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Charisma in Everyday Life: Conceptualization and Validation of the General Charisma Inventory

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Although both scholars and lay people are fascinated with charismatic individuals, relatively few theorists have attempted to define charisma. Much of the empirical research examining charisma has focused on leadership. Even within that literature, however, theorists have focused on charisma's outcomes, leaving unarticulated what charisma actually is. Here, we tested an operational conceptualization of charisma in the context of everyday life. Specifically, we proposed that charisma is composed of the interpersonally focused dimensions of influence (the ability to guide others) and affability (the ability to make other people feel comfortable and at ease). We validated this conceptualization in a series of studies. In Studies 1–3, we used exploratory and confirmatory factor analyses to construct a short 6-item measure of charisma, the General Charisma Inventory. Next, in Study 4, we used round-robin evaluations and informant reports to establish the interpersonal nature of charisma. Finally, we examined the incremental validity of the scale in the context of dyadic interactions and tested the impact of charisma on perceptions of persuasiveness from voices. We found that (a) lay people possess a consensual conception of charisma; (b) charisma consists of a composition of quantifiable dimensions; (c) charisma is distinct from other constructs of interest to psychologists and leadership theorists; (d) charisma is observable; and (e) assessments of charisma predict real world outcomes. Thus, the current work not only comprehensively conceptualizes and measures charisma as an empirical construct, but also demonstrates its potential importance for the routine interactions that people experience every day.

Keywords: charisma, individual differences, leadership, personality, social perception

Among the many different characteristics that people use to describe each other, charisma holds a special place. The word is typically reserved to describe those who inspire masses of people with seemingly little effort toward either good or bad ends. Indeed, figures such as Princess Diana, Oprah Winfrey, Mahatma Gandhi, Ronald Reagan, and Adolf Hitler share this triumphant, mysterious, and fascinating descriptor. Researchers share the public's fascination with charisma. A simple search for the term "charisma" in the academic database Google Scholar produced 163,000 entries in January 2016, outnumbering the results returned for intensively studied traits like extraversion (142,000 entries). Moreover, numerous companies (e.g., Charisma Training Academy; http://charismatrainingacademy.com/) and social media venues (e.g., The Art of Charm; http://theartofcharm.com/) make it their mission to help people become more charismatic. Thus, interest in charisma is both broad and encompassing.

Despite widespread interest in charisma, however, the empirical study of charisma is relatively young and sparse, and no unifying conceptualization of charisma currently exists (see Antonakis, 2012; van Knippenberg & Sitkin, 2013). Instead, most researchers seem to conceptualize charisma from the position of their preferred theoretical frameworks, almost all of which have been confined to the study of leadership in organizational settings (e.g., Transformational Leadership Theory; Bass, 1985; see also Antonakis, 2012, for review). People observe charisma not only among leaders of large organizations and political parties, however, but also among their friends, family members, and even strangers (Friedman, Prince, Riggio, & DiMatteo, 1980). Thus, charisma can also be informal and general. In contrast to leadership charisma, general charisma may be a function of personal qualities among lay people, rather than traits directly relevant to navigating an organizational environment. The goal of the current work was to identify the components of charisma that exist in the larger population beyond leadership and to demonstrate its impact in everyday life.

Charisma in Leadership

Unlike historical accounts describing charisma as something supernatural (Potts, 2009), the scholarly treatment of charisma has been pragmatic and primarily associated with leadership (Antonakis, 2012). In his seminal work, *Economy and Society*, Max Weber (1922/1978) suggested that charisma is a product of leaders' personal characteristics and their perceptions of followers. Asso-

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ciating charisma with leaders, Weber reasoned that charismatic individuals can move crowds by appealing to people's emotions via expressive displays in times of crisis. Following this sociological discussion of charisma with respect to leadership, charisma emerged as a central construct in leadership research.

House (1977) provided the first operational definition of charisma, based on Weber's (1922/1978) work and motivation theories. He viewed charisma as leaders' moral conviction, need for power, and ability to transfer an idealized vision to their followers via emotions and appeals to their collective identity (e.g., House & Howell, 1992; House, Spangler, & Woycke, 1991; Shamir, House, & Arthur, 1993). In other words, charisma constituted the ability to motivate people toward a common goal and identity.

Several researchers refined this definition by attaching concrete behaviors to charisma, such as those that communicate one's idealized vision (Bass, 1985; Conger & Kanungo, 1987, 1988, 1994, 1998). Accordingly, Bass's (1985) transformational leadership framework further revised the definition of charisma as leaders' ability to influence others via expressive emotional displays, considering it an emotionally laden vision used to influence followers (see also Podsakoff, MacKenzie, & Bommer, 1996; Yukl, 1999).

Defining charisma in terms of behavioral signals that leaders communicate to their followers quickly dissolved the idea that charisma applies only to top members of organizations and extraordinary leaders. Research instead recognized that charismatic leaders influence others better than their less charismatic counterparts, regardless of their organizational standing (DeRue, Nahrgang, Wellman, & Humphrey, 2011; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). Despite these advances, the study of charisma remained constrained to organizational settings and leadership. That is not to say that leadership theorists did not consider charisma relevant to laypeople but, rather, that they simply focused on questions most relevant to the organizational environment. Indeed, all of the models discussed above focused on how charisma differentiates leaders from their less charismatic counterparts and followers. This interindividual variability implicitly characterizes charisma as an individual difference variable in addition to being an expressive behavior (Antonakis, 2011; Avolio & Bass, 1988; Avolio, Waldman, & Yammarino, 1991; Conger & Kanungo, 1987, 1988; House & Howell, 1992). What comprises these individual differences remains unclear, however (particularly outside of leadership hierarchies). We therefore examined whether individual differences in the ability to influence others and to have an emotional appeal constitute charisma, both in leadership and in general.

Charisma Beyond Leadership

Few researchers have explored charisma and its components outside of leadership, with most focusing on verbal and nonverbal expressions. For example, Friedman et al. (1980) used the terms "charisma" and "expressiveness" almost interchangeably, showing that people in stereotypically charismatic occupations (e.g., acting) report being more expressive and extraverted than people in less charismatic occupations but with only a small proportion of overlap between the two (see also Friedman, Riggio, & Casella, 1988; Riggio & Friedman, 1982). Keating (2002, 2011) similarly conceptualized charisma as an *effect* of expressiveness, suggesting that behaviors signaling dominance should elicit avoidance reactions from others whereas behaviors signaling warmth should elicit approach reactions. By this logic, people who elicit both approach *and* avoidance reactions from others should seem charismatic, thus integrating both influence (dominance) and emotionality (approachability) as components of charisma, as in the leadership research reviewed above.

Relating these traits to charisma connects its structure to classic circumplex models (e.g., Wiggins, 1979). Warmth (which encompasses individuals' likability, trustworthiness, affiliation, and emotional positivity) and competence (including dominance and power) may thus help to describe individual differences in charisma as they relate to the influence, affiliation, positive emotions, and expressiveness identified in past work (e.g., Avolio & Bass, 1988; Bass, 1985; Conger & Kanungo, 1988; Friedman et al., 1980). Charisma should therefore positively correlate with both the competence and warmth circumplex dimensions, falling in the same quadrant as extraversion (e.g., Fiske, Cuddy, & Glick, 2007), but representing a finer grained manifestation that the basic competence and warmth dimensions serve to support.

Another construct, individuation, seems to indirectly relate to charisma (Maslach, 1974; Maslach, Santee, & Wade, 1987; Santee & Maslach, 1982). Although charisma was never explicitly mentioned in the conceptualization of individuation, it appears to resemble charisma and similarly relates to leadership. For example, one investigation found that individuals classified as high in individuation emerged as leaders in group settings, had outstanding verbal and nonverbal social skills (as measured by the Affective Communication Test, ACT, and observer reports), and were more prone to display unconventional behavior (Whitney, Sagrestano, & Maslach, 1994)—all traits and behaviors familiar to the conceptualization of charisma in leadership and psychology (see Antonakis, 2012). However, this characterization appears to suggest that charismatic individuals use charisma to stand out in a crowd, again suggesting that charisma is an expressive behavior, rather than a personal disposition.

Thus, although several forays have extended charisma beyond the leadership literature, each has examined a limited aspect of charisma or focused on impressions made of others rather than on individual differences. Furthermore, although psychologists have developed constructs closely related to charisma (individuation, warmth, dominance, and competence), few have attempted to identify what charisma actually is. Here, we sought to contextualize charisma as an internal disposition and to develop an assessment that would allow for a more complete account of charisma in everyday life as an individual difference.

Everyday Charisma

In our investigation of everyday charisma, we aimed to capture the main components most consistently outlined in research on leadership and psychology. Specifically, because previous research has suggested that charismatic leaders have a superior ability to influence others, we expected that influential ability contributes to everyday charisma by attuning people to common goals (e.g., Antonakis, 2011; Tskhay, Xu, & Rule, 2014; Weber, 1922/1978), attracting their attention (Whitney et al., 1994), motivating them (House & Howell, 1992; House et al., 1991), and generating structure for interpersonal interactions (e.g., Conger & Kanungo, 1988; Weber, 1922/1978). Importantly, we reasoned

that charismatic people should be internally disposed to have influence and command over their environment (see Whitney et al., 1994). Here, we examined whether this disposition toward influence would emerge as a component of charisma, whether naïve and close others would be able to observe it, and whether it might predict interpersonal outcomes.

Given that leadership researchers have suggested that charismatic leaders frame followers' emotions using emotional displays, and that the psychological literature emphasizes the role of positive emotions in forming everyday relationships (see Shiota, Campos, Keltner, & Hertenstein, 2004), we proposed that charismatic people would convey a positive disposition to others in everyday interactions, thereby setting an "affable" tone. For example, charismatic individuals may project an image of warmth (Fiske et al., 2007) and trustworthiness (Keating, 2002; Keating & Heltman, 1994) that affects others' desire to approach them (Hareli et al., 2009). We therefore predicted that people with a greater disposition toward consistently positive emotional expressions would be considered charismatic (Hareli et al., 2009).

Critically, because charisma is characterized by interpersonal interactions and expressiveness, because previous research states that it is both a disposition and perception (e.g., Antonakis, 2011; Weber, 1922/1978), and because both influence and affability are transitive, we reasoned that charisma must be observable. Research on social perception has demonstrated that traits and individual differences may manifest in appearance and behavior (e.g., Albright, Kenny, & Malloy, 1988; Borkenau & Liebler, 1993; Connelly & Ones, 2010; Gosling, Ko, Mannarelli, & Morris, 2002). Along these lines, we propose that the perception of charisma is simply the consequence of an individual possessing a charismatic disposition, such that individuals with charismatic traits produce impressions of charisma through their expressive behavior (Conger & Kanungo, 1987; Friedman et al., 1980; House, 1977; Shamir et al., 1993).

Thus, because previous research has conceptualized charisma as the ability of an individual to influence others (often through the framing and expression of emotions; e.g., Antonakis, 2012; Bass, 1985; Weber, 1922/1978) and because previous research unanimously stated that charisma is relevant in interactions with other people, we theoretically derived that charisma (a) has an influence component, (b) has an (positive) emotional component, and (c) must be observable. In light of recent criticisms of charismatic leadership research (van Knippenberg & Sitkin, 2013), it is important to note that our definition is not tied to a specific context (e.g., leadership), nor is it defined by its outcomes. Instead, it provides a unified account of everyday charisma that opens new avenues for investigating charisma's general effects across a number of domains, including leadership.

Current Work

Before accepting the conceptualization as proposed, we sought to confirm the validity of its components. We therefore endeavored to test our propositions about charisma by conducting a series of studies to examine the different aspects of our definition.

First, we sought to ensure that the hypothesized dimensions of influence and affability are indeed elements that people think charismatic people possess. If so, we wanted to establish these two concepts operationally via scale construction and validation. To achieve this, we asked people about the traits that they would ascribe to charismatic people. We then assessed the overlap between the traits to identify those that the participants perceived to be particularly descriptive of charismatic people. Because we were interested in conceptualizing charisma as an individual's internal disposition (as opposed to a perception of the individual), we examined these traits as self-descriptors with a new sample of participants by submitting people's self-ratings to an exploratory factor analysis in Study 1. In Study 2, we confirmed the dimensional structure of our new charisma scale as consisting of influence and affability via confirmatory factor analysis, and then conducted convergent and discriminant validity analyses in Study 3 to ensure that charisma was a unique construct distinguishable from others like charismatic leadership, intellect, and political skills.

