JOANDREA HOEGG and MICHAEL V. LEWIS*

Spending on political advertising has grown dramatically in recent years, and political campaigns have increasingly adopted the language and techniques of marketing. As such political marketing efforts proliferate, the factors that drive electoral success warrant greater attention and investigation. The authors employ a combination of laboratory studies and analysis of actual election results to reveal influences of candidate appearance and spending strategies in campaigns. They analyze how personality trait inferences based on candidate appearance interact with political party brand image, advertising spending, and negative advertising. The results indicate that appearance-based inferences about candidates influence election outcomes, but their impact is driven partially by trait associations at the party brand level. This interaction between appearance and party alters the effects of advertising spending, particularly the effects of negative advertising. The findings have implications for the marketing of political candidates in terms of their party's brand image.

Keywords: political marketing, effects of appearance, party positioning, visual inferences, political branding

The Impact of Candidate Appearance and Advertising Strategies on Election Results

It is widely accepted that candidate appearance influences election outcomes. This view is supported by anecdotal evidence (Stanton 2000) and academic study (e.g., Rosenberg and McCafferty 1987; Todorov et al. 2005). It is also widely believed that elections are, in many ways, marketing contests, with outcomes heavily influenced by the marketing efforts of candidates and associated political parties (Faber, Tims, and Schmitt 1993; Homer and Batra 1994; Klein and Ailuvalia 2005; Newman and Sheth 1985; Pinkleton 1997). This article presents the results of an empirical study of the intersection of candidate appearance and marketing tactics. We examine how personality judgments based on candidate appearance interact with marketing variables, including party brand image, advertising spending, and negative advertising.

The issues of candidate appearance, campaign spending, and negative advertising have received individual attention in the psychology and political science literatures (e.g., Erikson and Palfrey 1998; Levitt 1994; Welch 1974), but a marketing-focused perspective offers additional insights. Specifically, we investigate these variables in terms of how they interact with the parties’ brand positions. Given that the two major U.S. political parties have distinct positions and associations, appearance-based inferences about candidates may have asymmetrical effects across parties. Our guiding premise is that the trait associations that voters have about each party alter the effects of appearance-based trait judgments about individual candidates. We examine this complex issue using a series of experiments and an analysis of U.S. congressional election results.

This work builds on previous research showing that candidates with an appearance conveying a high level of overall competence enjoy greater electoral success (Todorov et al. 2005). We extend this research by demonstrating that within the positive perceptual space related to candidates’ perceived competence, there exist subtle but distinct traits that can be communicated visually and have greater explanatory power than an overall measure. More important, we find that these distinct traits interact with party...
brand. Specifically, we show that the physical appearance most beneficial to a Republican candidate is not the same appearance that best benefits a Democratic candidate. We show that this asymmetry stems from differences in the traits that voters associate with each party.

We organize the remainder of this article as follows: We begin with a review of relevant literature in marketing, psychology, and political science and present our hypotheses. We then discuss a series of experiments demonstrating the interaction between trait inferences and party affiliation. Then, we use findings from those studies to develop specifications to examine outcomes for a subset of congressional elections. We conclude with a discussion of the implications and limitations of our work, along with suggestions for further research.

BACKGROUND

Candidate Traits and Political Branding

Among the most basic components of a candidate’s image are his or her perceived trait qualities. Candidate personality trait impressions have been found to significantly influence voter choice, in some cases to a greater degree than issues (Shanks and Miller 1990). Research has attempted to identify the traits that exert the most influence on voters; however, agreement on the exact traits remains elusive (Funk 1996). Funk (1996) highlights several distinct “dimensions” that have been shown to affect voter preference, including competence, trustworthiness, and warmth/likeability. Competence encompasses traits such as intelligence, reliability, competence, and effectiveness, and research has shown it to be the most important dimension in predicting voter choice (Markus 1982; Shanks and Miller 1990; Todorov et al. 2005). Trustworthiness involves morality and honesty. Warmth or likeability suggests caring and sociability.

The identification of influential personality dimensions is useful for political marketing because they may be translatable to the perceptual space used by voters to assess candidates. Each of these dimensions has a positive and negative side (Asch 1946; Judd et al. 2005; Rosenberg, Nelson, and Vivekanathan 1968). All candidates will attempt to convey images on the positive side of each dimension—that is, images of competence, trustworthiness, and likeability rather than images involving ineptitude, dishonesty, or meanness. However, given that voters have heterogeneous preferences, it is likely that more subtle positioning differences are important. For example, beneath the umbrella of the positive dimension of competence may be specific skills or distinct traits that appeal differentially to various segments of voters. Image management efforts can focus on dissecting the broader dimensions and highlighting conceptually distinct constructs to make subtle but critical distinctions in how candidates are perceived.

Competence versus intelligence. Although prior research has found that competence and intelligence are correlated, we propose that there are important differences between the constructs in terms of judgments of a candidate’s ability. Rosenberg, Nelson, and Vivekanathan (1968) illustrate this finding by using multidimensional scaling to identify the structure of human personality judgments. Although ability-related constructs such as intelligence, practicality, and industriousness tend to load on a single dimension, the authors found important differences among the constructs. For example, a significant distance separates the constructs of practical and reliable from intelligent. Consistent with this distinction, a thesaurus links intelligence to being brainy and competence to being skilled or proficient. In other words, although the traits are similar, there are differences. It is possible, for example, to imagine someone who is highly intelligent but ineffective at accomplishing tasks or a person who is a highly reliable employee but not brilliant. These types of distinctions are of particular importance in politics, in which perceptions of candidate personalities are influenced not only by candidates themselves but also by opponents. An example of this occurred in the 1952 presidential election, when Richard Nixon referred to Adlai Stevenson as an “egghead” (Hofstadter 1966), a term acknowledging Stevenson’s intellect but simultaneously suggesting his lack of common sense.

To explore differences in the constructs of intelligence and competence, we ran a pilot study in which 41 undergraduate students rated the similarity of “competence” and “intelligence” to a number of other traits, adapted from brand personality research (e.g., “daring,” “charming,” “reliable,” “cheerful”) (Aaker 1997). On a seven-point scale (1 = “not at all similar to [competence],” and 7 = “extremely similar to [competence]”), we found that, consistent with prior literature, competence was rated as being similar to intelligence ($M = 5.68$). However, competence was rated as being more similar to other traits such as good judgment ($M = 6.22$) and successful ($M = 6.24$) than to intelligence (for good judgment and successful, respectively, $t(40) = 2.11, p = .02$, and $t(40) = 1.91, p = .06$). Similarly, competence and reliability were viewed as more similar than intelligence and reliability ($M = 5.85$ vs. $M = 4.17$; $t(40) = 7.3, p < .001$).

Personality traits in party positioning. An added layer of complexity in the judgment of candidate traits is that each candidate is a member of a group (i.e., party) that likely has its own trait associations. Although research on candidate traits has focused on how personality traits are inferred for individual candidates (e.g. Funk 1996), it may be revealing to consider how personality traits operate at the party brand level. Branding is a critical issue in political marketing: The two major U.S. parties need to define distinct positions to differentiate themselves, yet only a few academic studies have focused on understanding the brand images and traits that voters associate with the parties (Downs 1957; Findlay 2008; Gelb and Sorensco 2000).

An area of research that has considered differences in party association is issue ownership theory, which suggests that parties influence voters through their focus on key issues (Petrocik 1996). For example, Brewer (2009) finds that the Democratic Party has consistently enjoyed a positive image regarding economic issues, while Republicans have tended to enjoy positive images in terms of government management. Although issue ownership theory demonstrates important differences in the public perceptions of the parties, its focus is primarily on the preferences of the electorate with regard to issues rather than differences in the parties’ brand images or positioning. Considering party image at a more fundamental level is potentially instructive because it can be viewed in terms of broad trait
associations rather than according to narrow statements of policy on specific social or economic issues.

