

Face Value: Linking Nonverbal Cues to Character Traits in Impression Formation of Politicians

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This study identifies how audiences use nonverbal cues to judge specific character traits in political figures. Participants assessed pictures that showed the example politician making eye contact with another person with highest scores. His hand positions received the lowest character-trait scores. Findings show that participants associated direct eye contact and smiling with characteristics such as intelligence, good leadership, and caring, but not morality or honesty. In fact, no nonverbal cue affected evaluations of morality. However, those who judged the candidate as moral from nonverbal cues had a greater likelihood of voting for him.

Keywords: political communication, nonverbal communication, character traits, impression formation

In politics, the way a candidate looks and acts can sometimes be more important to voters than what he or she says (Grabe & Bucy, 2009; Haumer & Donsbach, 2009). Impressions—especially first impressions—are important, as research shows that people can form opinions about candidates and make voting decisions based on the candidates’ personalities and character traits (Kim & McCombs, 2007; Wu & Coleman, 2014). Impressions are formed in an instant, and nonverbal cues and gestures are crucial in making a good first appearance (Asch, 1946; Smith, Mackie, & Claypool, 2000). Furthermore, assessment of character traits with nonverbal communication has been shown to be reliable and accurate (Bucy & Grabe, 2008; Olivola & Todorov, 2010). But little research has been done to determine which nonverbal cues lead to first impressions of specific character traits. As such, we seek to examine how audiences judge character traits by evaluating the nonverbal cues of a politician. For example, what does moral look like in a hand gesture? Do people glean information about intelligence from a smile?

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Date submitted: 2017–10–31

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Researchers have typically explored the role of nonverbal cues on these first impressions in controlled experiments, isolating nonverbal expressions from other stimuli under artificial conditions (e.g., Koppensteiner, Stephan, & Jaschke, 2015, 2016). The present study is ecologically valid, asking untrained judges to rate the character traits of a real politician using nonverbal cues from media images. Using the observational methodology protocol that employs untrained judges to rate nonverbal expressions in naturally occurring settings (Babad, 1990; Friedman, DiMatteo, & Mertz, 1980; Mullen et al., 1986), we seek to understand which nonverbal expressions of a politician lead viewers to infer specific character traits that voters commonly use to evaluate candidates, and which combinations of character traits and nonverbal cues lead to voting intentions. It is important to study phenomena using different methods, as what works in a controlled experiment might not work in the real world (Gerber & Green, 2012), with more externally valid methods such as those used in this study recommended to complement experiments (Fiske, 2016).

These findings advance our theoretical understanding of nonverbal cues and impressions of personality traits and provide new insight about impressions and voting intentions. For practical purposes, this research helps political candidates and campaign managers know what nonverbal cues make specific impressions on constituents. Additionally, this work ultimately will help visual journalists and editors make better choices of political candidate images by knowing how they affect audiences.

Literature Review

Impression Formation

The theory of impression formation says that nonverbal cues and appearance are key elements in developing first impressions of people. In his seminal work, Asch (1946) asserts, "We look at a person and immediately a certain impression of his character forms itself in us" (p. 253). When minimal information is available, people use salient features, such as appearance and prominent nonverbal cues, to process information. Research has confirmed that appearance and nonverbal cues cause people to quickly assign character traits to individuals (e.g., Koppensteiner et al., 2015, 2016; Little, Burriss, Jones, & Roberts, 2007; Parzuchowski & Wojciszke, 2014; Poutvaara, Jordahl, & Berggren, 2009). For example, people with their hand over their heart are seen as moral and honest (Parzuchowski & Wojciszke, 2014). This study seeks to extend our understanding of nonverbal expression's effect on the formation of character trait impressions of politicians, incorporating evaluations of morality, intelligence, good leadership, consistency, and caring.

Impression formation theory says that the assignment of character traits and first impressions through nonverbal cues involves four general factors (Smith et al., 2000). The first is the source or actor. This research's inquiry is narrowed to a White male politician, as White men are still predominant in the U.S. political arena. The second factor in impression formation is the valence of salient information. In this study, we focus on nonverbal cues with positive valence because they are more frequently displayed by politicians in campaigns than negative behaviors (Verser & Wicks, 2006) and are considered appropriate for candidates in campaign contexts (Bucy, 2016; Bucy & Newhagen, 1999). The third factor is that the information being displayed is performed in an ordinary activity rather than an unusual one. All images in this study depict a politician engaged in obvious but ordinary nonverbal communication, including the candidate giving

speeches, casting votes, and meeting with constituents. These images stand in contrast to the more unusual polarizing images of politicians, such as the 1988 tank-ride photo of Michael Dukakis. We acknowledge that images such as these can play a role in general impression formation, but these images do not fulfill the criterion of being ordinary for formation of first impressions and, therefore, are not considered in this study. The final factor that influences impression formation is that this is the first time people have encountered the subject. To satisfy this factor, all participants in this study had no prior knowledge of or familiarity with the politician in the photographs, thus, participants' responses represented their first impressions.

Nonverbal Cues and Impressions

Nonverbal communication includes the expansive collection of all nonverbal stimuli created by the source and surroundings. Nonverbal expressions create critical meanings for receivers through observation of specific details. Although this often happens in conjunction with verbal cues, nonverbal cues play a significant role in the perceptions, including voter perceptions, and judgments that audiences make (Bucy & Grabe, 2008).

The majority of visual research in the political realm has focused more on fixed characteristics, such as attractiveness and face shape (Little et al., 2007; Poutvaara et al., 2009), than on specific nonverbal expressions, such as smiling or making eye contact, and associating them with character judgments. Unlike the more stable aspects of appearance, facial displays are highly variable and can be manipulated by any candidate (Bucy & Grabe, 2008; Bucy & Bradley, 2004; Stewart, Bucy, & Mehu, 2015). Koppensteiner and colleagues (2015) examined personality trait assignments from hand and arm gestures in German political speeches. In their experiments, the researchers animated nonverbal cues from political speeches with stick figures, isolating nonverbal gestures from appearance characteristics. They found that nonverbal gestures were associated with extroversion and agreeableness. In another study, Koppensteiner and colleagues (2016) again turned the movements of politicians in political speeches into stick-figure videos, linking nonverbal cues with the personality traits of dominance, trustworthiness, and competence. Additionally, expressive displays made by candidates have been reliably documented as implying corresponding behavioral intentions (Grabe & Bucy, 2009). In this study we concentrate on three nonverbal cues that stand out as having been examined for their effects in political settings—eye contact, smiling, and hand position.

