A cross-cultural study of trait self-enhancement, explanatory variables, and adjustment ☆

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Abstract

We investigated trait self-enhancement, explanatory variables, and adjustment in European American ($n = 141$), Asian American ($n = 72$), Mexican ($n = 141$), and Filipino ($n = 174$) college students. Consistent with trait perspectives, students in all cultural groups rated their traits with moderate to high accuracy, using peer ratings as a criterion. European Americans did not exhibit self-enhancement relative to peers, but both self and peer ratings were higher (i.e., more positive) for European Americans than for the other three groups. Support was found for some, but not all, cultural psychology explanations of self-enhancement. In all cultural groups, self-enhancement was more associated with personal (intrapsychic) adjustment than interpersonal adjustment, as judged by peers. The results provided support for an integration of trait and cultural psychology perspectives.
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1. Introduction

Taylor and Brown (1988) proposed an influential theory of positive illusions, in which self-enhancement—the tendency to view oneself in overly positive terms—played a prominent role. They reviewed evidence that self-enhancement is associated with positive mental health (Taylor & Brown, 1988, 1994). Recently, cultural psychologists have investigated the prevalence of self-enhancement across cultures, but controversy remains regarding its universality (Brown & Kobayashi, 2003; Heine, 2003b, 2005; Sedikides, Gaertner, & Toguchi, 2003). In addition, cross-cultural studies relating self-enhancement to adjustment are rare (Kurman, 2002; Norasakkunkit & Kalick, 2002). In the present study, we investigated trait self-enhancement, hypothesized explanatory variables, and adjustment in European Americans, Asian Americans, Mexicans, and Filipinos.

Our overarching goal was to test an integrated cultural trait psychology perspective on accuracy and enhancement in trait self-assessment (Church, 2000). Accordingly, we investigated self-enhancement using standard trait assessment methods and operationalized self-enhancement as the discrepancy between self ratings and aggregated peer ratings. This goal encompassed three specific aims: (a) to determine the universality versus culture-specificity of both accuracy and enhancement in self-assessments of traits; (b) to test alternative theoretical explanations of self-enhancement; and (c) to determine the extent to which trait self-enhancement predicts personal (intrapsychic) and interpersonal adjustment across cultures. The study has implications for culture and personality theory, evolutionary versus socio-cultural perspectives on the self (e.g., Heine, 2001; Markus & Kitayama, 1991b; Sedikides et al., 2003), and our understanding of positive mental health (Taylor & Brown, 1994).

1.1. Accuracy and enhancement in trait assessments: An integrated cultural trait psychology perspective

Church (2000) noted that two theoretical perspectives—trait psychology and cultural psychology—dominate current research on culture and personality. Although some theorists have suggested that the two approaches are incompatible (e.g., Markus & Kitayama, 1998; Shweder, 1991), Church (2000) reviewed evidence for both perspectives and proposed that a theoretical and empirical integration was possible. For example, support for the trait perspective includes evidence of the cross-cultural universality, heritability, and predictive validity of personality dimensions (e.g., Church & Katigbak, 2000, 2005; Jang, McCrae, Angleitner, Riemann, & Livesley, 1998; McCrae, 2000; McCrae & Allik, 2002). Support for the cultural psychology perspective includes evidence of reduced "traitedness" of self-concepts and behavior attributions, and reduced self-enhancement, in collectivistic as compared to individualistic cultures (e.g., Choi, Dalal, Kim-Prieto, & Park, 2003; Choi, Nisbett, & Norenzayan, 1999; Heine, 2003b; Kanagawa, Cross, & Markus, 2001).

The integrated cultural trait psychology perspective proposes that individuals in all cultures can describe their personality traits with some accuracy, for example, using aggregate peer ratings as a comparison standard or criterion. This follows from the existence of universal, heritable traits with adaptive significance, combined with a "realist" perspective on person perception (Baron & Misovich, 1993; Funder, 1995). For example, the ecological-realist perspective postulates, with some empirical support, that trait dispositions can be

directly perceived through certain evolved indicators (e.g., facial expression, gait, vocal qualities, etc.), particularly if one is able to observe oneself or others in the context of trait-relevant activities (Baron & Misovich, 1993). Similarly, the "realistic assumption" of Funder's (1995) Realistic Accuracy Model—that personality traits are real characteristics of individuals—implies that traits can be accurately judged "if the judge can manage to detect and correctly use behaviors that are relevant to the trait and available to his or her observation" (p. 658).

At the same time, cultural psychologists have argued that traits are less central to identity among people in collectivistic cultures, as compared to individualistic cultures, so there is less motivation to provide self-enhanced trait assessments (Heine, 2003a; Markus & Kitayama, 1991b). An integrated cultural trait psychology perspective thus leads to the expectation that self-enhancement tendencies will be stronger in individualistic than in collectivistic cultures. The predictions of this integrated perspective are not incompatible. Moderate or even high levels of self-peer agreement in trait ratings within cultures (i.e., accuracy) could accompany cultural mean differences in trait self-enhancement between cultures.

1.1.1. Available evidence

Cross-cultural studies of accuracy in trait assessments, as indexed by self-peer agreement, are fairly rare. However, several studies that have examined observer agreement across cultures have tended to find comparable levels of agreement (Heine & Renshaw, 2002; Malloy, Albright, Díaz-Loving, Dong, & Lee, 2004; McCrae et al., 2004; Spirrison & Choi, 1998; Yik, Bond, & Paulhus, 1998). For example, McCrae et al. (2004) reviewed cross-observer agreement in previous studies of the Five-Factor Model and reported new self-observer agreement data for Russian and Czech samples. They concluded that levels of observer agreement are comparable across cultures.

Most cross-cultural comparisons of self-enhancement have involved only East Asian and North American samples. Researchers have reported that East Asians exhibit a variety of self-enhancement biases less than North Americans do (Chang & Asakawa, 2003; Heine, 2003b; Heine, Kitayama, & Lehman, 2001; Heine & Lehman, 1995, 1999; Heine, Takata, & Lehman, 2000; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Norasakkunkit & Kalick, 2002). Even in East Asian cultures, however, some findings have been complex (e.g., Chang, Asakawa, & Sanna, 2001; Kashima & Triandis, 1986) and some studies suggest that East Asians do exhibit self-enhancement, depending on the characteristics assessed, measurement conditions, or criteria used to index self-enhancement (e.g., Brown & Kobayashi, 2002; Falbo, Poston, Triscari, & Zhang, 1997; Heine, 2005; Kudo & Numazaki, 2003; Sedikides et al., 2003; Yik et al., 1998).

Some theorists have distinguished between the need for positive self-regard, which may be a cultural universal traceable to human evolutionary history (e.g., Sedikides et al., 2003), and the culture-specific manifestations of that need. For example, Heine (2005) argued that positive self-regard, in the sense of "being a good self," or striving to be the kind of person who is seen as appropriate and significant in one's culture, is a cultural universal, whereas the specific tendency to self-enhance, or over-elaborate positive information about the self, is not. Heine summarized meta-analytic results based on 45 studies, which supported the view that self-enhancement effects are larger and more consistent in Western samples than in East Asian samples, while frequent self-critical biases appear only in studies with East Asians.

In summary, available evidence suggests that accuracy in trait assessments, as indexed by self-peer agreement, may be comparable across cultures, but that average self-enhancement may be greater in individualistic than collectivistic (or at least East Asian) cultures. An important limitation of the self-enhancement literature, however, is the limited range of cultures sampled. Almost all studies have compared East Asian (largely Japanese) and North American samples. Thus, we compared European American, Asian American, Mexican, and Filipino samples. In the cross-cultural literature, European Americans are described as individualistic and Mexicans and Filipinos as collectivistic (Church, 1987; Díaz-Loving & Draguns, 1999; Hofstede, 2001; Malloy et al., 2004). Asian Americans might be an intermediate group, with many Asian Americans retaining traditional values typically associated with collectivism (Kim, Atkinson, & Yang, 1999). Based on the theoretical and empirical considerations reviewed above, we specified the following hypotheses regarding accuracy and enhancement in trait self-assessment:

Hypothesis 1. Individuals in all cultural groups rate their traits with some accuracy, as indicated by at least moderate correlations (e.g., .30 or higher) between self ratings and aggregate peer ratings.

Hypothesis 2. European Americans, as compared to Asian Americans, Mexicans, and Filipinos, exhibit greater overall self-enhancement in trait self-ratings.