To evaluate charisma's observable nature, we examined it as a perception in Study 4. Specifically, in Study 4A, we investigated whether individual differences in charisma can be perceived in brief interactions (see Ambady, Bernieri, & Richeson, 2000, for review), hypothesizing that participants would be able to perceive charisma from briefly interacting with each other. Furthermore, in Study 4B, we also examined whether individuals' charisma may be apparent to close acquaintances, family, lovers, and friends, predicting that charisma will be visible in intimate relationships, demonstrating its observability.

To test the validity of our conceptualization, we examined whether charisma might affect one important leadership outcome—persuasion (e.g., Cialdini, 1993; DeRue et al., 2011; Judge & Piccolo, 2004; Petty & Cacioppo, 1986). We therefore recruited men and women in Study 5 to read either a strong or weak argument in favor of wind power energy. An independent group of raters then evaluated the persuasiveness of the speakers and the messages, which we correlated with targets' self-reported charisma. We expected different relationships between charisma and persuasiveness according to the strength of the message: weak arguments should seem more persuasive as a function of the speaker's charisma but strong arguments should show no relationship because they ought to be sufficiently persuasive on their own. Moreover, as previous research reported that charismatic leadership styles tend to be more common among women, that women's performance may benefit more from charisma, and because the speakers' sex was apparent in the study, we expected that gender stereotypes might augment how charisma relates to persuasion (e.g., Carli, 1999; Costrich, Feinstein, Kidder, Marecek, & Pascale, 1975; Eagly & Karau, 2002). Specifically, because women are stereotyped as warmer than men, we expected that the affability component of charisma would positively predict persuasion for women, but not for men, due to better stereotype fit (see Eagly & Karau, 2002). Thus, we expected individual differences in charisma to affect interpersonal outcomes (here, persuasion).

Finally, in Study 6, we examined the incremental validity of charisma by examining whether people interacting with charismatic individuals would like them more, independent of other personality traits that influence liking (i.e., extraversion and agreeableness; van der Linden, Scholte, Cillessen, te Nijenhuis, & Segers, 2010). We therefore recruited participants to interact in dyads and subsequently rate each other's likability, aiming to evaluate whether our new charisma measure could predict interpersonal outcomes over and above other established measures.

Ethics

All studies reported here were completed under Protocol #25554 ("Social Perception and Cognition") approved by the University of Toronto's Research Ethics Board.

Pilot Study: Item Generation

In a pilot study, we aimed to identify items that represent the traits that people ascribe to charismatic individuals. Rather than generating these items ourselves, we instead asked informants to generate them to help us develop a scale that would be representative of general public opinions about everyday charisma (Hinkin, 1995, 1998). Importantly, because we had specific predictions regarding the items that the participants would generate (items related to influence and affability), our approach to item generation was both inductive and deductive (Hinkin, 1995). That is, although nonexperts generated the initial pool of items, we expected that the ideas that people have about charismatic others would converge with those previously expressed in the strong theoretical tradition of charismatic leadership, reviewed above.

We therefore recruited two groups of participants: one to list four descriptors of a charismatic person whom they might have encountered in their everyday life, and one to rate the items generated by the first sample for how representative they were of a charismatic person. By focusing on hypothetical individuals, we were able to gather traits that people think are relevant to charisma without biasing the responses by a reference to the self.

The study consisted of two stages. First, we asked 102 American Mechanical Turk (MTurk)[1] Workers (n = 50 female; Age Range: 19–74 years) to list four characteristics of charismatic individuals encountered in everyday life. Because we wanted to ensure that participants generated the items spontaneously, we did not provide any definition of charisma. To increase variability in the items and avoid single word answers, we encouraged participants to provide detailed descriptions and gave examples of good responses (i.e., if listing the characteristics of a happy person, "smile" would be insufficient but "a big, genuine smile" would be an appropriate answer). At the end of the first stage, we had collected 408 individually generated descriptors that were then grouped into 100 categories by two of the authors (KOT and RZ) to simplify redundancies; for example, by categorizing the items "good speaker," "fluent speaker," and "clear speaker" under the category "good public speaker").

Second, an independent group of 50 American MTurk Workers (n = 29 female; Age Range: 21–72 years) rated each of the 100 descriptor categories on the likelihood of each being a good descriptor of a charismatic person using a 7-point scale (1 = *Not at all Likely*, 7 = *Very Likely*). We aggregated the participants' likelihood ratings for each item (Cronbach's alpha = .93), which they perceived as good descriptors of charisma overall (M = 5.26, SD = 0.76). We retained the 40 items receiving the highest ratings (Min = 5.54; M = 5.94, SD = 0.24; Appendix A) to ensure that we had a small yet variable set of initial items.

Study 1: The Factor Structure of Charisma

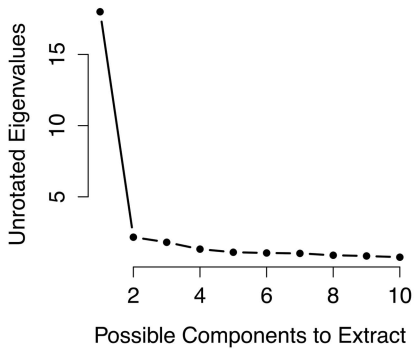
To work toward developing a scale to measure charisma as a general individual difference construct, we first examined commonalities between the 40 items retained in the second stage of the pilot study using exploratory factor analysis. In other words, we identified the unique factors that comprise charisma. We thus asked 412 American MTurk Workers (n = 147 female; Age Range: 18–89 years) to self-report how much they endorsed each item to describe themselves; we excluded eight participants because they gave uniform responses (final N = 404). For each item, we used the root construction "I am someone who is X" on a 5-point rating scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). Because we were interested in individuals' own sense of charisma, we focused on how the attributes that other people perceived to be charismatic applied to oneself. Thus, we measured charisma as an internal disposition via report about the self rather than report about hypothetical others, as in the pilot study.

We used exploratory factor analysis with principal axis factoring and a promax rotation to estimate the factor correlations because we thought that the factors may be correlated, given that the items all intended to measure charisma (Hendrickson & White, 1964). Both the cumulative variance explained and Kaiser-Guttman Rule (Kaiser, 1960) suggested retaining two factors, whereas the scree plot suggested retaining only one and Horn's Parallel Analysis (Horn, 1965; Hayton, Allen, & Scarpello, 2004) with 1000 simulations suggested retaining three. Given that this third factor only contained one item (i.e., "Is approachable"), and as the decision about the number of factors to retain in factor analysis is subjective (Hayton et al., 2004; Hinkin, 1995, 1998), we choose the two-factor solution based on the factor structures and factor loadings (i.e., .70 inclusion threshold; Meyers, Gamst, & Guarino, 2005).

The data suggested that two correlated factors composed charisma (r = .76). The first explained 30% of the variance (*Eigenvalue* = 11.82) and consisted of items describing leadership ability and influence in group settings; we named this factor "Influence." The second explained 18% of the variance (*Eigenvalue* = 7.31) and consisted of items describing a pleasant and inviting disposition toward other people, which we named "Affability." Nine items, five for Influence and four for Affability, had factor loadings exceeding .70 with cross-loadings below .17. To balance the number of items loading on each factor, we added an additional item loading highly on Affability (β = .62; "Can get along with anyone"); see Figure 1 for the resulting items and their factor loadings, reliability coefficients, variance explained, eigenvalues, and scree plot.

The results of the pilot study and exploratory factor analysis revealed that two correlated dimensions, Influence and Affability, described self-reported charisma. Influence consisted of leadership ability and one's strength of presence among other people. In contrast, Affability consisted of being pleasant and approachable, demonstrating that positive affect plays a role in fostering interpersonal appeal within everyday relationships. Although both Influence and Affability together constitute charisma, they are also distinct. We therefore concluded that traits related to both Influence and Affability compose charisma and used the items constituting these two factors to generate our measure: the General Charisma Inventory (GCI). Importantly, we also ob-

[1] Although we requested the data from 100 participants on MTurk, we recorded the data from two additional participants who submitted their responses but decided not to collect their compensation. Here, and throughout the manuscript, we included the participants who did not collect their compensation, often resulting in uneven sample sizes.



Item	Influence	Affability
1. Has a presence in a room	**0.87**	-0.10
2. Has the ability to influence people	**0.85**	-0.12
3. Is a good leader	**0.83**	-0.05
4. Has a magnetic persona	**0.83**	-0.06
5. Knows how to lead a group	**0.78**	0.00
6. Makes people feel comfortable	-0.16	**0.85**
7. Smiles at people often	-0.17	**0.80**
8. Is approachable	-0.07	**0.74**
9. Projects positive energy	0.05	**0.71**
10. Can get along with anyone	-0.10	**0.62**
Cronbach's α	.89	.82
Cumulative Variance Explained	30%	18%
Rotated Eigenvalue	11.82	7.31

Figure 1. Left: Scree plot graphing unrotated eigenvalues for the first 10 components. Right: Item factor loadings, factor reliabilities (Cronbach's alpha), factor variance explained, and rotated eigenvalues from the exploratory factor analysis (Study 1). Factor loadings relevant to scale construction indicated in bold. All factor loadings were standardized.

served that these two dimensions spontaneously emerged as attributes of charisma outside of a leadership context, where previous research would have foretold their importance within that domain. Thus, we not only developed a measure of charisma in everyday life, but also confirmed the two premises constituting our theoretical definition: that charisma is composed of both Influence and Affability.

Study 2: Confirming the Factor Structure of the GCI

Although the exploratory factor analysis in Study 1 indicated a two-factor structure for the GCI, it is necessary to confirm that this structure is consistent and stable using a different sample. Thus, in Study 2, we employed a new sample of participants and used confirmatory factor analysis to ensure the two-factor structure of our scale.

Method

Participants. We recruited 402 American MTurk Workers (n = 143 female; Age Range: 18–70 years) to complete the 10-item self-report GCI developed in Study 1.

Procedure. Participants rated themselves on the five items assessing Influence (e.g., "I am someone who knows how to lead people") and the five items assessing Affability (e.g., "I am someone who smiles at people often") using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). We removed 37 participants who gave uniform responses (final N = 367).

Results

We fit one- and two-factor measurement models using the structural equation modeling package lavaan in R (Rosseel, 2012), constraining the factors' variance to 1 in both models to facilitate model identification and using a weighted least squares estimator to account for the ordinal nature of the indicator variables. Although all 10 items loaded on a single factor (βs $\geq$ .45, Zs $\geq$ 8.71, ps $<$ .001), the overall model fit was poor: $\chi^2(35) = 174.18$, $p <$ .001, CFI = .65, RMSEA = .11, 90% CI [.09, .12]. We therefore rejected the one-factor solution (i.e., with all of the items as indicators of one latent construct) and fit the two-factor structure identified in Study 1, allowing the two factors to correlate freely. The two-factor model fit the data significantly better than the one-factor model: $\chi^2(34) = 141.28$, $p <$ .001, CFI = .73, RMSEA = .09, 90% CI [.08, .11]; $\Delta\chi^2(1) = 32.90$, $p <$ .001.

To improve the model fit further, we focused on the items' contents and correlations (see Table 1). In doing so, we found that

Table 1
Means, Standard Deviations, and Bivariate Correlations for the Initial GCI Items in Study 2

Item	*M* (*SD*)	2	3	4	5	6	7	8	9	10
Influence										
1. Has a presence in a room	3.20 (1.07)	.66	.61	.67	.64	.34	.32	.30	.50	.24
2. Has the ability to influence people	3.53 (1.08)		.71	.62	.69	.33	.26	.26	.46	.27
3. Is a good leader	3.37 (1.10)			.63	.82	.34	.30	.30	.51	.33
4. Has a magnetic persona	2.99 (1.12)				.62	.41	.36	.33	.57	.32
5. Knows how to lead a group	3.38 (1.13)					.38	.27	.34	.54	.34
Affability										
6. Makes people feel comfortable	3.75 (.89)						.51	.47	.55	.58
7. Smiles at people often	3.62 (1.06)							.54	.55	.45
8. Is approachable	3.90 (.93)								.47	.45
9. Projects positive energy	3.60 (1.07)									.49
10. Can get along with anyone	3.80 (1.02)									

Note. GCI = General Charisma Inventory. All correlations significant at $p <$ .001; (N = 367). Items retained following confirmatory factor analysis indicated in bold.

the items "Is a good leader" and "Knows how to lead a group" strongly correlated ($r = .82$), and thus arbitrarily removed the item "Is a good leader" from the Influence subscale for parsimony, as well as "Has a magnetic persona" because it was conceptually more abstract than the other items. We also observed that "Projects positive energy" in the Affability subscale moderately correlated with the items in the Influence subscale (all rs $\geq .46$), so we removed it to minimize cross-loadings. Last, we removed "Is approachable" because it seemed more relevant to trait agreeableness than to charisma and wanted to assure that our measure possessed discriminant validity (see Studies 3 and 6 below).