Eyes. Positive eye contact is typically associated with direct contact, rather than indirect or inconsistent eye contact. For politicians, misdirected eye contact can be viewed negatively (Keating & Latane, 1976). However, a politician's making eye contact with other individuals may indicate responsiveness (Lobinger & Brantner, 2015). More generally, direct eye contact and consistent gaze at a target can lead audiences to perceive speakers as honest and qualified (Bayliss, Griffiths, & Tipper, 2009; Bayliss & Tipper, 2006; Beebe, 1974). However, studies that look at eye movement tend to be more concerned with deception. For example, increased rates of blinking or avoidance of eye contact are associated with lying (DePaulo et al., 2003; Ekman, Sorenson, & Friesen, 1969; Porter & ten Brinke, 2008). Direct eye contact with a raised chin and medially raised brows (called a "plus" face) is another indicator of deception (DePaulo et al., 2003). Eye position and direction can also signal psychological stress, such as anxiety (Gregersen, 2005; Waxer, 1977). Nelson and Brown (2012) acknowledged that eye contact serves as the most powerful form of nonverbal communication, and gendered differences certainly emerge for

those in elite positions: Women are more likely to hold and maintain eye contact as a listening strategy; men tend to hold eye contact to establish dominance. Important to also note, eye contact can carry different meanings in various contexts and cultures.

Smiling. Smiling is associated with several positive characteristics, such as trustworthiness, leadership, caring, and charisma (e.g., Boone & Buck, 2003; Krumhuber et al., 2007; Teven & Hanson, 2004; Zajonc, Murphy, & Inglehart, 1989), though Cashdan (1998) found that smiling may not be associated with leadership at all. Olivola and Todorov (2010) show that charisma includes cues such as smiling and demanding visual attention from the audience. For high-profile political candidates, Stewart and colleagues (2015) showed that smiles vary greatly, and audiences can recognize subtle changes in smiling based on small details. The corners of the lips, muscles around the eyes, and teeth were components of differentiating types of smiles.

Hands. Certain hand positions can be interpreted as caring (Floyd, 1999) or friendly (Demir, 2011) and also may influence audiences to think of a candidate as moral (Parzuchowski & Wojciszke, 2014). For example, emblematic gestures such as placing the hand over the heart or shaking hands with others may influence audiences to think of a candidate as moral or charismatic (Parzuchowski & Wojciszke, 2014). According to Demir (2011), hand placement near the face can communicate various character traits, including sincerity and decisiveness. In political speeches, hand positions have been shown to direct audience attention and applause (Bull, 1986). Descriptive hand positions during speeches help audiences understand what the speaker is saying, thus lending the speaker more credibility (Van Edwards, 2017).

As this literature review shows, nonverbal expressions are associated with more than one character trait—hand gestures convey impressions of both caring and morality, for example. Because of the polysemic nature of nonverbal communication, we suspect that it will not be possible to isolate just one character trait per nonverbal cue; therefore, we examine whether more than one nonverbal cue conveys each of the character traits, described next.

Character Traits

Character traits tell us what people are like (Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006). A *trait* is defined as an enduring characteristic of an individual that influences that person's behavior, such as the tendency to be honest (Caprara et al., 2006). In multiple contexts, people make assessments of a candidate's character traits using visual images (e.g., Barrett & Barrington, 2005). Trait inferences may be activated automatically when people form impressions of politicians and, therefore, may be more important than values in determining whether one likes a politician (Caprara et al., 2006).

Many candidate character traits have been studied, including competence (Kinder, Peters, Abelson, & Fisk, 1980; Pancer, Brown, & Barr, 1999; Todorov, Mandisodza, Goren, & Hall, 2005), leadership (Kinder, 1986; Miller & Miller, 1976), intelligence (Balmas & Sheafer, 2010; King, 1997), morality (Balmas & Sheafer, 2010; Benoit & McHale, 2004; Kinder, 1994; Pancer et al., 1999), empathy (Benoit & McHale, 2004), relations to others (Reinemann & Wilke, 2007), and reliability (Balmas & Sheafer, 2010). These characteristics are fundamentally important for establishing a political image (Benoit & McHale, 2004; Kinder

et al., 1980) and are frequently used in many large-scale surveys, including the American National Election Studies (ANES), to assess political candidate characteristics.¹ Thus, including them in research such as this allows findings to be compared with a larger body of knowledge.

Our inquiries focus on the traits of *leadership*, which includes expertise, competence, qualification, and experience; *intelligence*, which includes being knowledgeable and intelligent; *consistency*, which encompasses reliability; *caring*, which includes empathy and relations to others; and finally, *morality*, which for this study includes honesty, trustworthiness, and integrity. It is important to note the complexity of the concept of morality, which is defined differently from various ethical, religious, and philosophical positions. Consistent with other quantitative research studies seeking to assess morality (e.g., Goodwin, Piazza, & Rozin, 2014; Landy, Piazza, & Goodwin, 2016), this study indexed similar traits featured in ANES studies.

As reviewed earlier, few studies explicitly link specific nonverbal expressions and cues with these precise character traits in the political realm. Therefore, we ask the following research questions rather than make predictions:

RQ1: *Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is moral?*

RQ2: *Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is intelligent?*

RQ3: *Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is a good leader?*

RQ4: *Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is consistent?*

RQ5: *Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is caring?*

Voting Intention

Some studies have shown that candidates with more favorable appearances have an increased likelihood of being voted for (Rosenberg, Bohan, McCafferty, & Harris, 1986), but other studies have also noted that the demographic characteristics of the voters themselves, such as race, gender, education, and partisanship, may also shift voting patterns (Leighley & Nagler, 1992; Sigelman, Sigelman, Walkosz, & Nitz, 1995; Sigelman & Welch, 1984; Wolfinger & Rosenstone, 1980). In addition, political knowledge and political participation are consistently shown to influence voting behavior (Cohen & Chaffee, 2013; Delli Carpini & Keeter, 1996; Harder & Krosnick, 2008; Torney-Purta & Amadeo, 2003). Therefore, we include these

¹ See *The ANES Guide to Public Opinion and Electoral Behavior*. Ann Arbor, MI: University of Michigan, Center for Political Studies. /resources/guide-to-public-opinion/.

variables as controls, that is, removing the effects of age, gender, education, partisanship, political knowledge, and participation, to understand which conveyed character traits visually influence voting intention. First impressions have been shown to affect decision making on important issues, including intention to vote (Koppensteiner & Stephan, 2014). Nonverbal behaviors, such as smiling, have also been found to influence voting (Horiuchi, Komatsu, & Nakaya, 2012). Our final research question concerns the important outcome of nonverbal expressions that convey character traits of political candidates, that is, the likelihood of voting for a candidate:

RQ6: Which of the character traits conveyed by nonverbal cues best predict likelihood of voting for the candidate, controlling for demographic characteristics, political participation, and political knowledge?

