
The Agreeableness Asymmetry in First Impressions: Perceivers' Impulse to (Mis)judge Agreeableness and How It Is Moderated by Power

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Prior research shows that perceivers can judge some traits better than others in first impressions of targets. However, questions remain about which traits perceivers naturally do infer. Here, the authors develop an account of the “agreeableness asymmetry”: Although perceivers show little ability to accurately gauge target agreeableness in first impressions, they find that agreeableness is generally the most commonly inferred disposition among the Big Five dimensions of personality (agreeableness, extraversion, conscientiousness, openness, and emotional stability). Using open-ended impressions based on photographs, videos, and face-to-face encounters, three studies show agreeableness as the most prevalently judged of the Big Five, although it is also poorly judged in both absolute and relative terms. The authors use interpersonal power to reveal an underlying mechanism. Manipulating the power of perceivers relative to targets substantially shifts impression content, suggesting that habitual interaction and relational concerns may partially explain perceiver’s chronic interest in assessing agreeableness despite their limited ability to do so.

Keywords: *impression formation; trait; person perception; Big Five; agreeableness; power*

For nearly a century, person perception research has explored how perceivers take scraps of evidence about a target—a toothy grin, a firm handshake, a verbal insult—and assemble them into generalized judgments about the target’s personality and character. How perceivers do this, and how well they do it, continues to be debated, but most scholars agree that personality judgments emerge with considerable rapidity and little

effort (see, e.g., Uleman, Newman, & Moskowitz, 1996). It seems almost certain, though, that perceivers’ rapid judgments tend to focus on some traits more than others—but which traits are most prevalently featured in spontaneous initial impressions? And are these often-judged traits also accurately judged ones?

This article suggests that judgments about agreeableness—a target’s apparent warmth and friendliness—appear frequently in early impressions. This happens despite the fact that initial judgments of agreeableness typically display modest, if any, validity. The result is what we call the *agreeableness asymmetry*: Perceivers tend to readily judge agreeableness in first impressions even though these initial judgments show limited accuracy. We ascribe this effect in part to perceivers’ chronic concern for anticipating others’ behavior toward them and their interest in structuring interpersonal relations. We use interpersonal power as a way of revealing and changing these concerns. We expect that when perceivers are in a position of lower power (e.g., judging a potential manager), their impressions will focus even more strongly on agreeableness, whereas those in a

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TABLE 1: Definitions for Subjective Coding of Big Five Traits

<i>Dimension</i>	<i>Positive Valence</i>	<i>Negative Valence</i>
Agreeableness	Friendly, warm, nice, easy to get along with	Aggressive, unfriendly, arrogant, unpleasant, difficult to get along with
Extraversion	Outgoing, happy, fun, loud, likes to be the center of attention	Quiet, shy, keeps to himself or herself
Openness	Smart, creative, and intellectual; eager to try and learn new things	Dull, uninterested, dumb
Conscientiousness	Pays attention to detail, punctual, professional, organized	Disorganized, careless, unreliable
Emotional stability	Calm, stable, laid-back, not easily excited or worked up	Emotional, fretful, unstable

position of higher power (e.g., judging a subordinate) will show less concern for target agreeableness.

Our approach extends person perception research in three ways. First, whereas others have suggested that agreeableness is a fundamental dimension of interpersonal judgment (e.g., Fiske, Cuddy, & Glick, 2006), we provide what we believe is the first evidence of the prevalence of agreeableness, and other trait dimensions, in open-ended impression reports. Second, whereas others have found that the validity of initial impressions of agreeableness is relatively low (compared to, say, impressions of extraversion; e.g., Zebrowitz & Collins, 1997), we gauge both prevalence *and* accuracy in the same experimental designs to highlight the presence of an asymmetry within the same context. Finally, we examine whether manipulating perceivers' power in relation to targets shifts the content of perceivers' impressions, suggesting that interactional and relational concerns underlie the impulse to judge agreeableness. Overall, our results shed light not just on what perceivers *can* judge about targets, but what they typically *do* judge, and why.

Perceivers Want to Know Target Agreeableness

The content of open-ended impressions ranges widely, including a seemingly infinite variety of traitlike (e.g., "She's hostile") as well as less traitlike (e.g., "He's a loser") judgments. As a starting point for examining these diverse inferences, this article adopts a Big Five approach, following research highlighting five dimensions that appear to account for much of everyday personality judgment (e.g., Goldberg, 1990; John & Srivastava, 1999). These dimensions include agreeableness, extraversion, conscientiousness, emotional stability, and openness¹ (see Table 1).

Although Big Five approaches to person perception have generally not portrayed agreeableness as somehow privileged over other dimensions, there are reasons to believe that perceivers are often preoccupied with gauging agreeableness. This notion dates back at least to Asch's (1946) pioneering work on impressions, in which he noted, "'Warm' and 'cold' seem to be of special importance for our conception of a person" (p. 266). He went on to describe agreeableness as a "central quality" that

plays an organizing role for information on other trait dimensions.

More recently, scholars have offered functional and evolutionary explanations for perceivers' interest in agreeableness (e.g., De Bruin & van Lange, 2000; Wojciszke, Bazińska, & Jaworski, 1998). Buss (1996) suggested that perceivers are sensitive to target agreeableness because it signals "cooperativeness and a proclivity to be a good reciprocator" (p. 189). Likewise, Graziano and Eisenberg (1997) argued that

If we recognize that 99% of human evolution occurred when humans lived in hunting/gathering bands consisting of approximately 30 individuals, and if we recognize that cooperation is seen as an essential attribute in such groups . . . then it is plausible that an individual's agreeableness might be a dimension receiving special attention. (p. 798)

A recent review by Fiske et al. (2006) noted that evolutionary pressure could have made warmth a primary dimension of social judgment because "gauging another person's intent for good or ill is . . . important to survival" (p. 77). Cottrell, Neuberg, and Li (2007) offered a similar rationale, arguing that trustworthiness and cooperation are among the traits people most desire in others.

The idea that agreeableness helps predict and structure social relations also corresponds with circumplex models from the interpersonal tradition (e.g., Trapnell & Wiggins, 1990; Wiggins, 1979). Agreeableness has been linked to the communion dimension of various circumplex models, a dimension hypothesized to evoke reciprocity (i.e., friendliness begets friendliness; e.g., Locke & Sadler, 2007; Moskowitz, Ho, & Turcotte-Tremblay, 2007). If agreeableness is a fundamental dimension for structuring and describing interpersonal relations, as interpersonal models suggest, it should be of keen interest to perceivers.

At a more basic cognitive level, inferences of agreeableness may simply be bound up with perceivers' like-dislike, approach-avoid evaluations of targets, more so than other Big Five traits (see, e.g., John & Robins, 1993). Evaluative attitudes may be reflexive, automatic responses that follow encounters with various

kinds of stimuli, including people. Indeed, recent evidence suggests that relatively stable judgments of likability may form in a fraction of a second (Willis & Todorov, 2006). Thus, perceivers may have a natural impulse to report conclusions about a target's agreeableness because it reflects their habit of making like-dislike evaluations of targets.

While these lines of work suggest that perceivers may have an instinctive interest in assessing a target's agreeableness, they have not documented the prevalence with which perceivers naturally make agreeableness judgments in early impressions. Indeed, there appears to be no evidence of how frequently each of the Big Five dimensions appears in unguided impression reports. A major goal of the present work, then, is to demonstrate the frequency with which adults naturally judge agreeableness and the other Big Five domains in initial impressions.

Initial Judgments of Agreeableness Show Limited Validity

Substantial evidence suggests that some traits are better judged than others in early impressions. Research using stimuli ranging from photographs to Internet profiles indicates that *extraversion* is the most easily and accurately judged Big Five dimension, whereas *agreeableness* is generally found to be judged less well and, in many cases, to have low or negligible absolute levels of accuracy (e.g., Borkenau & Liebler, 1992; Borkenau, Mauer, Riemann, Spinath, & Angleitner, 2004; Funder & Drobny, 1987; Levesque & Kenny, 1993; Paulhus & Bruce, 1992; Zebrowitz & Collins, 1997).