The trimmed two-factor model demonstrated excellent fit, $\chi^2(8) = 13.54$, $p = .10$, CFI = .98, RMSEA = .04, 90% CI [0, .08], and all items loaded well onto their respective factors. Furthermore, the two factors moderately correlated, $\beta = .52$, $Z = 10.24$, $p < .001$, and the trimmed two-factor model fit the data better than an alternative single-factor model with each of the six items serving as indicators: $\Delta\chi^2(1) = 127.74$, $p < .001$. Thus, we established a charisma scale composed of six items, three of which assess Influence (Influence: *Has the ability to influence people*; Presence: *Has a presence in a room*; Leader: *Knows how to lead a group*) and three of which assess Affability (Get Along: *Can get along with anyone*; Comfort: *Makes people feel comfortable*; Smile: *Smiles at people often*; see Figure 2 for the factor structure and standardized estimates).

Study 3: Establishing the Convergent and Discriminant Validity of the GCI

Having confirmed the structure of the GCI as a 6-item measure consisting of two subscales (Influence and Affability, three items each), we wanted to ensure that the scale was unique from other individual difference measures. Thus, we tested the convergent and discriminant validity of the GCI in Study 3 to establish that it only moderately correlates with other closely related constructs, such as leadership charisma, personality, and emotions. We therefore measured how individuals' scores on the GCI correlated with the Emotional Intelligence Scale (Schutte et al., 1998), the Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988), the General Confidence Scale (Keller, Siegrist, Earle, & Gutscher, 2011), the Big Five Inventory (John & Srivastava, 1999), the Political Skill Inventory (Ferris et al., 2005), the Conger-Kanungo Scale of charismatic leadership (Conger & Kanungo, 1994), measures of competence[2] and warmth (Fiske et al., 2007), and the ACT (Friedman et al., 1980). Furthermore, we wanted to differentiate our scale from intelligence to assure that individual differences in interpersonal charisma are not simply manifestations of cognitive ability.

Method

Measures.

General Charisma Inventory (GCI). We used the 6-item scale developed in Study 2 to measure the basic interpersonal dimensions of general charisma. Thus, the scale had two 3-item subscales examining Influence and Affability, as described above. Both subscales exhibited acceptable levels of internal consistency reliability (specific estimates reported below). Participants responded with how much they agreed that the item described them along a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*).

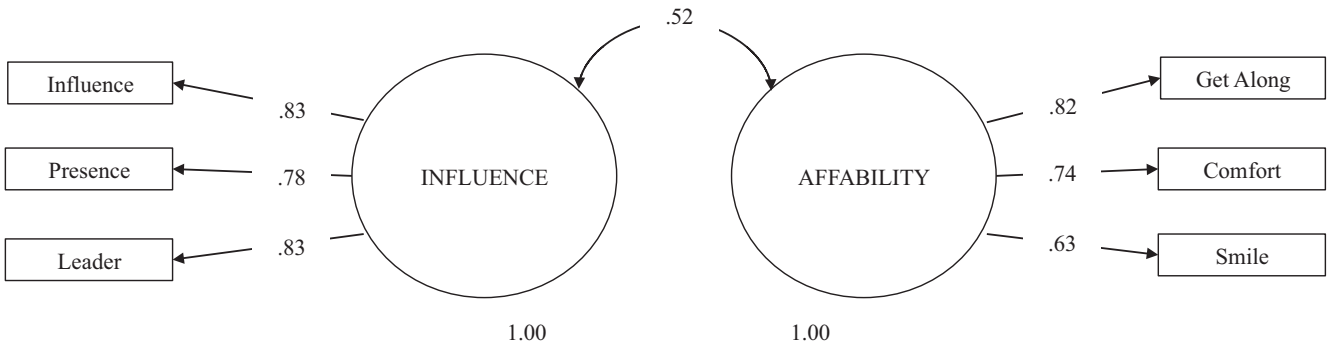
Emotional Intelligence (EI; Schutte et al., 1998). The EI Scale consists of 33 items measuring a construct developed by Salovey and Mayer (1990). Specifically, the scale measures the appraisal, expression, regulation, and utilization of emotions in a variety of contexts (Schutte et al., 1998). Participants were asked to answer items such as "I am aware of my emotions as I experience them" using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*); greater scores indicate greater emotional intelligence. The scale has been extensively validated in the past and demonstrated exceptional internal consistency reliability in our sample (Cronbach's alpha = .98). Because previous work has suggested that emotional intelligence and charismatic leadership are related constructs (Prati, Douglas, Ferris, Ammeter, & Buckley, 2003; but see also Antonakis, 2003, 2004), we expected to observe moderate correlations with both facets of charisma.

Positive and Negative Affect Scale (PANAS; Watson et al., 1988). We used the PANAS to examine participants' affect. It consists of 20 adjectives: 10 measuring positive affect ("Strong"; Cronbach's alpha = .89), and 10 measuring negative affect ("Distressed"; Cronbach's alpha = .92). Respondents report their affect using a 5-point scale (1 = *Strongly Disagree,* 5 = *Strongly Agree*), with higher scores suggesting greater experiences of affect on either dimension. Because previous research highlights the role of emotions in charismatic leadership (e.g., Bass, 1985; Damen, van Knippenberg, & van Knippenberg, 2008; Erez, Misangyi, Johnson, LePine, & Halverson, 2008; see also Keating, 2002, 2011), we predicted that both the Influence and Affability dimensions of the GCI would correlate positively with positive affect and negatively with negative affect.

General Confidence Scale (GCS; Keller et al., 2011). The GCS measures general and positive expectations about the ability of social systems to deal with stress, meaning that the scale measures the degree to which an individual feels certain about both the world and his or her idiosyncratic surroundings. The scale consists of six items (e.g., "Our society is well-equipped to solve future problems") evaluated using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*) such that higher scores indicate stronger beliefs in the ability of systems to deal with stressors in the environment. In our sample, the scale demonstrated good internal consistency reliability (Cronbach's alpha = .89). Unlike the positive affect dimension measured by the PANAS, the GCS measures the positive feelings that individuals project outward toward their environment, rather than those that define their current emotional states. Thus, we predicted that the scores on this scale would positively relate to the Affability dimension of the GCI, which we consider to capture the expression of positive emotions toward others (e.g., being pleasant). Because the GCS focuses on confidence in external systems rather than in individuals' abilities, however, we expected to find a null relationship between scores on this scale and those on charisma's Influence facet.

Big Five Inventory (BFI; John & Srivastava, 1999). This 44-item scale was designed to measure the personality traits outlined by the Five-Factor Model of personality (McCrae & Costa, 1999): openness to experience (10 items; Cronbach's alpha = .85),

[2] Here, we focused on Competence rather than Dominance/Power because Ambition and Dominance/Power compose a single axis in the circumplex model within which the traits describing Ambition appear to closely resemble Competence (Wiggins, 1979).



$\chi^2(8) = 13.59$, $p = .09$; CFI = .99; RMSEA = .04, 90% CI [.00, .08]

Figure 2. The final factor structure established in the confirmatory factor analysis (Study 2). All coefficients are standardized beta-weights.

conscientiousness (nine items; Cronbach's alpha = .89), extraversion (eight items; Cronbach's alpha = .87), agreeableness (nine items; Cronbach's alpha = .84), and neuroticism (eight items; Cronbach's alpha = .89). A sample item measuring extraversion is "I am someone who is talkative," to which a participant would respond using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). We predicted that all dimensions but neuroticism would positively relate to both GCI dimensions (as neuroticism tends not to associate with positive emotionality; Shiota, Keltner, & John, 2006) and that agreeableness would relate to Affability and not Influence because Affability primarily describes positive interactions with others and individuals' approachability, whereas Influence measures the degree to which an individual believes that he or she can affect others.

Political Skill Inventory (PSI; Ferris et al., 2005). The 18-item PSI is often conceptualized as a measure of leadership charisma, though it was designed to measure the four fundamental dimensions of political skill: social astuteness (three items; Cronbach's alpha = .81), interpersonal influence (five items; Cronbach's alpha = .85), networking ability (five items; Cronbach's alpha = .89), and apparent sincerity (five items; Cronbach's alpha = .88). Participants are asked to endorse each item using a 5-point scale (e.g., "I am good at getting people to like me," 1 = *Strongly Disagree*, 5 = *Strongly Agree*) with greater values on each subscale representing greater political skill within each domain. We predicted that both Influence and Affability would positively relate to all of the subscales, as previous research considered political skills to be closely related to charisma (e.g., Friedman et al., 1980).

Conger-Kanungo Scale of charismatic leadership (C-K; Conger & Kanungo, 1994). The 24-item C-K Scale measures three different stages of charismatic leadership in organizational settings using six subscales. Three subscales [environmental sensitivity (seven items; Cronbach's alpha = .86), sensitivity to group member needs (three items; Cronbach's alpha = .81), and nonmaintenance of the status quo (two items; Cronbach's alpha = .72)] measure the environmental assessment stage. One subscale [vision and articulation (six items; Cronbach's alpha = .89)] measures the vision formulation stage. Finally, the two remaining subscales [personal risk (three items; Cronbach's alpha = .82) and unconventional behavior (three items; Cronbach's alpha = .83)] measure the implementation stage. Participants rate how much they agree that each item describes them using a 5-point scale (e.g., "I am an exciting public speaker," 1 = *Strongly Disagree*, 5 = *Strongly Agree*) and greater numbers represent a greater degree of charismatic leadership on each subdimension. Thus, because all components of this questionnaire assess leadership charisma, we predicted that each would positively relate to both dimensions of the GCI.

Competence and warmth. Competence and warmth are both central dimensions of social behavior and individual dispositions (e.g., Fiske et al., 2007). We therefore generated a short 11-item questionnaire to assess participants' Competence (six items; "I am someone who is competent," Cronbach's alpha = .90) and Warmth (five items; "I am someone who is warm," Cronbach's alpha = .88) to which participants responded using a 5-point scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*). Although this scale has not been previously validated, the item-correlations were high and scale items were face valid (scale available upon request). Intuitively, we expected that Influence would correlate more strongly with Competence than with Warmth and that Affability would correlate more strongly with Warmth than with Competence. In both cases, however, we expected moderate correlations as we conceptualized charisma to be a finer-grained and more feature-based manifestation of Warmth and Competence.

Affective Communication Test (ACT; Friedman et al., 1980). The 13-item ACT measures individual differences in expressiveness, conveying interpersonal attractiveness or "charisma" (e.g., Friedman et al., 1988). The scale contains items such as "When I hear good dance music, I can hardly keep still" using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*) on which greater scores represent greater expressiveness. The scale was validated in previous work and demonstrated acceptable internal consistency reliability in the current work (Cronbach's alpha = .77). Because previous research suggests that expressiveness and charisma should be related (e.g., Antonakis, 2012; Friedman et al., 1980; Shamir et al., 1993), we expected that this scale would positively correlate with both Influence and Affability.

Raven's Advanced Progressive Matrices (Raven, Raven, & Court, 2003). Raven's matrices present participants with a visual pattern that contains a missing section. Participants then choose from eight parts that they could use to complete the image with the

difficulty of the task increasing progressively with each subsequent item. Because the task is visually based, it is considered to be free of any verbal or cultural influence, thus allowing for an unbiased assessment of intelligence. To avoid participant fatigue, we only used the first 24 items from this measure and computed the number of items correctly solved for each participant. Although intelligence and leadership tend to moderately correlate ($\rho = .21$; Judge, Colbert, & Ilies, 2004), we conceptualized charisma as a personality trait that focuses more heavily on social interaction and interpersonal skill. Furthermore, the trope of the "lovable fool" (Casciaro & Lobo, 2005) demonstrates that high interpersonal skill and intelligence need not necessarily coexist. Thus, we formally predicted no relationship between participants' GCI scores and their performance on Raven's matrices.