Method

To understand which nonverbal cues are linked with which specific character traits, we use observational communication protocols that rely on untrained judges rather than on trained coders to gauge the impressions of actual observers (Babad, 1990; Friedman et al., 1980; Miller, Coleman, & Granberg, 2007; Mullen et al., 1986). The approach used in these studies has been determined to be methodologically and ecologically legitimate (Babad, 1999), and it has the advantage of allowing researchers to determine how average viewers judge nonverbal cues exhibited in more realistic circumstances than in the artificial experiments so prevalent in this type of research. Our study uses published news photographs of a real political office holder with whom the participants were unfamiliar, as have other studies in this vein (Antonakis & Dalgas, 2009; Poutvaara et al., 2009). This method is most appropriate for our research goals because it enables us to isolate photographs with prominent nonverbal cues and examine them under more naturalistic conditions. In addition, this method helps triangulate results from the numerous experiments found in the literature.

Photographs

The photographs used in this study were published news media images of one politician. Many studies have used actors to isolate and control the visual production of nonverbal cues (Brettschneider, 2002; Haumer & Donsbach, 2009), but this study asked judges to rate nonverbal expressions of an actual politician. One advantage to this approach is that judges were exposed to nonverbal cues a politician actually makes rather than those that researchers assumed one would make. For example, Parzuchowski & Wojciszke's (2014) experiment used photographs of actors placing their hands over their hearts in an experiment; however, we found that in more than 100 photographs of the politician used in this study, none showed him with his hand over his heart. However, this approach still introduces challenges. The photographs represent mediated versions of reality that are ultimately selected by a photographer and editor. The photographer typically takes a picture at a decisive moment. Bock (2011) argues that these moments are products of the "human body, using technology, interact[ing] with the physical environment in a specific moment of time" (p. 707). This recontextualization process means that multiple actors contribute to the construction of meaning. As such, though our photographs include a real-life politician, our

study assesses the link between character assessments and nonverbal behaviors by using photographs that represent the mediated realities created by local and digital media producers.

The man pictured in the study was a U.S. Republican politician elected to the House of Representatives from a western state. At the time this study was conducted, he had been in this position for two years. The pictures were taken between 2011 and 2014 and appeared in local print and digital media. The politician is a White male in his 50s, a demographic that is still typical for U.S. politicians despite increasing diversity. Because the same politician was in all photographs, his weight, height, and other physical characteristics were the same. No photographs revealed the politician's political party or location.

Pilot Study. A pilot study was conducted prior to the actual study to establish photographs with identifiable nonverbal expressions. In the pilot, 35 high-quality images were presented to 75 participants from Amazon's Mechanical Turk (MTurk). Participants were asked to identify the dominant nonverbal cue exhibited in each photograph. *Dominant nonverbal cue* was defined as the nonverbal communication method that they first noticed, choosing from eye contact, hand position, and smiling. Because of to the polysemy of visuals, the pilot study was used to identify general agreement. Photographs used in the actual study were those with the highest percentage of agreement on dominant nonverbal cues. This resulted in a total of six—two showing direct eye contact, two showing hand positions, and two showing smiling. Eye-contact photos had agreement of 76% (Figure 1) and 80% (Figure 2); hand-position photos had 63% agreement (Figure 3) and 74% (Figure 4); smiling pictures had agreement of 61% (Figure 5) and 63% (Figure 6). We accepted the lower agreements of the smiling pictures because they coincided with the characterization of a smile in Stewart et al. (2015): "Lip corners pulled up and at an angle + muscles surrounding the eyes contracted + teeth are revealed and the jaw is relaxed/dropped/pulled apart" (p. 4, emphasis in original).



Figure 1. Politician displaying eye contact.



Figure 2. Close-up of politician displaying eye contact.



Figure 3. Politician displaying hand movement.



Figure 4. Politician using hand movement.



Figure 5. Politician smiling at a constituent.



Figure 6. Politician smiling at camera.

In photos where eye contact was the prominent nonverbal cue, the politician was making eye contact directly with another person, and his eyes and hands were in a neutral position or not shown. Pictures with hand gestures as the prominent cue included one of a cupped hand while giving a speech and one with a hand over the mouth; both pictures are categorized as positive hand movements (Bull, 1986; Demir, 2011).

Procedure

A questionnaire was constructed using Qualtrics and distributed to U.S. adults via MTurk. Several attention-check questions were incorporated to confirm that judges were actively engaged in the study. Responses from those who did not correctly answer the attention-check questions were removed ($n = 45$). Judges were shown each of the six pictures individually and were immediately asked to rate the politician on 10 character traits, using the same wording found in the ANES poll. Judges were instructed to base assessments on each photograph individually, and the order the photos were presented in was randomized by the software. Judges were not trained in these assessments, consistent with similar methodological protocols (Ambady & Rosenthal, 1993; Babad, 1999).

Participants

This research used U.S. adults recruited through Amazon's Mechanical Turk (MTurk) as judges. Buhrmester, Kwang, and Gosling (2011) found that MTurk participants were as reliable as participants obtained from traditional methods and were actually more diverse than standard Internet samples and samples of college students. In addition, MTurk participants provide more quality data than most undergraduate samples because their gratifications and motivations are different (Woo, Keith, & Thornton, 2015). However, representation questions remain. For example, U.S. MTurk survey takers are disproportionately female (Horton, Rand, & Zeckhauser, 2001), young, and well educated (Ross, Irani, Silberman, Zaldivar, & Tomlinson, 2010), although that has been changing, with demographics becoming more representative (Berinsky, Huber, & Lenz, 2012). This study controls for those variables. Previous studies used sample sizes ranging from 40 to 240 (Babad & Peer, 2010; Friedman et al., 1980; Mullen et al., 1986). A total of 225 judges were used in the final study. Each received 75 cents as compensation.

Because pre-existing attitudes toward a known politician can influence responses, we first ensured that the politician was unknown to the judges by asking whether they recognized the man in a professional headshot photo. Only one respondent said yes, and was removed from the study. Next, respondents were shown one of the pictures, randomly ordered by the software, and asked to rate the politician on the 10 character traits described below. This process continued until each respondent had seen all six pictures and rated the politician after each one.