One reason for the seemingly low validity of initial judgments of agreeableness may be a comparative lack of valid cues: early face-to-face encounters may be highly constrained by norms of politeness. An otherwise hostile and difficult person may temporarily convey an aura of warmth during a brief first encounter. It may also be that perceivers commonly and confidently rely on "pseudo-diagnostic" cues (cf. Funder, 1995; Gill, Swann, & Silvera, 1998). Gosling, Ko, Mannarelli, and Morris (2002) found a dissociation between cue validity and cue usage for agreeableness in judgments of targets based on visits to offices and bedrooms. Bad smelling, uninviting offices and gloomy, messy bedrooms were taken as signals of low agreeableness, even though those attributes bore no relation to occupant agreeableness. Elsewhere, Borkenau and Liebler (1995) found that target smiling strongly predicted ratings of target agreeableness, even though smiling was unrelated to target self-ratings or acquaintance ratings of target agreeableness.

While previous work suggests which traits perceivers typically *can* and *cannot* validly infer, the current studies provide evidence for what perceivers actually *do* infer. At

the same time, we replicate previous findings suggesting that perceivers show limited ability to judge agreeableness in early impressions. Thus, in the present work we simultaneously measure validity (i.e., how well agreeableness and other dimensions were judged) and prevalence (i.e., the presence of seemingly spontaneous references to agreeableness) in the *same contexts*. Gauging these factors simultaneously allows us to examine whether validity and prevalence converge or whether, in the case of agreeableness, they part ways.

The Agreeableness Asymmetry in Everyday Descriptions of Persons

There are multiple ways to test for the prevalence of different traits in initial impressions. For instance, one could simply ask people explicitly about what they are likely to judge, though there are reasons to think people's ability to access and report on these inferential processes is far from perfect. Another, less direct, approach would be to use response latencies to gauge accessibility or activation. In the present work, we examined the content of people's open-ended written descriptions of targets. We believe that by inviting participants to write as much or as little as they like, and to focus on whatever they wish without any prompting or constraints, our method opens a window onto natural impression content (cf. Chung & Pennebaker, 2008). To gauge the prevalence of Big Five factors, we coded these descriptions subjectively (with coders interpreting statements in light of definitions of each Big Five dimension) and also analyzed the descriptions quantitatively, counting adjectives associated with each of the five factors.

Relying on open-ended person descriptions is not without limitations, but the method has been used insightfully in the past, including classic work by Asch (1946) and Dornbusch, Hastorf, Richardson, Muzzy, and Vreeland (1965). Since that time, psychologists have analyzed open-ended person descriptions to gauge effects such as mediating cognitions, relationships, physical descriptions, and the balance of references to traits and other content including behaviors (e.g., Bromley, 1977; Chen-Idson & Mischel, 2001; Fiske & Cox, 1979; Park, 1986; Park, DeKay, & Kraus, 1994; Prentice, 1990). While these lines of work have shown that open-ended descriptions can be useful empirical data, they have not examined the relative prevalence of each Big Five factor in person descriptions (though see Donahue, 1994, on children's trait use). The present article presents what we believe are the first such analyses.

Underlying Mechanism: Relationship Orientation

Why would perceivers judge agreeableness so often in early impressions if they typically cannot judge it very

well? One possibility is “because it *seems* to be there”—that is, the content of impressions is governed by pseudodiagnostic cues, with perceivers feeling, even if incorrectly, that they have abundant evidence to judge agreeableness. We suspect that perceivers make copious use of pseudodiagnostic or invalid cues in initial judgments of agreeableness, as other scholars have noted (e.g., Borkeu & Liebler, 1995). Yet, why would perceivers make more liberal use of pseudodiagnostic cues for agreeableness than for other dimensions? It is unlikely that there are somehow more invalid cues for agreeableness than other traits. In theory, there are an infinite number of invalid cues for any trait.

This suggests a different possibility: Perceivers judge agreeableness not because they can, or simply because evidence appears to be abundant, but because they are habitually interested in it. It is not the apparent supply of evidence but the hard-to-resist demand of preparing for interpersonal relations that pulls for agreeableness inferences. In order to coordinate interpersonal relations effectively, perceivers must gauge how they expect another party to treat them (cooperation, deceit, criticism, and so on) and how they, in turn, should treat the other party (e.g., Moskowitz et al., 2007). As the functional and evolutionary accounts discussed earlier have noted, this challenge of social judgment has been a central part of human relationships for a considerable part of our species’ history (e.g., Fiske et al., 2006). There are good reasons to believe, then, that a “default” preoccupation when judging others is to assess how warm, kind, and cooperative they are; in other words, to assess their agreeableness. Moreover, while agreeableness may be a pragmatic concern when confronted with a new interaction partner (e.g., Gill & Swann, 2004), the impulse to judge agreeableness may become so ingrained that perceivers judge it even when they will never interact directly with a target. However, it also seems plausible that the content of these concerns could be shifted by altering relationship orientation and expectations for the nature of future interactions.

A crucial factor regulating interpersonal relations is *power*, the capacity for one party to control another’s resources and outcomes (Keltner, Gruenfeld, & Anderson, 2003). Power differences between two parties, such as a supervisor–subordinate relationship, can clarify and constrain the nature of expected interdependency. Research suggests that power affects social attention and impressions and that those lower in power may be even more concerned with the threats others, especially superiors, pose to them (e.g., Galinsky, Magee, Inesi, & Gruenfeld, 2006; Snodgrass, 1985; Stevens & Fiske, 2000). By definition, those high in power are less dependent on subordinates, and so their concerns with subordinate agreeableness may be attenuated. They

may instead be more attuned to a subordinate’s task-related attributes, such as conscientiousness. If this were the case, it would also suggest that perceiver’s apparent concern with agreeableness is not merely a reflection of an automatic evaluative (good–bad, approach–avoid) tendency but instead hinges at least partly on situational factors such as relationship orientation.

Thus, as a final part of the present research, we focused on the role of relationship orientation to gauge whether, holding evidence and stimuli constant, we could shift impression content by altering the expected role relationship from perceiver-as-higher-power (target as potential subordinate) to perceiver-as-lower-power (target as potential supervisor). If, as we predict, perceivers in high-power positions are less concerned with agreeableness the findings would suggest that relationship orientation is a mechanism underlying the agreeableness asymmetry.

Plan of Study

We tested our claims in studies involving impressions based on photographs (Study 1), videos (Studies 2 and 4), and face-to-face encounters (Study 3). In all cases, we gathered open-ended impressions and analyzed them for the prevalence of the Big Five dimensions. In the second and third studies, we obtained trait ratings of targets along with open-ended descriptions, allowing us to examine validity alongside prevalence. In our fourth study, we explored an underlying mechanism, gauging whether a shift in power and relationship orientation would alter the content of impressions. Our results provide what we believe is the first evidence of the prevalence of Big Five dimensions in open-ended impressions and also suggest that the content of these impressions shifts depending on the perceiver’s power relative to the target.

STUDY 1

To gauge the prevalence of each Big Five dimension in initial impressions, participants in Study 1 recorded open-ended impressions based on photographs drawn from targets’ self-created profiles on the online social networking site Facebook. Judges coded descriptions for reference to each Big Five dimension. In addition, we conducted text analyses, gauging the prevalence of adjectives associated with each of the Big Five. This analysis was performed with two dictionaries. A “basic” dictionary used markers for each dimension reported in Goldberg (1990), such as *timid* and *talkative* for extraversion and *selfish* and *kind* for agreeableness. Because participant responses revealed a handful of frequently

used adjectives that were seemingly related to the Big Five but were not included in the original markers, we also developed an “expanded” dictionary (we are grateful to Lew Goldberg for his assistance).

By using over 200 randomly selected self-posted photographs in a widely trafficked online social networking site, Study 1 featured naturally occurring stimuli. Because criterion measures of personality for our targets were not available, Study 1 focused solely on prevalence (Studies 2 and 3 gauged both prevalence and validity). Our prediction was that agreeableness would show the greatest prevalence among the Big Five dimensions in open-ended initial impressions.

Method

Stimuli. Stimuli included 215 target photographs selected randomly from Facebook.com and balanced by sex. To gather photos, we created a Facebook account linked to an East Coast university’s network that included over 30,000 users. These photos were posted by the account owners with the intention of displaying them to any other members of the network (i.e., these were public photos). We included photos only from profiles that had no security limitations. For each selection trial, we selected the “browse” option to produce a random list of profiles. The first photo of a single individual (not a group or an animal) from a profile that was open to all users (i.e., no security limitations) was selected. Photos were then printed in color and assembled into packets.

