

KEEPING UP IMPRESSIONS

Keeping up impressions:  
Inferential rules for impression change across the Big Five

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Abstract

Not all first impressions have equal longevity. Which kinds of impression have the greatest mobility—downward and upward—over the course of acquaintanceships? In this article, we propose an *inferential* account of impression maintenance across Big Five trait domains. With data from field and laboratory studies, we provide evidence that positive impressions of agreeableness (A), conscientiousness (C), and emotional stability (ES) are especially vulnerable to small amounts of contrary evidence, whereas positive first impressions of extraversion (E) and openness (O) are more resistant to contrary information. Impressions of E and O demonstrated minimal susceptibility to negativity effects in a longitudinal study of college roommate impressions (Study 1), in a study of perceivers' implicit theories about different trait domains (Study 2), and in an experimental study of manipulated impression change (Study 3).

Keywords: impression change, dispositional inference, person perception, social cognition, Big Five

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During even the most fleeting interactions, perceivers rapidly form impressions of one another's personality traits (Ambady & Rosenthal, 1993; Uleman, Hon, Roman, & Moskowitz, 1996). In many cases, first impressions turn into lasting ones, through a mix of initial accuracy, information-processing biases, and/or self-fulfilling prophecies (De La Ronde & Swann, 1998; Kunda, 1999; Murray, Holmes, & Griffin, 1996). Nevertheless, it is also common for impressions to change over the course of acquaintanceship, at times demonstrating dramatic reversals (Felmlee, 2001; Paulhus, 1998; Ybarra, 2001). The study of when and why impressions change, we believe, is an essential complement to research on when and why impressions persist. But many questions remain about how perceivers update their judgments in light of accumulating behavioral evidence. Which impression dimensions are most prone to change, and in what direction? And how much evidence does it take to shift them?

Research on the Big Five personality dimensions suggests that impressions in these five domains are differentially stable over the course of acquaintance. Impressions of extraversion often persist from first meeting to close acquaintance; this stability is shown in longitudinal studies that track participants' impressions as they become better acquainted over a period of weeks (e.g. Paulhus & Reynolds, 1995) and in cross-sectional studies that examine the correspondence between judgments made by strangers and by close friends (Levesque & Kenny, 1993; Marcus & Lehman, 2002). Such high impression stability is less true of other Big Five trait domains, e.g., impressions of agreeableness or conscientiousness (Kenny, 1994; Zebrowitz & Collins, 1997).

Most theoretical accounts of Big Five impression stability and instability point to evidentiary differences in the personality dispositions themselves. Some traits, it is argued, are inherently more observable than others (John & Robins, 1993; Kenny, 1994) and therefore lead to highly reliable first impressions. Extraversion is a case in point: extraverts and introverts provide frequent behavioral cues to these traits and, as a result, perceivers get a profusion of reliable information about extraversion fairly quickly. This “evidence prevalence” explanation is fundamentally a realist account, centered on the ecology of behaviors provided by the target.

From the realist perspective, although the abundance of evidence may differ from trait to trait, perceivers are expected to apply similar inferential operations to the available evidence regardless of trait (Buss & Craik, 1983). If Marcos meets his new colleague Ella at a company function, he may pick up a host of sociability cues in the first five minutes. Some cues may suggest extraversion; others may suggest introversion. Marcos would aggregate and weight these observations before concluding that Ella is a fairly extraverted individual. According to a realist account, it may take Marcos a few more days or weeks to pick up the same number of meaningful cues to Ella’s conscientiousness, but once he had these observations in hand, they would be aggregated and weighted with the same inferential calculus as were the extraversion cues. From this perspective, impression change or revision is largely a matter of the emergence of valid evidence.

Although evidence prevalence doubtless plays an important role in how impressions are updated over the course of acquaintance, we hypothesize that another significant source of stability/instability in impressions derives from differences in the inferential rules perceivers apply to the five trait domains. In this paper, we provide new evidence that as classes of interpersonal judgments, the five trait domains differ in the rules perceivers use to weight and

interpret available behavior observations. Specifically, we claim that even when perceivers are given comparable samples of observable trait-relevant behavior—when evidence prevalence is controlled—different patterns of impression maintenance and change will still emerge across different Big Five traits. Our account complements and goes beyond prior evidence-based accounts by emphasizing the sources of impression stability and change that emerge from the mind of the perceiver, rather than from the behavior of the target.