Procedure. We recruited four samples of American MTurk Workers. The first consisted of 305 participants ($n = 165$ female; Age Range: 18–74 years) presented with our GCI (Influence: Cronbach's alpha = .79; Affability: Cronbach's alpha = .82), the EI Scale, PANAS, GCS, BFI, PSI, and C-K Scale. The second consisted of 122 participants ($n = 47$ female; Age Range: 19–71 years) who completed the GCI (Influence: Cronbach's alpha = .85; Affability: Cronbach's alpha = .79) and Competence and Warmth Scale described above. The third consisted of 150 participants ($n = 65$ female; Age Range: 18–67 years) who completed the GCI (Influence: Cronbach's alpha = .85; Affability: Cronbach's alpha = .80) and ACT. Finally, the fourth consisted of 203 participants ($n = 97$ female; Age Range: 18–71 years) who completed the GCI (Influence: Cronbach's alpha = .77; Affability: Cronbach's alpha = .77) and the 24 items from Raven's Progressive Matrices.

Results

Sample 1: Relating the GCI to emotions and charismatic leadership. Because we made some changes to our scale in the confirmatory factor analysis (Study 2), we wanted to replicate the obtained factor structure in the current sample. Thus, we estimated the final two-factor model described in Study 2 in which each factor predicted the three items from the questionnaire that served as observed indicators. As before, we constrained the factor variances to 1 and estimated the covariance between the latent variables (Influence and Affability) using a weighted least squares estimator. Overall, the model fit well, $\chi^2(8) = 9.01$, $p = .34$, CFI = .99, RMSEA = .02, 90% CI [0, .07], the factors moderately correlated, $\beta = .51$, $Z = 9.37$, $p < .001$, and the factor loadings were high, all $\beta s \geq .65$, $Zs \geq 10.49$, $ps < .001$). Thus, we replicated the basic factor structure with a new sample of participants.

Proceeding with the analysis of convergent and discriminant validity, we observed moderate positive correlations between Influence ($M = 3.45$, $SD = 0.90$) and Affability ($M = 3.89$, $SD = 0.79$) with emotional intelligence, positive affect, openness to experience, conscientiousness, extraversion, all measures of political skill, and the environmental sensitivity, sensitivity to members' needs, personal risk, and unconventional behavior dimensions of the C-K Scale (see Table 2 for estimates and confidence

Table 2
Means, Standard Deviations, and Correlations Between Each Validity Measure in Study 3 and the Two GCI Subscales, Accompanied by the 95% Confidence Interval Around Each Estimate

Measure	*M* (*SD*)	General charisma	
		Influence	Affability
Sample 1 ($N = 305$)			
Emotional Intelligence Scale	3.72 (.56)	.56 [.48, .64]	.66 [.59, .72]
Positive Affect and Negative Affect Scale – Positive	3.72 (.69)	.50 [.41, .58]	.50 [.41, .58]
Positive Affect and Negative Affect Scale – Negative	1.85 (.82)	−.21 [−.31, −.10]	−.26 [−.37, −.16]
General Confidence Scale	2.97 (.90)	.09 [−.02, .20]	.33 [.23, .43]
Big Five Inventory – Extraversion	2.99 (.86)	.56 [.47, .63]	.44 [.35, .53]
Big Five Inventory – Openness	3.65 (.68)	.38 [.28, .47]	.23 [.12, .33]
Big Five Inventory – Conscientiousness	3.90 (.74)	.31 [.21, .41]	.34 [.24, .44]
Big Five Inventory – Agreeableness	3.82 (.70)	.07 [−.04, .19]	.57 [.49, .64]
Big Five Inventory – Neuroticism	2.53 (.91)	−.28 [−.38, −.17]	−.36 [−.46, −.26]
Political Skill Inventory – Social Astuteness	3.65 (.83)	.54 [.46, .62]	.52 [.44, .60]
Political Skill Inventory – Interpersonal Influence	3.60 (.77)	.57 [.49, .64]	.64 [.57, .70]
Political Skill Inventory – Networking Ability	3.09 (.94)	.48 [.39, .56]	.48 [.39, .57]
Political Skill Inventory – Apparent Sincerity	4.06 (.75)	.31 [.21, .41]	.44 [.52, .60]
Conger-Kanungo Scale – Environmental Sensitivity	3.64 (.72)	.52 [.43, .60]	.39 [.30, .49]
Conger-Kanungo Scale – Sensitivity to Member Needs	3.84 (.77)	.32 [.22, .42]	.52 [.44, .60]
Conger-Kanungo Scale – Maintains Status Quo	3.31 (.93)	.00 [−.11, .11]	.22 [.11, .33]
Conger-Kanungo Scale – Vision	3.17 (.92)	.05 [−.06, .16]	.05 [−.07, .26]
Conger-Kanungo Scale – Personal Risk	2.76 (.98)	.31 [.20, .41]	.19 [.07, .29]
Conger-Kanungo Scale – Unconventional Behavior	3.12 (.96)	.30 [.20, .40]	.14 [.03, .25]
Sample 2 ($N = 120$)			
Competence	4.21 (.61)	.56 [.42, .67]	.37 [.21, .52]
Warmth	4.12 (.63)	.18 [.00, .35]	.67 [.56, .76]
Sample 3 ($N = 150$)			
Expressiveness	2.80 (.53)	.47 [.34, .59]	.43 [.29, .56]
Sample 4 ($N = 203$)			
Intelligence	12.02 (3.79)	−.13 [−.26, .01]	.08 [−.05, .22]

Note. GCI = General Charisma Inventory.

intervals). Furthermore, the GCI subscales negatively correlated with both negative affect and neuroticism. We therefore observed that charisma related to positive and negative emotions, to the five factors of personality, and to the interpersonal dimensions of charismatic leadership and political skill.

As predicted, GCS scores positively related to Affability but not Influence. We speculate that this occurred because the GCS assesses the projection of emotions, which resembles the Affability dimension of the GCI, and because the GCI's Influence factor centers on the interpersonal context, rather than the broader social systems relevant to the GCS. Similarly, the BFI dimension of Agreeableness significantly related to Affability, as both focus on pleasant interactions with others, but not Influence, likely because the ability to influence others is conceptually orthogonal to being agreeable.

Last, we observed several other incidental relationships. The Status Quo Maintenance subscale of the C-K Scale unexpectedly related to Affability rather than Influence, perhaps because polite individuals (potentially high in Affability) may be more inclined to maintain interpersonal harmony than to challenge the status quo. Neither Influence nor Affability significantly correlated with the Vision subscale of the C-K Scale, perhaps because the Vision subscale measures the performance aspect of the vision formation stage (e.g., "I am someone who appears to be a skillful performer when presenting to a group"; Conger & Kanungo, 1994) and does not directly concern individuals' stable dispositions. However, future research is needed to understand these associations better.

Sample 2: Relating the GCI to competence and warmth. As in Sample 1, we once again confirmed the two-factor structure of the scale; the model fit was acceptable: $\chi^2(8) = 10.99$, $p = .20$, CFI = .97, RMSEA = .06, 90% CI [0, .12]. Next, we examined how Influence ($M = 3.34$, $SD = 0.94$) and Affability ($M = 3.73$, $SD = 0.87$) related to Competence and Warmth. Although all four correlations reached significance, Influence correlated more strongly with Competence, $r(120) = .56$, $p < .001$, than Warmth, $r(120) = .18$, $p = .05$; $\Delta r = .38$, $Z = 4.30$, $p < .001$, and Affability correlated more strongly with Warmth, $r(120) = .67$, $p < .001$, than with Competence, $r(120) = .37$, $p = .001$; $\Delta r = .30$, $Z = 3.82$, $p < .001$.

Sample 3: Relating the GCI to expressiveness. We again confirmed the GCI's factor structure with the new sample, which showed a satisfactory fit, $\chi^2(8) = 6.82$, $p = .56$, CFI $> .99$, RMSEA $< .01$, 90% CI [0, .09], and moderate correlation between the two factors, $r(148) = .50$, $p < .001$. Both Influence, $r(148) = .47$, $p < .001$, and Affability, $r(148) = .43$, $p < .001$, correlated with expressiveness, as measured by the ACT. Thus, people who scored higher on the GCI tended to be more expressive, supporting the association between expressiveness and charisma discussed in previous work (e.g., Friedman et al., 1988; Shamir et al., 1993).

Sample 4: Relating the GCI to intelligence. As above, we replicated the two-factor scale structure before proceeding with subsequent analysis, model fit: $\chi^2(8) = 6.52$, $p = .59$, CFI $> .99$, RMSEA $< .01$, 90% CI [0, .07]. Respondents' performance on the modified Raven's Progressive Matrices test did not significantly relate to either Affability ($M = 3.94$, $SD = 0.80$), $r(201) = .08$, $p = .23$, or Influence ($M = 3.38$, $SD = 0.92$), $r(201) = -.13$, $p = .07$. This finding might appear to contrast with previous research reporting a moderate correlation between leadership and intelligence (Judge et al., 2004). Because we conceptualized charisma as a trait-like construct that includes nonleaders, the absence of an association between charisma and intelligence in the present sample was unsurprising.

Discussion

Across the first three studies, we gathered items that people consider to be charismatic and refined them using exploratory and confirmatory factor analyses. We concluded that interpersonal charisma could be captured in six items, half assessing Influence and half assessing Affability. We then established the convergent and discriminant validity of our measure, which largely supported the associations we hypothesized between our scale's properties and those of conceptually related measures. Specifically, general charisma correlated with scales measuring positive and negative emotions, basic dimensions of personality, several measures of charismatic leadership, and expressiveness. Furthermore, neither GCI subscale correlated highly with intelligence, suggesting that individual differences in general charisma are not redundant with cognitive ability. Furthermore, GCI displayed relatively high correlations with Competence and Warmth, suggesting that Influence and Affability may represent features of the broader dimensions of Competence and Affability. These data collectively affirm the GCI as a valid and unique measure of charisma.

Study 4A: Charisma in Group Interactions With Strangers

Because we conceptualized charisma as an observable construct, similar to past work (e.g., Antonakis, 2012), we wanted to demonstrate that others would perceive charisma similarly and accurately during brief interactions. That is, we wanted to establish that different people would agree in their perceptions of targets (consensus) and that these perceptions would reflect the targets' own self-reports (a measure of accuracy; Funder, 1995). We therefore asked participants to briefly interact in a small group setting. After the interaction, the participants reported their own Influence and Affability using the GCI and rated the other members of the group for how charismatic they seemed in a round-robin design. Because we thought that perceptions of attractiveness (both physical and interpersonal) would contribute to perceptions of charisma along with Influence and Affability, we also asked the participants to rate each other's attractiveness. Thus, we aimed to establish the observable and perceptible aspects of charisma.

Importantly, this investigation not only allowed us to test whether charisma can be assessed using different methods (additional multimethod validation), but also allowed us to infer that self-reported charisma manifests in brief, casual, day-to-day interactions. Significant results from this test would support our conceptualization of charisma as a general construct that does not require the rhetoric common to leaders' public speeches to be apparent to observers (e.g., Shamir, 1995). Thus, the current study examined whether charisma is an interpersonally perceptible construct.

Method

Participants. A total of 187 undergraduate students ($n = 155$ female; Age Range: 18–31 years) received partial credit in an introductory psychology course for participating in the study.

Materials.

Charisma. We used our 6-item GCI, assessing Influence and Affability, to measure the participants' charisma. Participants rated

themselves using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*), as in the studies reported above, and then also used the same 6-item measure and 5-point scale to rate each member of the group based on observing them in the interaction.

Attractiveness. Because previous research has shown that attractiveness is an important variable that positively influences judgments of other personality traits (Nisbett & Wilson, 1977), including leadership ability (Re & Perrett, 2014; Surawski & Ossoff, 2006), we controlled for perceptions of attractiveness (see also Dion, Berscheid, & Walster, 1972). Thus, the participants rated the attractiveness of the other group members using a 7-point scale (i.e., "How attractive is X?") from 1 (*Not at all Attractive*) to 7 (*Very Attractive*).

Procedure. We randomly assigned unacquainted participants to one of 50 groups of 3–4 persons. Research assistants seated each group in a room and provided each person with a packet containing the measures described above. Participants were identified using playing cards positioned in front of them on the table (all the same value but of different suits). The participants were asked to indicate their assigned playing card on the first page of the booklet, which we used to identify their data. A research assistant introduced the group to a short and casual interaction task. Specifically, they were instructed to casually get to know each other using three prompts for 5 min ("What do you study?"; "What's your favorite food?"; and "Describe your dream vacation."). During this brief interaction, the research assistant left the room to allow for a more natural interaction and to time the participants. Immediately after, the participants first rated themselves and then the other members of the group on the two GCI factors on the second page of their response booklet, after which they rated each other for attractiveness on a separate page.