Dependent Variables

Character Traits. For each photograph, participants assessed the politician based on the character traits of being moral, knowledgeable, intelligent, honest, competent, qualified, experienced, caring, consistent, and a good leader on a scale from 1 = strongly disagree to 7 = strongly agree. Mean values for these measures fell between 4.56 and 5.02, indicating that the politician was more often evaluated favorably than unfavorably.

Intention to Vote. After judging was complete, a final question was asked about how likely participants were to vote for the candidate, measured on a scale from 1 = very unlikely to 7 = very likely. Although reporting an intention to vote is not the same as actual voting (Maccoby & Maccoby, 1954), it has been found to be a reliable of measure voting behavior (e.g., Bolstein, 1991).

Covariates

This study controls for variables shown to be important in voting and political impression formation.

Demographics. Gender (female = 56%), age ($M = 37$, $SD = 10.89$), race (83% White, 4% Black, 5% Hispanic, 5.4% Asian, and 2.6% other), and education (1 = less than a high school degree, 6 = graduate or professional degree; $M = 4.11$, $SD = 1.22$).

Political Ideology. Participants were asked to report their general political ideology on a scale of 1 to 7, with 1 = strongly liberal, and 7 = strongly conservative ($M = 3.61$, $SD = 1.648$).

Political Knowledge. This item was measured by a series of seven questions asking participants to identify current political leaders and office holders, such as the party that holds the congressional majority. Correct answers were summed into an index of knowledge (Cronbach's $\alpha = .87$, $M = 5.63$, $SD = 1.45$).

Political Participation. This item was measured with an index of seven questions (1 = never, 7 = very frequently): How often do you attend public hearings, town hall or city council meetings? Contact political representatives? Vote? Contribute to, participate in, or volunteer for political campaigns? Have political discussions either offline or online? Participate in demonstrations, protests, marches, or political rallies? Subscribe to a political mailing list, listserv, blog, or social media account? (Cronbach's $\alpha = .824$; $M = 3.06$, $SD = 1.20$.)

Results

RQ1: Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is moral?

Repeated measures ANOVA showed no significant differences among the three nonverbal cues using Wilks's lambda ($F[2] = 1.33$, $p = .267$, observed power = 0.285, partial $\eta^2 = 0.012$). Because the omnibus test was not significant, no further significance tests were performed on individual nonverbal variables.

RQ2: Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is intelligent?

Repeated measures ANOVA showed significant differences using Wilks' lambda ($F[2] = 4.23$, $p < .05$, observed power = 0.737, partial $\eta^2 = 0.037$), with eye contact being significantly better at conveying intelligence than hand position ($t[223] = -2.87$, $p < .01$, $d = 0.111$). It was no different than smiling ($t[223] = -0.458$, $p = .648$). And smiling was no better than hand position ($t[223] = 1.63$, $p = .104$, $d = 0.087$). See Table 1.

Table 1. Significance Tests, Means, and Standard Deviations of Nonverbal Cues and Character Traits.

Trait	Eye Contact Mean (SD)	Smiling Mean (SD)	Hand Position Mean (SD)
Moral	4.61 (.867)	4.54 (.899)	4.56 (.899)
Intelligent	4.96 (.844) ^{a**}	4.94 (.854)	4.85 (.841) ^{a**}
Good leader	5.02 (.736) ^{a***}	5.01 (.794) ^{b***}	4.83 (.775) ^{a***, b***}
Consistent	4.80 (.849) ^{a*}	4.67 (.940) ^{a*}	4.73 (.848)
Caring	4.98 (.988) ^{a*}	4.88 (.944)	4.79 (.991) ^{a*}

Note. Superscript letters indicate significant differences between nonverbal cues within each character trait using repeated measures ANOVA.

* $p < .05$; ** $p < .01$; *** $p < .001$.

RQ3: Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is a good leader?

Repeated measures ANOVA showed significant differences among the three nonverbal cues using Wilks' lambda ($F[2] = 17.56, p < .001$, observed power = 1.0, partial $\eta^2 = 0.137$). Planned post hoc tests showed that smiling was significantly better at conveying good leadership than hand position ($t[223] = 3.62, p < .001, d = 0.173$). Eye contact was significantly better than hand position ($t[223] = -5.63, p < .001, d = 0.184$), but not smiling ($t[223] = -0.231, p = .817, d = -0.011$). See Table 1.

RQ4: Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is consistent?

Repeated measures ANOVA showed significant differences using Wilks' lambda ($F[2] = 3.17, p < .05$, observed power = 0.603, partial $\eta^2 = 0.028$) with eye contact being significantly better at conveying consistency than smiling ($t[223] = -2.45, p < .05, d = 0.136$). Eye contact was not significantly better than hand position ($t[223] = -1.55, p = .121, d = -0.071$). Smiling and hand position were not significantly different ($t[223] = -1.17, p = .243, d = -0.065$). See Table 1.

RQ5: Which of the three nonverbal cues will be significantly better than others at conveying that the candidate is caring?

Repeated measures ANOVA showed significant differences among the three nonverbal cues using Wilks' lambda ($F[2] = 3.02, p < .05$, observed power = 0.581, partial $\eta^2 = 0.026$) with eye contact being significantly better at conveying caring than hand position ($t[223] = -2.46, p < .05, d = -0.181$). Smiling was not significantly better than hand position ($t[223] = 1.15, p = .251, d = 0.083$) or eye contact ($t[223] = -1.34, p = .182, d = -0.098$). See Table 1.

To discover which of the character traits conveyed by nonverbal cues best predicted likelihood of voting for the candidate (RQ6), we used hierarchical regression: Block 1 contained demographics variables of age, gender, race, education, and political ideology; block 2 contained political knowledge and political participation; and block 3 contained character trait assessments.

The full model was significant (F change < 0.001), accounting for 42% of the variance (adjusted $R^2 = .423$) in likelihood of voting for the candidate in the photographs. None of the demographics variables was a significant predictor of intention to vote for the candidate; neither was political knowledge. However, political participation was significant, with likelihood of voting for the candidate increasing as political participation increased ($t = 3.24, p < .001, \beta = .185$). See Table 2.

Table 2. Hierarchical Regression of Character Traits Conveyed in Nonverbal Cues on Likelihood of Voting.