#### Inferential Standards for Impression Maintenance

Imagine again Ella and Marcos's first meeting at the company function. Marcos thinks Ella is very talkative and Ella finds Marcos to be warm and friendly. Over their next few encounters, how might Marcos and Ella's impressions of one another evolve? Some research suggests Marcos's impression of Ella's talkativeness might remain stable because extraversion is diagnosed quickly and accurately thanks to an abundance of valid behavioral cues. Ella's impression of Marcos's warmth might change, though, because valid evidence of agreeableness reveals itself more sparingly. We hypothesize that Marcos's judgment *is* likely to remain more stable than Ella's, but for an additional reason: because people process information about extraversion and agreeableness differently, using different inferential rules. Marcos's impression of Ella's talkativeness may be particularly resistant to substantial contrary evidence while Ella's impression of Marcos's agreeableness may be vulnerable to even small glimpses of contrary evidence. If on the second meeting, Marcos is somewhat argumentative and Ella is a bit reserved, Marcos might lose his reputation as a nice guy faster than Ella loses her reputation as an outgoing woman.

A handful of researchers in social perception have consistently emphasized that perceivers employ different inferential rules depending on the trait under consideration (Reeder

& Brewer, 1979; Rothbart & Park, 1986; Skowronski & Carlston, 1989; Trafimow & Trafimow, 1999). Gidron and colleagues (Gidron, Koehler, & Tversky, 1993) have provided evidence, for example, that trait concepts differ systematically in *scope*: the frequency of behavior required to maintain the impression. A high scope trait (such as “kind”) requires frequent performances of trait-consistent behavior to keep up the impression. A low scope trait (such as “rude”) requires only occasional performances of trait-consistent behavior to make the impression stick. One consistent finding is that positive traits have higher scope than negative traits (Gidron et al., 1993). In consequence, as acquaintances progress and impressions are updated, positive impressions are typically easy to lose while negative impressions tend to be hard to shake (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

Most relevant to our discussion of Big Five impressions, the size of this valence asymmetry appears to systematically differ by trait domain (Reeder, 1993, , 1997; Reeder & Coovert, 1986; Rothbart & Park, 1986; Trafimow, 1997). For some domains (e.g. honesty-dishonesty) the asymmetry—and the subsequent negativity bias—is large; for other domains (e.g. talkativeness-untalkativeness) the asymmetry is small. Accordingly, one can characterize trait domains in terms of the difficulty inherent in keeping up a positive impression in that domain, that is, by *maintenance-level*. Although trait maintenance-level is a continuous dimension, we simplify our discussion by distinguishing two types of trait maintenance. A *higher-maintenance* trait dimension<sup>1</sup> has asymmetric standards, such that perceivers require much more evidence to infer the positive pole of the trait than to infer the negative pole. (In Gidron et al.’s (1993) terminology, high-maintenance domains are characterized by both high-scope positive traits and low scope negative traits). Reliability, for example, would be a high-maintenance dimension if perceivers required frequent demonstrations of reliability to call someone reliable and only a few

demonstrations of unreliability to call someone unreliable. A *lower-maintenance* trait dimension will not show this strong asymmetry: both positive and negative poles of the trait require several instances of trait-consistent behavior to maintain the impression (that is, the poles have similar scope). For these traits, it should take many examples of negative behavior to shift the impression downward.

Are some Big Five trait domains more high-maintenance than others? Although prior work on inferential standards has looked at an assortment of individual trait constructs, this research has not directly examined or contrasted impression maintenance standards across the Big Five. Realist approaches to Big Five impressions would predict similar maintenance-levels across the five trait domains, once evidence prevalence had been controlled. Reeder and colleagues' schematic model of person perception (Reeder & Brewer, 1979; Reeder, Pryor, & Wojciszke, 1992), however, suggests that systematic differences in trait-maintenance likely exist across these domains. According to the schematic model, perceivers hold implicit theories, or schemas, about how dispositions are manifested in overt behavior, and these schemas guide perceivers' treatment of negative versus positive information about the trait. When judging trait domains that tap moral qualities, for example, perceivers view negative information as more informative than positive information, as a result of an underlying theory about how moral character is expressed in behavior. When perceivers judge trait domains that tap abilities, on the other hand, the asymmetry reverses, with positive behavior regarded as more diagnostic than negative behavior (because of a different underlying schema for ability).