1.1.2. Self-enhancement of agentic versus communal traits

Some researchers have suggested that self-enhancement may depend on the traits being assessed. For example, Brown and Kobayashi (2002) argued that people in all cultures exhibit self-enhancement for valued or important traits. Indeed, Brown and Kobayashi (2002, 2003) found that, for important traits, Japanese and Americans were equally likely to evaluate themselves and close friends favorably relative to others. However, Heine and Renshaw (2002) found that trait self-enhancement was negatively associated with trait importance in Japanese, and unrelated to trait importance in Americans.

Of particular relevance to the present study, Kurman (2001) and Sedikides et al. (2003) suggested that agentic traits (e.g., assertiveness, intelligence) are internalized as important in individualistic cultures, whereas communal traits (e.g., generosity, agreeableness) are valued in collectivistic cultures. In this view, self-enhancement should be greater for agentic traits in individualistic cultures and for communal traits in collectivistic cultures. The results from available studies are mixed, however. Supportive results were reported by Sedikides et al. (2003), who found that Americans, when describing themselves relative to the typical participant in a small group exercise, self-enhanced more for agentic traits than for communal traits, whereas Japanese showed the opposite pattern. Kurman (2001) found, as expected, that Singaporean Chinese self-enhanced more for communal traits than for agentic traits. However, Israeli Druze and Jews did not show consistent differences in self-enhancement of communal versus agentic traits. Nonsupportive or mixed results were reported by (a) Markus and Kitayama (1991a), who found that both Americans and Japanese exhibited more self-enhancement for interdependent traits than for independent traits; (b) Silvera and Seger (2004), who found that Americans unexpectedly self-enhanced more for communal traits than for agentic traits, while Norwegians showed the opposite pattern; and (c) Yik et al. (1998), who found that Hong Kong Chinese more frequently self-enhanced for agentic traits and self-effaced for communal traits. Yik et al.'s

results would only support theoretical expectations if the Hong Kong Chinese in their study were actually individualistic. Although available evidence for the importance of the agentic-communal distinction is mixed, we retained the distinction in our hypotheses because of its importance in personality theory and assessment more generally (e.g., Bakan, 1966; Wiggins & Trapnell, 1996).

Hypothesis 3. European Americans exhibit greater self-enhancement for agentic traits than for communal traits, whereas Asian Americans, Mexicans, and Filipinos exhibit greater self-enhancement for communal traits than for agentic traits.

1.2. Theoretical explanations of self-enhancement

The second aim of this study was to test, in multiple cultures, alternative theoretical explanations of self-enhancement. In this section, we introduce each explanation, then consider how they might be interrelated under the constructs of individualism and collectivism.

1.2.1. Self-construals

Several theorists have argued that people who maintain a more independent construal of self as a self-contained, autonomous, and unique entity will exhibit greater self-enhancement tendencies, because trait attributes are more central to their identity and because they have a greater need to express and confirm their uniqueness and competency (Heine, 2003a; Heine & Lehman, 1995, 1999; Markus & Kitayama, 1991b; Triandis, 1989). In contrast, people who maintain a more interdependent construal of self as interconnected with others may benefit from self-critical tendencies, which are consistent with cultural mandates to maximize interpersonal harmony and avoid separation from others (Kitayama et al., 1997). Indeed, a few researchers have found that, within cultures, self-enhancement is positively correlated with independent self-construals and uncorrelated or negatively correlated with interdependent self-construals (Heine, 2003a; Heine & Renshaw, 2002; Norasakkunkit & Kalick, 2002).

1.2.2. Self-monitoring or internal versus external frame of reference

Heine (2003a) suggested that the motive to self-enhance will be greater for people who set their own standards for self and behavior (i.e., internal frame of reference), than for individuals who are socialized to attend to the shared standards of others (i.e., external frame of reference). The distinction recalls Snyder's (1974, 1987) self-monitoring construct, which differentiates individuals whose behavior is determined by internal dispositions or traits (low self-monitors, internal frame of reference) versus external social contexts and cues (high self-monitors, external frame of reference). Accordingly, we should expect that self-enhancement will be greater for low self-monitors.

1.2.3. Implicit theories

Heine (2003a) and Church (2000) hypothesized that self-enhancement will be greater for people who believe that traits are stable and predictive of behavior—for example, Dweck's (2000) entity theorists and Church's implicit trait theorists. In contrast, the motivation to self-enhance should be less for people who believe that traits are malleable and

less predictive of behavior—for example, Dweck's incremental theorists and Church's implicit contextual theorists.

1.2.4. Egoistic versus moralistic biases

Paulhus and John (1998; see also Paulhus, 2002) distinguished egoistic bias—an exaggerated sense of self-worth with regard to intellectual and social competence, versus moralistic bias, involving avoidance of disapproval by conforming to social norms. They speculated that egoistic bias is associated with self-enhancement of agentic traits, whereas moralistic bias is associated with self-enhancement of communal traits. The authors suggested that egoistic bias is related to "normal narcissism," whereas moralistic bias is related to impression management or self-deceptive denial. Indeed, several researchers have found narcissism to be positively related to self-enhancement tendencies (Colvin, Block, & Funder, 1995; John & Robins, 1994; Paulhus, 1998; Robins & Beer, 2001). Inversely, Kurman (2002) and Brown and Kobayashi (2003) have argued that modesty norms, which can be viewed as the opposite of egoistic bias or narcissism, inhibit the expression of self-enhancement tendencies in some cultures. Indeed, in a few studies, modesty has predicted lower levels of self-enhancement within cultures, or mediated between-culture differences in self-enhancement (Kurman, 2001, 2002).

1.2.5. Integration of explanatory variables

These alternative explanations of self-enhancement may be interrelated, at least conceptually, under the broad umbrella of individualism versus collectivism. Theorists have linked individualism to independent self-construals, an internal frame of reference (low self-monitoring), implicit trait beliefs, and egoistic biases, while linking collectivism to interdependent self-construals, an external frame of reference (high self-monitoring), implicit contextual theories, and moralistic biases (Church, 2000; Heine, 2001, 2003a; Markus & Kitayama, 1991b; Paulhus & John, 1998; Triandis, 1989). Accordingly, in our hypotheses and results, we organize the explanatory variables under broad individualistic and collectivistic conceptual clusters.

Finally, theorists have differed in whether these hypothesized explanatory variables account for self-enhancement of all traits or particular traits. Proponents of self-construal, frame-of-reference, and implicit theory explanations imply that these explanations apply to all traits. In contrast, Paulhus and John (1998) proposed that egoistic and moralistic biases differentially account for self-enhancement of agentic versus communal traits, respectively. For the present study, we have extrapolated from the theoretical work of Paulhus and John (1998) to specify the following hypotheses:

Hypothesis 4. In all cultures, self-enhancement of agentic traits is positively associated with explanatory variables theoretically linked to individualism (i.e., independent self-construals, low self-monitoring, implicit trait beliefs, and egoistic bias).

Hypothesis 5. In all cultures, self-enhancement of communal traits is positively associated with explanatory variables theoretically linked to collectivism (i.e., interdependent self-construals, high self-monitoring, implicit contextual beliefs, and moralistic bias).

Although these theoretical variables have been used to explain both within- and between-culture differences in self-enhancement, we limit ourselves to within-culture analyses. Although these variables are often aggregated to the cultural level, they are foremost

dimensions of individual differences. In addition, between-culture comparisons of such variables are inherently more risky, because they can be affected by remaining measurement inequivalencies, cultural differences in response styles, and reference group effects (Heine, Lehman, Peng, & Greenholtz, 2002; van de Vijver & Leung, 1997).

1.3. Self-enhancement and adjustment

The final aim of the study was to investigate the relationship between trait self-enhancement and adjustment across cultures. Even in Western psychology, there is debate about this relationship (Asendorpf & Ostendorf, 1998; Colvin & Block, 1994; Paulhus, 1998; Taylor & Brown, 1988, 1994). The resolution of this debate may depend on how one measures self-enhancement, and whether one is investigating personal (intrapsychic) or interpersonal adjustment. Paulhus (1998) observed that when researchers operationalize self-enhancement as the extent to which participants judge themselves more favorably than others (self-other paradigm), self-enhancement tends to correlate positively with adjustment (e.g., Taylor & Brown, 1988). However, researchers have noted limitations of this paradigm, in particular, the absence of an external criterion or objective comparison standard (Colvin et al., 1995; Paulhus, 1998). Many researchers have argued that the social consensus provided by observers provides a reasonably valid external criterion (Colvin et al., 1995; John & Robins, 1994; Paulhus, 1998; Robins & John, 1997). Most studies that have used such a criterion—that is, the discrepancy between self ratings and the aggregated ratings of knowledgeable observers—have reported unhealthy correlates of self-enhancement, in particular, higher scores on self-report measures of narcissism and observer reports of narcissistic tendencies such as hostility, defensiveness, and condescension (Colvin et al., 1995; John & Robins, 1994; Paulhus, 1998; Robins & Beer, 2001).