Brand personality research has identified a variety of traits used to describe product brands (Aaker 1997). However, in the case of political parties, we suggest that it could be more informative to distinguish them using the same personality traits as those applied to individual political candidates. Given that stereotypes at the group level often reflect traits at the individual level (Fiske et al. 2002), it is useful to consider the extent to which these traits are associated with each political brand. In particular, we focus on the dimension that has been previously referred to as competence but can be construed as a broad dimension of ability (Fiske et al. 2002). We propose that this ability dimension can be segmented into a trait of practical or reliable competence and a separate trait of intelligence. We further propose that these traits are differentially associated with the two major U.S. political parties. We argue that the Democratic Party currently tends to be more associated with intelligence than with competence and the Republican Party is more associated with competence than with intelligence (Brooks 2008).

Certainly, at the voter level, there is a broad spectrum of Democrat, from union members to new immigrants, but at the brand level, the party in recent years has been linked in the media to the intellectual elite, as represented by people such as Bill Clinton, John Kerry, and Barack Obama (Brooks 2008; Douthat 2009).1 The Republican Party, while also wide-ranging in its representation at the voter level, has moved toward an ideology that supports “regular folk,” decisive strength, and traditional values, with leaders such as George W. Bush, Ronald Reagan, and John McCain (Dionne 2007).2 Unlike the Democrats, who are said to prize “deliberation and self-examination,” Republicans are said to “govern from the gut” (Brooks 2008) and to be more effective at getting things accomplished (Meyerson 2009; Toner and Hulse 2007).

Although portrayals in the popular press suggest a distinction between the two party images on relative competence and relative intelligence, to our knowledge no empirical evidence exists for this distinction. Thus, to confirm that voters perceive a relative difference between competence and intelligence for the two major parties, we conducted an online survey of 130 people in the United States (58 female, 72 male; aged 20–60 years, 88% under 40 years).3 We provided participants with a five-point, zero-centered semantic differential scale (–2 = “higher on intelligence than competence,” and 2 = “higher on competence than intelligence”). We asked participants to think about the Republican Party brand and the Democratic Party brand and then to place each party along the scale. They also provided their own political affiliation.

A party × affiliation mixed analysis of variance (ANOVA) revealed no interaction (F < 1), but it did reveal the expected main effect of party. As suggested in the popular press, regardless of affiliation of the respondent, the Democratic Party was viewed as higher on intelligence than on competence than the Republican Party (MDems = –.34 vs. MRep = .15; F(1, 126) = 5.61, p < .05).4 Thus, people seem to differentially associate the traits of competence and intelligence with the two parties. The primary goal of our research, however, is to understand how these party trait associations interact with a candidate’s visually inferred personality traits.

Visual trait inferences and party trait associations. Inferences about others’ personality traits can occur quickly and can be long-lasting (Wyer, Srull, and Gordon 1984). Inferences based on facial characteristics have been shown to influence ratings of job suitability (Hassin and Trope 2000), to alter perceived chief executive officer responsibility for a crisis (Gorn, Jiang, and Johar 2008), to correlate with promotions in the military (Mueller and Mazur 1996), and even to correlate with company profits (chief executive officer appearance) (Rule and Ambady 2008). Most relevant to our research, Todorov et al.’s (2005) study asked participants to make judgments of congressional candidates on a variety of personality traits solely on the basis of photographs. The results indicated that visually inferred traits related to the dimension of competence were predictive of election success.

Todorov et al.’s (2005) findings are striking; however, their work examines trait inferences in aggregate and does not consider the possibility that trait advantages may be moderated by party brand. We suggest that trait inferences based on the physical appearance of a candidate’s face interact with party affiliation such that candidates will benefit if their appearance communicates traits that are associated with their respective party. Prior research on the matchup hypothesis has shown the value of a fit between certain physical characteristics of a representative (e.g., gender, attractiveness) and the characteristics of a product (Kahle and Homer 1985; Koernig and Page 2002; Lynch and Schuler 1994). In the domain of political advertising, Ansolabehere and Iyengar (1994) show that candidate advertising is more successful when it focuses on issues already associated with the candidate’s party. Although centered on issues rather than physical appearance, their research supports the hypothesis that a match between the candidate and the party is more beneficial than a mismatch. Formally,

\[ H_1: \text{An appearance reflecting traits associated with a party leads to higher preference and vote share than an appearance that reflects traits associated with the other party.} \]

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1The IQ hoax of 2004 exemplifies the distinction on the intelligence trait. Although the available evidence (e.g., test scores) suggests that George W. Bush has a higher IQ than John Kerry (Tierney 2004), various sources, from significant Internet buzz to a Doonesbury cartoon, commented on Bush’s apparently low intelligence.

2For example, the Republican Party has often been described as anti-intellectual (Brooks 2008), William Buckley’s famous statement that he would rather be ruled by the first two thousand people in the Boston telephone directory than by the two thousand members of the Harvard faculty highlights this tendency.

3These data were collected in 2009 and, as such, represent the images of the parties at that time.

4We also examined the extent to which the dimensions of trust and likeability were associated with the two parties. Because these are more affective traits, we suspected that judgment of these traits would be driven primarily by people’s party affiliation. One hundred seventeen people from the same pool rated the parties along the dimensions of trustworthiness and likeability. We found a significant interaction of party and affiliation (F(1, 115) = 35.50, p < .001). In each case, members of a party viewed their party as relatively more trustworthy than likeable and viewed the other party as equivalent on trustworthiness and likeability.
Previously, we provided some evidence that the traits of competence and intelligence, though correlated, are distinct. We also demonstrated that, as suggested in the popular press, competence tends to be relatively more associated with Republicans and intelligence more associated with Democrats. On the basis of the construct differences in competence versus intelligence and their differential associations with the two parties, we predict that, consistent with the matchup hypothesis, an appearance suggesting greater competence than intelligence will be predictive of success for Republican candidates, while an appearance suggesting greater intelligence than competence will be beneficial for Democrats. More formally,

H2: A visual advantage in competence leads to an increase in preference and vote share for Republican candidates over Democratic candidates.

H3: A visual advantage in intelligence leads to an increase in preference and vote share for Democratic candidates over Republican candidates.

It should be emphasized that we are not theorizing that appearing intelligent or competent will be problematic for any candidate. As we noted previously, the broad ability dimension is positively valenced, and all candidates would do well to signal, visually or otherwise, that they have a high level of ability. In line with Todorov et al. (2005), we expect that perceptions of some overarching measure of ability will be beneficial for all candidates. However, we suggest a more subtle additional effect, whereby Democrats benefit from possessing an appearance suggesting that their ability is more driven by intellect, while Republicans benefit from portraying ability associated with practical skills and competence.

Visual Stereotypes

We have proposed that for political candidates, an advantageous match will occur when the personality trait inferences that voters make about candidates (based on their appearance) match the trait associations that voters have about the party as a whole. However, an alternative perspective holds that candidates would do well to match a visual stereotype for their party rather than matching partywide trait associations. In other words, it is plausible that there exists a visual stereotype for the Republican Party (i.e., a typical look or set of appearance characteristics for Republican politicians) and a different visual stereotype for the Democratic Party, and a “match” would occur when a candidate looks typical of his or her party. If so, all else being equal, candidates who resemble the stereotypical member of their party would do better.

The stereotype explanation for candidate appearance is consistent with research on groups demonstrating that people judge a person’s fit with a group by assessing the extent to which the individual person matches the group norm (Turner et al. 1994). Political candidates may be viewed as a human extension of the political brand (Thomson 2006) and, therefore, be judged on their fit with the party stereotype. Formally, this alternative hypothesis is as follows:

H4: An appearance that is consistent with a visual stereotype for candidates of the party leads to higher preference and vote share than an appearance that is not.