Analytic strategy. We first examined the participants' consensus ratings of each other's Influence, Affability, and attractiveness by measuring their agreement using intraclass correlations (ICC) estimated within a multilevel model (Hox, 2010; Kreft & De Leeuw, 1998). We then calculated how well their self-reported Influence and Affability related to others' perceptions of them (self-other agreement; Funder, 1995) while controlling for attractiveness.

Because participants' responses were simultaneously nested within both their own individual and other group members' judgments, we used multilevel structural equation modeling to address our primary hypotheses (Muthén, 1994; Preacher, Zhang, & Zyphur, 2011). Furthermore, to test our expectation that people's self-reported Influence and Affability would relate to others' perceptions of charisma, we analyzed the data following the conceptual analytic framework of the Social Relations Model to account for target, perceiver, and relationship variances and effects (Malloy & Kenny, 1986) in a single cross-classified structural equation model (e.g., Baayen, Davidson, & Bates, 2008; Judd, Westfall, & Kenny, 2012; Westfall, Kenny, & Judd, 2014). Specifically, because the total variance in ratings is a product of the target (Level 2A), the perceiver (Level 2B), and the association between the two (i.e., individual ratings; Level 1), we partitioned the variance across these three levels. In this analysis, we label participants as both targets (when other group members rated them) and perceivers (when the participants provided ratings of other group members).

Between-targets level (Level 2A). Because we recognized that participants would agree in their ratings of each other to some extent (i.e., they would show consensus), we estimated self-reported Influence, self-reported Affability, and other-rated attractiveness as latent variables on Level 2A (see Figure 3). We then specified these three variables as indicators of a latent perception of charisma. In other words, the model stated that charisma would be partly based on others' impressions of Influence, Affability, and attractiveness. Furthermore, we modeled participants' self-reported Influence and Affability as latent variables only on Level 2A, which we correlated as in the studies above, and examined the covariances between self-reported Influence, self-reported Affability, and charisma. Significant correlations between the participants' self-reported charisma (i.e., self-reported Influence and self-reported Affability) with the other group members' impressions (i.e., other-rated Influence, other-rated Affability, and other-rated attractiveness) following just 5 min of interpersonal interaction would suggest that charisma is an observable interpersonal construct.

Between-perceivers level (Level 2B). Because the Social Relations Model specifies that the same observer has a systematic bias in rating all targets, we also estimated latent other-rated Influence, other-rated Affability, and other-rated attractiveness at Level 2B. As with Level 2A, we assumed these variables to be indicators of a latent Charisma factor.

Within level (Level 1). Even after accounting for the variance attributable to each target and each perceiver, we expected that every perceiver would rate every target idiosyncratically. In other words, the raters would express some degree of unique variability in rating each target. To account for this, we also specified latent variables for self-reported Influence, self-reported Affability, and other-rated attractiveness on Level 1 with all factors as indicators of latent Charisma.

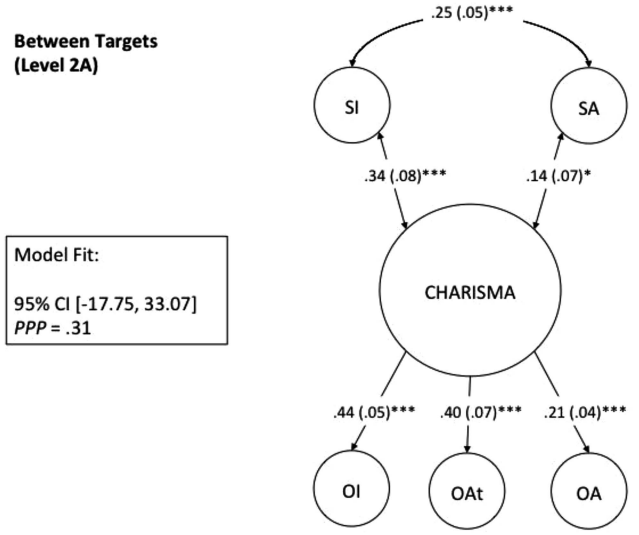


Figure 3. Graphical representation of the relationship between self- and observer-ratings in the round robin interaction task on the between targets level (Study 4). SI = self-reported Influence; SA = self-reported Affability; OI = observer-rated Influence; OA = observer-rated Affability; OAt = observer-rated Attractiveness. The model parameter estimates are unstandardized. * $p < .05$, *** $p < .001$.

Estimation. We estimated the model using the Bayesian estimator (Muthén & Asparouhov, 2012) in Mplus (Muthén & Muthén, 2011) because it is the only estimator, to our knowledge, that can accommodate structural equation models in the context of cross-classification and boasts several other advantages. First, Bayesian estimates are not evaluated in the context of a normal (Gaussian) distribution: rather than assuming that the parameters are normally distributed, their distributions are derived from simulated data, providing a more precise evaluation of statistical significance. Second, empirical examination of the Bayesian estimator shows that it performs better with small samples (Muthén & Asparouhov, 2012) and can accommodate multiple types of response variables (e.g., interval, categorical), providing more precise parameter estimates than the more common maximum likelihood estimator. Finally, unlike frequentist models that often estimate parameters as constant, the Bayesian estimator explicitly models the parameters as variable (Muthén & Asparouhov, 2012). That is, instead of constraining the parameters to zero (or any other value), the model constrains the parameter to be within a reasonable vicinity of zero (or another specified constant). Critically, allowing the parameters to vary improves the model fit and allows researchers to estimate the models with greater precision.

Thus, generating model-fit indices using a Bayesian approach constrains discrepancies between the data generated by the model and those actually obtained by researchers; large discrepancies therefore suggest model misspecification (van de Schoot et al., 2014). This can be evaluated using two model-fit measures: the difference between the model's implied and observed χ^2 values, and Posterior Predictive p values (*PPP*). For the first index, the model computes the χ^2 fit value for the actual data and compares this value to simulated χ^2 values, obtaining the difference between the two on each simulation to construct a confidence interval (95% confidence intervals that do not contain 0 suggest that the model describes the data well). Similarly, the *PPP* represents the proportion of simulated χ^2 values greater than those produced by the actual data such that $PPP = .50$ suggests that the model describes the data well.

We therefore calculated the 95% confidence interval of the differences between the implied and observed χ^2 values and *PPP* to assess our model's fit. Moreover, because the current design is akin to a multilevel modeling framework, we report unstandardized coefficients to evaluate our individual parameters, accompanied by their standard errors and probability level.

Results and Discussion

Consensus and self-other agreement. Participants tended to agree with each other in their ratings of others' Influence, Affability, and attractiveness. Furthermore, self-reported ratings of Influence and Affability correlated with others' ratings of Influence and Affability, respectively. These effects remained statistically significant even when including attractiveness in the equations, meaning that people could perceive others' Influence and Affability following a brief interaction independent of attractiveness (see Table 3).

Main analysis. Overall, our theoretical model fit the data well: $PPP = .31$, 95% CI around implied-observed χ^2 values [−17.75, 33.07]. For concision, we focus on the parts of the model displayed in Figure 3 that test our a priori theoretical predictions on Level 2A.[3] Specifically, we hypothesized that charisma would be apparent in the 5-min interaction (i.e., that perceptions of latent Charisma would correlate with self-reported Influence and self-reported Affability). Confirming our hypothesis, participants' self-reported Influence ($b = 0.34$, $SE = 0.08$, $p < .001$) and Affability ($b = 0.14$, $SE = 0.07$, $p = .048$) correlated with the other group members' overall perceptions of Charisma. Brief interpersonal interactions therefore seem sufficient to allow for reliable perceptions of charisma that correspond to individuals' self-reports. Thus, charisma is an interpersonally observable construct.

Study 4B: Perceptions of Charisma by Close Others

In Study 4A, we established that just a few minutes of interpersonal interaction was enough to perceive a person's internal charismatic disposition. Specifically, previously unacquainted individuals could perceive charismatic influence and affability better than would be expected by chance. In Study 4B, we extended this to informant reports, predicting that individuals would be able to perceive the Influence and Affability of people they know well.

Method

Participants. Each of 147 undergraduate students provided the names and contact information (i.e., e-mail addresses) for three friends, family members, or relationship partners. We contacted each informant, asking him or her to complete a short survey (3 min) by email about the participant who nominated them. If the informant did not respond to the survey, we contacted the person weekly up to three times with a reminder to complete it. A total of 361 informants (128 female; $M = 31.22$ years old, $SD = 14.97$; 81.86% response rate) complied with our request, allowing us to obtain data from all three informants for 67 participants, and from two informants for 80 participants. Of these, 164 were family members, 162 were friends, 28 were romantic partners, and seven indicated having another type of relationship with the participant. We did not compensate the informants but awarded the participants partial credit in an introductory psychology course.

Procedure. Participants reported their Influence and Affability using the GCI through a psychology department subject pool prescreening measure two weeks prior to the beginning of the semester. Those who later enrolled in the study via the subject pool were asked to provide the name and email address for three informants who knew them well upon presentation to the laboratory (i.e., friends, family members, relationship partners). We then contacted each informant, asking the person to rate each participant using the questions from the same 6-item GCI and matched their responses with the participants' self-reports. In total, the data collection took approximately three months. Reliability scores for the self-reported and other-rated Influence (Cronbach's alpha = .81) and Affability (Cronbach's alpha = .75) measures were acceptable.

Analytic strategy. We aggregated informants' responses to the GCI for each target. Because we were interested in the covariance between self-reported and informant-rated charisma, we examined the covariances between the self-reported and

[3] Notably, Influence, Affability, and attractiveness loaded onto a single latent Charisma factor across all three levels: $ps \leq .01$.

Table 3
Estimates of Consensus for Influence, Affability, and Attractiveness, and Unstandardized Regression Coefficients and Corresponding Standard Error Values for Self-Other Agreement in Study 4A

Source	Consensus	$Agreement_0$ *b* (*SE*)	$Agreement_1$ *b* (*SE*)
Influence	.38	.28 (.05)	.26 (.05)
Affability	.14	.19 (.05)	.17 (.05)
Attractiveness	.20	—	—

Note. All estimates significant at $p < .001$. ICC = intraclass correlation coefficient; $Agreement_0$ = original agreement estimate; $Agreement_1$ = partial agreement estimate controlling for attractiveness.

informant-rated scores for the Influence and Affability subscales in the context of a one-level structural equation model. Specifically, we estimated separate Influence and Affability latent factors for participants and their informants, freely estimating all possible covariances between the latent factors.[4] We constrained the factor variances to 1 and used a maximum likelihood estimator because the indicator variables were continuous (unlike in the studies reported above).

Results and Discussion

The model fit was excellent: $\chi^2(48) = 59.89$, $p = .12$, CFI = .98, RMSEA = .04, 90% CI [0, .07]; see Figure 4 for graphical depiction and all parameter estimates. Consistent with our hypothesis, we observed that the informants could accurately discern whether the participants were charismatically influential ($\beta = .42$, $Z = 4.70$, $p < .001$) and affable ($\beta = .37$, $Z = 3.77$, $p < .001$), as indicated by statistically significant covariances between the participants' self-reported and informant-rated Influence and Affability scores.

Thus, whereas we established the structure of everyday charisma in Studies 1–3, we documented its observability to both newly acquainted strangers (Study 4A) and close relations (Study 4B) here. Not only does the GCI appear to be a valid measure of self-reported charisma, then, it also seems to reliably index inferences made by other people. Additionally, the moderate agreement between self- and other-ratings of charisma underscores the convergent validity of the GCI (Campbell & Fiske, 1959; Zou, Schimmack, & Gere, 2013). To determine the scale's validity and utility further, we wanted to also test its predictive ability (i.e., criterion validity). We therefore investigated how GCI-measured charisma might predict individuals' persuasiveness in Study 5.

Study 5

To further validate the GCI, we examined its capacity to predict outcomes relevant to persuasion (Avolio & Bass, 1988; House, 1977). Here, we asked participants to recite either a strong or weak argument favoring the adoption of windmill-based power generation while being audio-recorded. Independent participants then listened to short segments of the recited speeches and rated the targets and speeches for how persuasive they were. Although we expected the speakers and their messages to all be persuasive when reading the strong argument, we hypothesized that participants would perceive readers of the weak argument as more persuasive only if they were more charismatically influential (i.e., higher score on the GCI's Influence subscale). Furthermore, we expected that participants would perceive speakers as more persuasive when they fit the stereotypes for their gender (e.g., Eagly, Johannesen-Schmidt, & van Engen, 2003; Keating, 2011). Specifically, we expected that Affability would positively relate to persuasiveness for women and negatively relate to persuasiveness for men.

