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RUNNING HEAD: SELF-OTHER PERCEPTIONS OF MORAL CHARACTER

### **Agreement and Similarity in Self-Other Perceptions of Moral Character**

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**Abstract**

We surveyed well-acquainted dyads about two key moral character traits (Honesty-Humility, Guilt Proneness), as well as several other individual differences. We examined self-other agreement, similarity, assumed similarity, and similarity-free agreement (i.e., self-other agreement controlling for similarity and assumed similarity). Participants projected their own level of moral character onto their peers (i.e., moderately high assumed similarity), but were nonetheless able to judge moral character with reasonable accuracy (moderately high self-other agreement and similarity-free agreement), suggesting that moral character traits can be detected by well-acquainted others. Regardless of reporting method, Honesty-Humility and Guilt Proneness were correlated with delinquency, unethical decision making, and counterproductive work behavior, suggesting that unethical behavior is committed disproportionately by people with low levels of these character traits.

**Keywords:** moral character; observers; informants; self-other agreement; assumed similarity; Guilt Proneness; Shame Proneness; GASP; HEXACO; personality;

### **Agreement and Similarity in Self-Other Perceptions of Moral Character**

Judgments of moral character may be the most important interpersonal judgments that we make across different situations. Misjudging a person's level of a trait such as Extraversion may be consequential for party planning or choosing an engaging group leader, but not nearly as consequential as misjudging a person's moral character; the latter misjudgment could lead one to be swindled, defrauded, or betrayed. When we hear stories of people losing their life savings to con artists, colleagues, or worse—friends—we often wonder whether the exploited party could have or should have known that the offender was prone to unethical conduct. We might also wonder if the victims had naively assumed that their former “friends” were as moral as they themselves are. Yet, despite the importance of accurately estimating people's moral character in our everyday lives, the topic has received scant attention by social and personality psychologists.

The basic questions guiding the current research are: (1) Can we see moral character in others whom we know well?; and (2) Do we project our own sense of moral character onto others whom we know well? To address these questions, for two key aspects of moral character, Honesty-Humility and Guilt Proneness, we investigate different ways that individuals can agree: *self-other agreement*, *similarity*, *assumed similarity*, and *similarity-free agreement*. We label Honesty-Humility and Guilt Proneness “moral character traits” to capture the idea that they are indicative of a moral or ethical disposition. These constructs predict unethical decision-making and behaviors in myriad contexts (*Honesty-Humility and unethical behavior*: Ashton & Lee, 2008a, 2008b; Lee & Ashton, 2012; Lee, Ashton, Morrison, Cordery, & Dunlop, 2008; Marcus, Lee, & Ashton, 2007; *Guilt Proneness and unethical behavior*: Cohen, Panter, & Turan, 2012, 2013; Cohen, Panter, Turan, Morse, & Kim, 2013; Cohen, Wolf, Panter, & Insko, 2011; Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010; Tangney & Dearing, 2002; Tangney, Stuewig, &

Mashek, 2007; Tangney, Stuewig, Mashek, & Hastings, 2011; Tangney, Youman, & Stuewig, 2009). Shame Proneness, a close cousin of Guilt Proneness, is also investigated in this research, although it is not as central to moral character as the two aforementioned traits (Cohen, Panter, Turan, Morse, & Kim, 2013; Cohen et al., 2011; Tangney & Dearing, 2002; Tangney et al., 2009).

Our work is novel in that it documents the first time that observer reports have been collected for Guilt Proneness or Shame Proneness. It is important to know whether these traits can be measured in a non-self-report format, and to what extent peer-ratings correspond to self-ratings. Although prior studies have examined observer reports and self-reports of Honesty-Humility, they have been limited to college student samples (Ashton & Lee, 2010; Lee et al., 2009). We extend prior work by examining relations between observer reports and self-reports in broad community samples of adults. Personality and moral character traits change throughout adulthood (Orth, Robins, & Soto, 2010; Roberts & Mroczek, 2008), so it is important to sample adults of all ages to ensure generalizability of findings across different age groups.

#### **Four Relations between Self-Reports and Observer reports**

We investigated our research questions about moral character by examining four relations between self-reports and observer reports of Honesty-Humility and Guilt Proneness: (1) self-other agreement; (2) similarity; (3) assumed similarity; and (4) similarity-free agreement (see Figure 1). *Self-other agreement* addresses the question, “Does the target see himself or herself in the same way as he or she is seen by another perceiver?” (Kenny & West, 2010, p. 197). It is typically studied by evaluating the bivariate correlation between a person’s self-report and an observer report made by a perceiver (e.g., Lee et al., 2009; Watson, Hubbard, & Wiese, 2000). A strong correlation indicates high convergence between the target and the perceiver. *Similarity*

captures the extent to which two individuals rate themselves similarly (i.e., self-report similarity). Questions about similarity can be addressed by examining the strength of the relationship between self-reports made by two people (Lee et al., 2009; Watson et al., 2000). *Assumed similarity* addresses the question, “Does a perceiver see himself or herself as he or she sees another target?” (Kenny & West, 2010, p. 197). In other words, what is the bivariate correlation between a target’s self-report and that same person’s report about another person? Assumed similarity may be based on projection or it may be based on actual similarity between a target and a perceiver (Lee et al., 2009). Either way, assumed similarity captures the extent to which a person judges another individual consistently with the way he or she judges himself or herself (Cronbach, 1955). Finally, we introduce the term *similarity-free agreement* to refer to self-other agreement controlling for similarity and assumed similarity (cf. Lee et al., 2009). Similarity-free agreement captures the relationship between a target person’s self-report and an informant’s report about him or her after accounting for (i.e., removing the variance associated with) the informant’s self-report.

To further clarify the relationships shown in Figure 1, consider the following scenario. Imagine there are two friends, Person A and Person B. Both complete personality inventories about themselves (self-reports) and about their friend (observer reports). Let variable  $x$  represent Person A’s self-report, variable  $y$  represent Person B’s observer report of Person A, and variable  $z$  represent Person B’s self-report. We are not considering Person A’s observer report of Person B in this example, as the labels Person A and Person B are arbitrarily assigned. Self-other agreement is indicated by the correlation between  $x$  and  $y$  ( $r_{xy}$ ), similarity by the correlation between  $x$  and  $z$  ( $r_{xz}$ ), assumed similarity by the correlation between  $y$  and  $z$  ( $r_{yz}$ ), and similarity-free agreement by the partial correlation between  $x$  and  $y$  controlling for  $z$  ( $r_{xy.z}$ ).

Although none of these four relationships has been examined for Guilt Proneness or Shame Proneness, Lee and colleagues (2009) reported self-other agreement, similarity, assumed similarity, and similarity-free agreement correlations for Honesty-Humility among well-acquainted college students. Before delving into these prior findings, however, we first define Honesty-Humility and Guilt Proneness and describe prior research establishing these individual differences as moral character traits.

### **Honesty-Humility and Moral Character**

Extensive cross-cultural research in personality has revealed that there are six broad dimensions of personality. These six dimensions are known as the HEXACO factors: (H) Honesty-Humility, (E) Emotionality, (X) Extraversion, (A) Agreeableness, (C) Conscientiousness, and (O) Openness to Experience (Ashton & Lee, 2007; Ashton, Lee, & Goldberg, 2004; Lee & Ashton, 2012). Most readers are likely familiar with the latter five of these dimensions, as they correspond to the well-studied traits captured by the five-factor model of personality structure, often referred to as the “Big Five” (Costa & McCrae, 1985; Goldberg, 1990). Honesty-Humility is a more recently discovered personality trait, but is now well-established (for reviews, see Ashton & Lee, 2007, 2008a; Lee & Ashton, 2012)

As defined by Ashton and Lee (2007, p. 156), “Honesty-Humility represents the tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation.” It is different from Agreeableness in that “Agreeableness represents the tendency to be forgiving and tolerant of others, in the sense of cooperating with others even when one might be suffering exploitation by them” (2007, p. 156). Honesty-Humility, like the other HEXACO factors, is considered a broad personality dimension rather than a narrow trait. The four facets underlying this broad dimension are fairness, sincerity,

modesty, and greed-avoidance. Adjectives that reflect the Honesty-Humility dimension of personality include sincere, honest, faithful/loyal, modest/unassuming, and fair-minded. Adjectives that reflect a lack of Honesty-Humility include sly, greedy, pretentious, hypocritical, boastful, and pompous (Ashton & Lee, 2007).

Honesty-Humility, or “the H-factor”, emerged as a major personality factor in cross-cultural lexical studies and through re-analysis of extant personality data collected in the United States and throughout the world (for a review, see Lee & Ashton, 2012). The addition of the H-factor as a sixth dimension of personality largely contributes to the predictive advantage of the HEXACO model over traditional five-factor personality frameworks. The HEXACO consistently outperforms the Big Five in predicting unethical business decisions, cheating, delinquency, and sexual harassment, as well as Psychopathy, Narcissism, Machiavellianism, and other variables related to integrity (Ashton & Lee, 2008b; Lee & Ashton, 2005; Lee, Ashton, & de Vries, 2005; Lee et al., 2008; Marcus et al., 2007).

The evidence linking Honesty-Humility to unethical and criminal behaviors provides strong support for the notion that Honesty-Humility is a major component of moral character—low levels of this personality dimension are associated with unethical behaviors. For example, Hershfield, Cohen, and Thompson (2012, Study 4) investigated the likelihood that students would cheat in a laboratory task in which they could earn money and found that Honesty-Humility, but not the other HEXACO factors, uniquely predicted cheating. Likewise, Lee and colleagues (2005) found that Honesty-Humility predicted delinquency more strongly than the other five HEXACO dimensions in a variety of international samples, including in Australia, Canada, and the Netherlands (see also, Lee et al., 2008; Marcus et al., 2007).