Research has shown that the dimensions of morality/warmth/communion and ability/competence/agency are two broad constructs that underlie most social judgments, including Big Five judgments (Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; McCrae &

Costa, 1989; Wojciszke, 1994). A study by Digman (1997) suggests that agreeableness (A), conscientiousness (C), and emotional stability (ES) are primarily morality/communion domains, whereas extraversion (E) and openness (O) are largely ability/agency domains. This finding, in conjunction with Reeder's schematic model of person perception, suggests that A, C, and ES would be higher-maintenance trait domains and that E and O would be lower-maintenance.

In three studies, we predict and find that impressions of E and O are indeed less susceptible to negativity effects than impressions of A, C, or ES. Impressions of extraversion and openness appear to be fairly low-maintenance; that is, impressions of sociability or creativity, once established, are easily maintained in the face of occasional observations of unsociable or uncreative behavior. Impressions of agreeableness, conscientiousness, and emotional stability on the other hand, appear to be much higher maintenance (occasional examples of disagreeable, unconscientious, or unstable behavior are more likely to cause a perceiver to revise an initial impression downward).

Our present results extend prior work on differences in impression-stability across the Big Five and provide new evidence of an inferential mechanism contributing to this effect. Our account points towards a more complete picture of which Big Five impressions are most likely to change—and how, and why.

### Study 1

In Study 1, we investigated patterns of impression maintenance and change in a sample of first-year college students over the course of one year. Students provided impressions of their college roommates during the initial days of orientation week and again during the end of the spring semester, after nine months of living with one another. Few prior studies have directly examined within-person changes in Big Five impressions as acquaintances develop (e.g. Paulhus



& Reynolds, 1995). Study 1 allowed us to observe the prevalence of impression change and stability for each of the Big Five dimensions, in the context of a naturally occurring relationship, one that gave perceivers ample opportunities for target observation over a relatively long period of time. In line with our hypothesis that E and O are particularly resistant to negativity effects, we predicted that impression declines would be less common for these two dimensions than for impressions of A, C, and ES.

### *Method*

*Participants and Recruitment.* Thirty (13 female,  $M$  age = 18) first-year college students participated in this longitudinal study for cash reimbursement. The data reported in this study were collected in two waves in August and May of the 2004-5 academic year. Participants were recruited through posters on campus during orientation week and invited to complete an initial on-line questionnaire about their experiences and impressions at the university, including impressions of their new roommate. The majority of participants completed this initial on-line questionnaire on the third day of their acquaintance with their roommate. Participants were contacted again at the end of the spring semester to attend a final laboratory session. Participants were reimbursed upon completion of each phase of the study. Four participants failed to complete the second study phase.

*Impression Questionnaires.* The roommate impression questionnaires asked participants to provide a free-response description of their roommate and to rate their roommate's Big Five traits using the 40 Saucier mini-markers (Saucier, 1994). This list contains 8 adjectives for each factor of the Big Five. For three factors (extraversion, agreeableness, and conscientiousness), there were equal numbers of positive and negative traits. For the emotional stability factor, there were 2 positive and 6 negative traits. For the openness factor, there were 6 positive and 2

negative traits. Both the first and final impression questionnaires were highly similar, except that the first impression questionnaire was administered over the web and the final impression questionnaire was completed in paper-and-pencil form in the laboratory.

### *Results & Discussion*

The average initial and final impressions and the mean impression changes are presented in Table 1. A significant effect of time in the repeated-measures ANOVA revealed that participants' impressions generally worsened from initial impression to final impression ( $F(1,25) = 6.97, p = .01$ ). A significant Trait X Time interaction indicated that impressions worsened more for some trait dimensions than others ( $F(4,100) = 4.23, p < .01$ ). As predicted, impressions declined most for the high-maintenance traits A, C, and ES, and least for the lower-maintenance traits E and O.