Paulhus (1998) noted that self-enhancers average higher on self-esteem measures, regardless of whether self-enhancement is operationalized in terms of self-peer discrepancies or using the self-other paradigm. Therefore, he suggested that self-enhancement may have intrapsychic adaptiveness—for example, in buttressing self-esteem or positive affect—but not interpersonal adaptiveness, at least in the long run (see also Bonanno, Rennicke, & Dekel, 2005; Robins & Beer, 2001; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Taylor, Lerner, Sherman, Sage, and McDowell (2003a, 2003b) provided evidence, however, that self-enhancement, regardless of how operationalized, is positively associated with both intrapsychic and interpersonal adjustment.

The uncertain relationship between self-enhancement and adjustment in American samples accentuates the difficulty of making predictions across cultures. However, the relatively few cross-cultural studies have generally found a positive relationship between self-enhancement and adjustment, using self-report measures of self-esteem, affect, and emotional stability as adjustment criteria. Cultural samples have included Japanese, Chinese in Hong Kong and Singapore, and Israeli and Ethiopian Jews in Israel (Kurman, 2002; Kurman & Sriram, 1997; Yik et al., 1998). Silvera and Seger (2004) found such a relationship in their American sample but not in their Norwegian sample. These studies have operationalized self-enhancement in a variety of ways, including the discrepancy between academic self-evaluations and actual grades (Kurman, 2002; Kurman & Sriram, 1997), "above-average effects" in self-ratings (i.e., rating oneself as above average relative to others of the same age and gender; Kurman, 2002), the correlation between ratings of self-descriptiveness and trait favorability (Silvera & Seger, 2004), and the discrepancy

between self and peer ratings (Yik et al., 1998). There are almost no cross-cultural data on observer perceptions of self-enhancers (Yik et al., 1998).

It is unclear whether the relationship between self-enhancement and adjustment should be expected to vary across cultures for agentic versus communal traits, and no cross-cultural studies have examined this question. On the one hand, one might predict a stronger relationship between self-enhancement and adjustment for the most valued traits, for example, agentic traits in individualistic cultures and communal traits in collectivistic cultures. On the other hand, if traits are more central to identity for people in individualistic cultures, then self-enhancement of either agentic or communal traits might be more related to adjustment in individualistic cultures than in collectivistic cultures. Indeed, some research suggests that in collectivistic cultures self-evaluations may be less important than relationship harmony and successful adherence to social norms as determinants of adjustment (Diener & Diener, 1995; Kwan, Bond, & Singelis, 1997; Suh, Diener, Oishi, & Triandis, 1998).

Given the current status of cross-cultural studies, we chose to focus on (a) the hypothesized differential impact of self-enhancement on personal versus interpersonal adjustment (Paulhus, 1998), which we expected to be supported in all cultures, and (b) the prediction that self-enhancement will be more positively associated with self-reported adjustment in individualistic cultures than in collectivistic cultures. Because of the uncertain theoretical basis for doing so, we did not make differential predictions for agentic versus communal traits.

Hypothesis 6. In all cultures, self-enhancement tendencies are more strongly associated with personal adjustment (i.e., self-esteem, emotional stability) than with interpersonal adjustment, as indexed by others' judgments of emotional stability, friendliness, and agreeableness.

Hypothesis 7. Self-enhancement tendencies are more positively associated with self-reported adjustment in individualistic cultural groups than in collectivistic cultural groups.

2. Method

2.1. Sample

2.1.1. United States

The self-rating sample included 263 college students (77 men, 185 women, 1 not reporting gender) at Washington State University ($n = 116$), Skyline Community College in California ($n = 88$), and Santa Clara University ($n = 59$). The sample sizes for specific instruments ranged from 259 to 263. Mean age was 22.6 years ($SD = 6.6$). Self-reported ethnic backgrounds were as follows: European American ($n = 141$), Asian American ($n = 72$), Chicano/Latino/Hispanic ($n = 25$), African-American ($n = 7$), Native American ($n = 1$), Multi-racial ($n = 11$), and other or not reporting ($n = 6$). All 263 participants were included in confirmatory factor analyses demonstrating the cross-cultural equivalence of the instruments. However, for most analyses, we treated the two largest ethnic groups, European Americans and Asian Americans, separately.

Each student was asked to obtain confidential ratings of their personality from two schoolmates, one parent or guardian, and a fourth person who knew them well outside

the school or home setting. Most students ($n = 230$) obtained these "peer" ratings from all four designated individuals. The remaining students obtained peer ratings from five persons ($n = 2$), three persons ($n = 26$), or two persons ($n = 5$). The genders and ages of the peer raters were as follows: (a) schoolmates: 67 men, 319 women (2 not reporting); M age = 22.3 ($SD = 6.5$); (b) parents/guardians: 70 men, 163 women; M age = 49.9 ($SD = 8.0$); (c) additional raters: 129 men, 155 women (2 not reporting); M age = 26.5 ($SD = 10.6$).

2.1.2. Mexico

The self-rating sample included 141 college students (66 men, 75 women) at the Autonomous University of the State of Mexico (UAEM) in Mexico City. The sample sizes for specific instruments ranged from 128 to 141. Mean age was 21.0 years ($SD = 2.3$). Self-reported ethnic backgrounds were as follows: 94 Mestizo, 26 Mexican-American, 7 indigenous Indian, and 2 Americano (Anglo). Mestizos, who are of mixed Spanish and indigenous Indian ethnicity, are the majority ethnic group in Mexico. Most students ($n = 109$) obtained peer ratings from all four designated persons. The remaining students obtained peer ratings from three persons ($n = 27$) or two persons ($n = 5$). The genders and ages of the peer raters were as follows: (a) schoolmates: 61 men, 159 women (14 not reporting); M age = 20.8 ($SD = 2.3$); (b) parents/guardians: 52 men, 67 women (2 not reporting); M age = 46.5 ($SD = 9.4$); and (c) additional raters: 71 men, 94 women (4 not reporting); M age = 24.6 ($SD = 8.9$).

2.1.3. Philippines

The self-rating sample for all instruments was 174 college students (65 men, 109 women) at De La Salle College in Lipa City, 90 km south of Manila. Mean age was 18.6 years ($SD = 1.1$). Filipino (Tagalog) was the native language of all participants. Most students ($n = 138$) obtained peer ratings from all four designated individuals. The remaining students obtained peer ratings from three persons ($n = 26$) or two persons ($n = 10$). The genders and ages of the peer raters were as follows: (a) schoolmates: 101 men, 228 women; M age = 18.6 ($SD = 1.1$); (b) parents/guardians: 39 men, 121 women; M age = 44.2 ($SD = 9.7$); and (c) additional raters: 62 men, 99 women; M age = 21.5 ($SD = 7.0$).

2.1.4. Peer rater effects

To determine whether cultural differences in the proportion of male and female peer raters might confound cultural comparisons, we conducted a MANOVA with cultural group and gender as independent variables and the eight measured traits, as rated by peers, as dependent variables. With the very large sample size ($N = 1900$ peer raters), the main effect for gender (Wilks' $\Lambda = .97$, $F[8, 1885] = 7.88$, $p < .01$) and the culture by gender interaction effect (Wilks' $\Lambda = .98$, $F[24, 5468] = 1.78$, $p < .01$) were statistically significant. However, all effect sizes were trivial (partial eta^2 less than .01 for all main effects but one [.03], and less than .003 for interaction effects). Therefore, the proportion of male versus female peer raters in each culture would not impact the results.