### **Guilt Proneness, Shame Proneness, and Moral Character**

Guilt Proneness is a dispositional tendency to anticipate negative feelings about personal wrongdoing, even when the wrongdoing is not publicized (Cohen et al., 2012). People who are high in Guilt Proneness have internalized moral values, and they refrain from acting unethically due to the anticipation of feeling guilty about potential bad behavior. Accordingly, it has been shown that highly guilt-prone adults engage in less deviant and counterproductive business practices compared to adults with low levels of Guilt Proneness, and they are less deceptive in negotiation and when making economic interpersonal decisions (Cohen et al., 2011; Cohen, Panter, & Turan, 2013; Cohen, Panter, Turan, Morse, & Kim, 2013). Moreover, they engage in fewer risky and illegal behaviors, have less jail experience, and fewer felony convictions compared to adults with low levels of Guilt Proneness (Dearing, Stuewig & Tangney, 2005; Tangney & Dearing, 2002; Tangney et al., 2009; Tangney, et al., 2011). Guilt Proneness is strongly correlated with Honesty-Humility (e.g.,  $r = .51$  in Cohen et al., 2011, Study 2), and this correlation is higher than the corresponding correlations between Guilt Proneness and the other HEXACO dimensions.

To clarify the adaptive properties of Guilt Proneness, it is helpful to compare it to its close relative, Shame Proneness. Though shame and guilt are each considered self-conscious moral emotions, their focus of evaluation and eliciting events are different. Shame occurs when one makes a negative evaluation of one's self, whereas guilt occurs when one makes a negative evaluation of a specific behavior (Tangney & Dearing, 2002). Although guilt and shame can each occur in private as well as public settings, people's negative self-evaluations to public transgressions are more indicative of their level of Shame Proneness, whereas people's negative behavior-evaluations to private transgressions are more indicative of their level of Guilt

Proneness (Smith, Webster, Parrott, & Eyre, 2002; Wolf, Cohen, Panter, & Insko, 2009). The reason for this public-private difference, we believe, is that when people commit transgressions in public, they are more likely to think of themselves as others see them—as a whole person. Conversely, when people commit transgressions in private, they are relatively more able to focus on the specifics of what they did, rather than their global self.

It is important to distinguish Shame Proneness from Guilt Proneness because of the differential behaviors that are associated with each trait. Unlike Guilt Proneness, Shame Proneness is associated more strongly with a desire to hide or withdraw from the situation following a transgression (Cohen et al., 2011; Tangney & Dearing, 2002; Wolf et al., 2009). Guilt Proneness, on the other hand, is associated more strongly with a desire to repair for one's transgression. In fact, conceptually (but not necessarily empirically), repair and withdrawal action tendencies are so tightly linked with guilt and shame that a widely-used guilt and shame individual difference assessment, the Test of Self-Conscious Affect (Tangney & Dearing, 2002; Tangney, Dearing, Wagner, & Gramzow, 2000), includes items measuring repair and withdrawal action tendencies in the scales designed to measure Guilt Proneness and Shame Proneness, respectively. Nonetheless, more recent work has shown that it is possible to empirically separate a person's repair action orientation from their guilt proneness and their withdrawal action orientation from their shame proneness (Cohen et al., 2011; Wolf et al., 2009). Therefore, in the current research, we measured Guilt-Repair Orientation and Shame-Withdrawal Orientation separately from Guilt Proneness and Shame Proneness. The latter two constructs represent the tendency to make negative behavior-evaluations to private transgressions (Guilt Proneness) and the tendency to make negative self-evaluations to public transgressions (Shame Proneness), whereas the former two constructs represent the tendency to take repair-oriented actions

following private transgressions (Guilt-Repair Orientation) and the tendency to avoid others following public transgressions (Shame-Withdrawal Orientation). Empirically, Guilt Proneness, Shame Proneness, and Guilt-Repair Orientation are highly correlated, albeit they emerge as separate factors in exploratory and confirmatory factor analyses (Cohen et al., 2011). Shame-Withdrawal Orientation, on the other hand, is only weakly related to the three other factors, and unlike the others, Shame-Withdrawal is associated with more *immoral* behavior (e.g., increased delinquency) (Cohen et al., 2011).

### **Are Moral Character Traits Observable?**

The evidence reviewed above indicates that Honesty-Humility and Guilt Proneness are indicative of moral character. Self-reports of these traits predict unethical choices; but, what about observer reports? Can these moral character traits also be detected by others? To date, there has been no investigation that has examined observer reports of Guilt Proneness or Shame Proneness, so it is an open question as to whether others can detect these personality traits in their acquaintances. Self-other agreement for Honesty-Humility has been investigated in studies assessing the across-reporter validity of the HEXACO model (Ashton & Lee, 2010; Lee et al., 2008; Lee et al., 2009). Ashton and Lee (2010) collected self- and observer reports of Honesty-Humility and the other HEXACO dimensions from more than 1,000 college students. They investigated self-other agreement among friends who either knew each other very well or relatively less well. Self-other agreement for Honesty-Humility among the well-acquainted pairs was moderately high ( $r = .52$ ), and similar in magnitude to the self-other agreement for the other five major personality dimensions: Emotionality  $r = .65$ , Extraversion  $r = .55$ , Agreeableness  $r = .52$ , Conscientiousness  $r = .53$ , and Openness to Experience  $r = .58$ . The corresponding agreements for friends who were less well-acquainted were considerably lower, especially for

Honesty-Humility ( $r = .27$ ), Agreeableness ( $r = .21$ ), and Conscientiousness ( $r = .28$ ); compared to Emotionality  $r = .50$ , Extraversion  $r = .50$ , and Openness to Experience  $r = .43$  (Ashton & Lee, 2010, p. 284). These findings indicate that Honesty-Humility, like the Big Five dimensions, is indeed observable by well-acquainted college students, but may not be particularly observable to strangers.

The relatively low self-other agreement for Honesty-Humility among less acquainted college students suggests that one must know a person reasonably well to form an accurate judgment of their character. Indicators of moral character are likely more subtle than indicators of highly visible traits, like Extraversion, which has a number of readily observable behaviors associated with it, such as talkativeness (Connelly & Ones, 2010; John & Robins, 1993; Vazire, 2010; Watson et al., 2000). Thus, it may take a considerable amount of time, samples of behavior, and experience with a person to be able to see moral character. As anyone who has ever gone through a breakup of a friendship or romantic relationship can attest, it can sometimes take a long while and a variety of experiences to see someone's true colors.

### **Do People Project their Character Traits onto Others?**

Although no investigation has examined observer reports of Guilt Proneness or Shame Proneness,<sup>1</sup> a prior article by Lee and colleagues (2009) reported self-other agreement, similarity, assumed similarity, and similarity-free agreement correlations for Honesty-Humility and the other five HEXACO dimensions. The first study in that article examined those relationships among 800 well-acquainted college students (400 dyads). Self-other agreement for Honesty-Humility was high ( $r = .54$ ), but so was assumed similarity ( $r = .44$ ); similarity was moderate ( $r = .28$ ). Despite the high observed levels of assumed similarity and moderate levels of similarity, these relations were not the primary source of the self-other agreement—similarity-

free agreement was also high: The partial cross-source correlation controlling for the other partner's self-report was .48. In other words, observer reports of Honesty-Humility corresponded to self-reports, above and beyond any projection or similarity among the dyad members.

A pattern similar to that of Honesty-Humility was found for Openness to Experience, but not the other four HEXACO dimensions (Lee et al., 2009, Study 1). Like Honesty-Humility, Openness to Experience showed high self-other agreement ( $r = .58$ ), assumed similarity ( $r = .35$ ), and moderate similarity ( $r = .23$ ), as well as strong similarity-free agreement (partial  $r = .55$ ). In contrast, the other HEXACO dimensions showed high levels self-other agreement ( $r_s = .48$  to  $.64$ ), yet low levels of assumed similarity ( $r_s = -.07$  to  $.11$ ) and similarity ( $r_s = -.10$  to  $.14$ ).<sup>2</sup>

In a subsequent study (Lee et al., 2009, Study 3), they found that assumed similarity for Honesty-Humility was higher among friends ( $r = .48$ ) than among non-friends ( $r = .26$ ), and the same was true for Openness to Experience ( $r = .33$  vs.  $.16$ ), but not for Agreeableness ( $r = .06$  vs.  $-.04$ ). They point out that Honesty-Humility and Openness to Experience are more strongly associated with personal values than the other HEXACO dimensions. Accordingly, they interpret their results as indicative of “a tendency to overestimate one's similarity to persons with whom one has a close relationship, but only on those personality characteristics whose relevance to values gives them central importance to one's identity” (Lee et al., 2009, p. 460). This conclusion is important for the current research because while it is unknown as to whether people project their Guilt Proneness onto others, we expect that Guilt Proneness is relevant to people's moral values, much like Honesty-Humility. Accordingly, we should expect high assumed similarity for both Honesty-Humility and Guilt Proneness.

### Hypotheses

Extrapolating from the prior research, we hypothesize that the moral character traits of Honesty-Humility and Guilt Proneness will be detectable by well-acquainted peers, as evidenced by high self-other agreement correlations for Honesty-Humility and Guilt Proneness. In addition, we hypothesize that people will project their moral character traits onto their peers, as evidenced by high assumed similarity correlations for Honesty-Humility and Guilt Proneness. However, this projection will not be the sole basis for self-other agreement. Instead, we should also find high similarity-free agreement partial correlations for Honesty-Humility and Guilt Proneness, which would indicate self-observer agreement beyond the effects of actual and assumed similarity. Considering the issue of power and precision, we note that we expect to find moderately large correlations (e.g.  $r_s \sim .50$ ), based on the research with the HEXACO scales reviewed above (Ashton & Lee, 2010; Lee et al., 2008; Lee et al., 2009). Given that each of our studies contain more than 300 participants, we will have ample statistical power to detect significant effects.

We have more reason for *a priori* confidence about our predictions for the character trait of Honesty-Humility than for the character trait of Guilt Proneness given that self-other agreement and assumed similarity correlations have never before been reported Guilt Proneness. Guilt is an internal psychological state and often occurs privately within someone's own mind. So, it is possible that the character trait of Guilt Proneness is not as readily observable as Honesty-Humility. Accordingly, a plausible alternative hypothesis is that Guilt Proneness will *not* be detectable or visible to others, so self-other agreement and similarity-free agreement will be low. Therefore, our prediction that Guilt Proneness is observable by well-acquainted others

might be best framed as a tentative one that we will explore in two studies of well-acquainted adults.