### Study 2

The results of Study 1, while consistent with our account, addressed trait maintenance indirectly, through patterns of impression change in the context of developing social relationships. Study 2 was designed to explicitly test the hypotheses that perceivers hold lower maintenance standards for extraversion and openness. One way to examine inferential standards is by mapping the *minimum frequency level* (MFL) of specific traits that tap the Big Five trait domains (e.g. Gidron et al., 1993). MFLs indicate the lowest frequency of trait-correspondent behavior perceivers require to maintain a trait impression. We may have seen John and Elisha chatting animatedly at a party, but if we learn John engages in an average of 20 conversations a day, while Elisha engages in only 3, we would be inclined to say John is more extraverted than Elisha. Although the cutoff that separates extraverts from non-extraverts may be a “fuzzy” boundary (Mervis & Rosch, 1981), evidence suggests that MFLs differ systematically between

traits (Gidron et al., 1993). A trait with an extremely high MFL would require near perfect behavior consistency to maintain the impression; a trait with an extremely low MFL would require only a few isolated behaviors to do the same.

We define a high-maintenance trait dimension as one with high MFLs for traits on its positive pole and low MFLs for traits on its negative pole (making it hard to earn the positive impression but easy to acquire the negative one). A lower-maintenance trait dimension, on the other hand, is identified by the absence of a strong positive asymmetry (i.e. similar MFLs for both poles, or perhaps even a reversed asymmetry). In this study, perceivers' standards for trait impressions were assessed using Gidron and colleagues' (1993) measure of MFL, wherein perceivers were asked to judge the minimum frequency levels for different traits.

### *Method*

*Participants.* Eighty native-English speaking college students (42 females;  $M$  age = 20.4) participated in this study for cash reimbursement.

*Stimulus Materials.* The 100 personality traits from Goldberg's Big Five scale (Goldberg, 1992) were selected for use in this study. This list contains 20 adjectives for each factor of the Big Five. For four factors (extraversion, agreeableness, conscientiousness, and openness), there were equal numbers of positive and negative traits. For the emotional stability factor, there were 6 positive and 14 negative traits.

*Measures and Procedure.* Each participant rated the MFL of the 100 trait adjectives. The instructions and rating scale for this study closely followed that of Gidron and colleagues (1993):

How often does a person have to be punctual before you are willing to say that the person is a 'punctual person'? How frequently does a person have to be in an irritated mood before you call them an 'irritable person'? Clearly, someone who is always punctual will

be called a punctual person, and someone who is always irritated will be called an irritable person. Likewise, someone who is *never* punctual or irritated will *not* be called a punctual or irritable person. But where does the cut-off fall? What is the minimum frequency level for these traits – the point where a person is called punctual if her frequency of being on time is above that level and is not called punctual if her frequency of being on time is below that level?

Consider the following frequency scale:

0	1	2	3	4	5	6	7	8	9	10
never	once in a blue moon		some- times		often		usually		almost always	always

Clearly, there are different minimum frequency levels for different traits. What, for example, is the minimum frequency of behavior required to call someone a murderer?

Using the scale, we would pick (1) – we call someone a murderer even if she only commits murder every once in a blue moon. On the other hand, what is the minimum frequency of behavior required to call someone a vegetarian? Here we might pick 9 or 10 – we only call someone a vegetarian if she always (or almost always) eats meatless meals. On the next page, you will be asked to estimate the minimum frequency level of several traits.

Participants were given the list of traits in one of four randomized orders. They were asked to notify the experimenter if they were unsure of a word's meaning.

### *Results & Discussion*

*Inter-judge consensus.* Inter-judge consensus of trait MFL ratings was assessed using Cronbach's alpha. The 80 raters had a reliability of 0.98.

*How high-maintenance are the Big Five?* The average MFL ratings for the positive and negative poles of each Big Five trait are summarized in Table 2. These data were analyzed with a 5 (Big Five factor) by 2 (pole) within subjects ANOVA. Replicating the well-established negativity effect, we found a main effect of pole ( $F(1, 79) = 136.93, p < .001$ ), such that traits on the positive poles of the Big Five factors ( $M = 6.47, SE = .09$ ) were generally judged to have higher MFLs than traits on the negative poles ( $M = 5.13, SE = .12$ ). Thus, participants indicated that, on the whole, maintaining positive impressions takes more work than maintaining negative impressions. Nevertheless, this positive-negative asymmetry was not consistently large across all Big Five factors, as evinced by the significant Pole X Factor interaction effect ( $F(4, 316) = 26.77, p < .001$ ).