We conducted a second MANOVA to determine whether the peer raters' relationship to the target might affect cross-cultural comparisons. The independent variables were cultural group and peer relationship (i.e., schoolmate, parent/guardian, and other acquaintance) and the eight traits were the dependent variables. Again, with the large sample sizes, both the main effect for peer relationship (Wilks' $\Lambda = .97$, $F[24, 5500] = 2.62$,

$p < .01$) and the interaction effect of culture by peer relationship (Wilks' $\Lambda = .94$, $F[72, 11540] = 1.57$, $p < .01$) were statistically significant. However, all effect sizes were trivial (<.001 to .01). Thus, slight differences in the relationship composition of the peer raters in each culture would not affect the results.

2.2. Instruments

2.2.1. Translation

All instruments were translated from English into Spanish and Filipino (Tagalog) using native speakers and the backtranslation method (Brislin, 1980). The Filipino translators were bilingual psychologists. The Spanish translators were bilingual graduate students. We describe each instrument, then present evidence of cross-cultural measurement equivalence.

2.2.2. Measures of agentic and communal personality traits

We obtained self and peer ratings using eight trait scales from the International Personality Item Pool (IPIP; Goldberg, 1999, in press), which converge well with measures of corresponding constructs in the NEO-PI-R (Costa & McCrae, 1992), Multidimensional Personality Inventory (MPQ; Tellegen, in press), and Hogan Personality Inventory (HPI; Hogan & Hogan, 1995). The eight scales, their α reliabilities in Goldberg's (1999) United States sample, and correlations with corresponding inventory scales, were as follows: (a) IPIP Assertiveness ($\alpha = .84$; $r = .81$ with NEO-PI-R Assertiveness); (b) IPIP Achievement-Seeking ($\alpha = .79$; $r = .64$ with MPQ Achievement); (c) IPIP Intellect ($\alpha = .84$; $r = .67$ with Goldberg's [1992] 10-item Big Five Intellect scale); (d) IPIP Emotional Instability ($\alpha = .84$; $r = .75$ with MPQ Stress Reaction); (e) IPIP Friendliness ($\alpha = .86$; $r = .67$ with HPI Likeability); (f) IPIP Agreeableness ($\alpha = .77$; $r = .70$ with Saucier's [1997] Big-7 Agreeableness factor); (g) IPIP Dutifulness ($\alpha = .71$; $r = .60$ with NEO-PI-R Dutifulness); and (h) IPIP Distrustfulness ($\alpha = .78$; $r = .70$ with MPQ Alienation). Items were rated on a five-point scale (Very Inaccurate, Moderately Inaccurate, Neither Inaccurate nor Accurate, Moderately Accurate, and Very Accurate). All scales contained 10 items, but we eliminated 7 of 80 items that had low item discrimination in one or more cultures in the present samples. All Big Five domains were represented by these scales (Goldberg, 1990).

Wiggins and Trapnell (1996) identified scales that assess agentic or communal aspects of the Big Five domains. The IPIP Assertiveness and Agreeableness scales assess prototypical agentic and communal traits in the Big Five Extraversion and Agreeableness domains, respectively (Wiggins & Trapnell, 1996, p. 134). In addition, within the Big Five Conscientiousness domain, Wiggins and Trapnell (1996, p. 136) distinguished (a) an agentic aspect (i.e., proactive self-discipline and activation in the pursuit of resources, power, or social status), exemplified by the achievement-seeking trait, and (b) a communal aspect (i.e., restrained self-discipline exercised in the pursuit of harmonious social relations), exemplified by the dutifulness trait. Wiggins and Trapnell (1996, p. 142) classified emotional stability as an agentic trait, noting that measures of anxiety and depression correlate negatively with agentic traits (e.g., dominance) and are uncorrelated with communal traits (e.g., nurturance). Wiggins and Trapnell (1996, p. 142–143) classified trustfulness as a communal trait, because distrustfulness is a neurotic characteristic that interferes with communal goals. Finally, Wiggins and Trapnell (1996, p. 144–145) justified their

classification of Intellect as an agentic trait by citing consistent correlations with measures of intellectual performance and achievement, and with agentic traits such as surgency, dominance, and ambition. Other self-enhancement researchers have designated comparable traits as agentic (individualistic) and communal (collectivistic) (e.g., Kurman, 2001; Paulhus & John, 1998; Sedikides et al., 2003; Yik et al., 1998). Based on this work, we classified IPIP Assertiveness, Achievement-Seeking, Intellect, and Emotional Stability (reverse scoring of IPIP Emotional Instability) as measures of agentic traits, and IPIP Friendliness, Agreeableness, Dutifulness, and Trustfulness (reverse scoring of IPIP Distrustfulness) as measures of communal traits.

2.2.3. Measures of explanatory variables
2.2.3.1. Self-construal scale.   The 30-item self-construal scale (SCS) (Singelis, 1994) was used to measure independent and interdependent self-construals. Items were rated using a 6-point agreement scale (strongly disagree, somewhat disagree, slightly disagree, slightly agree, somewhat agree, strongly agree). Alpha reliabilities across the cultural groups ranged from .63 to .81 for the independent scale and .66–.73 for the interdependent scale. The SCS has been widely validated in cross-cultural studies (e.g., Singelis, 1994; Singelis & Sharkey, 1995).

2.2.3.2. Self-monitoring measure.   To measure self-monitoring (or internal versus external frame of reference), Church et al. (in press) adapted the Lennox and Wolfe (1984) measures of Self-Monitoring and Concern for Appropriateness and added new items to balance the proportion of high and low self-monitoring items. Items were rated using a 6-point agreement scale (strongly disagree, somewhat disagree, slightly disagree, slightly agree, somewhat agree, and strongly agree). In exploratory and confirmatory factor analyses (CFA) in six cultures, Church et al. identified distinct dimensions associated with the high self-monitoring items (labeled Self-Monitoring) and low self-monitoring items (labeled Autonomous Self-Expression). The two dimensions were related to interdependent and independent self-construals, respectively, in a manner consistent with theory. In the present study, we administered a 66-item version of the measure. The 33 Self-Monitoring items measured the following content facets: tendency to modify self-presentation, cross-situational variability, attention to social comparison information, sensitivity to the expressive behaviors of others, and attention to others' status characteristics. The 33 Autonomous Self-Expression items measured authenticity or expression of true self, trait consistency, independence of others' approval, disregard for the expressive cues of others, and egalitarian or status free relations with others. We deleted one item that performed poorly in all cultures in the present samples. Alpha reliabilities across the four cultural groups ranged from .88 to .90 for the Self-Monitoring scale and .84–.86 for the Autonomous Self-Expression scale.

2.2.3.3. Personality beliefs inventory.   The personality beliefs inventory (PBI) (Church et al., 2003) measures implicit trait and contextual theories or beliefs. The trait beliefs items measure beliefs about the longitudinal stability of traits, the cross-situational consistency of trait-relevant behavior, the ability to predict individuals' behavior from their traits, and the ability to infer traits from few behavioral instances. The contextual beliefs items measure beliefs about the longitudinal instability of traits, the variability of behavior across situations, the difficulty of predicting behavior from traits, and the difficulty of

inferring traits from a few instances of behavior. See Church et al. (2003, Appendix) for sample items. Church et al. (2003, 2005) showed that trait and contextual beliefs represent relatively independent dimensions, not bipolar opposites. Items were rated using a 6-point agreement scale (strongly disagree, somewhat disagree, slightly disagree, slightly agree, somewhat agree, strongly agree). A 50-item version of the PBI was administered. Across the four cultural groups, alpha reliabilities ranged from .84 to .91 for the Trait Beliefs scale and from .83 to .87 for the Contextual Beliefs scale. In several cultures, PBI scores have predicted judgments regarding the consistency of behavior and have exhibited cultural differences that conform to theory (Church et al., 2003; Church et al., 2005).

2.2.4. Measures of egoistic and moralistic bias

2.2.4.1. Egoistic bias. As recommended by Paulhus and John (1998), we used the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) to assess egoistic bias, an exaggerated sense of self-worth with regard to intellectual and social competence. We administered 18 of 40 NPI items. To reduce instrument length, we administered the affirmative items in true-false format rather than the authors' forced-choice format. Alpha reliabilities ranged from .70 to .79 across cultural groups. Raskin and Terry (1988) reported validity evidence for the NPI.