Although not a central focus of this research, Study 2 includes data relevant to testing the stability of moral character over time vis-à-vis other dimensions of personality. Therefore, in Study 2 we report test-retest correlations for self-report assessments of the Guilt and Shame Proneness scale (GASP; Cohen et al., 2011) and the HEXACO Personality Inventory (Ashton & Lee, 2009) administered 14 weeks apart. To date, there have been no published studies examining test-retest reliability of the GASP or HEXACO scales, so documentation of these correlations is important for the personality and measurement literatures, and other areas using these scales.<sup>3</sup>

### **Study 1**

The central aims of Study 1 were to investigate self-other agreement, similarity, assumed similarity, and similarity-free agreement of two moral character traits: Honesty-Humility and Guilt Proneness. We also examined the four relationships for Guilt-Repair Orientation, Shame Proneness, and Shame-Withdrawal Orientation, and the Big Five. In addition, Study 1 included measures of self-reported delinquency and unethical business decisions, which were used to establish criterion validity for the moral character traits. We predicted that self-reports of Honesty-Humility and Guilt Proneness would each be significantly correlated with delinquency and unethical business decisions, given that these relationships have been documented in prior empirical papers (e.g., Ashton & Lee, 2008b; Cohen et al., 2011). To the extent that self-reports and observer reports both assess moral character, we should also find significant correlations between the criterion variables and the observer reports of Honesty-Humility and Guilt Proneness.

We explored the relative concurrent validity of the two reporting methods, although we did not have *a priori* hypotheses about whether self-reports or observer reports would be more strongly associated with the criterion variables. In the job performance domain, it has been found that observer reports of the Big Five personality dimensions offer predictive advantages over self-reports (Connelly & Hülshager, 2012; Connelly & Ones, 2010; Oh, Wang, & Mount, 2011), but it is unclear as to whether that finding generalizes to moral character and self-reported unethical behavior.

## Method

### Participants

Participants ( $N = 320$  individuals / 160 dyads) were recruited in pairs to complete a 15-minute computerized survey titled “Rate Your Friend.” The study was conducted in a mobile research laboratory (i.e., a “datatruck” containing eight cubicles with laptop computers) that parked in various locations around the city of Pittsburgh, Pennsylvania. As appreciation for their participation, each participant who completed the study was given \$5.

The sample was 48.4% female, with 66.5% White, 13.5% Black, 9.7% Asian, 2.5% Hispanic, and 7.8% other or multi-racial. Participants’ ages ranged from 18 to 85 years ( $M = 29.72$ ,  $SD = 14.03$ ). On average, participants reported being well-acquainted with their counterpart ( $M = 3.98$ ,  $SD = 1.07$  on a five-point scale with 1 = *not very well*, and 5 = *extremely well*). The length of time the pair members knew one another varied from as little as two days to as much as 63 years. Most individuals reported being friends with their counterpart (35.0%), although other kinds of relationships were represented in the sample as well, including unmarried partners (20.9%), spouses (11.3%), relatives (10.0%), coworkers (5.9%), acquaintances (3.4%),



roommates (1.6%), and neighbors (0.9%). In addition, 10.9% of the sample reported other or multiple types of relationships.

### **Procedure**

The survey began with a short demographic questionnaire in which participants provided their gender, age, and other demographic information. Next, participants answered questions about their counterpart (i.e., “the person you are rating”). They were asked the person’s name, how long they had known them, how well they knew the person, and the nature of their relationship with the person (e.g., friend, relative, etc.). Participants then completed observer reports of the Guilt and Shame Proneness scale (GASP) (Cohen et al., 2011); the ten Honesty-Humility items from the HEXACO-60 (Ashton & Lee, 2009) and the Ten Item Personality Inventory (TIPI) (Gosling, Rentfrow, & Swann, 2003), which assesses the Big Five traits. These three scales were presented in a randomized order for each participant, and items within each scale were randomized for each participant. In the subsequent survey section, participants completed self-report versions of the same three scales, also in a randomized order with items within each scale randomized. A subset of respondents ( $n = 208$ ) completed a final survey section in which they completed self-report measures of delinquency and unethical business decisions (UBD).<sup>4</sup> Tables with the descriptive statistics, and correlations are provided in the online supplement (Tables S1 & S2). Because the various scales use different response formats, the moral character and personality variables were standardized prior to analysis for ease of interpretation.

### **Measures**

**GASP.** Guilt Proneness, Guilt-Repair Orientation, Shame Proneness, and Shame-Withdrawal Orientation were assessed with the GASP (Cohen et al., 2011). Each of the four

subscales of the GASP contains four items. The current research is the first time the GASP has been administered in an observer report format, so we describe that version below. Details on the self-report version can be found in Cohen et al.'s (2011) scale development paper.

In the observer report version of the GASP, participants were instructed to imagine the person they were rating in a variety of situations that people are likely to encounter in day-to-day life and indicate the likelihood that they would react in the way described (*1 = very unlikely, 2 = unlikely, 3 = slightly unlikely, 4 = about 50% likely, 5 = slightly likely, 6 = likely, 7 = very likely*). The Guilt-Proneness items described private transgressions and respondents indicated the likelihood that the person they were rating would feel bad about their behavior as a result of these transgressions. The Guilt-Repair Orientation items asked respondents to indicate the likelihood that the person they were rating would take repair-oriented actions (e.g., attempt to make amends or improve themselves in the future) after committing private transgressions. The Shame-Proneness items described public transgressions and respondents indicated the likelihood that the person they were rating would feel bad about themselves as a result of these transgressions. The Shame Withdrawal-Oriented items asked respondents to indicate the likelihood that the person they were rating would hide or avoid others after committing public transgressions.

A sample Guilt Proneness item is: "After realizing he/she has received too much change at a store, he/she decides to keep it because the salesclerk doesn't notice. What is the likelihood that he/she would feel uncomfortable about keeping the money?" A sample Guilt-Repair Orientation item is, "He/She reveals a friend's secret, though the friend never finds out. What is the likelihood that this failure to keep the secret would lead him/her to exert extra effort to keep secrets in the future?" A sample Shame Proneness item is, "He/She successfully exaggerates

damages in a lawsuit. Months later, his/her lies are discovered and he/she is charged with perjury. What is the likelihood that he/she would think he/she is a despicable human being?” A sample Shame-Withdrawal Orientation item is, “After making a big mistake on an important project at work in which people were depending on him/her, his/her boss criticizes him/her in front of coworkers. What is the likelihood that he/she would feign sickness and leave work?”

The GASP was scored by averaging the four items in each subscale. Higher scores represent greater Guilt Proneness, Guilt-Repair Orientation, Shame Proneness, and Shame-Withdrawal Orientation, respectively. Three of the GASP subscales had adequate internal consistency for both the observer report and self-report forms ( $\alpha \geq .68$ ); the Shame-Withdrawal Orientation subscale had somewhat low internal consistency for the self-report ( $\alpha = .60$ ) and the observer report ( $\alpha = .53$ ).

**Honesty-Humility.** Honesty-Humility was assessed with ten items from the HEXACO-60 revised personality inventory (Ashton & Lee, 2009). None of the other HEXACO dimensions besides Honesty-Humility were assessed, as the other dimensions of the HEXACO share a high degree of conceptual overlap with the Big Five dimensions that were assessed with the TIPI. For the observer reports of Honesty-Humility, participants were asked to indicate the extent to which they agreed or disagreed with 10 statements about the person they were rating using a five-point scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Sample observer report items include, “He/she’d be tempted to use counterfeit money, if he/she were sure he/she could get away with it,” and “He/she wants people to know that he/she is an important person of high status.”

Honesty-Humility composites were formed by averaging the 10 scale items, after reversing six of them. Higher scores represent greater Honesty-Humility. The self-report and observer report measures of Honesty-Humility had adequate internal consistency ( $\alpha \geq .72$ ).

**Big Five.** Emotional Stability, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience were assessed with the TIPI (Gosling et al., 2003). Each Big Five dimension was measured with two items, and each item contained a pair of traits. The coefficient alphas for the two-item TIPI scales were low ( $\alpha = .34$  to  $.67$ ). The reliability estimates we obtained matched those obtained by Gosling et al. (2003) in their scale development work. On the TIPI website ([http://homepage.psy.utexas.edu/homepage/faculty/gosling/tipi\\_alpha\\_note.htm](http://homepage.psy.utexas.edu/homepage/faculty/gosling/tipi_alpha_note.htm)), Gosling points out that the TIPI was not designed to have high internal consistency but rather to optimize construct validity and measure broad domains with a very short instrument.

**Delinquency.** The delinquency scale was developed by Ashton and Lee (Ashton & Lee, 2008b) to validate the HEXACO inventory and subsequently used by Cohen and colleagues (2011) to validate the GASP scale. The scale contains six general delinquency items that ask participants to report (a) the total dollar value of items they had purchased that they knew or suspected to have been stolen; (b) the total dollar value of items they had stolen, not including those taken from their workplace; (c) the total dollar value of items they smuggled into the country; (d) the number times they entered a theatre, concert, park, sports facility, et cetera without paying the entrance fee; (e) the total dollar value of property damage they caused by deliberate vandalism, sabotage, or pranks, not including damage done at their workplace; and (f) the percentage of exams they cheated on in high school and/or college. Each item had eight

response options, with higher scores indicative of more delinquency. We standardized and averaged these six items to form a composite index of delinquency ( $\alpha = .78$ ).

**Unethical business decisions.** The UBD scale was also developed by Ashton and Lee (2008b) and subsequently used by Cohen et al. (2011). Respondents are presented with ethical dilemmas in which financial interests are pitted against ethical concerns (e.g., harming others). For example, one item asks respondents whether they would market an extremely profitable food product for which they could receive a raise and promotion even though the product has known health risks. Responses are made on a four-point scale ranging from 1 = *definitely not* to 4 = *definitely yes*.