Method

We randomly assigned 120 undergraduate students ($n = 73$ female; Age Range: 17–48 years; all native English speakers) to read either a strong or weak argument while being audio-recorded ($M_{Duration} = 1.17$ min, $SD = 0.14$ min; see Appendix B).[5] Participants completed the GCI after they finished reading the passage.

Six hundred American MTurk Workers ($n = 215$ female; Age Range: 18–74 years) listened to speeches and rated the persuasiveness of both the message and the speaker. Each participant heard only one, randomly selected audio track for an average of 4.85 raters ($SD = 0.95$) per speech. They then described the message's content, which we used as an attention check (13 participants failed and were subsequently removed) and answered four questions evaluating the message's persuasiveness (e.g., "I found the message to be convincing"; Cronbach's alpha = .87), two questions evaluating the speaker's persuasiveness (e.g., "I found the speaker to be convincing"; $r = .76$, $p < .001$), rated the attractiveness of each voice (i.e., "I found the speaker to be attractive"), and rated the speaker's charisma ("I found the speaker to be charismatic"), all using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*).

Analytic strategy. We analyzed the data using multilevel modeling to account for the variance due to speakers, raters, and their relationships, with mean perceptions of message persuasiveness and speaker persuasiveness as the respective dependent variables in two separate models. We examined each dependent variable as a function of condition (1 = *Strong Argument*, −1 = *Weak Argument*), the speaker's sex (1 = *Male*, −1 = *Female*), Influence, Affability, and the interactions of both condition and sex with Influence and Affability, all while controlling for mean perceived attractiveness. We then added the charisma ratings, specifying its interactions with condition and target sex. We used the same model specifications as above in model estimation.[6]

Results

Message persuasiveness. The strong arguments was more persuasive than the weak argument, $b = 0.20$, $SE = 0.03$, $t(98) = 6.21$, $p < .001$. Similarly, more attractive voices were perceived as

[4] Notably, we could not generate a higher-order charisma factor because we only had two ratings (Influence and Affability) to serve as indicators.

[5] Argument strength did not affect participants' scores on either the Influence, $b = 0.01$, $SE = 0.07$, $t(118) = 0.11$, $p = .92$, or Affability, $b = 0.02$, $SE = 0.07$, $t(118) = 0.25$, $p = .80$, subscale of the GCI.

[6] Although the shared variance between mean ratings of the speaker's persuasiveness and mean ratings of the message's persuasiveness was relatively high ($r^2 = .50$), we treated them as separate constructs because of their conceptual differences. Aggregating the two measures and using them as a single dependent variable produced similar results.

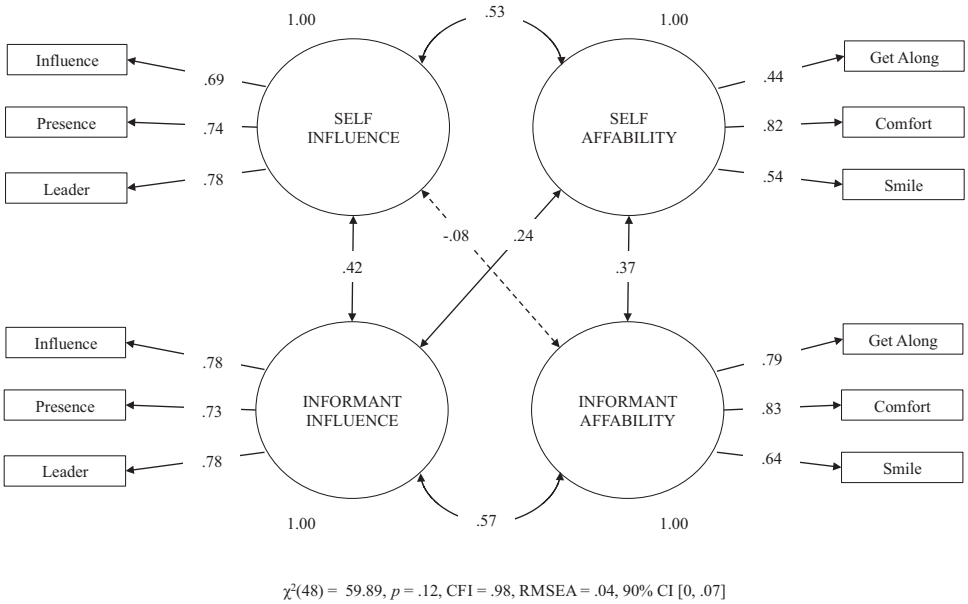


Figure 4. Standardized parameter estimates and model fit statistics for relationships between participants' self-reported and informant-rated scores on the General Charisma Inventory (GCI) in Study 4B. All solid paths significant at $p < .02$.

more persuasive than less attractive voices, $b = 0.27$, $SE = 0.03$, $t(574) = 9.02$, $p < .001$. Finally, we observed a three-way interaction between Target Sex, Condition, and Affability, which we decompose below, $b = 0.12$, $SE = 0.04$, $t(97) = 2.73$, $p = .007$. No other results reached statistical significance: $ts \leq 1.89$, $ps \geq .06$.

Breaking down the interaction, we examined effects of Affability on message persuasiveness within each Target Sex × Condition combination. Affability did not predict message persuasiveness for either men, $b = 0.11$, $SE = 0.09$, $t(89) = 1.21$, $p = .23$, or women, $b = 0.02$, $SE = 0.08$, $t(101) = 0.25$, $p = .81$, in the strong argument condition. But, consistent with gender stereotypes, Affability predicted persuasiveness for women, $b = 0.20$, $SE = 0.07$, $t(100) = 2.81$, $p = .006$, but not for men, $b = -0.18$, $SE = 0.10$, $t(101) = 1.83$, $p = .07$, in the weak argument condition (see Figure 5).

Including perceptions of charisma and its interactions into the model showed that speakers scoring higher on charisma delivered more convincing messages, $b = 0.16$, $SE = 0.03$, $t(565) = 4.81$, $p < .00$. The three-way interaction between condition, target sex, and Affability remained statistically significant, $b = 0.10$, $SE = 0.04$, $t(96) = 2.44$, $p = .02$, and perceived charisma did not interact with any variable, $ts < 1.70$, $ps > .09$.

Speaker persuasiveness. Similar to the results above, raters perceived individuals reading the strong argument as more persuasive than individuals reading the weak argument, $b = 0.17$, $SE = 0.04$, $t(94) = 4.57$, $p < .001$. Furthermore, attractiveness positively predicted speaker persuasiveness as it did message persuasiveness above, $b = 0.49$, $SE = 0.03$, $t(574) = 14.08$, $p < .001$.

As above, a significant Target Sex × Condition × Affability interaction emerged, $b = 0.14$, $SE = 0.05$, $t(95) = 2.85$, $p = .005$. Here, however, we also observed a main effect of target sex [participants perceived men to be more persuasive than women overall, $b = 0.09$, $SE = 0.04$, $t(102) = 2.42$, $p = .02$] and a significant Condition × Influence interaction (decomposed below), $b = -0.10$, $SE = 0.05$, $t(95) = 2.00$, $p = .049$. No other results reached significance, $ts \leq 1.50$, $ps \geq .14$.

We decomposed the Target Sex × Condition × Affability interaction by condition, as above. Consistent with our hypotheses, Affability did not affect either male, $b = 0.06$, $SE = 0.11$, $t(87) = 0.53$, $p = .60$, or female, $b = -0.08$, $SE = 0.09$, $t(99) = 0.81$, $p = .40$, speakers' persuasiveness when reading the strong argument. However, when the argument was weak, participants rated more Affable women as more persuasive, $b = 0.22$, $SE = 0.08$, $t(98) = 2.79$, $p = .006$. However, Affable men were not perceived as more or less persuasive, $b = -0.20$, $SE = 0.11$, $t(99) = 1.80$, $p = .07$ (see Figure 6). Affability therefore interacted with gender to affect speaker persuasiveness ratings of in stereotype-congruent ways, mirroring the effects for message persuasiveness reported above.

Decomposing the Condition × Influence interaction, we found that Influence did not predict speaker persuasiveness for strong, $b = -0.08$, $SE = 0.07$, $t(93) = 1.04$, $p = .30$, or weak arguments, $b = 0.12$, $SE = 0.06$, $t(97) = 1.86$, $p = .07$.

As before, including ratings of speaker's charisma into the model, we found that speakers scoring higher on the GCI were more persuasive, $b = 0.37$, $SE = 0.04$, $t(568) = 10.21$, $p < .001$. The three-way interaction again remained reliable, $b = 0.11$, $SE = 0.05$, $t(93) = 2.36$, $p = .02$, and no other results were statistically significant, $b = 0.11$, $SE = 0.05$, $t(93) = 2.36$, $p = .02$.

Discussion

Individuals' self-reported charisma predicted their persuasiveness with some nuances. When the argument was strong, a speaker's charisma had no impact on his or her persuasiveness. When

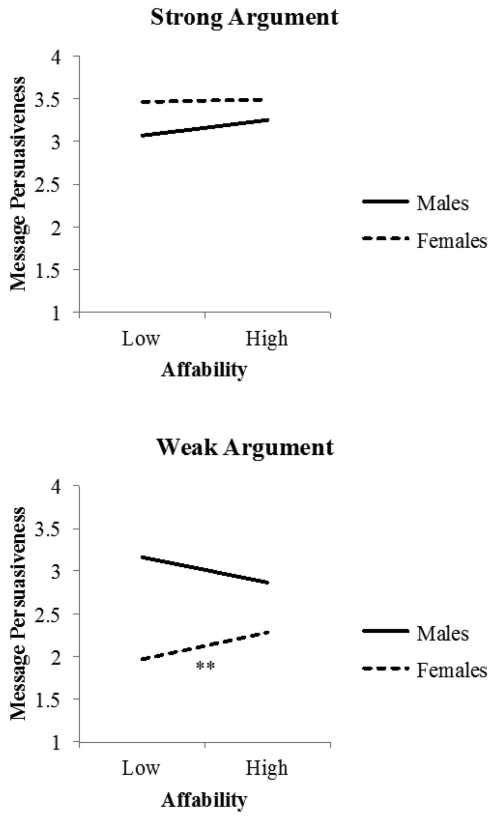


Figure 5. Message persuasiveness as a function of charismatic Affability for male and female speakers reading strong arguments (upper panel) and weak arguments (lower panel) in favor of wind power energy in Study 5. ** $p < .01$.

the argument was weak, however, speakers possessing more charismatic Influence persuaded listeners better. Charismatic Affability also affected speakers' persuasiveness but in different ways for men versus women. Men self-reporting greater Affability were no more or less persuasive but women self-reporting greater Affability were more persuasive. This pattern accords with gender stereotypes: women are typically expected to be warm and pleasant, whereas men are expected to be emotionally neutral and agentic (e.g., Bem, 1981; Carlson, 1971; Keating, 2011). Women who better fit this expectation seemed to be more effective at persuading others. Interestingly, all relationships for men were not statistically significant, suggesting that something beyond the individual differences in charisma affect their persuasiveness. Future research is needed to understand this better.

Beyond these insights, the present data also allowed for a demonstration of the predictive validity of the GCI beyond external perceptions of charisma. Although listeners knew nothing about the role of speaker charisma as a factor in these studies, they were more persuaded by individuals who scored as more charismatic on the GCI. This result is noteworthy, given the importance of persuasion to previous theories and research on charisma in leadership. It thus also helps to validate the GCI by showing convergence with past work on charisma in leadership and by showing the ability to predict an external outcome (persuasive arguing) that is both interpersonal and common to everyday life.

Study 6

In Study 5, we found that the GCI predicted a classic outcome of leadership charisma (persuasion). However, given that we intended the GCI to measure charisma more generally than what has been captured in traditional measures of leadership charisma, we examined its capacity to predict a more common charismatic outcome in Study 6: interpersonal liking. Building on our tests of the GCI's discriminant validity in Study 3, we tested whether the GCI would predict liking above and beyond other liking-predictive personality traits; namely, extraversion and agreeableness (van der Linden et al., 2010). To do so, we assigned dyads to briefly interact and then report their liking of each other. We expected the interactants' GCI scores to predict how much their partner liked them over and above the variance explained by their BFI extraversion and agreeableness scores.

