 per cent of the elections).

The predictions for majority group judgments are presented in Table 2. With respect to all constituencies, laboratory vote performed the most consistently, predicting 63 per cent of the 75 elections.[18] However, for the other two traits, the accuracy of the predictions depended on electoral marginality.[19] In the most marginal constituencies (those with a margin of victory of less than 5 per cent), attractiveness was the best predictor. In total, we can predict the outcomes of 72 per cent of the elections in the most marginal constituencies simply by aggregating US subjects' laboratory judgements about the candidates' attractiveness.[20] This suggests that attractive British candidates have a significant advantage in close elections. Competence was, however, a

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[17] The aggregate laboratory vote choice correlated highly with both aggregate attractiveness (0.60, p<0.001) and aggregate competence (0.58, p<0.001), though majority group competence and attractiveness were not significantly correlated (0.25, p<0.169).

[18] Aggregate judgements of laboratory vote correctly predict 47 of 75 races in our sample. Marginality is operationalised using the difference between the percentages of votes received by the first and second place candidates in the 2010 election. While the conventional standard is to use marginality from the previous election, we opt to use marginality in the current election for two reasons. First, the unusually high number of resignations due to the expenses scandal meant that a large number of constituencies were unexpectedly up for grabs in 2010 – i.e., there was no incumbent contesting the seat. Second, there were significant boundary revisions prior to the 2010 election. Johnston and Pattie (2013) argue that "that in many places the local competitive situation was different from that experienced at the last contest" (295), which suggests that voters would not have been able to use the previous elections results to predict marginality in 2010 (see also Denver 2010). Therefore, we opt to measure marginality using 2010 election results on the assumption that parties would have determined the unexpected "marginals", and targeted them accordingly. In turn, this would have signaled to voters that they were residing in a marginal seat, even if their constituency was not marginal in the previous election.

[20] Perceptions of attractiveness correctly predicted the outcome in 18 of the 25 marginal seats.

stronger predictor of outcomes in safe constituencies; of these, we were able to predict 67 per

cent of the election winners using the majority judgement of relative competence.[21]

[Table 2 here]

Table 3 presents the results of logistic regression models, where the dependent variable –

the real election winner – is modelled as a function of the majority group attractiveness and com-

petence judgements (columns 1-4). Note that a positive coefficient indicates that the majority

judgement is more likely to predict the real election winner, while a negative coefficient means

the judgement is more likely to predict the election loser. In addition to the majority judgements,

we also control for the gender make-up of the race (i.e., female-only contest vs. male-only con-

test), and the age difference between the candidates.[22]

The baseline model, presented in column 1 of Table 3, demonstrates that candidates

judged as more attractive by a majority of respondents are more likely to be election winners, and

competence judgements at this point appear to have no effect.[23] However, Table 2 suggests that

the marginality of the race may, in part, determine whether attractiveness or competence judge-

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[21] Perceptions of competence correctly predicted the outcome in 34 of the 50 safe seats.

[22] One might assume that age serves as a cue for both attractiveness and competence – i.e., sub-
jects view older candidates as being more competent, and judge younger candidates to be more
attractive. Our data supports this idea with respect to attractiveness judgments. The average age
of candidates who were deemed more attractive by the majority of respondents was 44 years,
compared with 50 years for the candidates who were not chosen as more attractive (the difference
is statistically significant at $p < 0.01$). There are no meaningful differences with respect to com-
petence. The average age for candidates deemed more competent was 46 years versus 49 years
for candidates not perceived as being more competent ($p > 0.05$). In addition, there do not appear
to be significant differences in the ages of candidates contesting marginal and safe seats. In safe
seats, the first place candidate tended to be older (approximately 3 years). In marginal seats, the
second place candidate was, on average 2 years older than the election winner, though the differ-
ences do not reach traditional levels of statistical significance ($p > 0.05$).

[23] We hesitate to conclude that competence judgements have no effect on electoral outcomes.
Rather, the null result with respect to competence may be due to the fact that our sample over-
represents marginal constituencies.