In the current study, each participant only received three out of a possible six questions to keep the survey length less than 15 minutes. The three UBD questions were randomly selected for each participant. Because no individuals responded to all six items, the internal consistency coefficient was not obtainable using the traditional method. Thus, to compute internal consistency for the UBD scale, we imputed missing values using the expectation maximization (EM) algorithm (Enders, 2003). After the imputations, we calculated the internal consistency coefficient in the usual fashion, finding that the three-dilemma version of UBD scale was reliable ( $\alpha = .86$ ).

## Results & Discussion

Consistent with previous research examining the four types of relationships among self-reports and observer reports (Lee et al., 2009; Watson et al., 2000), we tested for evidence of self-other agreement and assumed similarity with zero-order correlations. Self-other agreement was the correlation between the target's self-report and the partner's observer report. Assumed similarity was the correlation between the target's self-report and the target's observer report

about their partner. Because the assignment of dyad members as Person A or Person B is arbitrary, we tested for evidence of similarity using intraclass correlations (ICCs) of self-reports of one dyad member with self-reports of the other dyad member. Similarity-free agreement was operationalized as the partial self-other agreement correlation controlling for the other dyad member's self-report. The similarity-free agreement values were calculated using an online calculator to compute the partial correlation  $r_{xy.z}$ , where  $r_{xy}$  represents the self-other agreement correlation,  $r_{yz}$  represents the assumed similarity correlation, and  $r_{xz}$  represents the similarity ICC (Lee et al., 2009). Table 1 reports the results of these analyses.

As shown in Table 1, self-other agreement for both Honesty-Humility and Guilt Proneness was high ( $rs = .43$ ). In addition, assumed similarity was also high ( $rs = .48$  and  $.59$  for Honesty-Humility and Guilt Proneness, respectively). These values could be due to biased projections, but they could also be indicative of accurate recognition of the similarity among the dyad members, given that the participants' self-reports of moral character suggest some similarity (ICCs =  $.23$  and  $.25$  for Honesty-Humility and Guilt Proneness, respectively). Nonetheless, the moderate similarity-free agreement partial correlations (partial  $rs = .37$  and  $.36$ , for Honesty-Humility and Guilt Proneness, respectively) suggests that beyond similarity and projection, well-acquainted adults can judge the moral character of their peers somewhat accurately. As shown in Table 1, these estimates are overall similar to the values obtained for the Big Five scales.<sup>5</sup>

Self-reported delinquency and unethical decision-making each were significantly correlated with Honesty-Humility and Guilt Proneness, both with self-reports ( $rs = -.38$  to  $-.44$ ,  $ps < .001$ ) and observer reports ( $rs = -.27$  to  $-.35$ ,  $ps < .001$ ) (see Table S2 in Online Supplement). Tables 2 and 3 report regression results of delinquency and unethical decision-

making controlling for gender and age. We controlled for these variables because prior research has found that gender and age are correlated with both moral character traits and unethical choices (e.g., Cohen et al., 2011, 2012; Kish-Gephart, Harrison, & Treviño, 2010).

Table 2 shows that for delinquency, the self-reported individual difference variables (i.e., Guilt Proneness, Guilt-Repair, Shame Proneness, Shame-Withdrawal, Honesty-Humility, Emotional Stability, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience) together accounted for significant variance ( $\Delta R^2 = 17\%$ ,  $p < .001$ ) beyond gender and age (which alone accounted for 14%). The observer reports did not account for significant incremental variance beyond the self-reports ( $\Delta R^2 = 4\%$ ,  $p = .29$ ). When entered in the reverse order (with observer reports entered before self-reports), the observer reports accounted for significant variance ( $\Delta R^2 = 11\%$ ,  $p = .004$ ) in delinquency beyond gender and age; self-reports accounted for significant incremental variance in delinquency beyond observer reports ( $\Delta R^2 = 11\%$ ,  $p = .002$ ).

For unethical business decisions, gender and age alone accounted for 15% of the variance, and the self-reported variables accounted for an additional 17% ( $p < .001$ ). In contrast to the delinquency model, the observer reports accounted for significant additional variance ( $\Delta R^2 = 7\%$ ,  $p = .02$ ) in unethical business decisions beyond the self-reports. When entered in the reverse order (with observer reports entered before self-reports), the observer reports accounted for significant incremental variance in unethical business decisions beyond gender and age ( $\Delta R^2 = 14\%$ ,  $p < .001$ ), and self-reports accounted for significant incremental variance beyond observer reports ( $\Delta R^2 = 10\%$ ,  $p = .001$ ).

Model 4 in Table 2 was nonsignificant for both delinquency and unethical business decisions, indicating that the relationships between the observer reports and the criterion variables were not moderated by acquaintanceship.

Whereas the analyses in Table 2 looked at overall model fit, the analyses in Table 3 examined each trait individually. Due to issues of multicollinearity among the variables, separate models were computed for each trait. Gender and age were included as controls. We calculated multiple correlations ( $R$ ),  $R^2$ , and standardized regression weights ( $\beta$ ) from models with both self-reports and observer reports, following the approach used by Connelly and Hülshager (2012). The regression weights indicate the relative importance of each rating source when combined in the same model. The  $\Delta R^2$  values indicates the improvement in  $R^2$  when the term is added in the combined model beyond the other rating source (i.e.,  $\Delta R^2$  for self-report indicates the change in  $R^2$  for regressing the outcome on self-report plus observer report compared to observer report alone;  $\Delta R^2$  for observer report indicates the change in  $R^2$  for regressing the outcome on self-report plus observer report compared to self-report alone).

As shown in Table 3, observer reports of Honesty-Humility predicted self-reported delinquency above and beyond self-reported Honesty-Humility, gender, and age. The same pattern was found for Guilt Proneness. The observer reports of Honesty-Humility and Guilt Proneness did not account for significant unique variance in the unethical decision-making regression models, although the effects for Honesty-Humility were marginal. Corresponding analyses of the other variables show somewhat smaller and less consistent relationships with the criterion variables, both for the self-reported variables and the observer reported variables.

Overall, the results in Table 2 and Table 3 suggest that self-reports have more predictive validity than observer reports for modeling self-reported delinquency and unethical business



decisions. It is possible that this is due to shared method variance, as the criterion variables were self-reported. However, it is also possible that self-reports provide a more valid assessment of moral character than do observer reports. Indeed, people are more privy to information about their own thoughts and feelings than the thoughts and feelings of other people, so it is possible that people can more accurately predict their own responses to transgressions than the responses of others. We will address this issue in Study 2, which includes additional self-report and non-self-report criterion variables.

## Study 2

Study 2 extends the previous study in several ways. First, it utilized a different sampling method. Whereas the participants in Study 1 were dyads recruited from Pittsburgh streets, in Study 2 participants were full-time employees and coworkers recruited from an online panel of adults across the entire United States. Replication of the results with a diverse, independent sample will add confidence to the conclusions reached in the previous studies. Second, Study 2 contained the full HEXACO-60 inventory (Ashton & Lee, 2009), allowing us to compare the moral character traits to the other five major personality dimensions using a more reliable measure than the TIPI. Third, Study 2 included self-reports and observer reports of counterproductive work behavior (CWB) and organizational citizenship behavior (OCB)—behaviors that are regarded as immoral and moral by working adults (Cohen, Panter, Turan, Morse, & Kim, 2013). Acts of CWB are behaviors that harm the organization or people within it (e.g., being rude to clients, taking office supplies without permission, leaving earlier than one is allowed), whereas acts of OCB are behaviors that help the organization or people within it (e.g., mentoring coworkers, changing vacation schedules or work shifts, offering suggestions for improving how work is done). Finally, Study 2 included test-retest data of personality and

character traits from surveys administered three months apart, allowing us to examine whether character traits are stable across a three-month time interval.

## **Method**

### **Participants & Procedure**

Study 2 used data from the Work Experiences and Character Traits (WECT) Project (see <http://WECTProject.org> for a complete study description).<sup>6</sup> Participants were 1,514 members of an online panel administered by a private survey research firm, plus a coworker for 341 of them. The participants were a diverse group of American adults, living in all 50 U.S. states, as well as the District of Columbia.<sup>7</sup>

The study was a three-month online diary study in which participants completed a battery of measures in the initial and final surveys of the project, and 12 weekly surveys about their behavior and experiences at work. The initial and final batteries were administered 14 weeks apart, and included the GASP (Cohen et al., 2011) and HEXACO-60 (Ashton & Lee, 2009) in a randomized order with items within each scale randomized. They were followed by other questionnaires about the respondent's personality and job. Assessing the GASP and HEXACO variables at the start and end of the project allowed us to examine test-retest reliability. Of the 1,514 participants who completed the initial survey, 845 of them (55.8%) completed the final survey.

### **Weekly Surveys**

Participants completed a survey each week investigating their work experiences and behaviors. The weekly survey included the 32-item CWB-Checklist (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006) and the 20-item OCB-Checklist (Fox, Spector, Goh, Bruursema, & Kessler, 2012). The CWB and OCB items were intermixed and presented in a

randomized order for each respondent. Participants indicated the number of times they did each CWB and OCB act during the past week at work, using a five-point scale ranging from 0 (*not at all this week*) to 4 (*four or more times this week*). The questionnaire included a “not applicable” response option for each item, and these responses were coded as missing data. We used a 10% threshold for missingness when calculating composite sum scores. Thus, if there was missing data on four or more CWB items, or three or more OCB items, no score was given on the measure.

We averaged the self-reported CWB scores across the 12 weekly surveys to create an aggregate measure of self-reported weekly CWB for the purposes of computing correlations with the moral character and personality variables. Likewise, we averaged the self-reported OCB scores across the 12 weekly surveys to create an aggregate measure of self-reported weekly OCB. For the regression analyses, we retained the separate weekly assessments and used multilevel modeling to account for the nesting of CWB and OCB within persons over time.