Method

Participants. We recruited 160 participants (122 female; 77 White, 75 East Asian, 6 South Asian, 2, Pacific Islander; Age Range: 18–45 years) from the introductory psychology subject

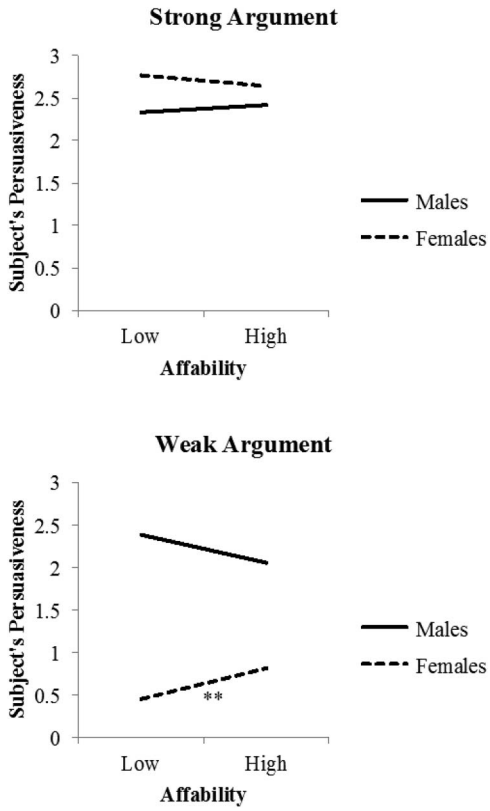


Figure 6. Speaker persuasiveness as a function of charismatic Affability for male and female speakers reading strong arguments (upper panel) and weak arguments (lower panel) in favor of wind power energy in Study 5. ** $p < .01$.

pool and local community in exchange either course credit or monetary compensation, respectively.

Measures.

Charisma. Participants completed the 6-item GCI to assess their charismatic Influence and Affability using a 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*), as above. Both Influence (Cronbach's alpha = .79) and Affability (Cronbach's alpha = .81) demonstrated acceptable reliability.

Extraversion and agreeableness. We used the same 44-item BFI as in Study 3, which showed acceptable reliability for all Big Five traits: openness to experience (Cronbach's alpha = .77), conscientiousness (Cronbach's alpha = .79), extraversion (Cronbach's alpha = .87), agreeableness (Cronbach's alpha = .77), and neuroticism (Cronbach's alpha = .83).

Liking. We evaluated the participants' liking for their partners using a 10-item scale that included items such as "How much do you like your partner?" rated on a 7-point scale (1 = *Not at All*, 7 = *Very*). We averaged the scores for the 10 items such that greater numbers represented greater liking for the partner (Cronbach's alpha = .89). Participants reported fairly high liking for their partners ($M = 4.91$, $SD = 0.89$), producing a skewed distribution; we therefore squared the liking ratings to obtain a normally distributed dependent variable (Lilliefors Test: $D = .06$, $p = .24$).

Procedure. We placed previously unacquainted participants into pairs upon their arrival in the laboratory, where they were seated across from each other in a private room. A research assistant provided the participants with 12, 3 in. × 5 in. notecards. On each card, we printed one of the 12 closeness-generating questions developed by Aron, Melinat, Aron, Vallone, and Bator (1997). Although the closeness-generating questions were originally designed to increase in the degree of intensity and disclosure, we only used the question from the first set and shuffled the cards for each dyad. Taking turns, each participant first asked his or her interaction partner the question printed on the card and then answered the question himself or herself. The participants were given 10 min and encouraged to go through as many cards as possible. The research assistant left the room after providing the participants with the task instructions, timing and monitoring the interaction from a separate room. Once the participants completed the closeness-generation task, we moved them into separate rooms and provided them with the BFI, GCI, and Liking measures among several other self-report questionnaires used as fillers (see Table 4 for descriptive statistics and correlations).

Analytic strategy. We used multilevel modeling to estimate a random intercept for partners nested within dyads using an unstructured variance-covariance matrix via the lme4 package in R (Bates, Maechler, Bolker, & Walker, 2013) with Satterthwaite degrees of freedom rounded to integers, grand-mean centering all continuous predictors and effect-coding all categorical predictors. We estimated a series of hierarchically nested multilevel models and evaluated the improvement in model fit using the overall variance explained index (R^2; see LaHuis, Hartman, Hakoyama, & Clark, 2014). We began by regressing partners' evaluations of targets onto their self-reported extraversion and agreeableness scores to test the predictions based on past work (van der Linden et al., 2010). We then added targets' other BFI trait scores (i.e., openness, neuroticism, and agreeableness) to the model, followed by their demographic characteristics (age, race, and sex) to serve as controls variables. Finally, our critical test comprised adding targets' Influence and Affability scores to measure whether they provided a significant degree of additional explanatory power, demonstrating the GCI's incremental validity.

Results

Overall, our final model including participants' GCI scores predicted the greatest amount of variance in how much their interaction partners liked them, $R^2 = .10$. Notably, this was significantly greater than the variance explained by any of the preceding models (see Table 5). Only adding the GCI produced a significant improvement in model fit, $\Delta R^2 = 0.05$, $F(2, 149) = 4.30$, $p = .02$, suggesting that including the GCI explained additional variance in partners' liking over and above targets' Big Five personality traits and demographic characteristics. Indeed, only

Table 4

Means, Standard Deviations, and Pearson's Product-Moment Correlations Between the Dyadic Interaction Partners' Liking of Each Other, Big Five Traits, Demographic Characteristics, and GCI Subscale Scores in Study 6

Variable	*M* (*SD*)	2	3	4	5	6	7	8	9	10	11
1. Liking	24.91 (8.23)	.09	.09	−.12	.00	.07	.07	.09	.06	.07	.21**
Big Five Inventory											
2. Agreeableness	3.77 (.58)	—	.18*	.07	−.29***	.36***	.16*	.07	.00	.00	.03
3. Extraversion	3.13 (.81)		—	.12	−.23***	.13	−.09	.03	−.05	.03	−.06
4. Openness	3.52 (.41)			—	−.10	.12	−.04	−.16*	−.08	.17	.03
5. Neuroticism	3.14 (.78)				—	−.31***	.10	.03	−.04	−.06	.09
6. Conscientiousness	3.38 (.65)					—	.07	−.06	.08	−.09	−.10
Demographic variables											
7. Sex	—						—	−.07	−.11	.08	.04
8. Age	20.23 (6.92)							—	.04	.10	.10
9. Race	—								—	−.03	−.13
General Charisma Inventory											
10. Influence	3.59 (.77)									—	.37***
11. Affability	3.93 (.78)										—

Note. GCI = General Charisma Inventory. Sex: 1 = female, −1 = male; Race: 1 = Caucasian, −1 = Not Caucasian.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5
Unstandardized Parameter Estimates, Model-Fit Statistics, and Significance Levels for a Series of Nested Multilevel Regression Models Predicting People's Liking for Their Interaction Partners in Study 6

Predictor	Model 1 *B* (*SE*)	Model 2 *B* (*SE*)	Model 3 *B* (*SE*)	Model 4 *B* (*SE*)
Intercepts				
Partner A	26.01 (.91)***	25.91 (.92)***	25.41 (1.03)***	25.36 (1.01)***
Partner B	23.77 (.93)***	23.88 (.93)***	23.50 (1.00)***	23.65 (1.00)***
BFI Scores				
Agreeableness	0.51 (1.12)	0.43 (1.21)	0.14 (1.24)	0.07 (1.24)
Extraversion	0.70 (.78)	0.80 (.80)	1.00 (.81)	1.07 (.81)
Openness		−2.41 (1.55)	−2.16 (1.57)	−2.32 (1.61)
Neuroticism		0.19 (.89)	0.20 (.89)	0.04 (.90)
Conscientiousness		0.65 (1.07)	0.60 (1.07)	0.80 (1.08)
Demographics				
Age			0.03 (.09)	0.03 (.09)
Race			0.73 (.64)	0.85 (.64)
Sex			0.88 (.77)	0.80 (.77)
GCI scores				
Influence				−.41 (.93)
Affability				2.02 (.90)*
Model fit				
R^2	0.01	0.04	0.05	0.10
ΔR^2		0.03	0.01	0.05*

Note. BFI = Big Five Inventory; GCI = General Charisma Inventory. Partner A and Partner B labels were randomly assigned to participants in each dyad. Liking ratings were squared to approximate normal distribution. Standard errors of unstandardized regression coefficients in parentheses.
* $p < .05$. *** $p < .001$.

participants' Affability scores significantly predicted how much their partners liked them, $b = 2.02$, $SE = 0.90$, $t(148) = 2.25$, $p = .03$, whereas none of the other parameter estimates were statistically significant, ts ≤ 1.44, ps $\geq .15$.

Discussion

Individuals' self-reported Affability predicted the degree to which other people liked them when they got to know each other by disclosing personal information in dyadic interactions. Moreover, the inclusion of Affability and Influence explained an additional 5% of variance in liking over and above the combined contribution of the participants' self-reported Big Five personality traits and demographic characteristics. Although we expected that all of Affability, Influence, extraversion, and agreeableness would predict liking based on previous theoretical and empirical research (van der Linden et al., 2010), we found that only Affability predicted interpersonal liking in this particular task.

The null effects for Influence, extraversion, and agreeableness surprised us. Asking the participants to take turns disclosing personal information for just a brief period of time may have precluded the opportunity to influence each other. Perhaps longer or less structured interactions might reveal the effect of influence on interpersonal liking. The task may have similarly disrupted the relationships of extraversion and agreeableness with liking. For example, because participants were meeting for the first time, they may have been more motivated to appear agreeable. Additionally, introverted and extraverted individuals might have been relatively indistinguishable because of the relatively structured nature of the task and regulated speaking time. As such, our findings contrast with those of previous research that demonstrated small to moderate correlations between agreeableness, extraversion, and liking (van der Linden et al., 2010). Liking was evaluated via classmate nominations in that work, however, and may have thus been informed by the raters' previous experiences with each other. These speculations are tentative and thus require future research to empirically resolve the differences between the present and past findings. Null results notwithstanding, we have demonstrated that at least one component of charisma (Affability) predicted an important interpersonal outcome, showing that the GCI possesses incremental validity beyond other, related measures (i.e., extraversion and agreeableness).

General Discussion

Previous research has suggested several conceptualizations of charisma (e.g., Bass, 1985; Conger & Kanungo, 1987; Friedman et al., 1980; House, 1977; see also Antonakis, 2012, for review). Yet, no research to date has provided a comprehensive and operational definition of this construct (van Knippenberg & Sitkin, 2013). Surveying the leadership literature, we theorized that general charisma is an individual difference comprised of interpersonal influence and affability. Results from the series of studies reported above empirically confirmed this characterization. Naïve participants described a charismatic person that they might encounter in everyday life as influential and affable (Pilot Study); that is, naturally leader-like but also kind and approachable. Using these data, we constructed a self-report measure of charisma via exploratory (Study 1) and confirmatory (Study 2) factor analyses. This allowed us to establish a new measure of individual differences in charisma applicable to leadership and nonleadership settings.

To validate the GCI, we examined its correlations with other constructs (Study 3), showing that our measure was conceptually related to, yet distinct from, emotional intelligence, positive and negative affect, general confidence, the traits described in the Five-Factor model of personality, political skill, charismatic leadership, interpersonal competence and warmth, nonverbal expressiveness, and intelligence. Additionally, the traits measured by the GCI were largely independent of intelligence, as measured by a modified version of Raven's Progressive Matrices. Furthermore, we observed that brief (Study 4A) and prolonged (Study 4B) interpersonal interactions allowed for perceptions of charisma that matched individuals' self-reports, confirming that charisma is an observable construct. Notably, these estimates were comparable with those reported in a meta-analysis on consistency and agreement of the Big Five personality traits ($r_{\text{effect size}}$ Range: .23–.43; Connelly & Ones, 2010).

Next, we examined whether our conceptualization of charisma as a combination of interpersonally oriented individual differences could predict important outcomes related to charisma in leadership (persuasion) and everyday life (interpersonal liking). In Study 5, we found that women self-reporting greater Affability were perceived as more persuasive whereas men's Affability had no effects on persuasion, reflecting gender stereotypes (see Eagly & Karau, 2002). Likewise, in Study 6, we observed that Affability predicted interpersonal liking over and above extraversion and agreeableness; specifically, people were perceived as more likable if they self-reported making others more comfortable, being able to get along with others, and smiling more. Not only did this help to demonstrate the GCI's incremental validity, it also suggests that agreeableness does not necessarily lead to liking but, rather, that an individual's disposition toward affability and kindness may be more important.