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ments predict electoral outcomes. Therefore, in the remaining models, we interact the margin of victory with the aggregate attractiveness and competence judgements.[24] The coefficient estimate associated with the interaction between marginality and attractiveness will be negative if the effect of attractiveness diminishes as the constituency becomes safer. In contrast, if the effect of competence is stronger in safer seats, then the coefficient estimate associated with the interaction between marginality and competence will be positive.

Columns 2-4 in Table 3 display the results of the interactive models.[25] With respect to attractiveness judgements (column 2), the coefficient estimate associated with the main effect (i.e., the effect of attractiveness when the margin of victory is equal to zero) is positive and statistically significant, indicating that in close elections, candidates judged as more attractive in the laboratory were more likely to be real election winners. However, the coefficient associated with the interaction between attractiveness and the margin of victory is negative and not significant, which suggests that attractiveness has no effect in safer seats. The reverse is true for perceptions of competence (column 3). The competence-only model shows that the main effect of competence is negative and statistically significant, but that the interaction between competence and the margin of victory is positive and significant, indicating that candidates judged as being more competent were less likely to be election winners in marginal constituencies, but more likely to be elec-

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[24] We also add a variable for the margin of victory; negative coefficients simply mean that the model is better at predicting the winner in closer elections.

[25] The r-squared coefficients of the majority choice models range from 0.07 to 0.28, indicating that candidate traits and marginality explain a relatively small portion of the variance in the dependent variable. This is to be expected, though one might argue that the coefficients are actually quite high considering that we are attempting to predict election outcomes using very limited candidate information (only first-impression judgements of candidate photos) and essentially no party-specific information. Moreover, there are many other (more important) factors that affect voting outcomes (e.g., national swings in party support or changes in the local distribution of party support).

tion winners in safe seats (i.e., when the victory margin becomes large enough, the net effect of the competence and interaction terms will become positive).

[Table 3 here]

Finally, we estimate a full model where we include both judgements (column 4), as well as the interactions with the margin of victory. The effects of the judgements are stronger, but the direction of the effects remains unchanged. Figure 2(a) illustrates the effect of each majority group judgement graphically. The solid black line represents the predicted probability of selecting the winning candidate at varying levels of electoral marginality, while the dashed line represents the effect of perceptions of competence. The predicted values indicate that attractive candidates were considerably more likely than competent candidates to be election winners in marginal seats, while the reverse is true in safe seats. The overlap between the two effects occurs when the margin of victory approaches 10 per cent.[26]

[Figure 2 here]

4.2 Election Outcomes and Individual Judgements

Our next set of analyses uses individual associations – that is, the frequency with which individual choices match the election outcomes.[27] The percentage of subjects in all constituencies, marginal constituencies, and safe constituencies that chose the overall election winner given their three judgements (attractiveness, competence, and vote choice) is presented in Table 2.[28] Though the effects are more muted, all of the percentages differ significantly from random choice. The largest difference between the accuracy of predictions relates to candidate pairs that competed in the most marginal constituencies, where a subject's attractiveness and competence

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[26] These findings remain unchanged when we control for aggregate vote choice.

[27] We use each subject judgement of a candidate pair as a separate observation, yielding N=3788 observations per judgement.

[28] All of the predictions were tested against the null hypothesis of random choice.

judgements predicted the real election winner 58 per cent and 46 per cent of the time, respectively. In safe constituencies, predictions from both judgements were equally accurate.

Using the individual choices, we model a subject's likelihood of selecting the winning candidate as a function of their relative evaluations of the candidates.[29] The results, presented in columns 5-8 of Table 3, support the findings of the majority group judgement analyses.[30] Once again, a positive coefficient indicates that the trait judgement is more likely to predict the real election winner. When we do not take into account electoral marginality (column 5), attractiveness judgements tend to be a stronger predictor of election winners. However, individual trait models (columns 6 and 7) indicate that the likelihood the trait successfully predicts the election winner is, once again, contingent on the marginality of the constituency. In the attractiveness-only model, the coefficient associated with the main effect of attractiveness judgements is positive and statistically significant, indicating that candidates who were perceived to be attractive were more likely to be winners in marginal seats. However, the interaction between the attractiveness and the margin of victory indicates that perceived attractiveness has no effect as the margin of victory increases. The reverse is true for the competence-only model. The main effect of competence is negative, and the interaction between competence and the margin of victory is positive, indicating that candidates judged as being more competent were less likely to be election winners in marginal constituencies, but more likely to be election winners in safe seats.