	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Demographics:						
Age	-.028	-.391	-.026	-.367	-.042	-.708
Gender	-.005	-.007	.003	.044	.026	.454
Race	.064	.924	.080	1.164	.082	.1494
Education	.032	.477	.017	.239	.066	1.158
Political ideology	.104	1.478	.115	1.617	.022	.372
Political sophistication:						
Political Knowledge			-.086	-1.172	-.130	-2.155*
Political Participation			.176	2.449*	.196	3.362***
Traits conveyed nonverbally:						
Moral/eye					.245	2.067*
Moral/smile					.322	2.904**
Moral/hand					-.022	-.183
Moral/arm					-.053	-.423
Intelligent/smile					.057	.467
Intelligent/hand					.067	.586
Intelligent/eye					-.210	-1.55
Intelligent/arm					.074	.630
Leader/smile					.039	.316
Leader/hand					.042	.304
Leader/eye					.087	.646
Leader/arm					-.007	-.057
Consistent/smile					.017	.180
Consistent/hand					-.018	-.186
Consistent/eye					-.003	-.003
Consistent/arm					.181	1.858
Caring/smile					-.094	-.966
Caring/hand					.122	1.389
Caring/eye					.051	.580
Caring/arm					-.016	-.181
Adjusted R^2		-.008		.012*		.425***

* $p < .05$; ** $p < .01$; *** $p < .001$.

Of all the traits conveyed by specific nonverbal cues, only two were significant predictors of voting likelihood, both conveying the morality trait. When morality was conveyed by direct eye contact and smiling, judges were significantly more likely to vote for the candidate (eye contact/moral $t = 2.738$, $p < .05$, $\beta = .276$; smiling/moral $t = 2.70$, $p < .01$, $\beta = .285$). The character trait of morality conveyed by these two nonverbal expressions was significant even after controlling for the demographics listed above and for political participation.

Discussion

Nelson and Brown (2012) assert that eye contact is the most influential of all the nonverbal cues in more general circumstances, and we now provide evidence that this also applies in the political arena. In this study, direct eye contact was significantly better than at least one other nonverbal cue in generating positive first impressions of the candidate on the character traits of intelligence, leadership, consistency, and caring. Eye contact was the only nonverbal cue that conveyed intelligence, consistency, and caring. In the case of good leadership, eye contact and smiling were equally effective. This lends weight to other research that links smiling with leadership (Boone & Buck, 2003; Krumhuber et al., 2007; Teven & Hanson, 2004), more so than conflicting findings (Cashdan, 1998). It also supports and extends research that shows that making direct eye contact leads to impressions of candidates as qualified (Bayliss et al., 2009; Bayliss & Tipper, 2006; Beebe, 1974). Previous studies of nonverbal cues have found that dominant behaviors, assertive tones in speeches, and commanding attention lead audiences to identify individuals as good leaders (Goffman, 1967). To this we can now add smiling.

The importance of direct eye contact with another person cannot be understated. That eye contact was better at predicting impressions of a candidate as intelligent is important because most of what we know about nonverbal depictions of intelligence are based on fixed characteristics such as attractiveness and face shape (Kanazawa, 2011; Zebrowitz, Hall, Murphy, & Rhodes, 2002). To this, we add the nonverbal cue of direct eye contact with a constituent. Though fixed characteristics may still play a role in character assessments, eye contact is a key element that politicians can regularly control.

Eye contact also led our participants to judge the candidate's personality as caring. Although smiling has been shown in other studies to be associated with caring (Boone & Buck, 2003; Krumhuber et al., 2007; Teven & Hanson, 2004) and charisma (Zajonc et al., 1989), it did not persuade the judges in this study to think of this politician in that way.

Consistency, a trait we did not find in previous studies of nonverbal cues but one that is important in political contexts, also was judged more positively when politicians made direct eye contact with another person. This should be explored in future studies to better understand how participants came to the assessment that a candidate would not flip-flop on issue positions from this nonverbal cue.

This overlap of nonverbal cues in creating positive judgments of political candidates confirms our belief in the polysemic nature of nonverbal communication, applied here to impression formation. The same nonverbal cue can convey more than one character trait; in this case, eye contact carried many meanings. Nonverbal communication of character traits is not as simple and straightforward for impression formation

as verbal communication of these traits is. When a candidate is said to be intelligent, people think he or she is smart. Mentions of caring lead people to think that the candidate is concerned about them. Nonverbal cues are more complicated. Eye contact conveys multiple character traits, and smiling conveys at least one—leadership. This finding provides some measure of triangulation with experimental research that attempts to isolate nonverbal cues in controlled settings. Our research reaffirms most findings from these experiments, but it also shows that what can be found in the controlled but artificial setting of experiments does not always show up in the real world.

That is especially true with the character trait of morality. That a person who makes direct eye contact would be honest is intuitive and documented in experiments (Bayliss et al., 2009; Bayliss & Tipper, 2006; Beebe, 1974). But that was not the case in this study, using a real politician. The judges in this study did not perceive morality in the candidate better through any of the nonverbal cues than the others. This leads us to speculate that impressions of honesty or morality may be more elusive in the nonverbal than other cues of politicians because of the nature of the occupation. Politicians have a history of being called out by the news media and each other for untruthful statements. A new wave of publicized fact-checking (e.g., on Politifact), has left audiences with the impression that all politicians lie; some just happen to lie less (Holan, 2015). It is possible that these sentiments make the impressions of morality from nonverbal cues nearly impossible to come by in the political arena.

Nonverbal cues that convey morality are nevertheless important. As this study shows, the more a candidate was judged as moral, the more likely the judge was to vote for him. In our analysis of likelihood of voting for the candidate, even after controlling for numerous variables shown to predict voting, only the combination of nonverbal communication and character trait for morality conveyed by direct eye contact and smiling were predictive of voting for the candidate. Others have noted that a smiling candidate is more likely to be voted for (Horiuchi et al., 2012); in this study, we demonstrate that this was only the case for participants who saw eye contact and smiling as linked with morality. We suspect that morality conveyed nonverbally may be multidimensional to a greater extent than other character traits. Obviously, there is much work to be done on figuring out the components that make political candidates look more moral—the premier character assessment that is most likely to lead to a vote. In terms of nonverbal behaviors, our results show that morality, above all other personality characteristics, is key to understanding voting intention. Although morality was more elusive via nonverbal behavior than the other character traits, we find support for the idea that nonverbal cues affect voting. Overall, 66% of our participants were willing to make a decision to vote for or against the candidate based on nonverbal information alone. This contradicts the rational voting model that says that people should make important political choices only after carefully considering all the information, and it provides more support for the view that people are voting with their hearts rather than their heads.