Participants and procedure. Forty-three members of an East Coast university research pool (mostly undergraduates) participated for payment. Mean age was 22.0 ($SD = 4.0$), and 27 (62.8%) identified themselves as women. Of the 41 who identified their ethnicity, 14 (32.6%) were Caucasian, 10 (23.3%) were Asian or Asian American, 9 (20.9%) were African American, 5 (11.8%) were Indigenous/Native American, and 3 (6.9%) were Latino or Hispanic.

Each participant received a packet of five photographs, either two male and three female targets or three male and two female targets, in alternating order. For each picture, participants were asked to record their impression in a computer-based survey in a lab setting. For the first photo, the question read, “Based on this photo, what’s your impression of this first person? In the space below, write a few sentences about what you think this person is like. Feel free to note whatever comes to mind.” Participants also indicated familiarity with the target. Six of the 215 cases were excluded because the participant reported at least some familiarity. Participants recorded their impression of all five targets in a similar manner.

Coding. Two independent raters evaluated each open-ended impression and coded it for the presence of Big Five references, using the definitions in Table 1. For presence, coders noted whether a given dimension was “clearly mentioned” in a description or not. For instance, a description of a target as “extremely nice and outgoing” was coded for the presence of both agreeableness and extraversion. Raters were not limited in the number of traits that could be counted as present in an open-ended description; some descriptions referenced many personality dimensions while others mentioned none. Raters also coded the description’s valence as positive (e.g., high agreeableness), negative (e.g., low agreeableness), or ambiguous (e.g., both low and high agreeableness). Interrater reliability was considerably high (see Table 2), and coders reconciled their judgments for our analyses.

Text analyses. Two sets of text analyses were pursued: one using a basic dictionary and one using an expanded dictionary. The basic dictionary featured 339 Big Five adjectives, based on Goldberg’s (1990) markers (see the appendix). In some cases, trait adjectives that seemed to fit with various Big Five dimensions emerged with substantial frequency, even though they were not in the original list. To incorporate these adjectives, we identified those that occurred at least six times in our 209 cases; these adjectives were then categorized by Goldberg in terms of their primary Big Five dimension (Goldberg, personal communication, August 21, 2006; November 15, 2006; January 5, 2007; February 23, 2007; July 3, 2007). For instance, in Study 1, “nice” was added to the dictionary for agreeableness and “fun” was added to the dictionary for extraversion (see the appendix).² Once the dictionaries were created, we used WordStat software to analyze how many times words associated with each Big Five dimension appeared in open-ended descriptions.

Results

Coding revealed that agreeableness was clearly mentioned in nearly half of the open-ended impression reports (see Table 3), significantly higher than the prevalence of extraversion, openness, conscientiousness, and emotional stability (all $\chi^2 > 3.90$, $ps < .05$; note that all reported p values are two-tailed). The rate of positive (vs. negative or ambiguous) valence for trait descriptions was relatively similar across traits; χ^2 tests revealed that this rate for agreeableness was not significantly different from other traits (see Table 4). This casts doubt on the possibility that the prevalence of agreeableness reflects valence (e.g., a focus on “good” things) rather than trait content.

TABLE 2: Coding Reliabilities for the Big Five Across Studies

<i>Dimension</i>	<i>Study</i>	<i>Kappa</i>	<i>% Agreement</i>	<i>Example</i>
Agreeableness	Study 1	.944	97.2	“She seems very well intentioned and thoughtful. I think she will be a very good teammate” “At a glance, I felt with his big smile that he is a nice guy” “Not warmest of exteriors”
	Study 2	.955	90.3	
	Study 3	.951	97.6	
	Study 4	.861	93.2	
Extraversion	Study 1	.832	92.2	“Doesn’t say much unless spoken to” “Person who sits on the sidelines” “Straightforward, speaks his mind” “Very outspoken; knows what she wants”
	Study 2	.970	93.8	
	Study 3	1.00	100	
	Study 4	.904	95.2	
Openness	Study 1	.812	95.8	“I think she might be a little closed-minded. She doesn’t seem to value the opinion of others too much” “Non-adventurous” “He seems to be open to new experiences and not afraid of daunting challenges”
	Study 2	.913	92.8	
	Study 3	.876	94.8	
Conscientiousness	Study 1	.849	96.3	“Pays attention to detail” “Professional and dedicated to his work” “Has showed up late to several meetings. Seems like she has less interest in school than the others” “He may be a bit emotionally erratic at times”
	Study 2	.985	92.5	
	Study 3	.909	96.1	
	Study 4	.834	92.5	
Emotional stability	Study 1	.932	99.1	“He may be a bit emotionally erratic at times” “Secure and calm person”
	Study 2	.980	92.8	
	Study 3	.884	97.1	
	Study 4	.750	94.4	

NOTE: Examples include illustrative comments coded as references to the given dimension.

TABLE 3: Prevalence of Reference to Each Big Five Dimension, Study 1

<i>Dimension</i>	<i>Coding</i>	<i>Prevalence</i>	
		<i>Original Dictionary</i>	<i>Expanded Dictionary</i>
Agreeableness (A)	47.8	21.0	40.0
Extraversion	38.3	7.6	36.7
χ^2 vs. A	3.90**	15.26**	0.50
Openness	12.4	9.6	9.6
χ^2 vs. A	62.2***	10.63***	52.43***
Conscientiousness	14.8	3.3	6.7
χ^2 vs. A	52.9**	30.6**	65.3**
Emotional stability	7.7	1.4	1.4
χ^2 vs. A	84.9***	40.3***	95.2***

NOTE: For prevalence, coding figures represent percentage of cases ($n = 209$) in which the trait was coded as “clearly mentioned” and dictionary figures represent percentage of cases in which a dimension-related word was mentioned (see the appendix). Chi-square values are comparisons of prevalence between agreeableness and the other four dimensions (1, $n = 209$). ** $p \leq .05$. *** $p \leq .01$.

Quantitative text analyses produced similar results. The most commonly used dictionary adjectives for each of the Big Five dimensions are shown in Table 5. Using the original dictionary, agreeableness adjectives appeared in over 20% of cases (see Table 3). This was significantly higher than the prevalence of extraversion, openness, conscientiousness, and emotional stability (all $\chi^2 > 10.63$, $ps < .01$).

As shown in Table 3, using the expanded dictionary, agreeableness was significantly more prevalent than openness, conscientiousness, and emotional stability (all $\chi^2 > 52.43$, $ps < .01$). Agreeableness was not significantly more prevalent than extraversion ($\chi^2 = 0.50$). However, the most common adjective in the expanded dictionary for extraversion was “happy” (14.8% of cases). Additional analyses revealed that nearly half the uses of happy in descriptions of the target photos referred to states or situations (e.g., “She looks happy to be outside”) rather than traits or dispositions. The prevalence of state references was not found for other adjectives. When state references for happy were omitted, agreeableness was significantly more prevalent than extraversion, $\chi^2(1, n = 209) = 5.59$, $p < .05$.

Discussion

Consistent with our claims, both coding and text analyses showed that agreeableness was the most commonly noted dimension among the Big Five. While we did not have criterion values to assess judgment validity in Study 1, past work has found little or no validity for judgments of agreeableness based on photographs (e.g., Zebrowitz & Collins, 1997). Likewise, Gosling, Gaddis, and Vazire (2007) found that while perceivers gauge some dimensions accurately from Facebook profiles—namely, extraversion—they did not fare well when judging agreeableness.

TABLE 4: Share of Positively Valenced Mentions, by Big Five Dimension

Dimension	Study 1	Study 2	Study 3	Study 4		
				Choosing Supervisor	Control	Choosing Subordinate
Agreeableness	75.0	63.5	81.5	78.9	79.3	74.6
Extraversion	80.0	56.5	55.0	71.9	67.7	73.8
Openness	80.8	73.3	86.1	80.0	100	100
Conscientiousness	90.3	56.5	82.3	60.4	83.4	66.0
Emotional stability	62.5	47.6	76.6	61.9	90.0	87.1

NOTE: Figures represent the proportion of clear mentions of a given Big Five dimension that were positively valenced (e.g., positive agreeableness = high warmth).