The distinction between visual stereotypes and visually inferred trait associations is a subtle point that merits investigation. It is conceivable that visual party stereotypes are actually a function of visually inferred traits associated with the party. If so, H4 will effectively be the same as H3. For example, if the appearance of intelligence is the major component of the Democratic visual stereotype, a stereotypical-looking candidate will have an intelligent appearance. However, visual stereotypes of successful candidates likely include a variety of other traits that may not be directly associated with the party itself and perhaps other visual information not related to trait inferences at all. For example, certain visual characteristics not necessarily suggestive of personality traits (e.g., a full head of hair) make differences in elections (Leigh and Susilo 2009). As long as other elements beyond the identified trait associations play a role in visual stereotypes, we will be able to distinguish between H3 and H4 and to draw conclusions regarding the value of candidate appearance characteristics.

Advertising Spending Effects

A huge determinant of the success of a political campaign is the money spent on it. Spending on political advertising in the United States grew from $1.6 billion in 1998 to $5.3 billion in 2008 (opensecrets.org). However, a consistent finding is that while challenger spending has a positive effect on vote share, spending by incumbents usually has a statistically insignificant effect (Ansolabehere and Gerber 1994; Jacobson 1990). The main explanation is that like an early market entrant, incumbents begin with advantages in awareness, which results in lower marginal effects of advertising investments. Moreover, because the goal is simply to win, managing costs may not be a primary objective. An incumbent may spend more than necessary to secure the win, and thus, the actual benefit per dollar spent would be lower. In contrast, challengers often start from a point of relative anonymity, so marginal spending has a greater effect.

Beyond general campaign spending, spending on negative advertising has been the subject of much inquiry (Sorescu and Gelb 2000). Negative advertisements have been found to be more effective than positive advertisements at influencing likeability of candidates (Homer and Batra 1994), though research has shown this finding to vary across different groups of voters (Klein and Aihlufalwia 2005). Assessing the direct impact of negative advertising on elections, however, has proved to be difficult. For example, according to an analysis of Senate campaigns from 1992 to 2002, Lau and Pomper (2004) find no clear evidence regarding the effectiveness of negative advertising.

Despite the difficulty in measuring its impact, negative advertising has been employed for decades and has flourished since the 1970s. The surge in negative advertising is often attributed to the increased role of television in political campaigns (Lau et al. 1999). Television enables transmission of negative messages combined with an image of an opponent’s face, creating a link that may be difficult to undo. Because of the prevalence of the visual elements, it is plausible that the effectiveness of negative advertising may be altered by candidate appearance. As noted, research has demonstrated that a spontaneous reaction to physical appearance can alter how negative information is processed (Gorn,
Jiang, and Johar 2008). If a candidate possesses an appearance that is consistent with party-associated traits, a positive voter reaction to this face trait–party trait match may reduce the impact of negative advertising. More formally,

\[ \text{H}_5: \text{Negative advertising is less effective against a candidate whose appearance conveys personality traits that match traits associated with his or her party than against a candidate whose appearance does not match traits associated with his or her party.} \]

As noted previously, an alternative view is that a fit with a visual stereotype, rather than with particular party trait associations, may be a benefit to candidates. Thus, we also present the alternative hypothesis that considers the possibility that a match with a visual stereotype has the same effect as a match with party trait associations:

\[ \text{H}_6: \text{Negative advertising is less effective against a candidate whose appearance resembles the visual stereotype of his or her party than against a candidate whose appearance does not resemble the visual stereotype of his or her party.} \]

**OVERVIEW OF STUDIES**

In the following sections, we present the results of a series of laboratory studies and analyses of election data. We begin with the development of a database of candidate photographs that we used in both our laboratory and field studies. Then, we present the results of several experiments conducted to test our hypotheses regarding the relationships among candidate appearance, party branding, and negative advertising. Study 1 tests whether appearance-based trait inferences have different effects on candidate evaluation when candidates are labeled Democrat or Republican (H1, H2, and H3). A follow-up study addresses the alternative hypothesis that matching a visual brand stereotype rather than particular party-level trait associations will also result in more favorable candidate evaluations (H4). Study 2 examines how negative advertising, appearance, and party labels interact to affect candidate evaluation (H5). As in Study 1, we also explore the effects of a match with a visual stereotype (H6).

We then investigate the extent to which these effects occur in actual elections. Study 3 presents an analysis of voting data for a subset of congressional districts from 2000 to 2004. This analysis uses data on advertising spending, advertising tone, and the visual trait inferences. The results provide confirmatory evidence regarding the effects of candidate appearance and the interactions among appearance, party membership, and negative advertising. Finally, in Study 4, we use the election data to further examine the issue of a match with a visual party stereotype.

To facilitate our empirical investigations, we created a database of personality trait ratings for a set of congressional candidate pairs. Personality judgments were based on candidate photographs for 153 congressional races from 2000, 2002, and 2004. Undergraduate student participants were presented with photographs of the two main candidates for a given district, which were obtained from CNN.com. For each pair of photographs, participants provided relative evaluations on a variety of personality traits, including competence, intelligence, trustworthiness, and likeability. Participants also predicted which candidate was the Republican and which was the Democrat and provided their political affiliation and some demographic information. Web Appendix A (http://www.marketingpower.com/jmroct11) provides full details of the data collection procedure.

The top half of Table 1 lists descriptive statistics for the entire set of races and separates races with Republican and Democratic incumbents. The data are coded such that if the participant chose the middle of the scale, which represents equality, the incumbent advantage was 0. Given the seven-point scale, the maximum advantage is 3 and the maximum deficit is −3. On average, respondents rated incumbents as more competent and intelligent than challengers. This tendency is more pronounced for the Republican incumbents than the Democratic incumbents. Indeed, Democratic incumbents are rated slightly less competent and intelligent appearing than their Republican challengers, suggesting that there may be systematic differences between the appearances of people who run as Republicans and Democrats (for examples of candidate pairs, see Appendix A).

The personality trait judgments were consistent across participants, despite different political leanings. An ANOVA comparing the average trait ratings as a function of political affiliations (Republican, Democrat, independent, none) revealed no main effect of affiliation or trait rating and no interaction (all Fs < 1). Following Olney, Holbrook, and Batra (1991), we assessed interjudge reliability for each set of ratings using coefficient alpha. Alpha values ranged from .87 to .94 across the data sets. We expected this judgment consistency because the participants did not know the candidates or their affiliation. It parallels research in face perception that reports high levels of interrater agreement on ratings of attractiveness and facial emotion across gender and culture (Ekman 2004; Langlois et al. 2000).

Our database includes 48 cross-gender and 8 cross-ethnicity pairs. Previous research on how gender influences perceptions of candidate traits is mixed. Some have found that gender stereotypes play a significant role in how voters perceive candidate traits (Huddy and Terkildsen 1993), but others report that gender is relatively irrelevant in candidate evaluation (Thompson and Stecknerider 1997). We included the demographically diverse races for ecological validity and to maximize sample size. To test for potential gender or

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**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>All Races</th>
<th>Republican Incumbents</th>
<th>Democrat Incumbents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>Competence</td>
<td>.14</td>
<td>.63</td>
<td>.36</td>
</tr>
<tr>
<td>Intelligence</td>
<td>.16</td>
<td>.67</td>
<td>.32</td>
</tr>
<tr>
<td>Trust</td>
<td>.02</td>
<td>.62</td>
<td>.14</td>
</tr>
<tr>
<td>Likeability</td>
<td>-.04</td>
<td>.81</td>
<td>.13</td>
</tr>
<tr>
<td>Spending ratio (Ratio)</td>
<td>.714</td>
<td>.20</td>
<td>.69</td>
</tr>
<tr>
<td>Challenger spending (Ch_Spend)</td>
<td>$453,000</td>
<td>$55,000</td>
<td>$528,000</td>
</tr>
<tr>
<td>Incumbent spending (I_Spend)</td>
<td>$841,000</td>
<td>$68,500</td>
<td>$858,000</td>
</tr>
<tr>
<td>Challenger negative % (Ch_Neg%)</td>
<td>17.0%</td>
<td>.227</td>
<td>19.8%</td>
</tr>
<tr>
<td>Incumbent negative % (I_Neg%)</td>
<td>16.0%</td>
<td>.253</td>
<td>20.8%</td>
</tr>
<tr>
<td>Incumbent vote share (I_Vote%)</td>
<td>60.08%</td>
<td>6.84</td>
<td>60.64%</td>
</tr>
</tbody>
</table>
ethnicity effects, we analyzed the results for each trait (competence, intelligence, trustworthiness, and likeability) as a function of these two factors but found no significant main effects and no interaction.