2.2.4.2. Moralistic bias. Paulhus and John (1998, p. 1046) noted that moralistic bias is best measured by the Impression Management, Self-Deceptive Denial (Paulhus & Reid, 1991), and Marlowe-Crowne Social Desirability (MCSD; Crowne & Marlowe, 1964) scales. For one measure, we used the 20-item Impression Management scale from the International Personality Item Pool (IPIP, 2001). The IPIP web site reports an alpha reliability of .82 for this scale and a correlation of .73 with Paulhus' (1991) Impression Management scale. We dropped three items that had weak factor loadings in the present samples. Alpha reliabilities ranged from .73 to .79 across cultural groups. For a second measure, we administered 17 true-keyed items from the MCSD. Paulhus and Reid (1991) found that true-keyed items from the MCSD scale correlate higher (above .50) with the Self-Deceptive Denial and Impression Management scales than do the false-keyed items (rs of .22 and .17, respectively). Two items with poor factor loadings in the present samples were deleted. Alpha reliabilities ranged from .64 to .71 across cultural groups.

2.2.5. Measures of personal adjustment

2.2.5.1. Rosenberg self-esteem scale (Rosenberg, 1989). This is a widely used 10-item measure of personal self-esteem. We deleted one item that had weak factor loadings in the present Mexican and Philippine samples. Alpha reliabilities ranged from .81 to .89 across cultural groups.

2.2.5.2. Collective self-esteem scale (CSE; Luhtanen & Crocker, 1992). We used items from the Private and Public subscales of the CSE to measure participants' personal esteem for their social group (Private subscale) and perceptions of others' esteem for their group (Public subscale). The CSE items refer to ''social groups'' in general, which we anticipated might be interpreted differently across cultures. Fortunately, Luhtanen and Crocker (1992, Study 3) have shown that the psychometric properties of the instrument remain much the same when participants rate the items based on more specific ascribed (e.g., nationality) or achieved (e.g., friends) social groups. Therefore, we adapted the items by replacing general

references to "social group" with "nationality" or "friends." The result was 16 items; half referred to an ascribed social group (nationality) and half to an achieved social group (friends). Alpha reliabilities ranged from .86 to .93 across cultural groups. Luhtanen and Crocker reported validity evidence for the CSE.

2.2.5.3. IPIP emotional instability scale (Goldberg, 1999). This scale was reverse scored to obtain a measure of emotional stability. Reliability and validity data for the IPIP scales were reviewed above.

2.2.6. Measures of interpersonal adjustment

Interpersonal adjustment was assessed by peer ratings on the IPIP Emotional Instability, Friendliness, and Agreeableness scales (Goldberg, 1999). The Emotional Instability scale was reverse-keyed to assess Emotional Stability. We assumed that participants perceived by others as emotionally stable, friendly, and agreeable have better interpersonal adjustment than participants rated low on these characteristics. The reliability and validity of these scales were noted above.

2.3. Procedure

In Mexico and the Philippines, volunteer participants completed the self-report inventories in two class sessions, separated by one week. In the United States, most participants were given the self-rating forms at a first session and completed them on their own time. All participants completed the IPIP self-rating form first, then the remaining forms in four orders. At the end of the first session, the researchers distributed the IPIP peer-rating forms. Each participant was asked to recruit four peer raters who knew them well: two schoolmates, a parent or guardian, and an acquaintance outside the school and home settings. Each peer rater received a cover letter, which described alternative methods (e.g., confidential drop box, stamped return envelope) for maintaining confidentiality when returning the questionnaires. Participants in the United States received a $5 Starbucks coupon. Participants in Mexico and the Philippines received local pesos in an amount roughly equivalent in terms of the local cost of living.

3. Results

3.1. Preliminary analyses

3.1.1. Cross-cultural measurement equivalence

In cross-cultural studies, it is important to demonstrate that the constructs retain their structure and meaning across cultures (van de Vijver & Leung, 1997). We conducted multigroup confirmatory factor analyses (CFA), using AMOS 4.0, to test the structural equivalence of each measure in the total United States, Mexican, and Philippine samples. For each instrument, the latent constructs (e.g., the eight traits in the IPIP measure; trait and contextual beliefs in the PBI) were measured by three to five item parcels, each comprised of randomly assigned items or items from existing content facets (Kishton & Widaman, 1994). For each instrument, the fit indices for models in which the factor loadings were constrained to equality across cultures were acceptable to excellent (e.g., CFI indices ranged from .89 to 1.00; RMSEA values ranged from .03 to .07). Factor loadings ranged from

.41 to .92 and were all statistically significant ($p < .05$). Thus, all of the instruments exhibited good structural equivalence across cultures.

3.1.2. Structure of explanatory variables

To examine the structural relationships among the explanatory variables, and to reduce the number of predictors, we conducted principal-axis factor analyses with varimax rotations in the European American, Mexican, and Philippine samples (the Asian American sample was too small for a separate analysis). Although the explanatory variables have been linked in theory with individualistic and collectivistic perspectives, two-factor solutions did not reveal distinct individualism or collectivism factors. Thus, the explanatory variables are better viewed as comprising conceptual clusters suggested by these perspectives, rather than as two unitary dimensions. Nonetheless, in 3- and 4-factor solutions, suggested by the eigenvalue patterns in each culture, some structural consistencies were apparent. These included the alignment of the independent self-construal and autonomous self-expression measures on the same factor, the interdependent self-construal and self-monitoring measures on the same factor, and the two moralistic bias measures on the same factor. Across the four cultural groups, correlations ranged from .48 to .63 ($p < .01$) between the independent self-construal and autonomous self-expression measures, from .28 to .46 ($p < .01$) between the interdependent self-construal and self-monitoring measures, and from .36 to .50 ($p < .01$) between the two moralistic bias measures. The remaining individualistic (i.e., egoistic bias, implicit trait beliefs) and collectivistic (i.e., contextual beliefs) variables were less consistent in their factor alignments across cultural groups.

Based on these results, we reduced the number of predictors for our regression analyses by creating three composite variables: (a) an independent self-construal/autonomous self-expression composite (α range = .86–.92 across cultural groups); (b) an interdependent self-construal/self-monitoring composite (α range = .87–.90 across cultural groups); and (c) a moralistic bias composite (α range = .76–.82 across cultural groups). The two variables comprising each composite were standardized and averaged. Each of the composites makes theoretical sense. The tendency to authentically express one's unique attributes (i.e., autonomous self-expression) can be viewed as one aspect of independent self-construals (Markus & Kitayama, 1991b). Similarly, a tendency to monitor one's behavior for social and situational appropriateness (i.e., self-monitoring) is expected by those with interdependent self-construals (Singelis, 1994). Finally, the moralistic bias composite is consistent with theoretical and empirical work reviewed by Paulhus and John (1998).

3.1.3. Self-enhancement composites for agentic and communal traits

As recommended by John and Robins (1994), we operationalized individual differences in self-enhancement for each trait as the residual scores after regressing the self-ratings onto the aggregate peer ratings. To examine the relationships among the self-enhancement scores for different traits, and to reduce the number of variables for some analyses, we factor analyzed these residual scores within the European American, Mexican, and Filipino samples (principal-axis factor analysis with oblique [oblimin] rotations). In each culture, self-enhancement scores for all eight traits loaded highly (.43–.79) on the first unrotated factor, supporting the existence of a general self-enhancement factor underlying ratings of both agentic and communal traits. Nonetheless, in two-factor solutions distinct agentic and communal self-enhancement factors were identified. In the European American sample, all four agentic traits loaded on the first factor, and all four communal traits loaded on

the second factor. In the Mexican and Philippine samples, the same pattern was observed, except that the Emotional Stability variable loaded better on the communal factor than the agentic factor. Therefore, in creating self-enhancement composites for agentic and communal traits, we excluded the Emotional Stability scale, which was not a consistent or prototypical agentic trait across all cultural groups. To obtain a self-enhancement composite for agentic traits we averaged the standardized self-enhancement residuals for the remaining agentic traits (Assertiveness, Achievement-Seeking, Intellect). To obtain a self-enhancement composite for communal traits we averaged the self-enhancement residuals for all four communal traits.

3.2. Accuracy and enhancement in trait self-assessments

Table 1 shows the reliabilities for the IPIP scales in the self and peer rating data. The alpha reliabilities were acceptable in all four cultural groups but were highest in the European American sample, next highest in the Asian American sample, and lower in the Mexican and Filipino samples. Inter-rater reliability, indexed by intraclass correlations (ICC), was similar for the European American, Asian American, and Mexican peer raters, but lower for the Filipino peer raters.