The effects of competence and attractiveness remained unchanged in the full model (column 8).[31] Using the estimates in the full model, we calculate the probability that a respondent will correctly predict the winner at varying levels of electoral marginality, given their perceptions

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[29] The standard errors are clustered by the individual subject.

[30] Note that the r-squared coefficients of the individual level models are considerably lower, which suggest that marginality and candidate traits do not explain much variance in individual-level behaviour. This is perhaps unsurprising given that there are a plethora factors that might cause any one individual to favour one candidate over another.

[31] These findings remain unchanged when we control for the subject's vote choice.

of the candidates' relative attractiveness and competence. Figure 2(b) presents these estimates. In a constituency where there is parity in competition, the probability that a respondent's attractiveness judgement will predict the real election winner is 0.58. However, when one candidate is expected to win by a large margin, the probability declines to 0.34. With respect to competence, the probability that a respondent's judgement will predict the winning candidate is 0.41. By contrast, the probability that a competent candidate will be a winner in a safe seat is 0.64. Therefore, the individual judgement analyses, like the majority group analyses above, suggest that attractiveness is a better predictor of general election outcomes in marginal constituencies, while perceptions of competence tend to predict outcomes in safe seats.

4.3 Partisanship and the Effect of Trait Perceptions

The analyses above suggest that perceptions of British candidates attributes can be used to predict election outcomes. In our final set of analyses, we explore whether British voters are, in fact, more likely to select attractive and/or competent candidates. To investigate this question, we merge our laboratory-based data on perceptions of candidate traits with BES survey data from the 2010 general election.[32] Atkinson et al. (2009) argue that the combination of perceptual (experimental) and survey data helps to address the external validity of perceptual research conducted in a laboratory setting. Moreover, the use of BES survey data allows us to gain traction on an important issue that we have been unable to address in our study to this point: the effect of partisanship. The use of American subjects in our computer-based study allows us to acquire perceptions of candidates' traits that are unbiased by partisanship. At the same time, many studies find

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[32] To maximise the overlap in the constituencies included in both the BES and our study, we rely on the BES internet survey prepared for the Comparative Study of Electoral Systems (CSES) project. The data are available at: http://www.bes2009-10.org/. In total, the 2010 BES internet survey contains respondents in 62 of the 75 constituencies included in our computer-based study. We replicated our representativeness checks on the reduced number of constituencies and find nearly identical results – i.e., the reduced pool of constituencies is as representative as our previous sample of 75 constituencies.

that the relationship between perceptions of candidates' traits and electoral outcomes is mediated by partisanship, or a lack of thereof (e.g., Ballew and Todorov, 2007; Johns and Shephard, 2007). Therefore, the analyses below represent an attempt to bridge the gap between our laboratory study and the real world.

We estimate three models where the dependent variable is the respondent's propensity to vote for each of the three parties included in our study.[33] Given that we limit our laboratory study to constituencies where the top two vote-receiving candidates were members of the three largest parties (the Conservatives, Labour, and the Liberal Democrats), in each model the focus party – i.e., the Conservatives party in the Conservative model – was one of the top two parties competing in the constituency.