The only other significant predictor in the voting analysis was that political participation increased the likelihood of voting for the candidate shown, while factors such as political ideology and political knowledge did not predict intention to vote. Increased political participation has been linked with political efficacy, enhancing the attitudes and beliefs that make future participation, such as voting, more likely (Blais, 2010). We suggest that this greater confidence in one's political skills empowers the politically active to make voting decisions based on nonverbal information alone. Perhaps those who participate in political

activities feel that they are capable of making good political judgments based on first impressions and do not require as much information on the candidate's political stance on issues as others.

Limitations and Future Research

This study is in the nascent stages of research linking nonverbal cues to assessments of character traits and must, accordingly, limit its scope. One limitation is that in the diversifying political climate of the United States, these implications may vary with the gender and ethnicity of politicians. Audiences may feel less comfortable with hugging and certain hand gestures when performed by men than women (Floyd, 1999). Future research should include female candidates and candidates of other races. We also acknowledge that extraneous, nondominant aspects of photos may affect outcomes and that these variables could only partially be controlled in our study. The percentages of agreement in the manipulation checks indicate that although the majority might agree on the dominant nonverbal cues, controlled experimental designs can better avoid confounding variable effects. However, these pictures are what a reader might encounter in an actual publication or website, and that is what we sought to understand. We weighed these trade-offs against greater control of an experiment but decided that as experimental designs are the predominant method in this type of research, we could better contribute to knowledge with a method that improved upon ecological validity. We used one politician to provide a measure of control against individual differences such as age, height, weight, attractiveness, and other appearance variables. Because the politician in the photographs was the same, these could not be the explanation for any differences in judges' assessments of him.

Another limitation of this study is the isolation of nonverbal cues with a perceived positive valence. Bucy (2000) contends that negative nonverbal cues may lead to more desirable character-trait assessments than positive cues. As such, future research might compare differences in first impressions when exposed to negative nonverbal cues. More work that incorporates both experimental and observational methodological approaches will be beneficial in replicating and refining these results.

Finally, the design of this study also limits generalizability. The photos each represent just a snapshot of time that was ultimately chosen by a photographer and editor. Therefore, the photographer played a mediating role that is unique to time and space. This work, nevertheless, provides more precise context for media professionals, indicating that even the subtle everyday selection of one nonverbal behavior in a visual depiction over another has implications that may affect news audiences. Future work using this method could ultimately lead to the development of more precise protocol for photographers and editors interested in objective visual choices.

Conclusion

It has long been known that media images of political candidates include nonverbal cues that lead viewers to form impressions of the candidate as having certain character traits; this study provides an extension to impression formation theory in the political realm by beginning the process of empirically identifying which specific nonverbal cues from political candidates lead people to form impressions of specific character traits. From this study, we can say that important traits of politicians are conveyed through the

eyes—looking directly at another individual. Eye contact may be the primary nonverbal cue that promotes positive character assessments of politicians. Smiling was just as important as eye contact in conveying leadership. And, although no single nonverbal cue stood out as better than the others at conveying morality, this was the only character trait whose nonverbal correlates led to increased likelihood of voting for the candidate.

The findings from this study are important because the nonverbal cues from politicians become the character traits attributed to them in the minds of audiences. This theoretical contribution will allow scholars to measure attributes in their nonverbal forms and link them to the attributes voters' assign to them. It is a significant improvement on the reductionist approach of merely positive and negative valence that is currently used. For example, we can now predict that eye contact and smiling serve as cues leading to impressions of good leadership, rather than reducing all nonverbal cues and character traits to being only positive or negative. After all, assessments of politicians' character traits from their nonverbal cues are not all about good and bad. Of course, refinement and replication need to be done before such statements can be taken for granted. However, this study provides the first demonstration that it can be done.

References

- Ambady, N., & Rosenthal, R. (1993). Half a minute: Predicting teacher evaluations from thin slices of nonverbal behavior and physical attractiveness. *Journal of Personality and Social Psychology, 64*, 431–441.
- Antonakis, J., & Dalgas, O. (2009). Predicting elections: Child's play! *Science, 323*, 1183.
- Asch, S. E. (1946). Forming impressions of personality. *The Journal of Abnormal and Social Psychology, 41*(3), 258.
- Babad, E. (1990). Measuring and changing teachers' differential behavior as perceived by students and teachers. *Journal of Educational Psychology, 82*(4), 683–690.
- Babad, E. (1999). Preferential treatment in television interviewing: Evidence from nonverbal behavior. *Political Communication, 16*, 337–358.
- Babad, E., & Peer, E. (2010). Media bias in interviewers' nonverbal behavior: Potential remedies, attitude similarity and meta-analysis. *Journal of Nonverbal Behavior, 34*(1), 57–78.
- Balmas, M., & Sheafer, T. (2010). Candidate image in election campaigns: Attribute agenda setting, affective priming, and voting intentions. *International Journal of Public Opinion Research, 22*(2), 204–229.

- Barrett, A. W., & Barrington, L. W. (2005). Is a picture worth a thousand words? Newspaper photographs and voter evaluations of political candidates. *Harvard International Journal of Press/Politics*, 10(4), 98–113.
- Bayliss, A. P., Griffiths, D., & Tipper, S. P. (2009). Predictive gaze cues affect face evaluations: The effect of facial emotion. *European Journal of Cognitive Psychology*, 21(7), 1072–1084.
- Bayliss, A. P., & Tipper, S. P. (2006). Predictive gaze cues and personality judgments: Should eye trust you? *Psychological Science*, 17(6), 514–520.
- Beebe, S. A. (1974). Eye contact: A nonverbal determinant of speaker credibility. *Speech Teacher*, 23(1), 21–25.
- Benoit, W. L., & McHale, J. P. (2004). Presidential candidates' personal qualities: Computer content analysis. In K. Hacker (Ed.), *Presidential candidate images* (pp. 49–63). New York, NY: Rowman & Littlefield.
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, 20(3), 351–368.
- Blais, A. (2010). Political participation. In L. LeDuc, R. G. Neimi, & P. Norris (Eds.), *Comparing democracies 3: Elections and voting in the 21st century* (pp. 164–183). Los Angeles, CA: SAGE Publications.
- Bock, M. A. (2011). You really, truly, have to "be there": Video journalism as a social and material construction. *Journalism & Mass Communication Quarterly*, 88(4), 705–718.
- Bolstein, R. (1991). Predicting the likelihood to vote in pre-election polls. *The Statistician*, 277–283.
- Boone, R. T., & Buck, R. (2003). Emotional expressivity and trustworthiness: The role of nonverbal behavior in the evolution of cooperation. *Journal of Nonverbal Behavior*, 27(3), 163–182.
- Brettschneider, F. (2002). *Spitzenkandidaten und Wahlerfolg: Personalisierung, Kompetenz, Parteien. Ein internationaler Vergleich* [Top candidates and electoral success: Personalization, competence, parties. An international comparison]. Wiesbaden, Germany: Westdeutscher Verlag.
- Bucy, E. (2016). The look of losing, then and now: Nixon, Obama, and nonverbal indicators of opportunity lost. *American Behavioral Scientist*, 60(14), 1772–1798. doi:10.1177/0002764216678279
- Bucy, E. P. (2000). Emotional and evaluative consequences of inappropriate leader displays. *Communication Research*, 27(2), 194–226.