**STUDY 1: APPEARANCE AND PARTY**

The primary goal of Study 1 was to examine how Republican and Democratic candidates would be evaluated when they presented an appearance that suggested competence versus one that suggested intelligence. We showed participants a photograph of a political candidate and a labeled political affiliation to elicit an evaluation. To manipulate the appearance of competence versus intelligence, we selected two congressional candidate photographs from our data set for which the candidates had scored relatively high on perceived competence and two photographs for which the candidates had scored relatively high on perceived intelligence. We chose faces of the same gender, race, and approximate age. We also pretested the selected faces on other factors, including trustworthiness, likeability, and “babyfacedness” to ensure there were no significant differences (p > .16).

We then manipulated the candidates’ political affiliation. Thus, the study conformed to a 2 (appearance: competent vs. intelligent) x 2 (party: Republican vs. Democrat) x 2 (replicate) between-subjects design.

**Participants and Procedure**

Three hundred twenty-seven participants (59% women; 46% under 30 years of age) from a national online pool completed the study for a cash payment. Participants were told they would be evaluating congressional candidates using very little information. They were shown a photo of a candidate along with a fictitious name (the same name was used in all conditions) and the candidate’s party (not necessarily his or her actual party). For example, participants in the competent/Republican condition saw a photo of one of the two relatively competent-looking people along with the words “Eric Hammond, Republican.” Participants indicated how much they liked the candidate on a nine-point scale (1 = “dislike very much,” and 9 = “like very much”) and their likelihood of voting for the candidate (1 = “very unlikely,” and 9 = “very likely”). Subsequently, participants provided some demographic information and their level of political conservatism (1 = “very liberal,” and 7 = “very conservative”).

**Results**

We created an evaluation index from the two dependent measures (α = .84). We regressed the index on political party, appearance, the interaction of party and appearance, political conservatism, gender, age, the interaction of conservatism and party, the interaction of gender and appearance, and the interaction of age and appearance. We included the last three interaction terms as control measures. The analysis yielded no effect of political party (β = −.46, t < 1) or appearance, (β = −1.03, t = −1.50, p = .14), but importantly it revealed an interaction of political party and appearance (β = .82, t = 2.94, p < .01). Democratic candidates were rated higher than Republicans when they appeared intelligent (M_{intelligent, Rep} = 3.22 vs. M_{intelligent, Dem} = 3.78; t(523) = −3.20, p < .01); and Republican candidates were rated marginally significantly higher than Democrats when they appeared competent (M_{competent, Rep} = 4.18 vs. M_{competent, Dem} = 3.71; t(523) = 1.80, p = .07). Table 2 lists full results of the analysis.

**Discussion**

The interaction of political party label and candidate appearance provides some initial support for H1, H2, and H3. The appearance of intelligence was more beneficial for Democrats, and the appearance of competence was directionally more beneficial for Republicans. Given the notion in the popular press as well as the findings from our pilot study that intelligence is a trait more associated with Democrats and competence a trait more associated with Republicans, these findings confirm H1, that an appearance reflecting the image people associate with the party can be beneficial in terms of voter preference.

Although not a central focus of our investigation, for completeness, we also ran a study that used the traits of trustworthiness and likeability. We followed the same design and procedure as the competence versus intelligence study. One hundred fifty-seven participants from the same pool completed the experiment. The results revealed only main effects for appearance (β = −1.74, t = −2.13, p < .05) and party (β = −2.42, t = −5.08, p < .001), and an interaction of party and liberalism (β = .47, t = 4.29, p < .001) (see Table 2). There was no interaction of appearance and party (p > .40). The results suggest that appearing trustworthy may be more important than appearing likeable, but this is true regardless of party. We further address the traits of trustworthiness and likeability in Study 3.

Study 1 tested whether possessing visual characteristics that communicate a personality trait consistent with party

<p>| Table 2: STUDY 1 AND FOLLOW-UP STUDIES: IMPACT OF APPEARANCE ON CANDIDATE EVALUATION |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Competence Versus Intelligence</th>
<th>Trust Versus Likeability</th>
<th>Visual Stereotype</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.84 (1.28)</td>
<td>5.50*** (.50)</td>
<td>5.10*** (.35)</td>
</tr>
<tr>
<td>Appearance</td>
<td>−1.03 (.69)</td>
<td>−1.75** (.82)</td>
<td>−.34 (.43)</td>
</tr>
<tr>
<td>Party</td>
<td>.46 (.58)</td>
<td>−2.42*** (.51)</td>
<td>−1.76*** (.34)</td>
</tr>
<tr>
<td>Appearance × party</td>
<td>82.8*** (.28)</td>
<td>.35 (.44)</td>
<td>−.14 (.29)</td>
</tr>
<tr>
<td>Conservatism</td>
<td>64*** (.11)</td>
<td>−13* (.08)</td>
<td>−24*** (.06)</td>
</tr>
<tr>
<td>Party × conservatism</td>
<td>−.41*** (.07)</td>
<td>.47*** (.11)</td>
<td>.45*** (.08)</td>
</tr>
<tr>
<td>Gender</td>
<td>.94* (.48)</td>
<td>−.35 (.36)</td>
<td>.02 (.22)</td>
</tr>
<tr>
<td>Age</td>
<td>.06 (.21)</td>
<td>−.17 (.12)</td>
<td>.02 (.08)</td>
</tr>
<tr>
<td>Gender × appearance</td>
<td>−.44 (.28)</td>
<td>.38 (.44)</td>
<td>.05 (.30)</td>
</tr>
<tr>
<td>Age × appearance</td>
<td>.03 (.32)</td>
<td>.27 (.16)</td>
<td>.05 (.12)</td>
</tr>
<tr>
<td>R²</td>
<td>.18</td>
<td>.21</td>
<td>.15</td>
</tr>
<tr>
<td>F-statistic</td>
<td>7.82***</td>
<td>4.44***</td>
<td>4.96***</td>
</tr>
<tr>
<td>Observations</td>
<td>327</td>
<td>157</td>
<td>267</td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01.
trait associations would be advantageous. However, as noted previously, an alternative possibility is that party and candidate consistency might also be defined in terms of more general stereotypes. H4 proposes that rather than appearing consistent with a brand trait association, it may be advantageous for a candidate to have an appearance that matches the stereotypical member of his or her party. To test the possibility of the visual advantage stemming from stereotypes, we replicated Study 1 using photographs of candidates that the vast majority of participants in our data set agreed were Democrats or Republicans. When we repeated the experiment using stereotypical candidates, the interaction between fit and party label became insignificant (t < 1, p = .55) (see Table 2). Thus, in contrast to H4, there does not seem to be a positive effect for an appearance that is consistent with a party stereotype. Rather, it seems that an appearance communicating party-associated traits is most effective.