Our main independent variables are created from the majority choice judgements that result from our computer-based study. In each model, we include two dichotomous variables that capture whether the party's candidate was deemed the more attractive or the more competent candidate by the majority of participants in our computer-based study. For example, in the "Labour" model, *Attractive Candidate* is coded 1 if the Labour candidate in the constituency was deemed the more attractive candidate by the majority of participants in our study, and 0 otherwise. Likewise, *Competent Candidate* is coded 1 if the Labour candidate in the constituency was deemed the more competent candidate, and 0 otherwise. Given that the effect of the judgments appears to be contingent on electoral marginality, we also include an interaction between the margin of victory and the aggregate attractiveness and competence judgements. To measure the effect of partisan affiliation, we include two dichotomous variables that capture whether the respondent shares the partisanship of the party's candidate or that of the other main party in the

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[33] Therefore, in the Conservative model, the dependent variable is coded 1 if the respondent voted for the Conservative party and 0 if they voted for any other party.

constituency.[34] Beyond these key variables, we also control for the candidate's age, gender, and whether the candidate of the focus party was the incumbent MP.

The results of the logistic regression models are presented in Table 4. As we would expect, partisanship is the best predictor of vote choice for all three parties. In each case, respondents are significantly more likely to vote for a candidate if they share the candidate's party affiliation. Note, however, that effect of perceived attractiveness and competence persists even when we control for the respondent's partisanship. In all cases, the main effect of attractiveness (the effect of attractiveness in a highly marginal constituency) is positive and statistically significant, indicating that in close elections respondents were more likely to vote for candidates who were judged to be more attractive by the majority of our laboratory subjects. Also, the coefficient associated with the interaction between attractiveness and the margin of victory is negative, which suggests the effect of attractiveness declines or disappears in safer seats. With respect to competence, candidates who were judged to be more competent by the majority of our laboratory subjects were less likely to be election winners in marginal constituencies, but more likely to be election winners in safe seats.

[Table 4 here]

Given that we are primarily interested in how perceptions of candidates' traits might influence outcomes in marginal constituencies, and that attractiveness appears to be more important influencing behaviour in marginal constituencies, we calculate the difference in predicted probability of voting Conservative, Labour, and Liberal Democrat that can be attributed to attractiveness.[35] Consistent with the idea that respondents with weak party attachments may be more likely to be influenced by perceptions of candidates' traits, we find that attractiveness has the greatest

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[34] The baseline category refers to respondents who share the partisanship of neither of the top two vote-receiving candidates.

[35] We fix all dichotomous variables at zero and all continuous variables at their mean. Because we are interested in the effect of attractiveness in marginal seats, we fix *Margin of Victory* to the mean marginality for all seats with a majority of less than 5 per cent (i.e., roughly 2 per cent).

effect on respondents who were not aligned with either of the top two parties in their constituency.

For example, attractiveness has no effect on voting behaviour of a Conservative supporter – i.e., Conservative supporters are already so likely to vote Conservative in a marginal seat so that there is little room for movement in the Conservative direction. Yet, for supporters of the other dominant party in the constituency or respondents who do not support either of the top two parties, an attractive Conservative candidate increases the probability of voting for the party by 0.12 and 0.20, respectively. The findings make intuitive sense, as they suggest that attractive Conservative candidates were more likely to entice support from individuals who did not have attachments to either of the top two parties in the constituency. We find similar effects for the Labour party. Once again, attractiveness has little effect on a Labour supporter; attractiveness increases the probability of voting Labour by only 0.03. However, for supporters of the other dominant party in the constituency, attractiveness increases the probability of voting Labour by 0.10, while for respondents who did not support either of the top two parties, the probability increases by 0.15. In contrast, for the Liberal Democrats, attractiveness appears to have a similar effect, regardless of the respondent's partisanship. For respondents who reported that they were a supporter of the Liberal Democrats, attractiveness increases the probability of voting Liberal Democrat by 0.23. For respondents who support the other primary party in the constituency, attractiveness increases the probability by 0.28. Finally, for respondents who support neither the Liberal Democrats nor the other major party in the constituency, the probability increases by 0.20.

Taken together, these analyses suggest that in marginal constituencies, an attractive candidate may entice the support from voters who may not have otherwise supported the party. In particular, it may help parties attract support from voters who are not affiliated with either of the top two vote-receiving parties in the constituency. If the group of voters who are not affiliated with either party is large enough, then attracting the support of this group could potentially alter the outcome of the election.