- Bucy, E. P., & Bradley, S. D. (2004). Presidential expressions and viewer emotion: Counterempathic responses to televised leader displays. *Social Science Information, 43*(1), 59–94.
- Bucy, E., & Grabe, M. E. (2008). "Happy warriors" revisited: Hedonic and agonistic display repertoires of presidential candidates on the evening news. *Politics and the Life Sciences, 27*(1), 78–98. doi:10.2990/27 1 78
- Bucy, E. P., & Newhagen, J. E. (1999). The emotional appropriateness heuristic: Processing televised presidential reactions to the news. *Journal of Communication, 49*(4), 59–79.
- Buhrmester, M., Kwang, T., & Gosling, S. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*(1): 3–5. doi:10.1177/1745691610393980
- Bull, P. (1986). The use of hand gesture in political speeches: Some case studies. *Journal of Language and Social Psychology, 5*(2), 103–118.
- Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political Psychology, 27*(1), 1–28.
- Cashdan, E. (1998). Smiles, speech, and body posture: How women and men display sociometric status and power. *Journal of Nonverbal Behavior, 22*(4), 209–228.
- Cohen, A. K., & Chaffee, B. W. (2013). The relationship between adolescents' civic knowledge, civic attitude, and civic behavior and their self-reported future likelihood of voting. *Education, Citizenship and Social Justice, 8*, 43–57.
- Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. New Haven, CT: Yale University Press.
- Demir, M. (2011). Using nonverbal communication in politics. *Canadian Social Science, 7*(5), 1.
- DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin, 129*(1), 74.
- Ekman, P., Sorenson, E. R., & Friesen, W. V. (1969). Pan-cultural elements in facial displays of emotion. *Science, 164*(4), 86–88.
- Fiske, S. T. (2016). How to publish rigorous experiments in the 21st century. *Journal of Experimental Social Psychology, 66*, 145–147.
- Floyd, K. (1999). All touches are not created equal: Effects of form and duration on observers' interpretations of an embrace. *Journal of Nonverbal Behavior, 23*(4), 283–299.

- Friedman, H. S., DiMatteo, M. R., & Mertz, T. I. (1980). Nonverbal communication on television news: The facial expressions of broadcasters during coverage of a presidential election campaign. *Personality and Social Psychology Bulletin*, 6(3), 427–435.
- Gerber, A. S., & Green, D. P. (2012). *Field experiments: Design, analysis, and interpretation*. New York, NY: Norton.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face interaction*. Oxford, UK: Aldine.
- Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, 106(1), 148.
- Grabe, M. E., & Bucy, E. (2009). *Image bite politics: News and the visual framing of elections*. New York, NY: Oxford University Press.
- Gregersen, T. S. (2005). Nonverbal cues: Clues to the detection of foreign language anxiety. *Foreign Language Annals*, 38(3), 388.
- Harder, J., & Krosnick, J. A. (2008). Why do people vote? A psychological analysis of the causes of voter turnout. *Journal of Social Issues*, 64(3), 525–549.
- Haumer, F., & Donsbach, W. (2009). The rivalry of nonverbal cues on the perception of politicians by television viewers. *Journal of Broadcasting & Electronic Media*, 53(2), 262–279.
- Holan, A. D. (2015, December 11). All politicians lie. Some lie more than others. *The New York Times*. Retrieved from http://www.nytimes.com/2015/12/13/opinion/campaign-stops/all-politicians-lie-some-lie-more-than-others.html?_r=0
- Horiuchi, Y., Komatsu, T., & Nakaya, F. (2012). Should candidates smile to win elections? An application of automated face recognition technology. *Political Psychology*, 33(6), 925–933.
- Horton, J. J., Rand, D. G., Zeckhauser, R. J. (2001) The online laboratory: Conducting experiments in a real labor market. *Experimental Economics*, 14, 399–425.
- Kanazawa, S. (2011). Intelligence and physical attractiveness. *Intelligence*, 39(1), 7–14.
- Keating, J. P., & Latane, B. (1976). Politicians on TV: The image is the message. *Journal of Social Issues*, 32(4), 116–132.
- Kim, K. & McCombs, M. (2007). News story descriptions and the public's opinions of political candidates, *Journalism & Mass Communication Quarterly*, 84, 299–314.

- Kinder, D. R. (1986). Presidential character revisited. In R. R. Lau & D. O. Sears (Eds.), *Political cognition: The 19th annual Carnegie symposium on cognition* (pp. 233–255). Hillsdale, NJ: Erlbaum.
- Kinder, D. R. (1994). Reason and emotion in American political life. In R. C. Schank & E. Langer (Eds.), *Beliefs, reasoning, and decision making* (pp. 277–314). Hillsdale, NJ: Erlbaum.
- Kinder, D. R., Peters, M. D., Abelson, R. P., & Fisk, S. T. (1980). Presidential prototypes. *Political Behavior*, 315–337.
- King, P. T. (1997). The press, candidate images, and voter perceptions. In M. McCombs, D. L. Shaw, & D. Weaver (Eds.), *Communication and democracy* (pp. 29–40). Mahwah, NJ: Erlbaum.
- Koppensteiner, M., & Stephan, P. (2014). Voting for a personality: Do first impressions and self-evaluations affect voting decisions? *Journal of Research in Personality*, 51, 62–68.
- Koppensteiner, M., Stephan, P., & Jaschke, J. P. M. (2015). From body motion to cheers: Speakers' body movements as predictors of applause. *Personality and Individual Differences*, 74, 182–185.
- Koppensteiner, M., Stephan, P., & Jaschke, J. P. M. (2016). Moving speeches: Dominance, trustworthiness and competence in body motion. *Personality and Individual Differences*, 94, 101–106.
- Krumhuber, E., Manstead, A. S., Cosker, D., Marshall, D., Rosin, P. L., & Kappas, A. (2007). Facial dynamics as indicators of trustworthiness and cooperative behavior. *Emotion*, 7(4), 730.
- Landy, J. F., Piazza, J., & Goodwin, G. P. (2016). When it's bad to be friendly and smart: The desirability of sociability and competence depends on morality. *Personality and Social Psychology Bulletin*, 42(9): 1272–1290.
- Leighley, J. E., & Nagler, J. (1992). Socioeconomic class bias in turnout, 1964–1988: The voters remain the same. *American Political Science Review*, 86(03), 725–736.
- Little, A. C., Burriss, R. P., Jones, B. C., & Roberts, S. C. (2007). Facial appearance affects voting decisions. *Evolution and Human Behavior*, 28(1): 18–27.
- Lobinger, K., & Brantner, C. (2015). Likable, funny or ridiculous? A Q-sort study on audience perceptions of visual portrayals of politicians. *Visual Communication*, 14(1), 15–40.
- Maccoby, E. E., & Maccoby, N. (1954). The interview: A tool of social science. *Handbook of Social Psychology*, 1, 449–487.
- Miller, A., Coleman, R., & Granberg, D. (2007). TV anchors, elections, and bias: A longitudinal study of the facial expressions of Brokaw, Rather, Jennings. *Visual Communication Quarterly*, 14(4), 244–257.