TABLE 5: Five Most Prevalent Words for Each Big Five Dimension, Studies 1-3

Dimension	Study 1		Study 2		Study 3	
	Word	% of Cases	Word	% of Cases	Word	% of Cases
Agreeableness	Nice	20.5	Friendly ^a	9.5	Friendly ^a	14.4
	Friendly ^a	13.3	Kind ^a	6.5	Nice	11.0
	Kind ^a	9.5	Nice	5.5	Open	7.7
	Open	2.9	Reasonable	4.5	Easygoing ^a	6.4
	Easygoing ^a	1.9	Aggressive	4.5	Warm ^a	5.7
Extraversion	Happy	14.8	Confident ^a	11.9	Quiet ^a	13.0
	Fun	11.0	Assertive	7.0	Reserved ^a	11.0
	Social	5.7	Shy ^a	2.5	Assertive	8.0
	Outgoing	5.2	Straightforward ^a	2.5	Confident ^a	6.4
	Confident ^a	4.8			Outgoing	5.0
Openness	Smart ^a	7.1	Smart ^a	3.0	Smart ^a	14.0
	Intelligent ^a	2.9	Intelligent ^a	2.0	Intelligent ^a	5.0
	Intellectual ^a	1.0	Intellectual ^a	0.5	Creative ^a	3.0
	Artistic ^a	0.5	Bright ^a	0.5	Bright ^a	1.0
	Deep ^a	0.5			Artistic ^a	0.3
Conscientiousness	Serious	3.3	Serious	3.5	Organized ^a	4.7
	Formal ^a	1.9	Focused	3.0	Reliable ^a	3.3
	Responsible ^a	1.4	Organized ^a	1.5	Dependable ^a	3.0
	Dependable ^a	0.5			Analytical ^a	2.7
					Mature	2.0
Emotional Stability	Insecure ^a	1.0	Nervous	5.5	Calm	8.0
	Unstable ^a	0.5	Comfortable	4.5	Anxious ^a	1.0
			Calm	3.0	Insecure ^a	0.7
			Insecure ^a	0.5		

NOTE: The top five words were only included for adjectives that had five words that appeared in Goldberg's (1990) original list or in the expanded dictionary.

a. Adjectives included in Goldberg's (1990) original dictionary.

STUDY 2

Study 1 revealed evidence that agreeableness was the most prevalently judged Big Five dimension. However, Study 1 provided no evidence of validity. In Study 2, judges noted open-ended impressions and also completed trait ratings of targets. In addition, Study 2 used a different form of stimuli: minute-long videos of dyads interacting. With measures of both prevalence and validity, we predicted the agreeableness asymmetry:

Agreeableness would be the most prevalently mentioned but not the best judged Big Five trait.

Method

Participants. Sixty-seven members of an East Coast university research pool (mostly undergraduates) participated for payment. Mean age was 21.6 ($SD = 4.2$), and 40 (59.7%) identified themselves as women. Of the 59 who reported ethnicity, 22 (37.2%) identified themselves as Caucasian, 21 (35.6%) as Asian or Asian American,

8 (13.6%) as African American, 7 (11.8%) as Latino or Hispanic, and 1 identified herself as Indigenous/Native American.

Materials. Each participant recorded open-ended impressions of targets based on three video clips with audio. Each video featured two master of business administration (MBA) students negotiating the purchase of computers in a role-play negotiation simulation, with one student playing the role of the buyer and one playing the role of the seller. While the negotiators were given materials describing the parameters of the case (e.g., the buyer was told the maximum she or he could pay), they were free to enact their role however they wanted; in other words, their behaviors were not scripted but rather reflected their own choices. There were nine videos (each with two students, yielding a total of 18 potential targets). Each participant was randomly assigned to view three videos and was randomly instructed to focus on either the buyer or seller as the target. Each condition contained a mix of buyer and seller targets and a mix of male and female targets.

Each video was approximately 1 minute long (the first minute of a 3- to 5-minute role-play) after which the computer-based survey presented an open-ended text box with instructions that read “Based on what you’ve seen, what’s your impression of Person A? In the space below, write a few sentences about what you think Person A is like. Feel free to note whatever comes to mind.”

After participants saw all three videos and recorded their open-ended impressions, they rated each target on the Ten Item Personality Inventory, or TIPI, a measure of the Big Five (Gosling, Rentfrow, & Swann, 2003) that adopts definitions of each dimension parallel to those reflected in Goldberg’s (1990) work and our dictionaries. The TIPI includes two items, one in each direction, for each Big Five dimension. For agreeableness, items included “S/he is sympathetic, warm” and “S/he is critical, quarrelsome.” Items were rated on a 7-point scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*).

Criterion impressions. To gauge the validity of target judgments, we used three sets of criterion values: self-ratings, classmate ratings, and former work colleague ratings. As part of a course exercise prior to the taping of the role-play, targets recorded ratings of themselves on the TIPI. The targets (MBA students) were also rated on the TIPI by four to six classmates ($M = 4.4$) from randomly assigned study groups; these teammates had collaborated with the targets on coursework for approximately 6 months at the time of rating. Lastly,

the targets solicited ratings of themselves from four to six ($M = 4.9$) former work colleagues who knew them well; targets had typically worked with these colleagues for 2 to 5 years.

Coding and text analyses. As in Study 1, coding and text analyses were conducted. A pair of independent coders showed high reliability in their judgments (see Table 2) and reconciled their coding for our analyses. Again, an expanded dictionary was created in consultation with Goldberg, categorizing trait adjectives that appeared at least six times in our 201 cases (see the appendix).

Results

Prevalence analyses. As shown in Table 6, coding revealed that agreeableness was clearly mentioned in over 40% of the open-ended impression reports. This was significantly higher than the prevalence for openness, conscientiousness, and emotional stability (all $\chi^2 > 48.67$, $ps < .05$). The coded prevalence was modestly higher for agreeableness than for extraversion ($\chi^2 = 2.69$, $p < .10$). The rate of positive valence for the trait mentions was relatively similar across the traits (see Table 4).

Text analyses produced similar results. The most commonly used dictionary adjectives for each of the Big Five dimensions are shown in Table 5. Using the original dictionary, agreeableness adjectives appeared in nearly 30% of cases, significantly more frequently than extraversion, openness, conscientiousness, and emotional stability (all $\chi^2 > 3.93$, $ps < .05$; see Table 6). Likewise, the expanded dictionary showed that agreeableness was more prevalent than the other dimensions (all $\chi^2 > 13.41$, $ps < .01$).

Validity analyses. To gauge the accuracy of participant impressions of the targets, three sets of criteria were used. The first were target self-ratings, the second featured the average of classmate ratings of the target, and the third featured the average of work colleague ratings of the target. For each Big Five dimension, the two relevant items on the TIPI were combined, creating a single value (e.g., self-rated extraversion, classmate-rated agreeableness, etc.). These values were then correlated, within Big Five dimension, across all judgments, with the corresponding impressions recorded by participants.

The results, shown in Table 6, were consistent with past work suggesting that extraversion is the best judged dimension ($r_{\text{self}} = .15$, $r_{\text{school}} = .39$, $r_{\text{work}} = .09$). As we expected, the validity of agreeableness impressions was low in both comparative and absolute terms across the criterion measures ($r_{\text{self}} = -.11$, $r_{\text{school}} = -.10$, $r_{\text{work}} = -.16$).³

TABLE 6: Prevalence and Accuracy Across Big Five Dimensions, Study 2

Dimension	Prevalence			Accuracy		
	Coding	Original Dictionary	Expanded Dictionary	Self-Rating Criterion	School Rater Criterion	Work Rater Criterion
Agreeableness (A)	42.3	28.4	36.3	-.11	-.10	-.16*
Extraversion	34.3	19.9	25.9	.15*	.39**	.09
χ^2 vs. A	2.69 [†]	3.93*	13.41**			
Openness	7.5	5.5	5.5	.11	.14	-.08
χ^2 vs. A	65.23**	37.45**	57.85**			
Conscientiousness	11.4	10.9	15.9	.04	.14*	-.05
χ^2 vs. A	48.67**	19.30**	28.17**			
Emotional stability	10.4	7.0	17.4	-.07	-.11	-.10
χ^2 vs. A	60.75**	31.63**	21.67**			

NOTE: For prevalence, coding figures represent percentage of cases ($n = 201$) in which the trait was coded as "clearly mentioned," and dictionary figures represent percentage of cases in which a dimension-related word was mentioned (see the appendix). For accuracy, figures represent an across-case, within-dimension correlation between participant judgments and the criterion ($n = 201$).