**STUDY 2: NEGATIVE ADVERTISING, APPEARANCE, AND PARTY MEMBERSHIP**

In Study 1 we demonstrated the positive effect of a match between visually inferred personality traits and a party-associated trait. Our second study investigated the impact of these visually inferred traits on a candidate’s ability to resist negative advertising attacks. If a match between visually inferred traits and party brand associations leads to positive outcomes for a candidate, this should subsequently mitigate the impact of a negative advertising campaign (H5).

**Participants, Design, and Procedure**

Two hundred ninety-one respondents from an online pool completed the study for a cash payment. The experiment used a 2 (ad target party affiliation: Republican vs. Democrat) × 2 (ad target appearance: competent vs. intelligent) × 2 (replicate) between-subjects design. Again, we employed the candidate photographs used in Study 1. All participants were presented with the same negative ad text (see Appendix B), with the only change being whether the target of the advertisement was stated to be a Republican or a Democrat. Inserted throughout the advertisement were pictures of the candidate who was ostensibly the target. At the end of the advertisement was a picture of both the target of the advertisement and the candidate sponsoring it, as well as a recommendation to vote for the advertisement’s sponsor.

Participants read the ad copy and indicated their relative preference between the two candidates, the relative appeal of the candidates, and their likelihood of voting for either candidate, each on nine-point scales, where lower scores indicate support for the sponsor of the advertisement and higher scores indicate support for the target of the advertisement. They also provided some demographic information and their level of political conservatism.

**Results**

We created a relative evaluation index from the dependent measures (α = .86). We regressed the index on the dummy variables of target appearance, target party affiliation, and the interaction of the two variables. We also included political conservatism and the interaction of conservativism and target party in the model to control for participants’ political leanings. The analysis revealed main effects of target party (β = −2.42, t = −3.11, p < .01) and target appearance (β = −2.43, t = 2.84, p < .01) and a significant interaction of party and appearance (β = 1.66, t = 3.46, p < .01). Providing support for H5, a competent-looking candidate was more resistant to negative attacks when labeled a Republican than as a Democrat (M_{Comp_Rep} = 5.10 vs. M_{Comp_Dem} = 4.36; t = 2.15, p < .05). Similarly, an intelligent-looking candidate was more resilient when labeled a Democrat than as a Republican (M_{Intel_Rep} = 3.64 vs. M_{Intel_Dem} = 4.50; t = 2.71, p < .01). Table 3 presents the full results.

**Discussion**

Study 2 shows that appearance interacts with party label to mitigate the influence of negative advertising. The significant interaction of ad target party affiliation and ad target appearance suggests that negative advertising may be less effective against a candidate whose appearance communicates a personality trait associated with the party brand. However, we note that the effect for Republicans was far more pronounced than for Democrats. In Study 4 we present analyses of election data that may help shed light on reasons for this difference.

To test H6, we repeated this investigation using candidates who looked stereotypical of the political party. Three hundred fourteen respondents from the same online pool completed the study. Consistent with Study 1, we found no support for H6, because fit with the visual brand stereotype did not yield a significant interaction with party label (t < 1).

**STUDY 3: PERSONALITY INFERENCE AND ELECTION OUTCOMES**

The preceding studies suggest several insights that we used to design specifications for empirically studying actual U.S. congressional elections. To examine how personality inferences based on candidate appearance might influence election outcomes, we use several sources of data, including the personality trait judgments; selected results from the 2000, 2002, and 2004 congressional elections; and data on television advertising spending (for definitions for all variables and the correlations among them, see Web Appendices B and C at http://www.marketingpower.com/jmroct11).

**Appearance Traits**

First, we examined the relationship between candidate appearance and vote share. Table 4 lists results for different

---

7 Again, the replicate factor did not interact with any of the variables. All ps > .16; thus, we collapsed across it.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>8.04* (1.40)</td>
</tr>
<tr>
<td>Appearance</td>
<td>−2.43* (0.86)</td>
</tr>
<tr>
<td>Party</td>
<td>−2.42* (0.78)</td>
</tr>
<tr>
<td>Appearance × party</td>
<td>1.66* (0.48)</td>
</tr>
<tr>
<td>Conservatism</td>
<td>.25 (0.21)</td>
</tr>
<tr>
<td>Party × conservatism</td>
<td>−.19 (0.13)</td>
</tr>
<tr>
<td>R²</td>
<td>.08</td>
</tr>
<tr>
<td>F-statistic</td>
<td>4.62*</td>
</tr>
<tr>
<td>Observations</td>
<td>291</td>
</tr>
</tbody>
</table>

* p < .01.
specifications that predict incumbent vote share using all four inferred traits (competence, intelligence, trustworthiness, and likeability). These specifications varied in terms of how the inferred personality traits entered the model. The first model, labeled “Inferred Traits,” simply used the incumbent’s relative rating on the personality traits to predict vote share. This model yielded an R-square of .041 and no significant estimates. Because the correlations among the trait variables clearly suggested an overlap, we next performed a factor analysis to investigate whether the data could be represented by a smaller number of latent dimensions. This analysis suggested a two-factor solution with competence, intelligence, and trustworthiness loading on the first factor and likeability and trustworthiness loading on the second factor. This first factor corresponds to the summary dimension of competence (Todorov et al. 2005). This model, labeled “Factors,” yielded a positive significant effect for the competence factor and a nonsignificant estimate for the second factor. The R-square for this model is .040. This result is consistent with the results Todorov et al. (2005) report.

The third model, labeled “Party-Specific Inferred Personality Traits,” estimates separate parameter estimates for each personality trait based on whether the race involves a Democratic or Republican incumbent. This model yielded an R-square of .13 and a striking pattern of results. Democrats benefit by appearing relatively more intelligent and likeable, whereas Republicans benefit from having an advantage in competence and trustworthiness. Despite correlations in the traits, the variance inflation factors for this model are in the acceptable range. The maximum variance inflation factor is 8.4 for the Republican competency measure, and the greatest condition index is 7.24.

The model labeled “Party-Specific Factors” provides estimates for the factor scores for each party. This model yields limited insights: Only the competence–ability factor is marginally significant for Republican incumbents and the R-square is only .04.

Although the collinearity diagnostics suggest that the party-specific inferred personality traits model is acceptable, the diagnostics are evaluated using rules of thumb rather than hard criteria. The pattern of results whereby Republicans benefit from appearing competent and trustworthy and Democrats benefit from appearing intelligent and likeable, combined with the results from the party-specific factor model, suggest that the traits merit further consideration.

On the basis of possible differences in the constructs and the divergent pattern of results observed across the traits in our laboratory experiments, we created four new variables. The first two variables are the differences between the competence and intelligence ratings separately for the Democratic incumbent and for the Republican incumbent, and the other two variables represent the differences between trustworthiness and likeability for incumbents of each party. This model is labeled “Difference Scores” and is represented by Equation 1:
\[ I_{\text{Vote}} = \beta_{I_{\text{Vote}}} + \beta_{\text{AdvCI}} \text{AdvCI} + \beta_{\text{AdvTL}} \text{AdvTL} \\
+ \beta_{\text{F1}} \text{Factor1} + \beta_{\text{F2}} \text{Factor2} + \epsilon, \]

where

- \( I_{\text{Vote}} \) = incumbent vote share,
- \( \text{AdvCI} \) = incumbent advantage factor,
- \( \text{AdvTL} \) = incumbent advantage factor,
- \( \text{Factor1} \) = factor 1,
- \( \text{Factor2} \) = factor 2.

This specification provides a structure that allows for further testing of hypotheses. The difference-score model suggests that Republicans benefit from appearances that are more competent than intelligent and more trustworthy than likeable. Democrats benefit from the reverse. The variance inflation factors for this model are all less than 1.6. Importantly, the correlations between the traits and the difference scores are relatively low.