Theoretical Implications

Previously, Weber (1922/1978), House (1977), Bass (1985), and Conger and Kanungo (1987) conceptualized charisma in terms of its effects within leadership. None of their models defined or operationalized charisma as a construct in its own right, however, focusing instead on effects of charisma in the context of organizations (van Knippenberg & Sitkin, 2013). Furthermore, all major theoretical frameworks of leadership viewed charisma as one of several prototypical leadership styles (Lord, Foti, & De Vader, 1984; Tskhay et al., 2014). In contrast, our new definition of charisma focused on individual dispositions independent of behavioral outcomes and extended beyond leadership more broadly than previous work (e.g., Tkalac Verčič & Verčič, 2011). In other words, we were able to identify and operationalize the components of charisma and demonstrate that they are relevant in interpersonal interactions and persuasion. The current research thus suggests that charisma can be defined and measured as an individual difference relevant to all individuals, not just leaders.

Naturally, our conceptualization of charisma also included leadership. Indeed, the characteristic that distinguishes charismatic leadership from other subtypes is the presence of charisma. Thus, leaders who adopt a charismatic leadership style should be evaluated as charismatic with greater frequency than leaders who do not. Our definition of charisma as a disposition may therefore help to capture such differences by moving charisma away from being conceptualized only within leadership toward greater consideration in people's daily lives. As such, the present work may complement and extend previous research on charismatic leadership by helping to identify the elements inherent to charismatic leadership (e.g., Antonakis, 2012). The expression of a charismatic personality could therefore be one precondition for the emergence of charismatic leaders in organizations.

We also demonstrated that displays of charismatic behavior are necessary for charisma to be accurately and consistently perceived by observers and acquaintances (see also Tskhay, Zhu, & Rule, in press). Results of the round-robin task in Study 4A demonstrated that only 5 min of casual interaction was enough for participants to deduce the other group members' self-reported Influence and Affability. Additionally, the results of Study 4B showed that long-term acquaintances knew the degree of charisma that their partners, friends, and relatives possessed. Thus, integrating previous work showing that personality can be accurately inferred from behavior (e.g., Gosling et al., 2002) and that charisma may partly manifest in expressiveness (e.g., Friedman et al., 1980), we found that charismatic people have a persistent and consistent pattern of expression that is reliably perceived by others (Tskhay et al., in press). Charisma may therefore not only be a product of perception, but the expression of charisma may be a manifestation of individual differences in charisma in everyday life. Thus, we consider expressiveness to be a *product* of individual differences in charisma, rather than its synonym (cf. Friedman et al., 1980).

Moreover, one of the main criticisms of charismatic leadership is that conceptions of charismatic leadership are somewhat circularly derived from its effects (van Knippenberg & Sitkin, 2013; see also Antonakis, Fenley, & Liechti, 2011). For example, charismatic leadership has been operationally conceptualized as leaders' idealized influence over followers (Avolio & Bass, 1988). Though parallel to our work, this conception focuses on charisma's effects on others. In our definition, we conceptualized charisma as an individual difference variable and persuasion and liking as consequences of having greater charisma. Thus, we observed the effects of charisma on life outcomes and conceptualized it as distinct from its effects in the current work. That said, further examination of the incremental validity of the GCI is necessary to fully understand the scope and limitations of its predictive power. Future use of the scale by diverse researchers will organically help to build a clearer understanding of the GCI's utility.

Limitations and Future Directions

Indeed, the present work is not without limitations as it stands. For example, we constructed our original scale items from a sample of participants obtained through MTurk. As MTurk Workers may represent a very specific segment of the population that participates in research studies for relatively low compensation, they may not represent the broader population (but see Buhrmester, Kwang, & Gosling, 2011). Regardless of the specific sample, it also remains unclear whether participants might have imagined someone specific when generating their descriptor terms (e.g., the sitting U.S. President) or exhibited any other systematic biases (e.g., individuals more readily envision leaders as male; Hogue & Lord, 2007). Furthermore, we removed multiple items in an attempt to construct a strong instrument, retaining only the most descriptive items. Some of the items we removed may add to

understanding charisma, however, and therefore should not be entirely disregarded but rather used in future research of how people think about charisma. Indeed, the items that load highly on both influence and affability may describe charisma quite well without warranting formal inclusion in the scale. Researchers may thus benefit from examining these items further to refine what it means to be charismatic. That said, the absence of those items from the present scale does not invalidate the psychometric properties of the individual differences scale developed herein, as the scale successfully measured charisma as a disposition. Finally, our a priori theoretical expectations about charisma converged with the participants' responses, providing both inductive and deductive support for our definition. Examination of other components of charisma may nonetheless facilitate further understanding how charisma manifests in everyday life.

Further, it is important to note that all of the items in the GCI are positively keyed; the lack of reverse-scored items could potentially heighten participants' desirability bias when self-reporting, or acquiescence biases more generally. This limitation notwithstanding, we observed significant variability in how people self-reported their charisma as well as a convergence between these self-reports and others' perceptions, suggesting a high degree of veracity to our conceptualization of charisma as an individual difference. Careful attention to model estimation may therefore treat any such bias variance, revealing the construct's true variance.

Future theoretical work could also seek to explain the mechanisms underlying the self-other agreement we observed. Previous studies have suggested that charismatic leaders entice and motivate people toward particular goals, fostering environments that lead to greater performance and other positive consequences (e.g., Antonakis, 2011). Everyday charisma may similarly empower others to achieve personal goals and overcome hardships, leading them to construe the charismatic person as likable, trustworthy, and warm. Furthermore, because charismatic individuals are typically more emotionally intelligent (e.g., Goleman, Boyatzis, & McKee, 2013), they might more easily influence other people's emotions. These charismatic expressions may be a critical piece of charisma's observability that is necessary for its accurate perception.

Additionally, although we examined how perceptions of voices affect persuasiveness in Study 5, we did not examine what vocal characteristics affect persuasion. Previous research, for example, has demonstrated that men's and women's voices differ in important ways (e.g., Feinberg, DeBruine, Jones, & Perrett, 2008; Klatt & Klatt, 1990; Titze, 1989) and that vocal characteristics can affect perceptions of attractiveness, dominance, and leadership (all traits related to charisma; Feinberg et al., 2008; Gardner, 2003; Puts, Gaulin, & Verdolini, 2006). Though this does not detract from the findings of Study 5, we believe that it would be useful to examine whether variations in vocal characteristics may affect persuasiveness. Additionally, Study 5 explored only audition. Some aspects of charisma may be visual (e.g., Tskhay et al., in press), and thus future research should also consider what other nonverbal cues individuals may implement to charismatically influence others beyond their voices.

In contrast to previous findings (see Antonakis, 2011), we also observed that our measure of charisma did not correlate with intelligence. Because we measured charisma as a disposition that focused on interpersonal skills and not necessarily intelligence, we expected this null result. One may reason that greater intelligence should be related to charisma as both a disposition and as a perception, however. More intelligent people may have deeper insight into their level of charisma and thus develop charismatic traits over time to influence their environment. Furthermore, people may simply evaluate more intelligent targets as more charismatic as a halo effect (Judge et al., 2004). Although we do not know exactly why the current findings diverged from previous work, we speculate that this could be due to how we measured intelligence. Specifically, Raven's Advance Matrices measure individuals' analytic skills, disregarding exceptional verbal skills, which is one of the hallmarks of charisma (e.g., Conger & Kanungo, 1988). Moreover, we used a modified version of Raven et al.'s (2003) test, perhaps disrupting its efficacy or validity. Examining the relationship between everyday charisma and intelligence therefore remains an open question.

Finally, although we conceptualized charisma as an individual difference variable that influences the impressions of charisma made by other people, we did not examine the impression-formation process directly, focusing instead on our self-report measure. Naturally, no single study or series of studies can explain all of the complexity in why some people may be perceived as charismatic but others as "socially awkward." Thus, despite the present gains in identifying dispositional aspects of charisma, researchers should consider how impressions of this disposition arise and sustain themselves over time.

Conclusion

In the present studies, we defined charisma as it manifests in everyday life. Specifically, by drawing on previous literature and asking people, we conceptualized charisma as a composition of observable internal individual differences in influence and affability. We also defined charisma in operational terms by constructing and validating a measure of everyday charisma that extends beyond (but may include) charismatic leadership. Thus, we demonstrated that charisma (a) is composed of Influence and Affability, (b) is observable, (c) is distinct from other traits, (d) is a trait that can be defined separately from the outcomes it produces, and (e) is relevant in everyday situations. We believe that the investigation of charisma in daily life is important for disentangling a construct previously understood primarily in terms of its consequences for leadership and hope that other researchers will share our enthusiasm about the potential new lines of research that this new conceptualization may elucidate.

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(*Appendices follow*)

Appendix A

Means and Standard Deviations for Charisma Ratings of the 40 Items Retained in the Pilot Study

Item	Rating *M* (*SD*)	Item	Rating *M* (*SD*)
Is charming	6.34 (.98)	Is an eloquent speaker	5.92 (1.16)
Knows how to engage others in a conversation	6.30 (.86)	Befriends others quickly	5.92 (.99)
Is engaging	6.28 (.81)	Is social	5.92 (.88)
Has a presence in a room	6.28 (1.03)	Has high self-esteem	5.90 (1.15)
Is able to talk to anyone	6.24 (.89)	Is alluring	5.82 (1.21)
Has a magnetic persona	6.20 (.86)	Is full of life	5.78 (1.33)
Has an ability to influence people	6.20 (1.12)	Has a witty mind	5.72 (1.05)
Has an effect on people around them	6.16 (.93)	Makes people feel special	5.72 (1.33)
Projects positive energy	6.16 (.93)	Is optimistic	5.68 (1.56)
Is articulate	6.14 (.88)	Is able to establish rapport with others	5.68 (1.19)
Communicates clearly	6.14 (.95)	Has a powerful "aura"	5.68 (1.13)
Can get along with anyone	6.14 (.97)	Is approachable	5.66 (1.15)
Makes people feel comfortable	6.14 (.93)	Is extraverted	5.64 (1.17)
Looks at people directly	6.08 (1.12)	Displays skills and abilities	5.60 (1.55)
Smiles at people often	6.06 (1.00)	Is a good leader	5.58 (1.39)
Captures attention when entering the room	6.06 (1.15)	Is invited to parties	5.58 (1.30)
Makes people laugh	6.02 (.94)	Knows how to lead a group	5.58 (1.39)
Keeps eye contact while speaking	6.00 (1.01)	Is an engaged listener	5.56 (1.21)
Is inspiring	5.98 (1.02)	Is willing to lead people	5.54 (1.20)
Is vibrant	5.98 (1.13)	Understands human emotions	5.54 (1.36)

Appendix B

Arguments Used in Study 5

Strong Argument

Wind power is a form of energy that we should be considering more seriously. It's currently the fastest-growing source of electricity production in the world. A single wind turbine can power 500 homes—and there's enough wind in Canada to power the country 10 times over.

Right now, coal power is a very popular energy source. However, the coal we rely on pollutes our atmosphere with harmful emissions such as sulfur, lead, and carbon monoxide. In contrast, wind power is environmentally friendly and doesn't release toxic chemicals into the air.

Also, unlike most forms of energy, wind power uses virtually no water, so it saves water resources. By 2030, Canadian wind power will have saved nearly 30 trillion bottles of water, and we can save even more energy if we keep building wind turbines! Think of the positive impact that wind power can have—it keeps our environment clean and saves our other resources.

Weak Argument

Wind power is a form of energy that we should be considering more seriously. There's a very popular novel about a futuristic society that powers its cities with only wind energy. This futuristic world is a clean, green place with lots of grass, flowers, and fresh water. It sounds like the perfect place to live in. Canada could become cleaner and greener by getting most of its electricity from wind power too.

Plus, there are more and more energy conferences every year praising the effects of wind power on the environment and the economy. Countless numbers of experts—such as scientists, professors, and technicians—at these conferences talk about how wind energy can positively impact the earth and change the world for the better. All the experts believe that wind power is good.

The world has the potential to be both technologically advanced and environmentally friendly—we just have to be open to new energy sources like wind power.

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