For agreeableness, conscientiousness, and emotional stability there was a large MFL asymmetry across the positive and negative poles, such that traits on the positive pole had much higher MFLs than traits on the negative pole. Extraversion, on the other hand, had a much lower MFL asymmetry, as did openness (see Table 2). Study 2 participants thus indicated that they use different inferential rules in making judgments about the different Big Five personality factors. Participants reported that impressions of A, C, and ES are quite high-maintenance: To retain a positive impression in these domains, a person is expected to adhere consistently to trait norms for agreeable, conscientious, and emotionally stable behavior (frequent deviations would result in a lowered impression). E and O emerged as the two lower-maintenance traits. Participants indicated that although it takes a certain frequency of extraverted behavior to maintain the impression of being extraverted, it also takes a fairly high frequency of introverted behavior to change that impression; the same was true for openness. These findings provide additional support for the claim that E and O are less susceptible to negativity effects than A, C, and ES.

## Study 3

Study 1 provided evidence of naturally occurring impression shifts in meaningful social relationships and Study 2 tapped perceivers' beliefs about the inferential standards they regularly use to update their impressions. Study 3 was designed to examine negativity effects directly, by recording within-person changes in participants' impressions when the number and type of behavior observations were experimentally controlled. In this study, participants were given a single positive episode of a target's behavior, leading them to form an initial positive impression of the target. The trait domain (E, A, C, ES, O) of the positive behavior was manipulated across conditions. Subsequently, participants read 10 more behavior episodes, 6 of which described additional positive behaviors in the trait domain but 4 of which described negative behaviors in the domain. The question of interest: How much would impressions worsen after participants viewed the negative information? We hypothesized that for high-maintenance traits (A, C, and ES) positive impressions would be vulnerable to negativity effects and should worsen considerably. In contrast, for lower-maintenance traits like E and O, positive impressions should be more resistant to downward revision.

*Method*

*Participants.* Eighty-eight college students (46 female,  $M$  age = 21.5) participated in this study for cash reimbursement.

*Procedure.* Upon arrival, participants were assigned to one of five between-subjects target conditions. All participants read one positive target behavior, rated the personality of the target, and then read ten more target behaviors (six positive, four negative). Participants then rated their final impression of the target's traits. The five target conditions corresponded to the five Big Five trait domains. Participants in the extraversion condition, for example, read about a

target's positive and negative behaviors along the extraversion dimension (seven extraverted and four introverted behaviors). Participants in the agreeableness condition read about agreeable and disagreeable behaviors, and so on for the remaining conditions. Once participants had rated their final impressions of the target, they were debriefed and compensated.

*Target Behaviors.* For each of the Big Five trait dimensions, 11 behaviors (7 from the positive pole of the trait dimension, 4 from the negative pole) were written and piloted. In piloting, each potential behavior was given to 10 subjects who rated the behavior on the five trait dimensions, using 7 point scales. The criteria for use in the study was that a behavior had to score significantly higher on its intended trait dimension than on the other four dimensions, and if it was a positive pole behavior, it should score between 1.5 and 2.5 on its intended trait-dimension, and if it was a negative pole behavior, it should score between -1.5 and -2.5 on its intended trait-dimension. Analyses indicated that there were no significant differences among the Big Five conditions in the average extremity of the positive pole and negative pole behaviors. Sample behaviors are listed below:

Susan helped her floor-mate carry several bags of groceries up seven flights of stairs (agreeable).

Susan started a rumor about another girl on the floor who she didn't like (disagreeable).

In February, Adam attended five parties in one weekend (extraverted).

During freshman orientation, Adam didn't feel like socializing much, so he stayed in his room and read a book, refusing his roommate's invitations to go out (introverted).

For each condition, one positive behavior was chosen to serve as the initial stimulus presented to the perceiver (no significant differences existed across conditions in pilot ratings of initial behaviors). The remaining 6 positive (P) and 4 negative (N) behaviors were presented to the

perceiver in the following order: PPNPNNPNPP. In each condition, both female and male versions of the target were used (counterbalanced across subjects).

*Trait Ratings.* Participants in each condition rated their initial impression and final impression of the target on the relevant Big Five trait dimension. Ratings were made on a single 11-point Likert item with four trait adjectives anchoring each pole. For example, for extraversion the negative pole anchor was “introverted, reserved, quiet, timid” and the positive pole anchor was “extraverted, gregarious, talkative, bold.”