Because the party-specific effects of appearance seem to be symmetric, we collapsed the four difference-score variables into two variables that encompass the trait advantages. We define an advantage variable related to the competence–intelligence difference trait as \( \text{AdvCI} = \text{IncComp} - \text{IncIntel} \) if the incumbent is a Republican, and \( \text{AdvCI} = \text{IncIntel} - \text{IncComp} \) if the incumbent is a Democrat. Similarly, we defined \( \text{AdvTL} \) as the difference between \( \text{IncTrust} \) and \( \text{IncLike} \) for Republican incumbents and the reverse for Democratic incumbents. We use the advantage variables and the factor scores described previously to estimate Equation 2:

\[ I_{\text{Vote}} = \beta_{I_{\text{Vote}}} + \beta_{\text{AdvCI}} \text{AdvCI} + \beta_{\text{AdvTL}} \text{AdvTL} \\
+ \beta_{\text{F1 Comp}} \text{Factor1} + \beta_{\text{F2 Warmth}} \text{Factor2} + \epsilon. \]

The results for the model with the factors and the advantage variables are illuminating. The variables explain approximately the same amount of variance as the party-level inferred traits model while using only half the number of covariates.

This model yields several crucial insights. First, the positive effects associated with the competence-oriented factor and the insignificant effects for the trust–likeability factor are consistent with previous literature (Todorov et al. 2005). However, the results also highlight that differences between competence and intelligence, and between trust and likeability, both have larger impacts on voter decision making than the competence-oriented factor. The variance inflation factors for this model are all below 1.4.

Advertising

We next expanded the analysis to add measures of advertising spending and tone, and we considered voter heterogeneity across districts. Television advertising makes up the majority of total spending in campaigns and serves as the way most voters come in visual contact with candidates; thus, we used the dollars spent on television advertising. We sourced campaign fund-raising and spending statistics from the Federal Election Commission. Table 1 highlights the magnitude and dispersion of spending. Republican incumbents spent on average $858,000 compared with $528,000 for Democratic challengers, and Democratic incumbents spent $820,000 versus $357,000 for Republican challengers.

Summary data are also provided for the ratios of incumbent spending relative to total spending in a district. The variable “Ratio” is computed in terms of incumbent spending and challenger spending: Ratio = I Spend/(I Spend + Ch Spend), where I Spend is incumbent spending and Ch Spend is challenger spending. Incumbents spent significantly more than challengers; the ratio variable had an average value of .71. The ratio measure ranged from .21 to .99.

In addition to overall spending, we considered the proportion that was spent on negative advertising. The Wisconsin Advertising Project (Goldstein, Franz, and Ridout 2002; Goldstein and Rivlin 2005) has published data on television advertising for congressional races in the 2000, 2002, and 2004 elections. The database contains information on races in the top 75 media markets in 2000 and the top 100 markets in 2002 and 2004. It also includes qualitative judgments as to whether each advertisement had a negative or positive tone, as well as estimated costs for each airing. We used the estimated costs and tone judgments to calculate the percentage of negative advertising candidate used.

Overall, we found that incumbents spend 16% of advertising dollars on negative advertisements versus 17% for challengers, though the use of negative advertising varied from 0% to 100%. We calculated a ratio (NegRatio) of negative to total advertising spending as the difference between the incumbents’ and challengers’ spending on negative advertising divided by total spending. The negative advertising ratio has a mean of .002 and ranges from .98 to −.55.

Finally, we employed the Cook Partisan Voting Index, a measure of the partisan leaning of each congressional district compared with the nation as a whole. It is derived by comparing the average of the results of the two prior presidential elections in a given district with the national result. It indicates which party was ahead in the district and the magnitude of the advantage compared with the national average (The Cook Political Report 2009).

Results

Table 5 provides estimation results for several models that include spending. The model labeled “Spending” includes the ratio of incumbent to total spending and the ratio of negative spending. The R-square of this model is .28, and only the overall spending ratio is significant. The second model, “Spending and Appearance,” adds the differencescore variables for each of the two parties (i.e., competence–intelligence and trust–likeability) and includes interactions

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8The data were obtained from a project of the Wisconsin Advertising Project, under Professor Kenneth Goldstein and Joel Rivlin of the University of Wisconsin–Madison, and include media tracking data from the Campaign Media Analysis Group in Washington, D.C. The Wisconsin Advertising Project was sponsored by a grant from the Pew Charitable Trusts. The opinions expressed in this article are those of the authors and do not necessarily reflect the views of the Wisconsin Advertising Project, Kenneth Goldstein, Joel Rivlin, or the Pew Charitable Trusts.
Table 5
STUDY 3: IMPACT OF SPENDING AND APPEARANCE ON VOTE SHARE

<table>
<thead>
<tr>
<th></th>
<th>Spending</th>
<th>Spending and Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parameter (SE)</td>
<td>Parameter (SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>62.51*** (4.72)</td>
<td>60.00*** (4.03)</td>
</tr>
<tr>
<td>Spending ratio (Ratio)</td>
<td>-29.46*** (14.53)</td>
<td>-21.77* (12.29)</td>
</tr>
<tr>
<td>Spending ratio squared (Ratio²)</td>
<td>34.24*** (10.57)</td>
<td>25.76*** (8.99)</td>
</tr>
<tr>
<td>Negative spending ratio (NegRatio)</td>
<td>- .92 (0.76)</td>
<td>-1.11 (.71)</td>
</tr>
<tr>
<td>Advantage competence versus intelligence (AdvCI)</td>
<td>3.53*** (1.32)</td>
<td></td>
</tr>
<tr>
<td>Advantage trustworthiness versus likeability (AdvTL)</td>
<td>2.53*** (1.74)</td>
<td></td>
</tr>
<tr>
<td>Factor 1: Competence</td>
<td>.74** (.37)</td>
<td></td>
</tr>
<tr>
<td>Factor 2: Warmth</td>
<td>.47 (.36)</td>
<td></td>
</tr>
<tr>
<td>Cook × Republican incumbent (Cook × RI)</td>
<td>- .33*** (.07)</td>
<td></td>
</tr>
<tr>
<td>Cook × Democrat incumbent (Cook × DI)</td>
<td>-.30** (.06)</td>
<td></td>
</tr>
<tr>
<td>Incumbent years (L_YRS)</td>
<td>.10* (.06)</td>
<td></td>
</tr>
<tr>
<td>AdvCI × NegRatio</td>
<td>5.18** (2.59)</td>
<td></td>
</tr>
<tr>
<td>AdvTL × NegRatio</td>
<td>.52 (1.17)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>153</td>
<td>153</td>
</tr>
<tr>
<td>R²</td>
<td>.28</td>
<td>.56</td>
</tr>
</tbody>
</table>

*p < .10.
**p < .05.
***p < .01.

between appearance and the negative advertising spending measure (NegRatio). This model enables us to examine whether the physical appearance of Democrats versus Republicans alters the effectiveness of negative advertising. In addition, the model includes the Cook Partisan Voting Index to account for district heterogeneity. This model is detailed in Equation 3:

(3) \[ L_{Vote\%} = \beta_{L_{Vote\%}} + \beta_{Ratio_{Ratio}} + \beta_{Ratio_{SQ_{Ratio}}} + \beta_{NegRatio_{NegRatio}} + \beta_{AdvCI_{AdvCI}} + \beta_{AdvTL_{AdvTL}} + \beta_{CompFactor1_{CompFactor1}} + \beta_{CompFactor2_{CompFactor2}} + \beta_{Cook_{RI}Cook_{DI}} + \beta_{L_{YRS_{L_{YRS}}}} + \beta_{NegRat_{AdvCI_{NegRatio}} \times AdvCI} + \beta_{NegRat_{AdvTL_{NegRatio}} \times AdvTL} + e. \]

This model yields an R-square of .56. The analysis reveals unsurprising positive effects for higher spending and a negative effect for negative advertising. We also observe significant effects of the Cook Partisan Voting Index that are similar for both political parties. The index is centered at zero, so the different signs across parties indicate the advantage for each party. The significant result for both parties highlights the importance of district heterogeneity.