* $p \leq .10$. ** $p \leq .05$. *** $p \leq .01$.

Discussion

Using open-ended impressions based on brief videos of targets interacting with another person, Study 2 supported the agreeableness asymmetry account. While agreeableness was the most commonly judged of the Big Five dimensions, it was also generally the worst judged of the Big Five. In absolute terms, perceivers showed no validity overall in their impressions of target agreeableness.

STUDY 3

While the results of Studies 1 and 2 are consistent with our claims, in Study 1 we did not have criterion values (and so could not compute accuracy), and in Study 2, targets were role-playing a negotiation. Thus, Study 3 sought evidence for both prevalence and accuracy in a natural, face-to-face setting. MBA student participants reported their first impressions of classmates randomly assigned to study groups. Open-ended impressions were recorded after several hours of interaction in an ordinary school environment (not in a lab or artificial situation). Participants also provided trait ratings, allowing us to test our central prediction: that agreeableness would be the most prevalently judged trait but not the most accurately judged one.

Method

Participants. One hundred two participants (31.4% women) were recruited from a cohort of approximately 180 students entering a full-time MBA program. Age and ethnicity data were not collected from respondents, but the group's composition was in line with other cohorts, typically aged 27 to 30 years old, approximately

two-thirds Caucasian. Students were recruited during their 1st week of school after having learned of their assignment to study groups and were offered a chance to win consumer electronics as an incentive for participating. Most participants recorded impressions of three targets, yielding a total of 298 cases.

Materials and procedure. During the 1st week of the program, participants received a hard copy survey asking for their initial impressions of their study group teammates. Participants noted each target's (team member's) name and the number of hours they had "spent with this person so far" ($M = 5.5$). Participants then were asked, "What are your first impressions of this person?" and were given a large blank space to provide their response. Participants were then asked to rate each target on the TIPI (the same items and scales as in Study 2).

Criterion impressions. Study 3 featured two sets of criterion values: self-ratings and former work colleague ratings. As part of a course exercise several months after the first impressions survey described above, targets recorded ratings of themselves on the TIPI. As in Study 2, targets solicited ratings of themselves from three to four former work colleagues who knew them well ($M = 3.5$); targets had typically worked with these colleagues for 2 to 5 years.

Coding and text analyses. Two independent coders showed high reliability in their coding for trait dimensions (see Table 2) and reconciled their coding for our analyses. As before, an expanded dictionary was created, categorizing trait adjectives that appeared at least six times in our 298 cases (see the appendix).

TABLE 7: Prevalence and Accuracy Across Big Five Dimensions, Study 3

Dimension	Prevalence			Accuracy	
	Coding	Original Dictionary	Expanded Dictionary	Self-Rating Criterion	Work Rater Criterion
Agreeableness (A)	67.1	29.1	46.5	.02	.07
Extraversion	59.7	19.7	31.8	.44***	.28***
χ^2 vs. A	2.90*	7.11***	13.62***		
Openness	33.6	23.7	23.7	.12**	.08
χ^2 vs. A	65.79***	2.24	34.00***		
Conscientiousness	32.2	17.4	21.4	.08	.07
χ^2 vs. A	72.59***	11.49***	43.25***		
Emotional stability	15.8	2.0	14.7	.18***	.09
χ^2 vs. A	161.85***	83.59***	71.17***		

NOTE: For prevalence, coding figures represent percentage of cases ($n = 298$) in which the trait was coded as “clearly mentioned,” and dictionary figures represent percentage of cases in which a dimension-related word was mentioned (see the appendix). For accuracy, figures represent an across-case, within-dimension correlation between participant judgments and the criterion ($n = 298$).

* $p \leq .10$. ** $p \leq .05$., *** $p \leq .01$.

Results

Prevalence analyses. Coding revealed that agreeableness was mentioned in two thirds of the open-ended impression reports, significantly higher than the prevalence for openness, conscientiousness, and emotional stability (all $\chi^2 > 65.79$, $ps < .05$; see Table 7). The coded prevalence was modestly higher for agreeableness than for extraversion ($\chi^2 = 2.90$, $p < .10$). The balance of positive and negative comments was relatively similar across traits (see Table 4).

Text analyses produced similar results. The most commonly used dictionary adjectives are shown in Table 5. Using the original dictionary, agreeableness adjectives appeared in nearly 30% of cases (see Table 7), more frequently than extraversion, conscientiousness, and emotional stability (all $\chi^2 > 7.11$, $ps < .01$). Agreeableness was not significantly more common than openness, using the original dictionary terms. However, expanded dictionary analyses showed that agreeableness was significantly more prevalent than each of the other dimensions (all $\chi^2 > 13.62$, $ps < .01$).

Validity analyses. To gauge the accuracy of participant impressions, two sets of criteria were used: target's self-ratings and former work colleague ratings of targets. The results, computed as in Study 2 and shown in Table 7, were consistent with our expectations for both sets of criteria. Agreeableness was judged only modestly well in both absolute and relative terms ($r_{\text{self}} = .02$, $r_{\text{work}} = .07$).⁴ Consistent with past work, extraversion was relatively well judged ($r_{\text{self}} = .44$, $r_{\text{work}} = .28$).

Discussion

Study 3 rounded out evidence for our predicted pattern of the agreeableness asymmetry. In open-ended

initial impressions based on face-to-face interactions, our participants were more likely to note agreeableness than the other Big Five dimensions. In terms of accuracy, their judgments of agreeableness were poor in absolute terms, lagging behind most of the other Big Five dimensions.

STUDY 4

Having found evidence that agreeableness is judged frequently, though often with limited validity, we turned our attention in Study 4 to revealing a mechanism that could help account for this effect. As noted previously, we believe that habitual concerns with coordinating interpersonal relations are partially responsible. The prevalence of agreeableness in impressions is not simply a function of the apparent supply of evidence about targets but of the seemingly urgent demand on behalf of perceivers to draw some conclusion about how the target will treat them and how they should treat the target. We argue that by manipulating interpersonal power, we can change these relational concerns and, accordingly, the prevalence of agreeableness in impressions.

Participants in Study 4 viewed video clips of several targets and recorded open-ended impressions of them. Drawing on the logic described above, we oriented participants to view some of the targets as potential subordinates, others as potential supervisors, and others still with no particular relationship orientation (a control condition). Different participants saw different targets through each of these relationship “lenses.” We expected those viewing targets as potential supervisors would be especially attuned to target agreeableness whereas those viewing potential subordinates would be less likely to reference agreeableness in their general

impressions. We expected the frequency of agreeableness judgments in the control condition to fall between these other two conditions. If this manipulation has the expected effects, it would point toward interaction orientation as a mechanism in the agreeableness asymmetry and in impression formation more generally.

Method

Participants. Forty-two people (85.7% women) participated in Study 4, all of whom were enrolled in a master's or doctoral program at a graduate school of education. Mean age was 26.0 ($SD = 3.0$), and 23 (54.8%) identified themselves as Caucasian, 12 (28.6%) as Asian or Asian American, 3 (7.1%) as African American, 2 (4.8%) as Latino or Hispanic, and 2 (4.8%) as Indigenous/Native American.

Materials and procedure. Participants received one of three versions of a hard copy survey. They then watched three pairs of videos; each 30-second video featured a target (an MBA student) engaged in a mock job interview, yielding six total targets. Videos were silent and featured a full-body shot of an individual seated target responding to questions from an off-camera interviewer. Target gender was held constant within each pair (i.e., both targets were men or women). Before each pair, participants were asked to evaluate each target as either a potential supervisor, subordinate, or with no particular goal in mind. After each target video, participants were asked to record their open-ended impressions in a large blank space.

Participants who received the first version of the survey (subordinate-control-supervisor) were asked to record their impressions of each of the first two people as if they were deciding whether or not to hire them. The directions read,

For the first pair of videos, imagine that you are the manager of a workgroup and you are in the process of hiring a new employee. Think as if you manage a group of professionals in an office setting and you need to choose one of the two people shown in the first pair of videos as a new employee. You'll be managing this person and his or her performance will reflect on you.

After the first video, the instructions continued:

Based on what you've seen, what's your impression of Person A? What do you think he or she is like? In the space below, write a few sentences about what you think Person A is like. Feel free to note whatever comes to mind.

After watching both videos and completing the open-ended responses, participants were asked to indicate which person they would hire.