In Hypothesis 1, we predicted at least moderate accuracy in trait self-ratings in all cultural groups, as indexed by self-peer agreement. Consistent with trait theory, and our integrated cultural trait psychology perspective, Hypothesis 1 was supported. In all four cultural groups, the self-peer rs in Table 1 indicate generally moderate (e.g., .30–.50) to high (.50–.70) agreement between self-assessments and aggregate peer assessments for all eight traits. The primary cultural difference involved the Filipino sample, which exhibited the least self-peer agreement for seven of the eight traits. The mean self-peer correlation across traits in the Philippines (mean $r = .33$) was significantly lower ($z = 2.28$, $p < .05$) than the mean self-peer correlation in the European American sample (mean $r = .54$), and marginally lower than the mean self-peer correlations in the Asian American (mean $r = .54$; $z = 1.84$, $p < .07$) and Mexican (mean $r = .50$; $z = 1.84$, $p < .07$) samples. This finding might be due, in part, to the lower agreement among peer raters in the Philippines, as compared to the other three cultural groups (see ICCs in Table 1). The lower observer agreement in the Philippines is consistent with the cultural psychology expectation that trait-based consistency is lower in collectivistic cultures than in individualistic cultures (Markus & Kitayama, 1998). However, we also noted the lower variability (SDs) in the self- and peer-rating data in the Philippine sample, which can decrease correlations among observers. Analyses of item distributions indicated that Filipino self and peer raters made less frequent use of the two extreme categories on the rating scale (i.e., strongly disagree and strongly agree) than did raters in the other three cultural groups.

In Hypothesis 2 we predicted that European Americans would exhibit greater trait self-enhancement overall than would Asian Americans, Mexicans, and Filipinos. Table 1 shows the mean self and aggregate peer ratings, as well as paired t tests comparing the self and peer ratings, for each trait and cultural group. Self-rating means were lower than aggregate peer-rating means for six of eight traits in the European American sample, for five of eight traits in the Asian American and Filipino samples, and two of eight traits in the Mexican sample. In no case were the aggregate peer rating means significantly lower than the self-rating means. These results indicate that the average tendency for most traits was one of self-effacement, rather than self-enhancement.

Table 1
Descriptive statistics for the IPIP self and peer ratings in four cultural groups

Trait scale	Self ratings			Peer ratings			t	ICC	Self-peer r
	α	M	SD	α	M	SD			
European Americans (n = 141)									
Agentic traits									
Assertiveness	.86	3.54	.70	.89	3.63	.52	−1.92	.62	.62
Achievement-seeking	.75	3.94	.51	.87	4.04	.44	−2.79[**]	.61	.61
Intellect	.76	3.82	.54	.84	3.97	.36	−3.73[**]	.48	.48
Emotional stability	.81	4.09	.72	.86	4.43	.50	−6.52[**]	.52	.52
Communal traits									
Friendliness	.83	3.90	.60	.91	4.11	.47	−4.97[**]	.59	.59
Agreeableness	.76	4.12	.47	.86	4.20	.36	−2.44[*]	.55	.55
Dutifulness	.76	4.28	.42	.85	4.25	.37	.71	.42	.42
Trustfulness	.77	4.62	.60	.87	4.89	.44	−6.21[**]	.53	.53
Asian Americans (n = 72)									
Agentic traits									
Assertiveness	.77	3.34	.64	.79	3.50	.38	−2.77[**]	.65	.65
Achievement-seeking	.72	3.72	.56	.85	3.81	.44	−1.65	.63	.63
Intellect	.80	3.65	.63	.88	3.72	.48	−1.10	.48	.48
Emotional stability	.82	3.91	.76	.87	4.36	.51	−5.97[**]	.57	.57
Communal traits									
Friendliness	.78	3.72	.58	.91	3.96	.49	−3.77[**]	.50	.50
Agreeableness	.56	3.84	.42	.83	3.98	.45	−2.69[**]	.49	.49
Dutifulness	.73	3.85	.51	.77	3.88	.45	−.43	.51	.51
Trustfulness	.71	4.32	.57	.88	4.69	.47	−6.04[**]	.51	.51
Mexicans (n = 141)									
Agentic traits									
Assertiveness	.68	3.47	.57	.65	3.44	.37	.79	.56	.56
Achievement-seeking	.72	3.76	.57	.84	3.84	.49	−1.70	.46	.46
Intellect	.70	3.61	.56	.81	3.76	.44	−3.56[**]	.52	.52
Emotional stability	.67	4.32	.61	.66	4.43	.42	−2.27[*]	.32	.32
Communal traits									
Friendliness	.73	3.74	.59	.82	3.77	.47	−.66	.58	.58
Agreeableness	.68	3.78	.53	.81	3.80	.44	−.61	.55	.55
Dutifulness	.76	3.89	.59	.84	3.85	.47	.95	.59	.59
Trustfulness	.65	4.43	.55	.76	4.51	.43	−1.87	.41	.41
Filipinos (n = 174)									
Agentic traits									
Assertiveness	.62	3.36	.44	.64	3.34	.28	.62	.40	.40
Achievement-seeking	.68	3.58	.43	.75	3.73	.30	−4.15[**]	.26	.26
Intellect	.79	3.64	.48	.83	3.81	.32	−5.19[**]	.45	.45
Emotional stability	.70	4.13	.53	.73	4.32	.34	−4.85[**]	.37	.37
Communal traits									
Friendliness	.77	3.83	.49	.83	3.91	.33	−2.20[*]	.34	.34
Agreeableness	.66	4.03	.38	.86	3.99	.33	1.15	.32	.32
Dutifulness	.68	3.86	.45	.84	3.91	.34	−1.39	.30	.30
Trustfulness	.59	4.46	.45	.76	4.63	.33	−4.41[**]	.21	.21

Note. ICC, intraclass correlations.
[*] $p < .05$.
[**] $p < .01$.

As recommended by John and Robins (1994), we operationalized individual differences in self-enhancement for each trait as the residual scores after regressing the self-ratings onto the aggregate peer ratings in the combined-culture sample. These residual scores are preferable to self-peer difference scores, which are less reliable and are confounded with the self and peer rating scores used to compute them. Table 2 shows the means and standard deviations for the unstandardized self-peer residuals for each trait in the four cultural groups. These residuals indicate the size and direction of self-enhancement (or self-effacement) in terms of the original five-point rating scale. Positive values indicate self-enhancement because the self-ratings were higher than predicted from aggregate peer ratings. Negative values indicate self-effacement because the self-ratings were lower than predicted from aggregate peer ratings. On average, the size of the self-enhancement or self-effacement tendencies was small, and ranged from zero to about one-fifth of a scale point (i.e., .20) on the five-point scale.

We conducted a repeated measures ANOVA with culture and gender as between-groups independent variables, and the agentic versus communal self-enhancement composites as a repeated (within-subjects) factor. The means and standard deviations of these standardized composites are also shown in Table 2. Hypothesis 2 would be supported by a significant main effect for culture, with European Americans averaging highest in overall self-enhancement. However, the main effect for culture was not significant, $F(3, 520) = 1.08$, $p > .05$, so Hypothesis 2 was not supported. In Hypothesis 3 we predicted that European Americans would self-enhance more on agentic than communal traits, while Asian Americans, Mexicans, and Filipinos would self-enhance more on communal than agentic traits. Hypothesis 3 implies an interaction effect involving culture and the

Table 2
Cultural differences in trait self-enhancement: Descriptive statistics for unstandardized self-peer residuals

Trait	European Americans		Asian Americans		Mexicans		Filipinos		$F[3, 520]$	Partial η^2
	M	SD	M	SD	M	SD	M	SD		
Agentic traits										
Assertiveness	−.03	.55	−.13	.50	.05	.47	.02	.41	2.67[*]	.02
Achievement-seeking	.06	.41	.00	.44	.01	.50	−.09	.43	2.55	.02
Intellect	.03	.47	.02	.55	−.04	.48	−.05	.43	1.41	.01
Emotional stability	−.08	.61	−.21	.63	.14	.59	.03	.50	5.14[**]	.03
Communal										
Friendliness	−.03	.49	−.11	.50	.04	.48	.03	.47	2.51	.01
Agreeableness	.03	.39	−.12	.37	−.08	.45	.06	.37	4.31[**]	.02
Dutifulness	.11	.39	−.07	.44	−.02	.48	−.09	.44	3.20[*]	.02
Trustfulness	.01	.51	−.17	.49	.04	.50	.01	.45	2.88[*]	.02
Agentic trait composite[a]	.05	.78	−.07	.78	.02	.82	−.09	.73	.89	.01
Communal trait composite[b]	.07	.75	−.26	.67	−.02	.78	.01	.73	2.00	.01