- Miller, A. H., & Miller, W. E. (1976). Ideology and the 1972 election: Myth or reality—a rejoinder. *American Political Science Review*, 70, 832–849.
- Mullen, B., Futrell, D., Stairs, D., Tice, D. M., Baumeister, R. F., Dawson, K. E., & Rosenfeld, P. (1986). Newscasters' facial expressions and voting behavior of viewers: Can a smile elect a president? *Journal of Personality and Social Psychology*, 51(2), 291–295.
- Nelson, A., & Brown, C. D. (2012). *The gender communication handbook: Conquering conversational collisions between men and women*. New York, NY: Wiley.
- Olivola, C. Y., & Todorov, A. (2010). Elected in 100 milliseconds: Appearance-based trait inferences and voting. *Journal of Nonverbal Behavior*, 34, 83–110.
- Pancer, S. M., Brown, S. D., & Barr, C. W. (1999). Forming impressions of political leaders: A cross-national comparison. *Political Psychology*, 20(2), 345–368.
- Parzuchowski, M., & Wojciszke, B. (2014). Hand over heart primes moral judgments and behavior. *Journal of Nonverbal Behavior*, 38(1), 145–165.
- Porter, S., & ten Brinke, L. (2008). Reading between the lies: Identifying concealed and falsified emotions in universal facial expressions. *Psychological Science*, 19(5), 508–514.
- Poutvaara, P., Jordahl, H., & Berggren, N. (2009). Faces of politicians: Babyfacedness predicts inferred competence but not electoral success. *Journal of Experimental and Social Psychology*, 45, 1132–1135.
- Reinemann, C., & Wilke, J. (2007). It's the debates, stupid! How the introduction of televised debates changed the portrayal of chancellor candidates in the German press, 1949–2005. *Harvard International Journal of Press/Politics*, 12(4), 92–111.
- Rosenberg, S. W., Bohan, L., McCafferty, P., & Harris, K. (1986). The image and the vote: The effect of candidate presentation on voter preference. *American Journal of Political Science*, 30(1), 108–127.
- Ross, J., Irani, L., Silberman, S., Zaldivar, A., & Tomlinson, B. (2010). *Who are the crowdworkers? Shifting demographics in Mechanical Turk*. Paper presented at the Association for Computing Machinery Conference on Human Factors in Computing Systems, Atlanta, GA. doi:10.1145/1753846.1753873.
- Sigelman, C. K., Sigelman, L., Walkosz, B. J., & Nitz, M. (1995). Black candidates, White voters: Understanding racial bias in political perceptions. *American Journal of Political Science*, 39(1), 243–265.

- Sigelman, L., & Welch, S. (1984). Race, gender, and opinion toward Black and female presidential candidates. *Public Opinion Quarterly*, 48(2), 467–475.
- Smith, E. R., Mackie, D. M., & Claypool, H. M. (2000). *Social psychology*. Philadelphia, PA: Psychology Press.
- Stewart, P. A., Bucy, E. P., & Mehu, M. (2015). Strengthening bonds and connecting with followers: A biobehavioral inventory of political smiles. *Politics & Life Sciences*, 34(1), 73–92.
- Teven, J. J., & Hanson, T. L. (2004). The impact of teacher immediacy and perceived caring on teacher competence and trustworthiness. *Communication Quarterly*, 52(1), 39–53.
- Todorov, A., Mandisodza, A., Goren, A., & Hall, C. (2005). Inferences of competence from faces predict election outcomes. *Science*, 308, 1623–1626.
- Torney-Purta, J., & Amadeo, J.-A. (2003). A cross-national analysis of political and civic involvement among adolescents. *Political Science and Politics*, 36(2), 269–274.
- Van Edwards, V. (2017). *Captivate: The science of succeeding with people*. New York, NY: Penguin.
- Verser, R., & Wicks, R. H. (2006). Managing voter impressions: The use of images on presidential candidate Web sites during the 2000 campaign. *Journal of Communication*, 56(1), 178–197.
- Waxer, P. (1977). Nonverbal cues for anxiety: An examination of emotional leakage. *Journal of Abnormal Psychology*, 86(3), 306.
- Wolfinger, R. E., & Rosenstone, S. J. (1980). *Who votes?* (Vol. 22). New Haven, CT: Yale University Press.
- Woo, S. E., Keith, M., & Thornton, M. A. (2015). Amazon Mechanical Turk for industrial and organizational psychology: Advantages, challenges, and practical recommendations. *Industrial and Organizational Psychology*, 8(2), 171–179.
- Wu, H. D., & Coleman, R. (2014). The affective effect on political judgment: Comparing the influences of candidate attributes and issue congruence. *Journalism & Mass Communication Quarterly*, 91(3), 530–543.
- Zajonc, R. B., Murphy, S. T., & Inglehart, M. (1989). Feeling and facial efference: Implications of the vascular theory of emotion. *Psychological Review*, 96(3), 395.
- Zebrowitz, L. A., Hall, J. A., Murphy, N. A., & Rhodes, G. (2002). Looking smart and looking good: Facial cues to intelligence and their origins. *Personality and Social Psychology Bulletin*, 28(2), 238–249.