For the second part of the subordinate-control-supervisor survey version, participants were told that there was not a specific goal in the judgment they were making and that they would not need to choose between the next pair of targets. The instructions read,

For the next pair of videos, there is no specific goal in the judgment or decision you're trying to make. Please watch the videos and develop whatever impression you might naturally have of the people involved.

After each of these videos, participants again provided open-ended descriptions based on general prompts identical to those noted above (e.g., "What do you think he or she is like?"). Finally, for the third pair of targets in the subordinate-control-supervisor survey version, participants were asked to evaluate the targets as though they were choosing a boss. For this task the instructions read,

For the final pair of videos, imagine you are now a subordinate, choosing which of the two people to work for. Think as if you were a professional working in an office setting and you were choosing between two team leaders: Which team leader would you want as a boss?

After each of these last two videos, participants again provided open-ended descriptions of the targets. Participants in the other two conditions completed the same tasks in different order. In the control-supervisor-subordinate condition, participants evaluated the first target pair with no specific goal, the second pair as potential supervisors, and the final pair as potential subordinates. Participants in supervisor-subordinate-control condition first evaluated the targets as potential supervisors, then as potential subordinates, and finally with no goal in mind. Counterbalancing the conditions (including the order as well as the videos used in each condition) enabled us to ensure that any effects were due to power and relational orientation rather than characteristics of particular targets or videos. There were 14 participants in each condition.

Coding. As in Studies 1 through 3, both coding and text analyses were conducted. A pair of independent coders showed high reliability in their judgments (see Table 2) and reconciled their coding for our analyses. An expanded dictionary was created in consultation with Goldberg, categorizing trait adjectives that appeared at least six times in our 252 open-ended responses (see the appendix).

TABLE 8: Prevalence Across Big Five Dimensions, Study 4

Dimension	Choosing Supervisor			Control			Choosing Subordinate		
	Coding	Original Dictionary	Expanded Dictionary	Coding	Original Dictionary	Expanded Dictionary	Coding	Original Dictionary	Expanded Dictionary
Agreeableness (A)	71.4	45.2	61.9	58.3	44.0	57.1	45.2	38.8	48.2
Extraversion	53.6	36.9	44.0	46.4	32.1	42.9	40.5	28.2	42.4
χ^2 vs. A	5.71**	1.21	5.38**	2.39	2.52	3.43*	0.39	2.15	0.60
Openness	11.9	10.7	14.3	7.1	6.0	8.3	11.9	10.6	12.9
χ^2 vs. A	61.22***	24.84***	40.38***	49.98***	32.51***	45.44***	22.87***	18.29***	25.07***
Conscientiousness	28.8	8.3	20.2	34.5	6.0	27.4	41.7	10.6	31.8
χ^2 vs. A	29.17***	29.17***	14.93***	9.57***	32.51***	15.25***	0.22	18.29***	4.84***
Emotional stability	11.9	7.1	1.4	15.5	8.3	20.2	14.3	11.8	15.3
χ^2 vs. A	61.22***	31.53***	30.13***	33.13***	27.71***	24.11***	19.25***	16.53***	21.40***

NOTE: $n = 84$ for each of the three conditions.* $p \leq .10$. ** $p \leq .05$., *** $p \leq .01$.

Results

Initial analyses examined whether there was an effect of condition order (e.g., whether the supervisor condition was first, second, or third) or target order within condition. We did not expect, or find, significant differences. Accordingly, we collapsed across condition order and across targets within condition in the analyses that follow. It is important to note that the same pattern of results emerges if we restrict our analyses to only the first condition encountered by each participant (e.g., the prevalence of agreeableness is highest in the subordinate condition and lowest in the supervisor condition).

Coding analyses. Our coding revealed that the relationship orientation manipulation had the expected effects on the prevalence of agreeableness in the open-ended impressions (see Table 8). Those choosing a supervisor were more likely to reference agreeableness (71%) than those in the control condition (58%), $\chi^2(1, n = 168) = 3.16, p = .08$, and those choosing a subordinate (45%), $\chi^2(1, n = 168) = 11.85, p < .01$. Those in the control condition were more likely to reference agreeableness than those in the choosing subordinate condition, $\chi^2(1, n = 168) = 2.88, p = .09$. In the choosing supervisor condition, agreeableness was significantly more prevalent than extraversion, openness, conscientiousness, and emotional stability. However, in the choosing subordinate condition, prevalence for agreeableness was not significantly different from that for extraversion and conscientiousness.

Although we did not make specific predictions about other trait dimensions, we found that references to conscientiousness increased in the choosing subordinate condition (42%) versus the choosing supervisor condition (29%), $\chi^2(1, n = 168) = 3.16, p = .08$. These results suggest that perceivers shifted attention between agreeableness and conscientiousness depending on their

relative power. In the choosing supervisor condition, of those who referred to conscientiousness, 44% also referenced agreeableness; of those who did not refer to conscientiousness, some 78% referenced agreeableness. In the choosing subordinate condition, of those who referred to conscientiousness, some 40% also referenced agreeableness; of those who did not refer to conscientiousness, some 49% referenced agreeableness. It appears, then, that when perceivers described target conscientiousness, they were less likely to also describe target agreeableness, suggesting that focus on one dimension may partially displace focus on the other.

These effects cannot be simply explained by a shift in the valence of impressions (e.g., those viewing potential supervisors might be more vigilant or defensive and thus be more likely to identify low agreeableness in their impressions). As shown in Table 4, the rate of positive valence for the trait mentions was relatively similar across the traits and conditions. It is also worth noting that our control condition was consistent with the results of our prior studies. As shown in Table 9, agreeableness was more prevalently mentioned than openness, conscientiousness, and emotional stability; differences were extraversion were less substantial, though in the expected direction.

Text analyses. The most commonly used dictionary adjectives for each of the Big Five dimensions are shown in Table 9. Text analyses with the expanded dictionary produced results similar to those from the coding, noted above. Those in the choosing supervisor condition were more likely to reference agreeableness (62%) than those in the choosing subordinate condition (48%), $\chi^2(1, n = 168) = 3.46, p = .06$. Those in the choosing subordinate condition showed a somewhat greater likelihood to reference conscientiousness (32%) than those in the choosing supervisor condition (20%), $\chi^2(1, n = 168) = 3.08, p = .08$.

TABLE 9: Five Most Prevalent Words for Each Big Five Dimension, Study 4

Dimension	Choosing Supervisor		Control		Choosing Subordinate	
	Word	% of Cases	Word	% of Cases	Word	% of Cases
Agreeableness	Nice	20.5	Friendly ^a	19.0	Friendly ^a	15.3
	Friendly ^a	13.3	Nice	11.9	Relaxed ^a	12.9
	Kind ^a	9.5	Relaxed ^a	8.3	Nice	8.2
	Open	2.9	Open	4.8	Casual ^a	8.2
	Easygoing ^a	1.9	Kind ^a	4.8	Easy	3.5
Extraversion	Happy	14.8	Confident ^a	17.9	Confident ^a	15.3
	Fun	11.0	Happy	7.1	Happy	5.9
	Social	5.7	Expressive ^a	4.8	Talkative ^a	4.7
	Outgoing	5.2	Quiet ^a	3.6	Social	4.7
	Confident ^a	4.8	Outgoing	2.4	Quiet ^a	3.5
Openness	Smart ^a	7.1	Intelligent ^a	3.6	Smart ^a	7.1
	Intelligent ^a	2.9	Knowledgeable	2.4	Knowledgeable	3.5
	Intellectual ^a	1.0	Smart ^a	1.2	Intelligent ^a	2.4
	Artistic ^a	0.5	Bright ^a	1.2	Creative ^a	1.2
	Deep ^a	0.5				
Conscientiousness	Serious	3.3	Serious	19.0	Serious	16.5
	Formal ^a	1.9	Professional	7.1	Professional	10.6
	Responsible ^a	1.4	Organized ^a	2.4	Responsible ^a	4.7
	Dependable ^a	0.5	Responsible ^a	2.4	Thoughtful	2.4
			Hardworking	1.2	Formal ^a	2.4
Emotional stability	Insecure ^a	1.0	Comfortable	7.1	Comfortable	2.4
	Unstable ^a	0.5	Calm ^a	4.8	Excitable ^a	1.2
			Laid-back	4.8	Emotional ^a	1.2
			Emotional ^a	1.2		
			Anxious ^a	1.2		

a. Adjectives included in Goldberg's (1990) original dictionary.