[a] The self-enhancement composite for agentic traits is the average of the standardized self-peer residuals for the Assertiveness, Achievement-seeking, and Intellect traits (see text).
[b] The self-enhancement composite for communal traits is the average of the standardized self-peer residuals for all four communal traits (see text).
[*] $p < .05$.
[**] $p < .01$.

agentic-communal within-subjects factor. The interaction effect was marginally significant, Wilks' $\Lambda = .99$, $F(3, 520) = 2.45$, $p = .06$. However, follow-up paired t tests indicated that self-enhancement of agentic versus communal traits differed only for Asian Americans ($t = -2.16$, $p < .05$) and in a direction opposite to expectations. Asian Americans self-effaced, not self-enhanced, more for communal traits than for agentic traits. Thus, Hypothesis 3 was not supported for any of the cultural groups.[1]

Because the Emotional Stability trait was not included in the agentic trait composite, we examined it separately. As seen in Table 2, a significant ANOVA main effect for culture was found ($F[3, 520] = 5.14$, $p < .01$). Post hoc Tukey HSD tests ($p < .05$) indicated that Asian Americans self-effaced more on this trait relative to the other groups and that Mexicans self-enhanced more than European Americans. The effect size was modest, however (partial eta$^2 = .03$).

To reiterate, European Americans did not exhibit greater self-enhancement relative to peer raters than the other three groups. Interestingly, however, they did provide consistently more positive self-assessments in an absolute sense. The European Americans had the highest self-rating mean for every trait except Emotional Stability (see Table 1), although not all of the cultural mean differences were statistically significant.[2] If we assume that higher scores on these traits are viewed positively in each culture, and that European Americans are not likely to be actually higher on all of these traits, then we might infer that the European Americans are, in fact, exhibiting self-enhancement biases. Indeed, it is possible that the European Americans did not reveal self-enhancement tendencies relative to aggregate peers only because European American peers rated the self targets even more favorably than did the targets themselves. Indeed, on all eight traits European American peers rated their targets more favorably than did peers from the other cultural groups, and most of these mean differences were statistically significant.[3] There was no consistent

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[1] Although we did not make any predictions regarding gender differences, we did find a significant interaction between gender and the agentic-communal factor, Wilks' $\Lambda = .98$, $F(1, 520) = 11.89$, $p < .01$. Follow-up paired t tests indicated that men self-effaced more on agentic traits ($M = -.19$, $SD = .78$) than communal traits ($M = -.05$, $SD = .80$), $t = -2.66$, $p < .01$, whereas females self-enhanced more on communal traits ($M = .11$, $SD = .74$) than agentic traits ($M = .03$, $SD = .79$), $t = 2.06$, $p < .05$. No other effects were statistically significant.

[2] In a MANOVA with cultural group as the independent variable and the eight traits as dependent variables, the overall effect of culture was significant (Wilks' $\Lambda = .78$, $F[24, 1488] = 5.47$; $p < .01$). Follow-up ANOVAs and Scheffé tests indicated the following patterns of significant mean differences: (a) for Assertiveness: European Americans greater than Filipinos; (b) for Achievement-Seeking: European Americans greater than all other groups; Mexicans greater than Filipinos; (c) for Intellect: European Americans greater than Filipinos and Mexicans; (d) for Emotional Stability: European and Asian Americans lower than Mexicans; (e) for Friendliness: no significant cultural group differences; (e) for Agreeableness: European Americans and Filipinos greater than Asian Americans and Mexicans; (f) for Dutifulness: European Americans greater than all other groups; and (g) for Trustfulness: European Americans greater than Mexicans and Asian Americans.

[3] For the peer ratings, a MANOVA revealed a significant overall effect for cultural group (Wilks' $\Lambda = .70$, $F[24, 1488] = 8.20$, $p < .01$). Follow-up ANOVAs and Scheffé tests indicated the following pattern of significant cultural mean differences: (a) for Assertiveness: European Americans greater than Mexicans and Filipinos; Asian Americans greater than Filipinos; (b) for Achievement-Seeking, Intellect, and Dutifulness: European Americans greater than the other three groups; (c) for Emotional Stability: no significant differences; (d) for Friendliness: European Americans greater than Mexicans and Filipinos; Asian Americans and Filipinos greater than Mexicans; (e) for Agreeableness: European Americans greater than all three groups; Filipinos and Asian Americans greater than Mexicans; and (f) for Trustfulness: European Americans greater than all other groups; Asian Americans greater than Mexicans.

tendency across traits for any of the other three cultural groups to be higher than the remaining two groups in either the self or peer ratings.

Unfortunately, there is some ambiguity in how to interpret the elevated self and peer means in the European American sample. It is plausible that they reflect both self- and other-enhancement tendencies in the European American sample when peer raters are close acquaintances. But they could also reflect response styles shared by self and peer raters, or other factors that complicate between-culture comparisons (e.g., remaining sampling or measurement inequivalencies). If we define self-enhancement solely in relative terms (i.e., self versus peer criterion), then we must conclude that the European American sample did not self-enhance more than the other cultural groups.

3.3. Predicting self-enhancement with explanatory variables

To test Hypotheses 4 and 5 we conducted hierarchical regression analyses to determine whether the self-enhancement composites for agentic and communal traits were differentially predicted by the individualistic and collectivistic explanatory variables, respectively. Tables 3 and 4 summarize the results. In predicting both composites, the individualistic and collectivistic explanatory variables were entered into the regression equation in successive blocks and in alternate orders. The correlations among the individualistic predictors ranged from .17 to .22 for the European Americans, .15 to .33 for the Asian Americans, .10 to .44 for the Mexicans, and .33 to .57 for the Filipinos. The correlations among the collectivistic predictors ranged from .00 to .13 for the European Americans, −.11 to .10 for the Asian Americans, .01 to .28 for the Mexicans, and .13 to .53 for the Filipinos. The cross-set correlations relating the individualistic and collectivistic variables ranged from −.25 to .38 for European Americans, −.33 to .48 for Asian Americans, −.12 to .38 for Mexicans, and .10 to .57 for Filipinos.

3.3.1. Self-enhancement of agentic traits
Table 3 shows the results of the analyses predicting the self-enhancement composite for the agentic traits. In Order 1, the individualistic variables were entered first. In Order 2, the collectivistic variables were entered first. The final regression coefficients after entry of both the individualistic and collectivistic variables are, of course, the same for both orders. The results provide some support for Hypothesis 4. Regardless of order of entry, the individualistic variables as a set provided statistically significant prediction of the self-enhancement composite for agentic traits (see ΔR^2 values for the individualistic variables in both Orders 1 and 2). The regression coefficients indicate that the independent self-construal/autonomous self-expression composite and egoistic bias (but not implicit trait beliefs) predicted self-enhancement of agentic traits in three of four cultural groups. In contrast, even when the collectivistic variables were entered first (see ΔR^2 values for the collectivistic variables), they generally provided modest, if any, prediction of self-enhancement of agentic traits.

The primary exception involved the Filipino sample, in which the interdependent self-construal/self-monitoring and moralistic bias composites also predicted self-enhancement of agentic traits. The ability of the former composite to predict self-enhancement of agentic traits was probably due to two factors. First, we have found that the independent and interdependent self-construal scales are less statistically independent in the Philippines than in the United States ($r = .58$ in the present study). Second, in a follow-up analysis,

Table 3
Predicting self-enhancement of agentic traits

Variables	European Americans ($n = 141$)				Asian Americans ($n = 72$)				Mexicans ($n = 141$)				Filipinos ($n = 174$)			
	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2
Individualistic variables			.22**	.20*			.22*	.18*			.13**	.09**			.17**	.11**
Independent self-construal/ autonomous self-expression composite	.15	.31**			.18	.46**			.13	.27*			−.05	−.10		
Egoistic bias (narcissism)	1.03	.27**			.45	.13			.71	.17*			1.68	.36**		
Implicit trait beliefs	−.02	−.02			−.12	−.09			−.07	−.06			−.08	−.05		
Collectivistic variables			.02	.03			.03	.07			.03	.07*			.10**	.17**
Interdependent self-construal/ self-monitoring composite	−.05	−.10			.01	.01			−.08	−.16*			.12	.24**		
Moralistic bias composite	.03	.06			−.06	−.12			.05	.10			.10	.22**		
Implicit contextual beliefs	−.08	−.06			.16	.14			.11	.08			.08	.04		

Note. Self-enhancement criterion was self-enhancement composite for agentic traits (see text). *B*, final unstandardized regression coefficients; *β*, final standardized regression coefficients. ΔR^2 in Order 1 gives changes in R^2 when individualistic variables were entered in the first block and collectivistic variables were entered in the second block in the hierarchical regression. ΔR^2 in Order 2 gives changes when collectivistic variables were entered in the first block and individualistic variables were entered in the second block.