5.0 Conclusion

Several recent studies, following the lead of Alexander Todorov and his colleagues, have linked reflexive "first-impression" judgements of unfamiliar candidates' photographs with election outcomes. Here, we employ a similar methodology to determine whether such a relationship holds within the context of British politics, where the reputation and leadership of parties are more integral to voters' decision-making processes. Despite the relative importance of British parties, we find a link between electoral success and our research participants' judgements of real British parliamentary candidates. The judgements predicted the actual outcomes of the 2010 general election, but with an interesting caveat – that the strength of the correlation between the judgements and electoral outcomes is contingent on whether the candidate pairs competed in a marginal or a safe constituency.

Using only judgements of relative attractiveness and competence, we successfully predict the outcomes in approximately 60 per cent of the constituencies included in our study. Furthermore, once we take electoral marginality into account, the accuracy of our predictions increases considerably. The most notable effect is that while candidates who were deemed more attractive appear to have no advantage in safe constituencies, they were dramatically more likely to be election winners in marginal seats (72 per cent). Though candidates tend to be of lesser importance to British voters than American voters, the accuracy of our predictions mirrors that of the original Todorov study, where the authors were able to predict 70 per cent of US Congressional elections. Moreover, these findings diverge from those of US-based studies, which suggest that American candidates tend to benefit from being perceived as (and being) more competent when running in competitive districts (Atkinson et al., 2009). By contrast, British candidates who were perceived as being more competent were significantly more likely to be election winners in safe seats. Here, we were able to predict 67 per cent of races correctly using only subjects' perceptions of the candidates' relative competence.

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Before we consider the possible implications of our findings, we note three caveats. First, our study specifically shows candidate faces with neutral backgrounds, and thus, we cannot speak to candidates' ability to manipulate the photographs they distribute to voters, and to what extent these would (or have) affected voting decisions. Indeed, Spezio et al. (2012) demonstrate that the non-facial aspects of a candidate's headshot may shape voter decision-making. Moreover, certain "optional" facial characteristics, such as glasses or beards, may influence whether a candidate is perceived as more or less competent or attractive. If these characteristics influence voters' perceptions, then candidates may be inclined to include (or remove) them if doing so will improve voters' assessments of their appearance. For the purposes of the current study, we do not concern ourselves with *why* the candidates appear more attractive or competent—we just confirm the relationship between those judgements and election results.

Second, while the majority of the top two candidate pairings in 2010 involved candidates of the same gender (approximately 61%), a substantial minority of seats involved mixed gender contests. Limiting our study to matched-gender pairs increases our reliability, but it also means that we cannot contribute to the discussion of whether these quick judgements interact with gender in mixed-gender races. That being said, Shephard and Johns (2011) explore this issue, and find that attractive candidates only have an advantage if competing against a member of the opposite sex. As a result, our results may provide a conservative test of the relationship between first impression perceptions of candidates' traits and electoral outcomes, and we might expect the effect of attractiveness to be even more pronounced in mixed-gender marginal seats.

Finally, the use of US subjects allows us to acquire trait assessments that are unbiased by partisanship – i.e., it was unlikely that the judgments of our American research participants were coloured by the political party of the candidate. At the same time, the use of US subjects means that we cannot account for how the subjects' partisanship may provide a filter for their first impression judgments of candidates, and therefore, their initial assessments of the candidates' traits. That being said, our final set of analyses seeks to address this limitation. When we merged our

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data with that of the BES, our non-partisan judgments were not only significant, but relatively free from concerns about partisan endogeneity. Therefore, these findings provide tentative evidence that the correlation between perceptions of candidates' traits and electoral outcomes is not an artefact of our research design.