### *Results & Discussion*

The average initial and final trait ratings for each target are shown in Table 3. Initial impressions were similarly positive for all five targets. Differences emerged, however, in final impressions across the conditions. A significant effect of time in the repeated-measures ANOVA revealed that participants' impressions generally worsened from initial impression to final impression ( $F(1,83) = 109.30, p < .001$ ). A significant Trait X Time interaction indicated that impressions worsened more for some trait dimensions than others ( $F(4,83) = 5.95, p < .001$ ). As predicted, impressions declined most for the high-maintenance traits A, C, and ES, and least for the lower-maintenance traits E and O.

### General Discussion

As social psychologists, we know a great deal about how perceivers form initial impressions from small behavior samples (Gilbert, Pelham, & Krull, 1988; Ross, 1977; Trope, 1986). In general, we know that perceivers form impressions quickly based on relatively little behavioral evidence (Srull, 1981) and that they expect considerable consistency in the behaviors of others (McConnell, 2001). Most of this research has focused exclusively on *general* evaluations rather than on impressions of others with respect to *specific types* of traits. We know



comparatively little, however, about how perceivers update impressions as they acquire more information about one another's behaviors (which typically are not perfectly consistent; Mischel, 1968). In particular, much remains to be learned about how and why certain impressions *change* as they mature (for exceptions see Felmlee, 1995; Paulhus & Morgan, 1997; Rydell & McConnell, in press; Swann, Milton, & Polzer, 2000). Current explanations for impression stability and instability in Big Five domains have focused on the abundance of behavioral cues readily available to the perceiver (John & Robins, 1993). The results of Studies 1-3 suggest that trait-specific inferential mechanisms may also play a role in Big Five impression stability—a phenomenon located in the head of the perceiver, rather than in the amount of evidence the target offers up.

Our findings indicate that extraversion and openness are *lower-maintenance* trait domains: impressions of talkativeness and originality are not likely to be shaken by occasional observations of quiet or conventional behavior. Impressions of agreeableness, conscientiousness, and emotional stability, on the other hand, appear to be much *higher-maintenance*. Positive impressions of A, C, and ES appear to be particularly vulnerable to downward revision as people become better acquainted; a handful of negative behavior observations might suffice to knock out an initially positive reputation in these trait domains. As a result, even though evidence about a target's agreeableness might be harder to come by than evidence about her extraversion, infrequent glimpses of her disagreeable behavior may carry as much, or even more, weight than more frequent observations of her introverted behavior.

### *New Questions*

One might ask: *why* are impressions of extraversion and openness lower-maintenance than impressions of agreeableness, conscientiousness, and emotional stability? One possibility,

explored earlier in this paper, is that perceivers hold different meta-cognitive beliefs about how the five dispositions are expressed in behavior (Reeder & Brewer, 1979). Reeder and colleagues (Coover & Reeder, 1990; Reeder, 1993; Trafimow, Reeder, & Bilsing, 2001) have argued that laypeople hold different schemas for morality versus ability dispositions. Research in social perception and personality has provided some evidence that A, C, and ES might be dispositions that tap moral/communal qualities; whereas E and O might be dispositions that tap ability/agency qualities (Digman, 1997; Reeder et al., 1992). Our findings are consistent with this mechanism, as E and O showed similarly low levels of maintenance across the three studies and A, C, and ES showed similarly high levels of maintenance.

Alternative explanations, however, exist for the current pattern of results. Recent research has suggested that multiple mechanisms may play a role in diagnostic asymmetries across trait domains. One might argue, for example, that negative behaviors on the A, C, and ES continuum are simply less frequent (and therefore more diagnostic) than negative behaviors on the E and O continuum. If A, C, and ES are heavily socialized dimensions of personality, as some have argued (Digman, 1997), this mechanism provides a plausible alternative account of the higher maintenance of A, C, and ES. It also could be the case that negative behaviors on the A, C, and ES continuum elicit an especially high amount of negative affect (Trafimow, Bromgard, Finlay, & Ketelaar, 2005), or that negative A, C, and ES behaviors are particularly likely to be construed as the product of an antisocial motivation (Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002)—both contingencies that are likely to raise trait maintenance levels. Current research on the possible mechanisms underlying variations in inferential standards across trait domains is typically conducted by different researchers, each using different sets of trait adjectives. We believe the Big Five might prove to be a useful organizing framework for

future explorations of the exact mechanism(s) underlying patterns of impression maintenance across trait domains.