### **Coworker Survey**

A month after the start of the project, participants were asked to invite a coworker to complete a survey about them by providing an email address to the survey research firm. Of the 683 coworkers for whom a valid email address was provided, 341 completed the survey (49.9% response rate).<sup>8</sup> The coworker surveys were completed a little over a month after participants completed the initial survey ( $M = 39.15$  days,  $SD = 9.11$ ). The length of time the coworkers knew one another varied from two months to 50 years, but most reported knowing them well ( $M = 4.19$ ,  $SD = 0.74$ ; ratings made on a five-point scale anchored by 1 = *not very well* and 5 = *extremely well*).

The coworker survey included observer reports and self-reports of the GASP, HEXACO-60, CWB-32 checklist, and OCB-20 checklist. The observer reports were completed before the self-reports. For the CWB and OCB scales, the coworkers were asked to “indicate how often the person you are rating (your co-worker) did each of the following things at your job during the *past month*” using a five-point scale ranging from 0 (*not at all this month*) to 4 (*four or more times this month*). A longer timeframe was used for the coworkers (one month versus one week for the self-reports) because we surveyed them only once and many of the behaviors in the checklists are rare and difficult to observe.

### Results

Tables S3 and S4 in the Online Supplement contain descriptive statistics and correlations (see also [www.WECTProject.org/?page\\_id=234](http://www.WECTProject.org/?page_id=234)). Table 4 presents the relations among the observer reports and self-reports of the GASP and HEXACO variables, along with the test-retest correlations. Unlike Study 1, in Study 2, we only had observer reports from one dyad member (i.e., the coworker of the participant), so similarity was assessed with bivariate correlations rather than ICCs because the assignment of dyad members as Person A or Person B was not arbitrary. Similarity correlations were moderately high for Guilt Proneness and Honesty-Humility, and we also observed moderately high self-other agreement, assumed similarity, and similarity-free agreement. The four relations were strong for the other GASP and HEXACO variables as well.<sup>9</sup>

The test-retest correlations for the moral character traits were strong and statistically significant: Honesty-Humility  $r(845) = .66, p < .001$ ; Guilt Proneness  $r(839) = .67, p < .001$ . These results demonstrate that moral character traits have a strong degree of stability over a three-month span. The test-retest correlations for the other HEXACO dimensions were slightly higher ( $r_s = .71$  to  $.83$ ), possibly suggesting that moral character is somewhat less stable than

other aspects of personality. It is unclear if the differences in stability between Guilt Proneness and Honesty-Humility versus the other personality traits are due to the moral character per se, but the possibility that moral character is somewhat less stable than other aspects of personality is an intriguing possibility that warrants further investigation.

### **Observer reports of CWB and OCB**

CWB and OCB are count variables and not normally distributed. Therefore, we analyzed CWB and OCB with Kendall's *Tau-b* correlations (Tables 5 and 6) and negative binomial regression models (Tables 7 and 8). The negative binomial regression models were estimated in Mplus 6.11 (Muthén & Muthén, 1998-2011) with maximum likelihood estimation with robust standard errors (MLR). The models controlled for gender and age given that prior research has shown that gender and age are correlated with moral character traits and unethical behavior (Cohen et al., 2012, 2013; Kish-Gephart et al., 2010). Separate models were estimated for each trait, and observer reports and self-reports from the initial survey were included simultaneously in the models, so the estimates indicate the relative importance of each rating source when combined in the same model.

Observer reports of CWB were negatively correlated with observer reports of Guilt Proneness ( $Tau-b = -.21, p < .001$ ) and Honesty-Humility ( $Tau-b = -.25, p < .001$ ); they were also negatively correlated with self-reports of Guilt Proneness, regardless of whether the trait was measured in the initial survey ( $Tau-b = -.19, p < .001$ ) or the final survey ( $Tau-b = -.14, p = .003$ ), and the same was true for Honesty-Humility assessed in the initial survey ( $Tau-b = -.17, p < .001$ ) and final survey ( $Tau-b = -.14, p = .002$ ).

When the observer report of Guilt Proneness and the initial self-report of Guilt Proneness were entered simultaneously into a negative binomial regression model predicting observer

reports of CWB, controlling for age and gender, the self-report of Guilt Proneness was significant ( $B = -.31, SE = .15, p = .04$ ), but the observer report was not ( $B = -.18, SE = .15, p = .24$ ). A parallel analysis for Honesty-Humility revealed the opposite—the self-report of Honesty-Humility was nonsignificant ( $B = -.07, SE = .12, p = .56$ ), but the observer report was significant ( $B = -.84, SE = .13, p < .001$ ).<sup>10</sup>

Observer reports of OCB were positively correlated with observer reports of Guilt Proneness ( $Tau-b = .28, p < .001$ ), and Honesty Humility ( $Tau-b = .18, p < .001$ ); they were also positively correlated with self-reports of Guilt Proneness, regardless of whether the trait was measured in the initial survey ( $Tau-b = .22, p < .001$ ) or the final survey ( $Tau-b = .24, p < .001$ ), and the same was true for Honesty-Humility assessed in the initial survey ( $Tau-b = .20, p < .001$ ) or the final survey ( $Tau-b = .18, p < .001$ ).

When the observer report of Guilt Proneness and the initial self-report of Guilt Proneness were entered simultaneously into a negative binomial regression model predicting observer reports of OCB, controlling for age and gender, the self-report was nonsignificant ( $B = .08, SE = .06, p = .22$ ), but the observer report was significant ( $B = .21, SE = .07, p = .001$ ). A parallel analysis for Honesty-Humility revealed the opposite—the self-report was significant ( $B = .12, SE = .06, p = .03$ ), but the observer report was not ( $B = .08, SE = .05, p = .10$ ).<sup>11</sup>

### **Weekly Self-Reports of CWB and OCB**

We collected 12 weekly assessments of CWB and OCB, so the self-reported CWB and OCB variables were nested within persons. To account for this nesting, multilevel models were computed with the HLM 7 software (Raudenbush, Bryk, & Congdon, 1996-2011) using Overdispersed Poisson distribution and robust standard errors (see Tables 7 & 8). These models included a random (level 1) intercept parameter to account for the nesting of observations within

persons, a fixed (level 1) effect for week number to account for changes in CWB and OCB over time, and fixed (level 2) effects for gender (*male* = 0, *female* = 1) and age (centered). As with the analyses of the observer reports of CWB and OCB, separate models were estimated for each trait, and observer reports and self-reports from the initial survey were included simultaneously in the models, so the estimates indicate the relative importance of each rating source when combined in the same model. We examined bivariate relationships by averaging across the 12 weekly reports and computing Kendall's *Tau-b* correlations (see Tables 5 & 6).

Self-reports of CWB were negatively correlated with observer reports of Guilt Proneness ( $Tau-b = -.17, p < .001$ ) and Honesty-Humility ( $Tau-b = -.20, p < .001$ ). Self-reports of CWB were also negatively correlated with self-reports of Guilt Proneness, regardless of whether the trait was measured in the initial survey ( $Tau-b = -.18, p < .001$ ) or the final survey ( $Tau-b = -.20, p < .001$ ), and the same was true for Honesty-Humility assessed in the initial survey ( $Tau-b = -.24, p < .001$ ) and the final survey ( $Tau-b = -.24, p < .001$ ).

When the observer report of Guilt Proneness and the initial self-report of Guilt Proneness were entered simultaneously into a multilevel model predicting self-reports of CWB, controlling for age and gender, the self-report of Guilt Proneness was significant ( $B = -.39, SE = .11, p < .001$ ), but the observer report was not ( $B = -.18, SE = .11, p = .12$ ). A parallel analysis for Honesty-Humility revealed that self-report of Honesty-Humility was significant ( $B = -.40, SE = .11, p < .001$ ), and so was the observer report ( $B = -.29, SE = .11, p = .009$ ).<sup>12</sup>

Self-reports of OCB were positively correlated with observer reports of Guilt Proneness ( $Tau-b = .16, p < .001$ ), but not Honesty Humility ( $Tau-b = .05, p = .18$ ). Observer reports of OCB were positively correlated with self-reports of Guilt Proneness in the initial survey ( $Tau-b = .09, p < .001$ ), and in the final survey ( $Tau-b = .08, p = .001$ ); the OCB correlations were

nonsignificant for Honesty-Humility assessed in the initial survey ( $Tau-b = .01, p = .57$ ) and the final survey ( $Tau-b = .02, p = .42$ ).

When the observer report of Guilt Proneness and the initial self-report of Guilt Proneness were entered simultaneously into a multilevel model predicting self-reports of OCB, controlling for age and gender, the self-report of Guilt Proneness was marginal ( $B = .12, SE = .07, p = .06$ ), and the observer report was significant ( $B = .17, SE = .07, p = .02$ ). For Honesty-Humility, the self-report was significant ( $B = .14, SE = .05, p = .01$ ), and the observer report was nonsignificant ( $B = -.02, SE = .06, p = .76$ ).<sup>13</sup>

### Discussion

Study 2 adds strong support to the conclusions drawn in Studies 1. Self-other agreement correlations and similarity-free agreement partial correlations for Honesty-Humility and Guilt Proneness were moderately high in magnitude, indicating that moral character is indeed observable by those who know the target well. These correlations were slightly smaller in magnitude than the other HEXACO dimensions, but we are uncertain if that trend is reliable given that prior research with the HEXACO scales has found that self-other agreement for Honesty-Humility is just as high, if not higher, than self-other agreement for other HEXACO traits (Lee et al., 2009). Assumed similarity correlations for the moral character traits were also quite high in Study 2, and higher than the corresponding relationships for the other HEXACO dimensions. Our findings are compatible with the conclusion drawn by Lee et al. (2009) that assumed similarity is greater for traits that are relevant to people's personal values.

Study 2 extended the previous studies by investigating the stability of moral character over a three-month time interval. The test-retest data we presented are the first of their kind, and thus offer an important contribution to the personality and measurement literatures. The



HEXACO and GASP variables were all found to be quite stable between Time 1 and Time 2 assessments (approximately 14 weeks).