For the visual effects, the main effects of the difference score variables are consistent with the trait models. The interaction between negative advertising and the trait-advantage variables is useful for addressing H4. We observe a significant, negative interaction between the competence-intelligence difference score and the negative ad spending ratio for Democratic incumbents, and a marginally significant (p = .07) positive interaction between the competence-intelligence difference score and the negative ad spending ratio for Republican incumbents. This suggests that Democratic incumbents benefit from using negative advertisements if they appear more intelligent than competent compared with their opponents, whereas Republican incumbents will benefit from negative advertising if they appear more competent than intelligent.

Discussion

The analysis of election data provides evidence that candidate appearance has a significant effect on outcomes. Consistent with our experiments and in support of H1, H2, and H3, visually inferred personality traits can be advantageous to a candidate if they are consistent with traits associated with the party as a whole. Specifically, Republicans benefit from appearing more competent than intelligent, and Democrats benefit from appearing more intelligent than competent. In evaluating the effects of trustworthiness and likeability, we found that these variables have divergent main effects across the two parties, though they do not interact with negative advertising.

STUDY 4: CANDIDATE FIT WITH VISUAL PARTY STEREOTYPE

Thus far, we have shown that when personality traits inferred from a candidate’s appearance match personality traits associated with the candidate’s party, it can promote success in electoral outcomes and can mitigate the impact of a negative advertisement directed at the candidate. Our laboratory results also indicate that a match between a candidate’s appearance and a visual party stereotype is not sufficient to produce these outcomes; however, our election data remain mute with respect to the alternative hypothesis of a visual stereotype. In our final study, we revisit the issue of visual party stereotypes to confirm our lack of support for this alternative hypothesis (H4). We use the same data sets described in Study 3. Our dependent measure is the party prediction for each candidate pair in our trait inference database. As noted, as part of the development of the personality-trait face database, we asked participants to make a binary prediction of the party affiliation of the candidates on the basis of their photographs. We interpreted these judgments as an indication of how much a candidate looked stereotypical of his or her party. A case with nearly unanimous agreement about which party a candidate was from suggested strong adherence to a visual party stereotype. We used respondents’ binary judgments to create a stereotype variable for each candidate pair, ranging from 0 to 1 (a score near 0 or 1 suggests rater agreement on candidate party affiliation). Then, we used this measure to analyze the relationship between stereotypicality and personality-trait judgments.

Analysis

We regressed the stereotype variable on the four trait inferences (competence, intelligence, trustworthiness, and likeability) to determine whether the traits would predict political party stereotypicality. We conducted the analysis separately for Republican and Democratic incumbents. As Table 6 shows, for Republicans stereotypicality was positively related to competence and negatively related to likeability, suggesting that the appearance of competence is part of the Republican stereotype. For Democratic incumbents,
however, none of the trait measures were significant predictors. We also tested the relationship between party stereotypicality and electoral success using a regression that predicts incumbent vote share as a function of the incumbent’s visual stereotypicality. Table 7 shows that the analysis revealed no significant effects and an R-square of only .01.

Discussion

Study 4 provides further evidence that consistency with a visual brand stereotype does not drive the appearance effects. Rather, the effects seem to be driven by a match between visually inferred personality traits and trait associations with the party brand. Nonetheless, we find some evidence that, at least for Republicans, certain appearance-based traits are associated with a visual stereotype. We found that for Republican candidates, the extent to which a candidate appeared stereotypical was related to having the same physical characteristics that were advantageous to the candidate in the election results.

The result for Republicans appears inconsistent with our laboratory studies; however, we believe that it may actually help clarify the laboratory findings. In the experiments, we selected faces that conformed to our experimental criteria, and we deliberately attempted to disentangle the trait of competence from other traits. Stereotypes are not unidimensional, however, and while we have evidence that competence is a component of the Republican stereotype, it is likely not the only trait that makes up a typical Republican’s appearance. Overall, our results suggest that the appearance of competence is a critical trait for Republicans, because it is both a trait that voters associate with the party and a component of the visual stereotype for candidates.

It is noteworthy that the personality-trait judgments did not predict Democratic stereotypicality. This may be because the Republican brand image is more narrowly defined than the Democratic brand, and this is represented visually as well. To test this possibility, we asked a sample of 43 men and 32 women, 42% Democrat, aged between 18 and 60 years, which party had a narrower position. Seventy-two percent reported that the Republican Party had the narrower position.

In addition to the preceding survey data, further analysis of the stereotypicality variable supports the possibility that voters have more distinct visual expectations of Republican candidates. Our participants correctly predicted the parties of Republican incumbents at a significantly higher rate than Democrats (74.7%; $\chi^2 = 21.25$, $p < .001$). In contrast, for the subset of Democrats, judgments about party membership were not significantly better than random chance (44.8%). While interpretation of these results is complicated by the fact that evaluations are made for pairs of Republicans and Democrats (i.e., one incumbent and one challenger), the finding that survey participants are more accurate when evaluating races with Republican incumbents is telling. The key observation is that participant evaluations are more accurate when assessing races with successful Republican candidates than races with successful Democratic candidates.

**GENERAL DISCUSSION**

Previous literature on candidate appearance has suggested that an appearance conveying traits related to competence is beneficial (Todorov et al. 2005). Through experimental studies and analysis of election results, we have shown that effects of appearance may be more nuanced than previously reported. We find that effects of physical appearance at the candidate level are dependent on trait associations at the party level. Candidates are at an advantage when there is a match between personality traits inferred from their physical appearance and the traits associated with their party. Democrats gain by appearing more intelligent than their opponents, whereas Republicans benefit from appearing more competent. This advantage occurs not only in terms of voter preference but also in terms of susceptibility to attacks from negative advertising.

In political campaigns, candidate and party images are actively managed. Our findings suggest that the two parties have become differentiated in the positive space associated with broad trait dimensions. Therefore, whereas a factor analysis loads competence and intelligence on a single dimension, the nonoverlapping elements of the two constructs provide an opportunity for candidates to be distinguished. This is an important finding for political image consultants because it suggests that differentiation of candidates can occur within a small perceptual space.

Our studies demonstrate that a match between appearance-based traits and party-level traits can benefit a candidate. The converse of this finding is that some candidates may struggle as a result of their physical appearance. Although a full analysis of the negative effects of visual inferences is

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**Table 6**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Republican Incumbents</th>
<th>Democratic Incumbents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>.051** (.017)</td>
<td>-.003 (.02)</td>
</tr>
<tr>
<td>Competence</td>
<td>.187** (.06)</td>
<td>.009 (.068)</td>
</tr>
<tr>
<td>Intelligence</td>
<td>-.009 (.043)</td>
<td>-.012 (.065)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>-.071* (.032)</td>
<td>.035 (.040)</td>
</tr>
<tr>
<td>Likeability</td>
<td>.23</td>
<td>.024</td>
</tr>
<tr>
<td>F-statistic</td>
<td>6.15</td>
<td>.046</td>
</tr>
<tr>
<td>Observations</td>
<td>87</td>
<td>67</td>
</tr>
</tbody>
</table>

* $p < .05$.  ** $p < .01$.  