Discussion

Our manipulation of power had the expected effect: Those who approached targets as potential supervisors were more likely to reference agreeableness in their open-ended descriptions while those who approached targets as potential subordinates were less likely to reference agreeableness and more likely to mention conscientiousness. Even though the stimuli remained constant, the shift in relationship orientation yielded a significant shift in impression content.

GENERAL DISCUSSION

In the first moments of an encounter, what are perceivers most likely to conclude about another's personality and character? And are those conclusions valid? While past research has examined how well perceivers *can* judge various traits, questions remain about which traits perceivers typically *do* infer. The present article attempted to address this gap, presenting what we believe to be the first evidence of the prevalence of Big Five trait dimensions in perceivers' open-ended initial impressions of targets. We complemented our findings on prevalence with evidence on judgment validity in the same paradigms. We also manipulated the power

relationship between perceiver and target, testing whether relationship orientation acts as a mechanism that shapes impression content.

Our results suggest that among the Big Five, the dimension perceivers judge most is the dimension they frequently judge worst: agreeableness. In multiple studies, using photographs, videos, and face-to-face encounters, we found that agreeableness was generally more prevalent than other Big Five traits in open-ended descriptions of early impressions. In the two studies where we gauged validity, our results converged with what others have shown before: Agreeableness is among the worst judged of the Big Five—and in absolute terms, it is generally not judged very accurately at all. The present evidence thus suggests an *agreeableness asymmetry*: What people typically *do* judge in everyday first impressions—agreeableness—is often not something that they *can* judge with much success.

Our results also revealed at least one mechanism underlying the agreeableness asymmetry. We manipulated participants' relationship orientation and power, altering whether they saw the targets in videos as potential subordinates or as potential supervisors. With the target evidence held constant, this relative power manipulation had a dramatic effect on impression content. Those considering the targets as higher power potential supervisors were significantly more likely to

report general impressions involving the agreeableness dimension, compared to those viewing the targets as lower power potential subordinates or those in a control condition. Further, those viewing the targets as potential subordinates were more likely to mention conscientiousness compared to those viewing the targets as potential supervisors.

Our results suggest that while evidence and pseudodiagnostic cues may play a role in the agreeableness asymmetry, impressions are at least partially driven by the expectations and objectives perceivers bring to an interaction. Perceivers may have a chronic or default orientation of evaluating a new acquaintance as an interaction partner with whom they have some mutual dependency (thus prompting an assessment of agreeableness). These orientations may also shift in particular cases to reflect specific roles or other relationships. While power—and interaction orientations more generally—is certainly not the only mechanism shaping impression content, our findings suggest that it is a meaningful and significant one.

The results of the power manipulation cast doubt on another potential mechanism we noted in the introduction that might simply and lawfully equate “agreeable” with “good.” In this view, impressions of agreeableness are reflections of more fundamental—automatic, rapid, uncontrolled—judgments of good–bad, approach–avoid, or like–dislike (though see Kenny & Kenny, 2006, for a case of dissociation between agreeableness and liking). However, our power manipulation results raise questions about this account: If judging agreeableness is an inevitable reflection of automatic attitudes, why did the prevalence of agreeableness drop so precipitously in the high-power condition? Those in the high-power condition appeared to shift their focus toward conscientiousness. In a sense, perceivers were still evaluating targets, but the basis of the evaluation changed from something like “will they treat me well?” (low power) to “will they effectively do what I ask?” (high power). We believe that perceivers have a habit of making good–bad judgments. In many cases, and perhaps as a default, that may mean evaluating a target’s agreeableness. Yet, evaluation does not always revolve around agreeableness; in some cases, the basis of evaluation shifts. Thus, to predict the content of a perceiver’s impression, one would want to know the relational context surrounding the perceiver and target.

Outstanding Issues and Implications

Persistence of the agreeableness asymmetry. If perceiving a target’s agreeableness accurately is important for everyday functioning, why are perceivers so apt to get it wrong? Or, at a minimum, why would they not recognize their fallibility and learn to exhibit greater prudence

in their initial judgments? There are a number of reasons why such a general agreeableness asymmetry effect could emerge and endure. One mechanism is exposure: Given a choice, people who form an initial impression of someone as disagreeable are unlikely to seek additional “samples” of that person’s behavior (Denrell, 2005). As a result, they may be unlikely to overturn their initial negative impression and may continue to believe that they judged the target accurately.

Likewise, confirmation biases and self-fulfilling prophecies could make an initial judgment appear to be true through selective attention and interpretation. This could also yield a generalized expectation that a perceiver uses to assess targets. As Kenny (1994) noted in explaining the high levels of assumed similarity between perceiver and target for agreeableness,

People who are agreeable probably bring about agreeable behavior in their partners. So if people who see themselves as agreeable are actually agreeable, their interaction partners should also be agreeable. So it is reasonable for agreeable people to expect others to be agreeable. (p. 184)

A reasonable expectation, we might add, though not always a correct one. In sum, due to exposure, confirmation, and prophecy effects, initial impressions of agreeableness may persist and feel right even though they are in some sense inaccurate or misguided.

Warmth in social judgment. Our results support the notion of the “primacy of warmth” in social judgment (e.g., De Bruin & van Lange, 2000; Fiske et al., 2006). Prior work has suggested that information about warmth is sought out, attended to, judged quickly, weighed heavily, and faithfully remembered. The present results reveal that references to warmth and agreeableness are also prevalent—arguably more so than many other dimensions—in perceivers’ unconstrained initial impression reports. This raises questions about what these judgments are based on. A growing body of literature suggests that people use (or misuse) cues to intuit agreeableness in early impressions (e.g., Borkenau & Liebler, 1995; Gosling et al., 2007; Sneed, McCrae, & Funder, 1998; Zebrowitz & Collins, 1997). It may also be that although people have a limited ability to gauge global agreeableness, they show effectiveness in judging circumscribed agreeableness (e.g., specific behavioral patterns) or pragmatic agreeableness (i.e., “whether she will be agreeable to *me*”; cf. Gill & Swann, 2004). Perceivers may have a tendency to overgeneralize beyond locally valid inferences.

Stereotypes may also often serve as a source, perhaps a distorting one, of warmth judgments (e.g., Cuddy, Fiske, & Glick, 2007). Our findings highlight the importance

of understanding the cues and stereotypes that shape agreeableness judgments since these inferences appear to account for a great share of what perceivers conclude about others in their initial impressions.

While our focus has been primarily on agreeableness, our results reveal that two Big Five dimensions tend to emerge with greater frequency than the others: agreeableness and extraversion, the most interpersonal dimensions of the Big Five. This resonates with work on interpersonal circumplex models, where the two basic dimensions of warmth/communion and dominance/agency have been linked, respectively, to agreeableness and extraversion. Discussing the circumplex, Wiggins (1979) noted that "One kind of way in which individuals differ from each other is in terms of what they do to each other" (p. 396). In these terms, a broader view of our results suggests that in early impressions, perceivers tend to judge what people are likely "to do to one another."

Power and social judgment. While prior work has shown that power affects social judgment, this research has generally focused on the effort, care, and accuracy motivation that shapes impression formation and perspective taking (e.g., Galinsky et al., 2006; Snodgrass, 1985; Stevens & Fiske, 2000). The present work appears to be the first evidence that power can affect the *spontaneous content* of impressions, seemingly channeling the perceiver's attention toward those aspects of targets that might be most relevant to their potential relationship. One implication of this finding is that individual differences in power could be a meaningful predictor of impression content: Perhaps perceivers' chronic sense of

power (e.g., Anderson & Galinsky, 2006) predicts their likelihood of intuiting target agreeableness.

Our ongoing research suggests that perceivers may, in effect, reverse the order of the power effect we revealed, intuiting a person's level of power from her references to different traits in other targets. In two studies, we have found that when speakers describe third parties in terms of conscientiousness, they are seen as more powerful than when speakers describe third parties in terms of agreeableness (Ames, Bianchi, & Magee, 2008). Thus, the content of a speaker's proclaimed impression of a third party may affect perceptions of the speaker herself.