Study 2 allowed us to examine the relationships of the moral character variables with observer reported and self-reported CWB and OCB. Both observer reports and self-reports of Honesty-Humility and Guilt Proneness were significantly correlated with CWB, regardless of whether these harmful work behaviors were measured with self-reports or observer reports. Observer reports and self-reports of Guilt Proneness were significantly correlated with OCB, regardless of whether these helpful work behaviors were measured with self-reports or observer reports. Observer reports and self-reports of Honesty-Humility, however, were only correlated with observer reports of OCB; Honesty-Humility was uncorrelated with self-reported OCB.

The regression models testing the relative predictive validity of observer reports versus self-reports for modeling CWB and OCB were inconclusive. These models revealed some evidence favoring observer reports and some evidence favoring self-reports. However, consistent patterns did not emerge, so further research is needed to determine when and for whom observer reports have greater predictive validity than self-reports, and vice versa. We return to this issue in the General Discussion.

### **General Discussion**

Research in social psychology and behavioral business ethics has made great strides in recent years in identifying subtle situational influences on our ethical decision-making and behavior (for reviews, see Ariely, 2012; Bazerman & Tenbrunsel, 2011). Much of this work has explicitly eschewed the study of personality characteristics and the search for “bad apples” in favor of studying how and why “good people” do bad things. The evidence that situational influences can cause people to make unethical choices is extensive and incontrovertible (e.g.,

Cohen, Gunia, Kim-Jun, & Murnighan, 2009; Gino & Pierce, 2009; Gino, Schweitzer, Mead, & Ariely, 2011; Kern & Chugh, 2009; Schweitzer, Ordóñez, & Douma, 2004; Wiltermuth, 2011; Zhong, Bohns, & Gino, 2010). This does not mean, however, that we should relegate the study of moral personality characteristics to the back-burner, nor does it mean that situations have a stronger impact on behavior than does personality (Fleeson, 2001; Fleeson & Nofle, 2008). Executives, for example, must be vigilant not only about creating ethical organizational climates and cultures (i.e., designing “good” rather than “bad barrels”), but must also be vigilant about selecting ethical individuals for their organizations (i.e., hiring “good” rather than “bad apples”) (Kish-Gephart et al., 2010).

Independent research streams on moral character have found that unethical acts are committed disproportionately by people with low rather than high levels of Honesty-Humility (Ashton & Lee, 2008a; Lee & Ashton, 2012) and Guilt Proneness (Cohen et al., 2012; Tangney et al., 2007). The current research confirmed these relationships and extended the prior literature by showing that these traits can be detected by well-acquainted others. Our finding of strong convergence between self-reports and observer reports of Honesty-Humility and Guilt Proneness allows us to reasonably infer that both assessment methods share some degree of accuracy, and thus are helpful tools for measuring moral character. Moreover, the magnitude of the self-other agreement correlations for these moral character traits were found to be moderately high across both studies ( $r_s = .33$  to  $.56$ ), and similar in magnitude to self-other agreement correlations for the Big Five, as reported in our studies, and in prior research (Connelly & Ones, 2010; Lee et al., 2009; Vazire & Carlson, 2010).

The question of whether self-reports of moral character have more or less predictive validity compared to observer reports remains to be answered. One way of thinking about this

question is through the lens of Vazire's (2010) self-other knowledge asymmetry (SOKA) model. The SOKA model posits that the relative accuracy of self-reports versus observer reports depends on the degree to which the trait is low versus high in observability and the degree to which the trait is low versus high in evaluativeness (see also, John & Robins, 1993). The less visible a trait is, the more likely it is that the self will be in a privileged position to judge it. And, the more value-laden (versus neutral) a trait is, the more likely it is that the respondent will be subject to self-deception in self-reports. Low observability of morally-relevant behavior would suggest that self-reports of moral character traits would be more accurate than observer reports. However, moral character traits are also seen as desirable, suggesting that the self could be subject to biased responding, which could undermine the accuracy of self-reports. Because of these issues regarding trait observability (favoring self-reports) and trait evaluativeness (favoring observer reports), neither method is free from measurement limitations.

The results of Study 1 suggest that self-ratings of moral character may have relatively more predictive validity than observer-ratings but, given that the criterion variables were self-reported, this finding is by no means conclusive; we cannot rule out common method bias as an alternative explanation. In Study 2, some analyses favored self-reports, but other analyses favored observer reports. For example, self-reports of Honesty-Humility had greater predictive validity for self-reports of CWB and OCB, and observer reports of OCB, but observer reports of Honesty-Humility had greater predictive validity for observer reports of CWB. Guilt Proneness had a different pattern. Self-reports of Guilt Proneness had greater predictive validity than observer reports for predicting CWB, regardless of whether the outcome was self-reported or observer reported. However, the opposite pattern was observed for OCB: Observer reports of Guilt Proneness had greater predictive validity than self-reports for predicting OCB. These

results are thus inconsistent with the general conclusion suggested by meta-analyses of job performance that observer reports of personality offer predictive advantages over self-reports (cf. Connelly & Hülshager, 2012; Connelly & Ones, 2010; Oh et al., 2011). If anything, our results suggest that self-reports of moral character traits have similar, if not more, predictive validity compared to observer reports, but our results also suggest that relative predictive validity might vary according to what is the focal outcome.

Currently, it is quite mysterious as to what kinds of outcomes will favor self-reports versus observer reports. We speculate that undesirable private behaviors, such as CWB, delinquency, and unethical decisions, might be better predicted by self-reports than by observer reports because people are motivated to keep these actions, and proclivities toward these actions, hidden (Berry, Carpenter, & Barratt, 2012). Behaviors that are more public and less undesirable might be more amenable to prediction by observer reports (John & Robins, 1993; Vazire, 2010). These ideas are speculative, of course, given the inconclusive data regarding this issue. However, what is clear is that future research is necessary to determine when and why observer reports of moral character should be preferred to self-reports, and vice versa.

One limitation of the current work is that we do not know how the dyad members formed their moral character judgments. What behavioral cues helped participants judge Honesty-Humility and Guilt Proneness in their acquaintances? Our results suggest that similarity and assumed similarity influence character judgments, but projection did not fully account for the observed consensus between self-ratings and other-ratings. An important avenue for future research, then, is to determine how acquaintances become knowledgeable of a person's moral character. Knowing that Honesty-Humility and Guilt Proneness are important dimensions of moral character and are potentially observable characteristics suggests that targeted interviewing

could focus on uncovering these traits. Research on this topic could examine moral character in “thin slices” (Ambady, Hallahan, & Rosenthal, 1995) or “zero acquaintance” settings (Kenny, 1991; Kenny, Horner, Kashy, & Chu, 1992)—situations in which raters have relatively small samples of behavior to observe and do not know the target well. Should a technique for detecting moral character traits in such situations be developed, it would have tremendous managerial implications for personnel selection and promotion, and possibly for friendship and mate selection as well.

### **Conclusion**

The ability to observe moral character in others is a vital skill that helps us avoid being cheated and betrayed. It is especially important to accurately judge the moral character of those closest to us, as these individuals may be in opportune positions to take advantage of us when we are most vulnerable. One of the most famous stories about the tragic consequences of misjudging a person’s moral character is that of Julius Caesar, who, as readers of Shakespeare will recall, was attacked and killed by a group of senators led by Caesar’s close friend, Marcus Junius Brutus. As if to signify that his friend’s betrayal was the deepest wound of all, it is said that the dictator’s last words were, “Et tu, Brute?” It is, of course, impossible to know whether Caesar’s fate would have been different had he been able to accurately judge the Honesty-Humility and Guilt Proneness of Brutus and the other senators. But, given the relationship between these traits and moral behavior, it would have been wise of him to consider whether those to whom he was most vulnerable had high versus low levels of these moral character traits.

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### Footnotes

<sup>1</sup> Watson and colleagues (2000) examined self-other agreement of guilty and shameful moods with the PANAS-X, which assesses affective states, and conflates guilty and shameful feelings (Watson & Clark, 1994; Watson & Clark, 1997). They found moderately strong self-other agreement ( $r_s = .27$  to  $.49$ ) and assumed similarity ( $r_s = .36$  to  $.42$ ); similarity correlations were modest ( $r_s = .05$  to  $.19$ ). Although Watson and colleagues did not report similarity-free agreement, the partial correlation can be computed from the results in their tables (pp. 550-553): partial  $r_s = .22$  to  $.46$ .

<sup>2</sup> Although not reported by Lee and colleagues (2009), using the results in their article (p. 463), we can see that similarity-free agreement for the other HEXACO dimensions ranged from  $.48$  for Agreeableness to  $.64$  for Emotionality, indicating that observer reports of personality corresponded to self-reports, above and beyond projection and similarity.

<sup>3</sup> Test-retest reliability coefficients have been reported for the Test of Self-Conscious Affect (TOSCA; Tangney & Dearing, 2002)—a different scenario-based measure of Guilt and Shame Proneness. Tangney and Dearing (2002, p. 41) reported that test-retest reliability among college students over a period of 3 to 5 weeks was  $.74$  for Guilt Proneness and  $.85$  for Shame Proneness.

<sup>4</sup> The remaining participants answered questions related to environmentalism. These questions were included for exploratory purposes and are not relevant to the current investigation.

<sup>5</sup> We tested whether level of acquaintanceship (how well the informant reported knowing the person they were rating) moderated the strength of the relationship between the observer

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reports and self-reports (Watson et al., 2000). For each trait, we regressed the self-report on the observer report, acquaintanceship, and the two-way interaction between the observer report and acquaintanceship. The interactions were nonsignificant for all the traits except Guilt-Repair Orientation ( $B = -.13$ ,  $SE = .06$ ,  $p = .03$ ). However, given that 89.4% of the respondents in Study 1 indicated knowing their counterpart at least moderately well, it is likely that level of acquaintanceship did not vary enough among our respondents for us to observe differences attributable to it.

<sup>6</sup> Data from the WECT Project has been used in other manuscripts involving different research questions from those investigated here (Cohen, Panter, Turan, Morse, & Kim, 2013; Halevy, Cohen, Chou, Katz, & Panter, 2013). No prior manuscript has used the coworker-reports of the GASP and HEXACO variables. Accordingly, the analyses in Study 2 have not been reported previously.