The above caveats notwithstanding, we believe our conclusions have several important implications. For scholars of British politics, our findings suggest that there is a payoff in analysing the effect of candidate characteristics in British elections. Though parties remain an integral part of British politics, they do not appear to tell the entire story, and these results suggest to us several directions to pursue. With respect to parties' election strategies, our findings indicate that British parties are (or at least, should be) cognizant of candidates' physical traits during the selection process. Even though the effect of appearance in politics is not normatively desirable, the prevalence of appearance effects in the social sciences indicates that we should not underestimate its importance in politics.[36] That so many British candidates have personal websites indicates that parties already strive to inform voters about the identity (and physical characteristics) of their candidates.

More generally, the fact that we that find that *candidates'* non-policy attributes can be used to predict election outcomes suggests the importance of understanding voters' responses to candidates' images—and going forward, understanding candidates' ability to manipulate such images to evoke (or stifle) particular voter reactions. As the ease of – and the number of outlets for – dissemination of information and imagery continues to increase, so should our desire to study the ramifications.

Our findings also underscore the importance of incorporating election competitiveness into future studies of political behaviour. While they certainly do not indicate that unattractive candidates are unelectable, they do suggest that an attractiveness "advantage" comes into play in

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[36] In general, perceived physical attractiveness produces a halo effect that carries over to both positive trait attribution and positive social outcomes (Dion et al., 1972; Kanazawa and Kovar, 2004).

closer elections because of the interaction between (1) the durability of reflexive "snap" judgments on long-term impressions and (2) the heightened impact of non-policy traits on voters with weak partisan attachment. Again, if all competing parties opt to select candidates with local connections and previous experience in local government, and all the candidates converge in terms of their policy positions, then undecided and/or apathetic voters will be left with few dimensions to differentiate between them. In a safe seat, such voters are unlikely to alter the outcome of the election. When minor shifts in support are important, a party's ability to garner additional votes can alter the outcome of the election. Given the effects of candidates' traits on voting decisions, and the competitive nature of marginal elections, there is little downside to political parties for being mindful of the appearance of their candidates, particularly when contesting a marginal seat.

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Table A1. Sample Representativeness

	All Constituencies			All Marginal Constituencies		
	Not Included	Included	p-value	Not Included	Included	p-value
Labour Constituency	0.41	0.37	0.51	0.31	0.44	0.26
Conservative Constituency	0.48	0.53	0.35	0.48	0.44	0.77
Lib Dem Constituency	0.09	0.09	0.92	0.18	0.12	0.50
Lab/Con Battleground	0.46	0.67	*0.00*	0.57	0.80	0.05
Lab/LD Battleground	0.19	0.11	0.09	0.21	0.12	0.32
Con/LD Battleground	0.33	0.23	0.06	0.21	0.08	0.14
Margin of Victory	19.66	8.90	*0.00*	2.41	2.46	0.89
Female Only District	0.06	0.23	*0.00*	0.07	0.24	*0.02*
Male Only District	0.51	0.77	*0.00*	0.28	0.76	*0.00*
Wales	0.07	0.04	0.38	0.07	0.00	0.19
Scotland	0.10	0.04	0.10	0.05	0.04	0.86
East Midlands	0.07	0.07	0.83	0.13	0.08	0.51
East of England	0.09	0.12	0.46	0.05	0.16	0.09
London	0.11	0.19	0.04	0.07	0.12	0.41
North East	0.05	0.04	0.80	0.03	0.04	0.87
North West	0.12	0.11	0.73	0.11	0.20	0.31
South West	0.08	0.09	0.80	0.16	0.08	0.31
South East	0.14	0.13	0.91	0.10	0.04	0.37
West Midlands	0.09	0.11	0.60	0.08	0.16	0.29
Yorkshire and The Humber	0.08	0.07	0.60	0.15	0.08	0.40

<u>Source</u>. Constituency data comes from Pippa Norris' May 6th 2010 British General Election Constituency Results Release 5.0 (http://www.hks.harvard.edu/fs/pnorris/Data/Data.htm).