Conclusion

Our results shed new light on a noteworthy phenomenon: Perceivers seem to habitually draw inferences about a target's agreeableness in their early impressions, even though these inferences often have limited validity. This *agreeableness asymmetry* deserves further exploration, including tests across additional settings and contexts, as well as further examination of the moderating factors involved. Regardless of whether the specific effects shown here garner additional attention or support, we believe scholarship on impression formation can benefit from considering not only what perceivers *can* judge but what they typically *do* judge when they confront and cognize a target. When validity and prevalence diverge, it may open a window into underlying inferential processes and help scholars better identify and understand the machinations, and potential vulnerabilities, of everyday person perception.

APPENDIX ORIGINAL AND EXPANDED DICTIONARY

<i>Dimension</i>	<i>Adjectives in Original Dictionary</i>	<i>Items Added for Expanded Dictionary</i>		
A	abusive, accommodating , adaptable , affectionate, agreeable , amiable, antagonistic, argumentative , belligerence, benevolent, bigoted, boastful, bossiness, bossy , bullheaded, callousness, casual , caustic, charitable, cold , combative, compassionate , conceit, conceited, condescending, considerate , cooperative , cordial, courteous , crabby,	faultfinding, flexible , flippant, folksy, friendly , generous , genial, greedy, gruff, grumpy, harsh, helpful , homespun, honest , humble, impersonal, impolite, impudent, inconsiderate, informal , insensitive, irritability, irritable, kind , lenient , manipulative, miserly, modest , moral, natural , obliging, obstinate, overcriticalness, patient ,	selfishness, selfless, sentimental, simple , sincere , skeptical, sly, smug, snobbish, stinginess, stingy, stubborn , stubbornness, surliness, surly, suspicious, sympathetic , tactful, tactless, tempestuous, thoughtless, thoughtlessness, trustful, truthful, unassuming,	<i>Study 1</i> open, nice <i>Study 2</i> aggressive, nice, reasonable <i>Study 3</i> easy, nice, open, open-minded <i>Study 4</i> approachable,

(continued)

APPENDIX (continued)

<i>Dimension</i>	<i>Adjectives in Original Dictionary</i>		<i>Items Added for Expanded Dictionary</i>	
	crafty, cranky, cruel, cruelty, cunning, curt, cynical , deceit, deceitful, demanding , devious, diplomatic , dishonest, disrespectful , distrust, distrustful, domineering, down-to-earth , earthy, easygoing , egocentric, egotistical, ethical, explosive	peaceful, pleasant , polite , pompous, pomposity, prejudice, prejudiced, principled, quarrelsome, reasonable , relaxed , respectful , rude , rudeness, ruthless, scornful self-indulgent, selfish	uncritical, undemanding, underhanded, understanding, unforgiving, unfriendliness, unfriendly , ungracious, unkind, unscrupulous, unsympathetic, vain, vindictive, volatile, volatility, warm	caring, easy, engaging, fair, nice, personable
E	active , adventurous, aloofness, ambition, ambitious , animation, assertion, assertive , assured , bashful, bitter, brave, candor, carefree , cheerful , communicative, confident , courage, courageous, demonstrative, detached, direct , docile, dominant, energetic , energy level , enterprising, enthusiastic , exhibitionistic, expressive , expressiveness, extraverted , flamboyant, forceful , frank gregarious , gregariousness	happy-go-lucky , humor , humorous , impetuous, inhibited, inhibition, jovial , joyless, lethargic, lethargy, melancholic, merry, mischievous, moody, morose, opportunistic, optimism, optimistic , passive , passivity, pessimism, pessimistic, playful , playfulness, proud, quiet , rambunctious, reserve, reserved , restrained, seclusive, secretive, self-esteem, shy , shyness, silence, silent, sluggish	sociable , somber, spirit, spirited, spontaneity, spontaneous , straightforward , submissive, talkative , talkativeness, timid , unadventurous, unaggressive, unaggressiveness, uncompetitive, uninhibited, unrestrained, unrestraint, unsociable, untalkative, verbal, verbose, vigorous, vivacious, withdrawn, witty, wordy, zestful	<i>Study 1</i> fun, happy, outgoing, social <i>Study 2</i> assertive <i>Study 3</i> assertive, fun, outgoing, positive, social, strong <i>Study 4</i> forward, fun, funny, happy, outgoing, social
O	artistic, bright , complex, contemplative, cosmopolitan, creative , creativity, cultured, curiosity, curious , deep, depth, dull, foresighted, ignorant, imaginative, imperceptive	imperceptiveness, innovative, inquisitive , insight, insightful, intellectual , intellectuality, intelligence , intelligent , introspective , inventive, meditative, perceptive, philosophical, refined	shallow, shallowness, smart , sophisticated, sophistication, stupidity, uncreative, unimaginative, unimaginativeness, unintellectual, unintelligent, unobservant, unreflective, worldly	<i>Studies 1, 2, 3</i> (no additions) <i>Study 4</i> knowledgeable
C	absent-minded, aimless, aimlessness, analytical , careful , careless, caution, cautious , concise, consistent, conventional , conventionality, decisive, decisiveness, deliberate, dependability , dependable , dignified, dignity, disorganization, disorganized , economical,	formal , frivolity, frivolous, haphazard, impractical, inconsistency, inconsistent, indecisive , indecisiveness, industrious, inefficient, lazy , logic, logical, mannerly, meticulous, negligence, negligent, nonconforming, nonconformity, orderly, organization, organized ,	punctuality , purposeful, rash, rebellious, reckless, recklessness, reliable , responsible , scatterbrained, self-disciplined , sloppy, sloth, slothful, steady, systematic, tenacious, thorough, thrift, thrifty, traditional, unambitious, unconscientious,	<i>Study 1</i> serious <i>Study 2</i> focused, unprepared <i>Study 3</i> mature, thoughtful

(continued)

APPENDIX (continued)

Dimension	Adjectives in Original Dictionary		Items Added for Expanded Dictionary
	efficiency, efficient , erratic, exacting, extravagant, fastidious, firm , foolhardy, forgetful, forgetfulness	perfectionistic, persistence, persistent , precise, precision, predictability, predictable , prompt, punctual	<i>Study 4</i> hardworking, professional, serious, thoughtful
ES	anxious , autonomous, defensive, emotional, emotionality, envious, envy, excitable , fear, fearful, fretful, gullibility, gullible , independence, independent	individualistic, insecure , insecurity, instability, intrusive, intrusiveness, jealous, meddlesome, naïve, negativistic, nervous , nosey, passionless, placidity	<i>Study 1</i> (no additions) <i>Study 2</i> calm, comfortable <i>Study 3</i> calm, comfortable, stable <i>Study 4</i> calm, comfortable, laid-back

NOTE: Original dictionary adjectives include those featured in Goldberg (1990); an expanded dictionary was created for each study, including adjectives that appeared at least six times in open-ended responses, categorized by Goldberg for Big Five dimension. Items in bold are original dictionary adjectives that appeared at least once in our text analyses.

NOTES

1. While some accounts of the Big Five match specific components to broader dimensions differently (e.g., Costa and McCrae, 1992, identify warmth as part of extraversion), we follow the many approaches, including natural language and related accounts, that identify warmth as part of agreeableness (e.g., Goldberg, 1990; Gosling, Rentfrow, & Swann, 2003; Graziano & Eisenberg, 1997; John & Srivastava, 1999; Norman, 1963).

2. As noted, we sought to include all adjectives that occurred with a meaningful frequency in our expanded dictionary in an effort to ensure that the results were not a function of the dictionary's giving disproportionate coverage to certain traits. Another approach to this issue is to equalize the number of traits for each dimension. The results from this approach (e.g., 10 adjectives for each dimension) are very similar to those reported in our expanded dictionary results across the studies. We focus our reports on the expanded dictionaries because they provide what we believe are the most exhaustive measures.

3. We pursued several other approaches to gauging validity, all of which converged in showing that among the Big Five, judgments of agreeableness showed among the lowest, if not *the* lowest, validity. In one approach, we aggregated participant judgments within target and compared those averaged ratings to the criterion value within each Big Five dimension. The correlations for agreeableness were negative, though not significant, for self-rating criterion (–.21), school-rater criterion (–.21), and work-rater criterion (–.33). Ratings for extraversion, for instance, were considerably higher (*r*s of .15 to .57). Multilevel modeling, controlling for target, revealed similar results with agreeableness showing low absolute and relative levels of validity.

4. As in Study 2, other approaches to gauging validity revealed a very similar picture. Both aggregate analyses (averaging judges' ratings within target) and multilevel modeling showed low absolute and relative levels of validity for agreeableness judgments.

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