<sup>7</sup> The WECT Project was designed as two separate studies, but given that the same design and variables were used in both, data from the two studies were combined in the current research.

<sup>8</sup> GASP and HEXACO scores, as measured in the initial survey, did not significantly differ between those for whom a coworker completed the coworker survey versus those for whom a coworker did not complete the survey.

<sup>9</sup> As in Study 1, we tested whether level of acquaintanceship moderated the strength of the relationship between the observer reports and self-reports (Watson et al., 2000). The interactions were nonsignificant for all the traits except Shame Proneness ( $B = -.14$ ,  $SE = .06$ ,  $p = .02$ ). In Study 2, 98.5% of the respondents indicated knowing their counterpart at least

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moderately well, so it is likely that level of acquaintanceship did not vary enough among our respondents for us to observe differences attributable to it.

<sup>10</sup> Regressing CWB observer reports on all self-reports and observer reports of the HEXACO variables simultaneously, along with gender and age as controls, revealed three significant effects: Honesty-Humility observer report ( $B = -.45, SE = .14, p = .001$ ), Agreeableness observer report ( $B = -.41, SE = .12, p = .005$ ), and Conscientiousness observer report ( $B = -.40, SE = .14, p = .005$ ).

<sup>11</sup> Regressing OCB observer reports on all self-reports and observer reports of the HEXACO variables simultaneously, along gender and age as controls, revealed only one significant effect ( $N = 265$ ): Extraversion observer report ( $B = .21, SE = .08, p = .008$ ).

<sup>12</sup> A multilevel model regressing CWB self-reports on the self-reports and observer reports of the HEXACO variables simultaneously, along gender and age as controls, revealed three significant effects ( $N = 329$ ): Honesty-Humility self-report ( $B = -.27, SE = .11, p = .02$ ), Conscientiousness self-report ( $B = -.34, SE = .14, p = .01$ ), and Conscientiousness observer report ( $B = -.34, SE = .13, p = .02$ ).

<sup>13</sup> A multilevel model regressing OCB self-reports on the self-reports and observer reports of the HEXACO variables simultaneously, along gender and age as controls, revealed one significant effect ( $N = 329$ ): Extraversion self-report ( $B = .18, SE = .08, p = .02$ ).



**Table 1***Study 1: Relations among Self-Reports and Observer Reports*

	Self-Other Agreement	Similarity	Assumed Similarity	Similarity-Free Agreement
1. Guilt Proneness	.43*	.25*	.59*	.36*
2. Guilt-Repair	.31*	.25*	.54*	.22*
3. Shame Proneness	.42*	.29*	.53*	.33*
4. Shame-Withdrawal	.19*	.05	.40*	.19*
5. Honesty-Humility	.43*	.23*	.48*	.37*
6. Emotional Stability	.38*	-.10	.06	.39*
7. Extraversion	.57*	.03	-.02	.57*
8. Agreeableness	.25*	.05	.15*	.25*
9. Conscientiousness	.40*	.03	.10+	.40*
10. Openness to Experience	.28*	.06	.07	.28*

*Note.* Study 1  $N = 320$  individuals. Self-other agreement values are zero-order correlations of self-reports of one dyad member with observer-reports by the other dyad member. Similarity values are intraclass correlations (ICCs) of self-reports of one dyad member with self-reports of the other dyad member. ICCs are presented for similarity because the assignment of dyad members as Person A or Person B is arbitrary. Assumed similarity values are zero-order correlations of self-reports and observer-reports made by the same person. Similarity-free agreement values are the partial self-other agreement correlations controlling for the other dyad member's self-report. The similarity-free agreement values were calculated from the values in the table using an online calculator to compute the partial correlation  $r_{xy.z}$ , where  $r_{xy}$  represents the self-other agreement correlation,  $r_{yz}$  represents the assumed similarity correlation, and  $r_{xz}$  represents the similarity intraclass correlation.

\* $p < .05$ , + $p < .10$ .

**Table 2***Study 1: Regression Models of Delinquency and Unethical Business Decisions*

<i><b>Delinquency</b></i>	<i>Variables in the model</i>	<i>R</i>	<i>R<sup>2</sup></i>	<i>ΔR<sup>2</sup></i>
Model 1 ( <i>df</i> = 2, 199)	Female, Age	.37	.14	--
Model 2 ( <i>df</i> = 12, 189)	Female, Age, Self-reported variables <sup>a</sup>	.56	.31	.17*
Model 3 ( <i>df</i> = 22, 179)	Female, Age, Self-reported variables <sup>a</sup> , Observer reported variables <sup>a</sup>	.60	.35	.04
Model 4 ( <i>df</i> = 32, 169)	Female, Age, Self-reported variables <sup>a</sup> , Observer reported variables <sup>a</sup> , Acquaintanceship <sup>b</sup> , Two-way interactions between acquaintanceship and observer reported variables	.63	.40	.04
<i><b>Unethical Business Decisions</b></i>	<i>Variables in the model</i>	<i>R</i>	<i>R<sup>2</sup></i>	<i>ΔR<sup>2</sup></i>
Model 1 ( <i>df</i> = 2, 199)	Female, Age	.38	.15	--
Model 2 ( <i>df</i> = 12, 189)	Female, Age, Self-reported variables <sup>a</sup>	.56	.32	.17*
Model 3 ( <i>df</i> = 22, 179)	Female, Age, Self-reported variables <sup>a</sup> , Observer reported variables <sup>a</sup>	.62	.39	.07*
Model 4 ( <i>df</i> = 32, 169)	Female, Age, Self-reported variables <sup>a</sup> , Observer reported variables <sup>a</sup> , Acquaintanceship <sup>b</sup> , Two-way interactions between acquaintanceship and observer reported variables	.64	.41	.03

*Note.* Study 1 *N* = 208. <sup>a</sup>Variables were: Guilt Proneness, Guilt-Repair, Shame Proneness, Shame-Withdrawal, Honesty-Humility, Emotional Stability, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience. <sup>b</sup>Acquaintanceship refers to how well the observer knew the target.

\**p* < .05, +*p* < .10.

**Table 3***Study 1: Regressions Combining Self and Observer Ratings to Predict Delinquency and**Unethical Business Decisions (controlling for gender and age)*

	<i>Delinquency</i>				<i>Unethical Business Decisions</i>			
	<i>R</i>	<i>R</i> <sup>2</sup>	$\beta$	$\Delta R^2$	<i>R</i>	<i>R</i> <sup>2</sup>	$\beta$	$\Delta R^2$
<i>Base model: Gender and age</i>	.38	.14			.39	.15		
Guilt Proneness	.47	.23			.49	.24		
Self-report			-.24*	.04*			-.31*	.07*
Observer report			-.15*	.02*			-.05	.00
Guilt-Repair	.41	.17			.45	.21		
Self-report			-.10	.01			-.25*	.05*
Observer report			-.11	.01			.00	.00
Shame Proneness	.40	.16			.46	.21		
Self-report			-.08	.00			-.16*	.02*
Observer report			-.10	.01			-.15*	.02*
Shame-Withdrawal	.41	.16			.42	.18		
Self-report			-.15*	.02*			.08	.01
Observer report			.05	.00			.13*	.02*
Honesty-Humility	.52	.27			.49	.24		
Self-report			-.29*	.06*			-.28*	.05*
Observer report			-.18*	.02*			-.13+	.01+
Emotional Stability	.40	.16			.39	.15		
Self-report			-.15*	.02*			-.03	.00
Observer report			-.00	.00			.04	.00
Extraversion	.40	.16			.39	.15		
Self-report			.08	.00			-.01	.00
Observer report			.09	.01			-.03	.00
Agreeableness	.38	.14			.41	.17		
Self-report			-.01	.00			-.13+	.02+
Observer report			-.01	.00			.10	.01
Conscientiousness	.40	.16			.41	.17		
Self-report			-.11	.01			-.11	.01
Observer report			-.04	.00			.13+	.02+
Openness to Experience	.38	.14			.39	.15		
Self-report			.05	.00			-.07	.00
Observer report			-.05	.00			.03	.00

*Note.*  $N = 208$ . Separate analyses were conducted for each of the traits, and all models controlled for gender and age. Standardized regression weights ( $\beta$ ),  $R$ , and  $R^2$  come from regression models with both self-reports and observer reports included, so  $\beta$  indicates the relative importance of each rating source when combined in the same model.  $\Delta R^2$  indicates the improvement in  $R^2$  when

the term is added in the combined model beyond the other rating source (i.e.,  $\Delta R^2$  for self-report indicates the change in  $R^2$  for regressing the outcome on self-report + observer-report compared to observer-report alone;  $\Delta R^2$  for observer report indicates the change in  $R^2$  for regressing the outcome on self-report + observer-report compared to self-report alone ).

\* $p < .05$ , + $p < .10$ .

**Table 4***Study 2: Relations among Self-Reports and Observer-Reports*

	Self-Other Agreement	Similarity	Assumed Similarity	Similarity- Free Agreement	Test- Retest
11. Guilt Proneness	.50*	.41*	.61*	.35*	.67*
12. Guilt-Repair	.32*	.36*	.56*	.16*	.58*
13. Shame Proneness	.44*	.36*	.56*	.31*	.58*
14. Shame-Withdrawal	.40*	.31*	.61*	.28*	.56*
15. Honesty-Humility	.56*	.34*	.61*	.47*	.66*
16. Emotionality	.57*	.21*	.25*	.54*	.75*
17. Extraversion	.68*	.28*	.46*	.64*	.78*
18. Agreeableness	.59*	.19*	.26*	.57*	.74*
19. Conscientiousness	.60*	.28*	.42*	.56*	.71*
20. Openness	.69*	.37*	.48*	.63*	.83*

*Note* Each participant completed self-reports in the initial survey ( $N = 1514$ ) and final survey ( $N = 845$ ), and was rated by a colleague in the coworker survey ( $N = 341$ ). The initial survey and coworker survey were approximately 5 weeks apart; the initial survey and final surveys were 13 weeks apart. The self-other agreement, similarity, and assumed similarity correlations are zero-order correlations based on the self-report provided in the initial survey and the observer-report provided in the coworker survey. Similarity-free agreement is the partial correlation between the participant's self-report and their coworker's observer-report controlling for the coworker's self-report. The test-retest correlations are zero-order correlations based on the self-report data provided in the initial and final surveys.