### *Conclusions*

This paper contributes to a growing effort to understand how perceivers update their impressions as the sample of available evidence increases during the course of acquaintanceship (Chen, 2003; Idson & Mischel, 2001; Kammrath, Mendoza-Denton, & Mischel, 2005; Read & Marcus-Newhall, 1993). Shifts in impressions, though not inevitable, occur quite frequently in developing relationships, as seen in recent studies of roommate relationships, romantic relationships, and work relationships (Felmlee, 2001; Paulhus, 1998; Swann et al., 2000; Ybarra, 2001). The results of the present studies suggest that Big Five impressions differ in their upward and downward mobility. Specifically, impressions of extraversion and openness seem to require an abundance of evidence to move substantially in either direction. Impressions of agreeableness, conscientiousness, and emotional stability on the other hand, require very little evidence to move downward but a great deal to keep up. More generally, these results suggest that impression change is not just a matter of the abundance of evidence, but of the ways in which perceivers weigh and construe that evidence. To advance our understanding of when and why impressions change, we should continue to explore the inferential rules perceivers bring to bear on the evidence the social world offers up.

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Footnotes

<sup>1</sup> Note that maintenance-level is a characteristic applied to the *entire* trait dimension, and is defined by the relationship between the minimum frequency levels used for the positive and negative poles of the trait.

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Table 1

*Change in impressions of roommate over one year of college (Study 1)*

Trait Factor	Initial Impression	Final Impression	Impression Change
Extraversion	1.31 <sub>a</sub>	1.22 <sub>a</sub>	-.08 <sub>a</sub>
Agreeableness	2.43 <sub>b</sub>	1.06 <sub>a</sub>	-1.37 <sub>b</sub>
Conscientiousness	.93 <sub>a</sub>	-.27 <sub>b</sub>	-1.20 <sub>b,c</sub>
Emotional Stability	1.15 <sub>a</sub>	.51 <sub>a</sub>	-.64 <sub>a,c</sub>
Openness	.87 <sub>a</sub>	.60 <sub>a</sub>	-.27 <sub>a</sub>

*Note.* Within each column, values that do not share a subscript differ significantly at  $p < .05$  (Fisher's LSD). Values in the impression change column are difference scores. Mean impression changes for A and C differed significantly from zero ( $t_s > 3.00$ ,  $p_s < .01$ ). For ES, mean impression change differed marginally from zero ( $t = 1.76$ ,  $p < .10$ ).

Table 2

*Maintenance Levels of Big Five Traits (Study 2)*

Trait Factor	Average MFL Ratings		Asymmetry
	Positive Pole	Negative Pole	
Extraversion	6.16 <sub>a</sub>	5.83 <sub>a</sub>	.33 <sub>a</sub>
Agreeableness	6.58 <sub>b</sub>	4.33 <sub>b</sub>	2.25 <sub>b</sub>
Conscientiousness	6.95 <sub>c</sub>	4.92 <sub>c</sub>	2.03 <sub>b</sub>
Emotional Stability	6.48 <sub>a</sub>	4.87 <sub>c</sub>	1.61 <sub>c</sub>
Openness	6.17 <sub>a</sub>	5.68 <sub>d</sub>	.49 <sub>c</sub>

*Note.* MFL = Minimum Frequency Level. Within each column, values that do not share a subscript differ significantly at  $p < .05$  (Fisher's LSD). Values in the asymmetry column are difference scores. All asymmetry values differ significantly from zero ( $ts > , ps < .05$ ).

Table 3

*Impression Change Following Four Negative Behaviors (Study 3)*

Trait Factor	Initial Impression	Final Impression	Impression Change
Extraversion	2.15 <sub>a</sub>	1.00 <sub>a,c</sub>	-1.15 <sub>a</sub>
Agreeableness	2.44 <sub>a</sub>	.17 <sub>a,b</sub>	-2.28 <sub>b</sub>
Conscientiousness	2.47 <sub>a</sub>	-.27 <sub>b</sub>	-2.73 <sub>b</sub>
Emotional Stability	1.72 <sub>a</sub>	-.67 <sub>b</sub>	-2.39 <sub>b</sub>
Openness	2.29 <sub>a</sub>	1.82 <sub>c</sub>	-.47 <sub>a</sub>

*Note.* Values represent mean trait ratings for each target condition. Within a column, values that do not share a subscript differ significantly at  $p < .05$  (Fisher's LSD).