We use difference of means tests to assess whether the sample of constituencies for which we have data that differs from those constituencies we omitted from our study. Table A1 presents the mean for each group, as well as the p-value associated with the difference between groups. A p-value below .05 suggests that the two groups are significantly different from each other on that characteristic. While our sample is representative on a number of dimensions, it differs from the omitted constituencies in several respects. First, we have (intentionally) overrepresented marginal constituencies; the margin of victory in our sample was 8.90 per cent versus 19.66 in the omitted constituencies. Second, our sample includes only same-sex contests, and more Labour/Conservative battlegrounds. Finally, we have overrepresented the constituencies in the Greater London area. In addition, we also compare the marginal seats included in our sample with the omitted marginals, and we find that the groups are quite similar. Again, the primary difference is the number of same-sex races; as with the total pool of constituencies, our sample contains more same-sex contests, as we omitted them from our study.
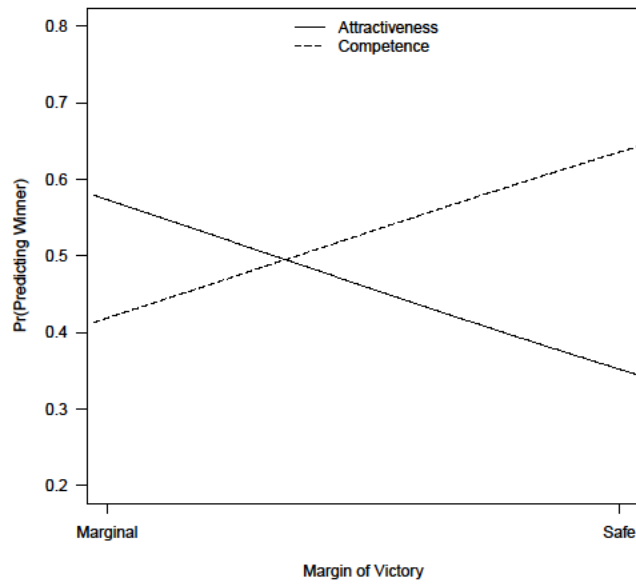
Figure 1. Sample Photo Pair

Figure 2. The Predicted Effect of Attractiveness and Competence Judgements

2(a). Majority Group Judgements
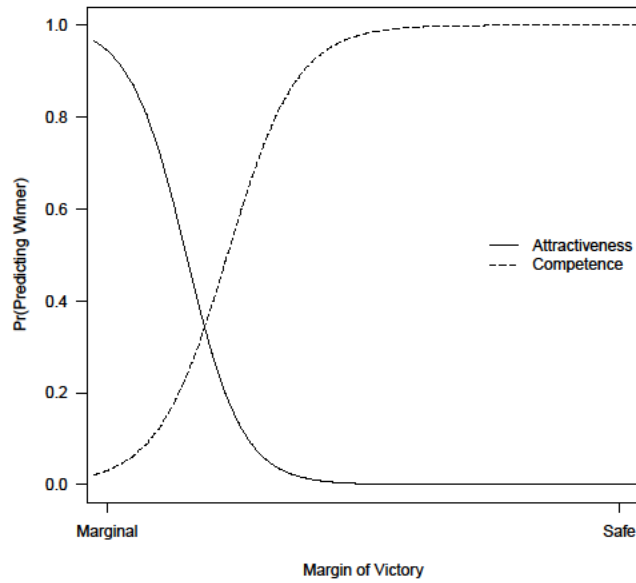
2(b). Individual Judgements

Notes. Predicted values are calculated using the estimates from the full models in Table 3.

Table 1. Candidates Chosen (By Party)

Trait/ Judgement	Conservative (41%)	Labour (40%)	Lib Dem (19%)	χ^2 Test (2 d.f.)
Attractiveness	50%	33%	17%	145.3 (p<0.01)
Competence	44%	41%	15%	37.7 (p<0.01)
Laboratory vote	45%	39%	16%	34.4 (p<0.01)

Notes. Rightmost column indicates results against the null hypothesis that the selection rate for that judgment was equal to the occurrence rate.