\* $p < .05$ , + $p < .10$ .

**Table 5**

*Study 2: Kendall's Tau-b Correlations of Moral Character and Personality Variables with Counterproductive Work Behavior (CWB)*

	<i>CWB Weekly Self- Report Average</i>	<i>CWB 1 Month Observer Report</i>
1. Guilt proneness initial self-report	-.18*	-.19*
2. Guilt Proneness final self-report	-.20*	-.14*
3. Guilt Proneness observer-report	-.17*	-.21*
4. Guilt-Repair initial self-report	-.15*	-.08+
5. Guilt-Repair final self-report	-.18*	-.07
6. Guilt-Repair observer-report	-.15*	-.19*
7. Shame Proneness initial self-report	-.08*	-.06
8. Shame Proneness final self-report	-.14*	-.01
9. Shame Proneness observer-report	-.10*	-.04
10. Shame-Withdrawal initial self-report	.18*	.11*
11. Shame-Withdrawal final self-report	.21*	.09+
12. Shame-Withdrawal observer-report	.08*	.12*
13. Honesty-Humility initial self-report	-.24*	-.17*
14. Honesty-Humility final self-report	-.24*	-.14*
15. Honesty-Humility observer-report	-.20*	-.25*
16. Emotionality initial self-report	.06*	.06
17. Emotionality final self-report	.04	.05
18. Emotionality observer-report	.09*	.15*
19. Extraversion initial self-report	-.14*	-.13*
20. Extraversion final self-report	-.17*	-.10*
21. Extraversion observer-report	-.18*	-.21*
22. Agreeableness initial self-report	-.14*	-.17*
23. Agreeableness final self-report	-.13*	-.15*
24. Agreeableness observer-report	-.21*	-.29*
25. Conscientiousness initial self-report	-.22*	-.13*
26. Conscientiousness final self-report	-.24*	-.08+
27. Conscientiousness observer-report	-.24*	-.24*
28. Openness to Experience initial self-report	-.10*	-.07
29. Openness to Experience final self-report	-.11*	-.02
30. Openness to Experience observer-report	-.12*	-.13*

*Note.* \* $p < .05$ , + $p < .10$ .

**Table 6**

*Study 2: Kendall's Tau-b Correlations of Moral Character and Personality Variables with Organizational Citizenship Behavior (OCB)*

	<i>OCB Weekly Self- Report Average</i>	<i>OCB 1 Month Observer Report</i>
1. Guilt proneness initial self-report	.09*	.22*
2. Guilt Proneness final self-report	.08*	.24*
3. Guilt Proneness observer-report	.16*	.28*
4. Guilt-Repair initial self-report	.11*	.23*
5. Guilt-Repair final self-report	.09*	.24*
6. Guilt-Repair observer-report	.10*	.26*
7. Shame Proneness initial self-report	.05*	.08+
8. Shame Proneness final self-report	.00	.12*
9. Shame Proneness observer-report	.10*	.17*
10. Shame-Withdrawal initial self-report	.01	-.11*
11. Shame-Withdrawal final self-report	-.01	-.15*
12. Shame-Withdrawal observer-report	.02	-.17*
13. Honesty-Humility initial self-report	.01	.20*
14. Honesty-Humility final self-report	.02	.18*
15. Honesty-Humility observer-report	.05	.18*
16. Emotionality initial self-report	.01	-.04
17. Emotionality final self-report	.01	-.01
18. Emotionality observer-report	-.02	-.05
19. Extraversion initial self-report	.13*	.20*
20. Extraversion final self-report	.14*	.26*
21. Extraversion observer-report	.15*	.30*
22. Agreeableness initial self-report	.05*	.09*
23. Agreeableness final self-report	.08*	.11*
24. Agreeableness observer-report	.10*	.19*
25. Conscientiousness initial self-report	.06	.23*
26. Conscientiousness final self-report	.06*	.22*
27. Conscientiousness observer-report	.10*	.27*
28. Openness to Experience initial self-report	.10*	.22*
29. Openness to Experience final self-report	.11*	.23*
30. Openness to Experience observer-report	.13*	.25*

*Note.* \* $p < .05$ , + $p < .10$ .

**Table 7**

*Study 2: Regressions Combining Self and Observer Ratings to Predict Counterproductive Work Behavior (CWB)*

	<i>CWB Weekly Self-Report</i> <sup>1</sup>	<i>CWB 1 Month Observer Report</i> <sup>2</sup>
<b>Guilt Proneness</b>		
Self-report (initial)	<b>-.39 (.11)*</b>	<b>-.31 (.15)*</b>
Observer-report	-.18 (.11)	-.18 (.15)
<b>Guilt-Repair</b>		
Self-report (initial)	<b>-.25 (.11)*</b>	-.06 (.16)
Observer-report	<b>-.21 (.10)*</b>	-.24 (.13)+
<b>Shame Proneness</b>		
Self-report (initial)	.02 (.13)	-.20 (.15)
Observer-report	<b>-.27 (.11)*</b>	.10 (.14)
<b>Shame-Withdrawal</b>		
Self-report (initial)	<b>.39 (.13)*</b>	.14 (.11)
Observer-report	.20 (.12)+	<b>.53 (.12)*</b>
<b>Honesty-Humility</b>		
Self-report (initial)	<b>-.40 (.11)*</b>	-.07 (.12)
Observer-report	<b>-.29 (.11)*</b>	<b>-.84 (.13)*</b>
<b>Emotionality</b>		
Self-report (initial)	.07 (.12)	-.16 (.17)
Observer-report	.21 (.13)	<b>.42 (.16)*</b>
<b>Extraversion</b>		
Self-report (initial)	.04 (.13)	.15 (.17)
Observer-report	<b>-.46 (.14)*</b>	<b>-.57 (.19)*</b>
<b>Agreeableness</b>		
Self-report (initial)	-.21 (.11)+	.06 (.15)
Observer-report	<b>-.35 (.11)*</b>	<b>-.78 (.15)*</b>
<b>Conscientiousness</b>		
Self-report (initial)	<b>-.35 (.12)*</b>	-.05 (.14)
Observer-report	<b>-.45 (.12)*</b>	<b>-.71 (.15)*</b>
<b>Openness to Experience</b>		
Self-report (initial)	-.03 (.13)	-.10 (.17)
Observer-report	-.20 (.13)	<b>-.37 (.19)*</b>

*Note.* Separate models were estimated for each trait. Observer-reports and self-reports from the initial survey were included simultaneously in the models, so estimates indicate the relative importance of each rating source when combined in the same model. All models controlled for gender and age. Unstandardized regression weights (with standard errors) are presented.

<sup>1</sup>The self-report models ( $N = 329$ ) were multilevel models estimated with Overdispersed Poisson distribution and robust standard errors. <sup>2</sup>The observer report models ( $N = 319$  for GASP variables,  $N = 323$  for HEXACO variables) were negative binomial regression models estimated with maximum likelihood estimation with robust standard errors (MLR). \* $p < .05$ , + $p < .10$ .



**Table 8**

*Study 2: Regressions Combining Self and Observer Ratings to Predict Organizational Citizenship Behavior (OCB) Controlling for Gender and Age*

	<i>OCB Weekly Self- Report</i> <sup>1</sup>	<i>OCB 1 Month Observer-Report</i> <sup>2</sup>
Guilt Proneness		
Self-report (initial)	.12 (.07)+	.08 (.06)
Observer-report	<b>.17 (.07)*</b>	<b>.21 (.07)*</b>
Guilt-Repair		
Self-report (initial)	<b>.25 (.07)*</b>	<b>.18 (.05)*</b>
Observer-report	.10 (.06)+	<b>.20 (.05)*</b>
Shame Proneness		
Self-report (initial)	.01 (.07)	-.03 (.05)
Observer-report	<b>.17 (.07)*</b>	<b>.16 (.06)*</b>
Shame-Withdrawal		
Self-report (initial)	.00 (.06)	-.06 (.05)
Observer-report	.04 (.06)	-.11 (.06)+
Honesty-Humility		
Self-report (initial)	<b>.14 (.05)*</b>	<b>.12 (.06)*</b>
Observer-report	-.02 (.06)	.08 (.05)
Emotionality		
Self-report (initial)	.03 (.07)	-.07 (.05)
Observer-report	-.04 (.07)	-.04 (.05)
Extraversion		
Self-report (initial)	<b>.21 (.07)*</b>	.04 (.07)
Observer-report	.06 (.07)	<b>.26 (.07)*</b>
Agreeableness		
Self-report (initial)	.04 (.06)	-.04 (.06)
Observer-report	.11 (.07)	<b>.19 (.06)*</b>
Conscientiousness		
Self-report (initial)	<b>.16 (.07)*</b>	.09 (.06)
Observer-report	.02 (.07)	<b>.17 (.05)*</b>
Openness to Experience		
Self-report (initial)	<b>.16 (.07)*</b>	.10 (.06)+
Observer-report	.06 (.07)	<b>.15 (.05)*</b>

*Note.* Separate models were estimated for each trait. Observer-reports and self-reports from the initial survey were included simultaneously in the models, so estimates indicate the relative importance of each rating source when combined in the same model. All models controlled for gender and age. Unstandardized regression weights (with standard errors) are presented.

<sup>1</sup> The self-report models ( $N = 329$ ) were multilevel models estimated with Overdispersed Poisson distribution and robust standard errors. <sup>2</sup> The observer report models ( $N = 262$  for GASP variables,  $N = 265$  for HEXACO variables) were negative binomial regression models estimated with maximum likelihood estimation with robust standard errors (MLR). \* $p < .05$ , + $p < .10$ .

Figure 1. Four Relations between Self-Reports and Observer Reports.