---

**Table 7**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study 4</th>
<th>Follow-Up Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>59.68* (.54)</td>
<td>59.63* (.50)</td>
</tr>
<tr>
<td>Democrat incumbent stereotype (DSTStree)</td>
<td>-.42 (4.87)</td>
<td>.10 (54)</td>
</tr>
<tr>
<td>Republican incumbent stereotype (RISTstree)</td>
<td>1.85 (4.18)</td>
<td>RISTstree X Cook</td>
</tr>
<tr>
<td>RISTstree X Cook</td>
<td>-.125* (.46)</td>
<td>.01 .05</td>
</tr>
<tr>
<td>R2</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>153</td>
<td>153*</td>
</tr>
</tbody>
</table>

* $p < .01$.  ** $p < .01$.  

---

The Impact of Candidate Appearance
beyond the scope of our research, we address one way that such effects might be mitigated.

The influence of appearance on personality judgments tends to be spontaneous and not a result of deliberation (Hassin and Trope 2000); thus, if voters are prompted to think consciously about the extent to which candidates’ appearances convey particular traits, such appearance effects should dissipate. To test this possibility, we ran an additional study in which we manipulated whether participants thought consciously about a candidate’s appearance. We presented 294 participants with a picture and a short written profile about a candidate. The picture and profile were matched or mismatched on traits. For example, participants viewed a picture-profile set in which the candidate looked competent and the profile suggested he was competent, or they viewed a picture-profile set in which the candidate looked competent but the profile suggested he was incompetent. Before reading the profile, half the participants were shown the profile only and were told to think about the extent to which the candidate looked competent. The other participants received no instructions. Both groups then saw the profile with the profile and were asked to indicate how likely they would be to vote for the candidate.

A 2 (picture profile: match vs. mismatch) × 2 (trait attention: yes vs. no) ANOVA revealed a significant interaction (F(1, 292) = 4.17, p < .05). When prior attention was not drawn to the trait, we saw a replication of our previous studies. Participants judged the candidate more favorably if the picture and profile traits were matched (M\text{Match} = 4.25) than mismatched (M\text{Mismatch} = 3.76; t(292) = 1.98, p < .05). However, when participants were alerted to think about the trait ahead of time, the appearance effect was mitigated (M\text{Match} = 4.02 vs. M\text{Mismatch} = 4.32; t(292) = 1.01, p = .31). The results imply that potential negative effects of appearance-based judgments may be limited by calling explicit attention to the candidate’s appearance deficiencies, presumably by inducing pause and avoiding snap judgments on the voter’s part.

In terms of limitations of our study, the most salient point relates to the sample size and time period. The advertising tone data from the Wisconsin Advertising Project are available only for select media markets and cycles, and within that set, we removed noncontested races. One consequence is that we were unable to delve deeply into the role of voter or district heterogeneity. The political science literature has devoted significant attention to voter partisanship and party identification (Campbell et al. 1960). A common view is that voters rely on partisanship to guide their evaluations of politicians and policies (Alvarez and Brehm 2002; Baumer and Gold 2007; Feldman 1988; Goren 2005). That is, political parties trigger emotional connections or serve as cues that can influence heuristic decision making.

This notion of party identification is in many respects similar to notions of brand loyalty in the marketing literature. However, rather than focus on how the parties (brands) create loyalty, which would be the standard in marketing, the interest in political science is on how the strength of segment membership changes over time. In other words, rather than focus on how parties craft brand images, the literature focuses on the resulting segmentation structure. The implication is that party loyalty may influence response to individual candidates. A less obvious but potentially important issue is that partisanship may influence reaction to candidate appearance or marketing tactics. In the context of our research, an open question is how voter appearance, party image, and voter ideology interact. For example, in the case of Republican candidates trying to appeal to Democratic-leaning voters, it is unclear whether they would benefit from possessing visual traits that match Republican or Democratic party-trait associations. The issue of voter heterogeneity merits additional research.9

Our election and laboratory data were all collected during 2000–2009. Because political parties and their personality-trait associations evolve over time as a function of the political climate and party leaders, our results may not generalize to other decades.10 Although the effects of these particular trait inferences may change as brand associations evolve over time, we suspect that the more general notion will continue to hold that candidate appearance and brand associations will interact to affect elections. Further research is needed to examine the evolution of the party association and its impact on election outcomes.

The results of the negative advertising study have important managerial implications. As noted, it is widely accepted that candidate appearance influences election results, and prior work has considered many elements such as height, hair, and attractiveness (Leigh and Susilo 2009). Our results suggest that appearance should be evaluated in concert with party affiliation, in terms of candidate selection, and even in terms of managing candidate appearance. These types of practices have long been noted (Shapiro 2008), but our findings suggest that image management at the candidate level should be done in conjunction with image at the party level.

The results of our research are consistent with a growing body of work demonstrating dramatic effects of facial characteristics beyond physical attractiveness and how relatively automatic reactions to appearance can have significant consequences (Gorn, Jiang, and Johar 2008; Mueller and Mazur 1996). Although we focus on the domain of political marketing, we speculate that such effects may occur in other marketing contexts in which competitors have distinct brand positions. Specifically, personality traits inferred on the basis of the appearance of a spokesperson or sales representative could be altered depending on the personality traits associated with the brand. Perhaps more important, visually inferred personality traits might alter the personality traits normally associated with the brand. Given the role of a brand’s personality in developing customer loyalty, the potential interaction between visually inferred personality traits and brand-level personality traits is an important topic for further research.

9To illustrate the importance of district heterogeneity, we conducted further analysis of the results of Study 4. The analysis of incumbent vote share in Study 4 yielded insignificant effects for members of both parties as a function of incumbent stereotypicality. Our follow-up analysis used interactions between incumbent party stereotypicality and district partisanship. This analysis yields the equation \text{L_Vote} = 59.63 + .10 \text{DIStereos} \times \text{Cook} − 1.26 \text{RIStereos} \times \text{Cook}. While the coefficient for the interaction between the fit of the Democratic incumbents and district partisanship is nonsignificant, the coefficient for the Republican term yields a t-statistic of −2.74 (see Table 7). This result suggests that Republican-leaning voters are more responsive to visual markers.

10It should be noted that in Brewer’s (2009) work, the parties have maintained similar images for the past 50 years.
Appendix A
ILLUSTRATIVE CANDIDATE PAIRS

Pair 1: A Is More Competent Than B

Pair 2: A Is More Trustworthy Than B


Pair 4: A and B Are Similarly Trustworthy. B Is More Likeable Than A.

This appendix presents four pairs of candidates that produced relatively extreme ratings. These pairs are useful for illustrating the types of judgments made by subjects. For example, in Pair 1, Candidate A was perceived as more competent than Candidate B, and in Pair 2, Candidate A was perceived as more trustworthy than Candidate B. Furthermore, although prior research has noted that the personality traits are strongly correlated—and we, too, observed high correlations—we also found important differences between the key measures. For example, Pair 3 illustrates the potential divergence between judgments of intelligence and competence, with the candidate on the left being rated as more intelligent but less competent than the candidate on the right. Pair 4 highlights the distinction between trustworthiness and likeability, with the two candidates being perceived as equally trustworthy, but Candidate B being perceived as more likeable.

Appendix B
SAMPLE OF STIMULI USED IN STUDIES

Sample of Text Used in Study 2

- Storyboard Page 1 (includes picture of ad target): Who will fight for working families? Not Stan Williams.
- Storyboard Page 2 (includes picture of ad target): Republican/Democratic candidate Stan Williams wants to remove all assistance to local farmers and opposes an income tax cut for hard-working middle-class Americans.
- Storyboard Page 3 (includes picture of ad target): And yet, Williams approves a plan to give congressmen a whopping 74% pay raise.
- Storyboard Page 4: Is this the kind of representation we want in Washington?
- Storyboard Page 5 (includes picture of ad target and ad sponsor): Say no to Stan Williams. Elect Republican/Democrat Eric Hammond to Congress.

REFERENCES