Table 2. Correctly Predicted Elections

Trait/ Judgement	All Constituencies	Marginal Constituencies	Safe Constituencies
Majority Group Judgements			
Attractiveness	58%	72%**	52%
Competence	57%	36%	68%**
Laboratory vote	63%**	56%	66%**
Individual Judgements			
Attractiveness	55%***	58%***	54%***
Competence	52%***	46%**	55%***
Laboratory Vote	54%***	53%*	55%***

Notes. Numbers represent the percentage of correctly predicted elections. Marginal constituencies are defined as those with a margin of victory of less than 5%. Binomial test against pure chance (50%). * p<0.10,** p<0.05, *** p<0.01

Table 3. Predicting Election Winners

	Majority Group Judgments				Individual Judgments			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Attractiveness	1.04*	1.57*		3.29**	0.41***	0.33***		0.39***
	(0.55)	(0.92)		(1.48)	(0.07)	(0.10)		(0.10)
Competence	0.28		-2.42**	-3.88***	0.13*		-0.24**	-0.28***
	(0.52)		(1.04)	(1.48)	(0.07)		(0.10)	(0.10)
Margin of Victory		-0.06	-0.28***	-0.18		-0.01	-0.03***	-0.02***
		(0.07)	(0.10)	(0.12)		(0.01)	(0.01)	(0.01)
Attractiveness x Margin of Victory		-0.08		-0.29*		0.01		-0.00
		(0.10)		(0.18)		(0.01)		(0.01)
Competence x Margin of Victory			0.41***	0.54***			0.05***	0.05***
			(0.14)	(0.18)			(0.01)	(0.01)
Female-Only	0.85	0.80	1.06	1.08	0.02	0.02	0.01	0.02
	(0.62)	(0.65)	(0.68)	(0.75)	(0.08)	(0.08)	(0.08)	(0.08)
Age Difference	-0.02	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)
Constant	-1.45***	-0.79	1.10	-0.19	-0.29***	-0.18**	0.11	-0.07
	(0.50)	(0.71)	(0.70)	(0.90)	(0.05)	(0.07)	(0.07)	(0.08)
Pseudo R-squared	0.07	0.13	0.21	0.28	0.01	0.01	0.01	0.02
Observations	75	75	75	75	3788	3788	3788	3788

Notes. Logit coefficients and standard errors in parentheses. The standard errors in the individual judgement models are clustered by the individual subject. * $p<0.10$, ** $p<0.05$, *** $p<0.01$

Table 4. Predicting Party Support Using Perceptions of Candidates' Traits

	Vote Conservative	Vote Labour	Vote Lib Dem
Margin of Victory	-0.13*	-0.07*	0.04**
	(0.07)	(0.04)	(0.02)
Attractiveness	2.36**	0.89*	2.13***
	(1.17)	(0.51)	(0.72)
Attractiveness x Margin of Victory	-0.46***	-0.02	-0.19***
	(0.11)	(0.05)	(0.05)
Competence	-3.49**	-2.30***	-2.71
	(1.41)	(0.60)	(2.42)
Competence x Margin of Victory	0.55***	0.14**	0.58*
	(0.12)	(0.06)	(0.30)
Incumbent	0.00	-0.99**	-1.03
	(1.02)	(0.47)	(0.90)
Candidate's Age	0.02	0.06***	0.02
	(0.02)	(0.02)	(0.01)
Female Candidate	0.63	-1.33***	-0.71*
	(1.03)	(0.47)	(0.38)
Share Candidate's Partisanship	8.05***	4.44***	3.70***
	(1.25)	(0.52)	(0.44)
Share Other Party's Partisanship	-0.73	-2.06***	0.59
	(0.75)	(0.44)	(0.42)
Constant	-2.89***	-2.88***	-3.19***
	(0.50)	(0.80)	(0.38)
Observations	335	335	335
Pseudo R-squared	0.753	0.482	0.386

Notes. Logit coefficients and robust standard errors in parentheses. * $p<0.10$, ** $p<0.05$, *** $p<0.01$