* $p < .05$.
** $p < .01$.

Table 4
Predicting self-enhancement of communal traits

Variables	European Americans ($n = 141$)				Asian Americans ($n = 72$)				Mexicans ($n = 141$)				Filipinos ($n = 174$)			
	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2	B	β	ΔR^2 Order 1	ΔR^2 Order 2
Collectivistic variables			.20*	.13*			.13*	.04			.23**	.18**			.32**	.26**
Interdependent self-construal/ self-monitoring composite	.01	.03			.01	.02			−.05	−.12			.05	.10		
Moralistic bias composite	.18	.37**			.09	.22			.19	.41**			.23	.51**		
Implicit contextual beliefs	−.10	−.07			.09	.07			−.15	−.12			−.23	−.12		
Individualistic variables			.06*	.13*			.06	.15**			.04	.09**			.02	.07**
Independent self-construal/ autonomous self-expression composite	.13	.27**			.10	.27**			−.02	−.04			.03	.06		
Egoistic bias (narcissism)	−.40	−.10			.12	.04			−.10	−.03			.32	.07		
Implicit trait beliefs	−.01	−.01			−.13	−.10			.27	.23*			.13	.09		

Note. Self-enhancement criterion was self-enhancement composite for communal traits (see text). B, final unstandardized regression coefficients; β, final standardized regression coefficients. ΔR^2 in Order 1 gives changes in R^2 when collectivistic variables were entered in the first block and individualistic variables were entered in the second block in the hierarchical regression. ΔR^2 in Order 2 gives changes when individualistic variables were entered in the first block and collectivistic variables were entered in the second block.

* $p < .05$.
** $p < .01$.

we found that interdependent self-construal items that refer to personal values and feelings, or valuing of communal traits (e.g., "I respect those who are modest about themselves.") correlated with self-enhancement of agentic traits, whereas interdependent items that refer more definitively to relatedness with others (e.g., "I feel my fate is intertwined with the fate of those around me.") did not. For Filipinos, endorsement of the former "personal reference" items might imply a sense of personal identity, leading these items to function like independent items in predicting self-enhancement. In the other three cultural groups, neither type of interdependent item predicted self-enhancement of agentic traits.

3.3.2. Self-enhancement of communal traits

As seen in Table 4, support for Hypothesis 5 was less definitive. The collectivistic variables as a set did provide significant prediction of self-enhancement of communal traits, regardless of their order of entry in the hierarchical regression analysis (see ΔR^2 values). On the other hand, only the moralistic bias composite from the collectivistic variables contributed unique prediction. In addition, an individualistic variable, the independent self-construal/autonomous self-expression composite, predicted self-enhancement of communal traits in two of the four samples (i.e., for European and Asian Americans), whereas the interdependent self-construal/self-monitoring composite failed in all four cultural groups to predict self-enhancement of communal traits.

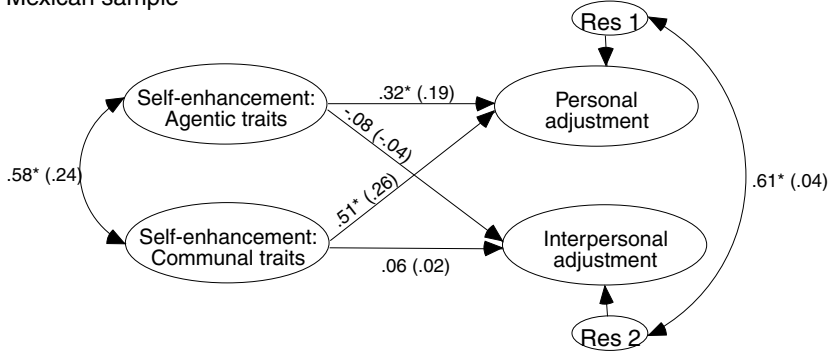### 3.4. Self-enhancement and adjustment

To test Hypotheses 6 and 7, we applied multigroup structural equations modeling (SEM) in the European American, Mexican, and Filipino samples to predict personal and interpersonal adjustment from self-enhancement of agentic and communal traits. The Asian American sample was too small to include in this SEM analysis. In the measurement model (CFA) for self-enhancement, agentic self-enhancement was defined by the standardized self-peer residuals for Assertiveness, Achievement-Seeking, and Intelligence, and communal Self-enhancement was defined by the standardized self-peer residuals for Friendliness, Dutifulness, Agreeableness, and Trustfulness. A model in which the factor loadings (range = .51–.78) were constrained to be equal across cultures fit the data very well ($\chi^2/df = 1.84$, GFI = .95, CFI = .96, RMR = .06, RMSEA = .04; a covariance between the error terms for Assertiveness and Friendliness was included to improve fit). In the measurement model (CFA) for adjustment, personal adjustment was defined by the scale scores for self-esteem, collective self-esteem, and self-reported emotional stability, and interpersonal adjustment was defined by peer rating scores for emotional stability, friendliness, and agreeableness. A model in which the factor loadings (range = .40–.96) were constrained to be equal across cultures fit the data very well ($\chi^2/df = 2.09$, GFI = .96, CFI = .96, RMR = .03, RMSEA = .05; a covariance between the error terms for self- and peer-rated Emotional Stability was included to improve fit). The cross-cultural equivalence of the measurement models enabled the use of multigroup SEM to test our two hypotheses.

Fig. 1 shows the results of the multigroup SEM model in which the paths relating agentic and communal self-enhancement to personal and interpersonal adjustment were freely estimated in each cultural group. For simplicity of presentation the measurement models are not depicted. The unstandardized path coefficients (regression weights) appear in
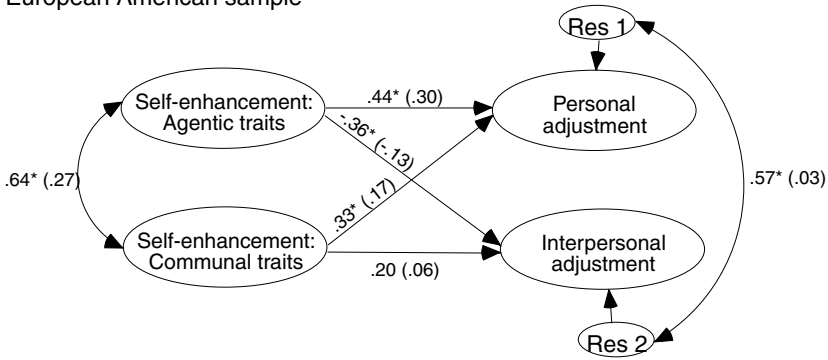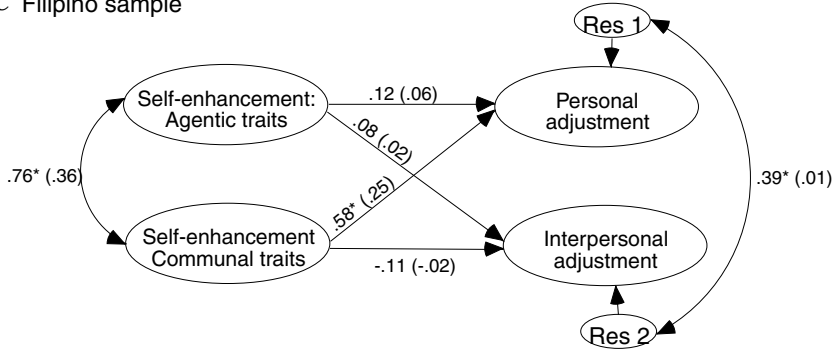
Fig. 1. Structural equations model predicting personal and interpersonal adjustment from self-enhancement of agentic and communal traits. Unstandardized path coefficients (regression weights) appear in parentheses after the standardized coefficients. *$p < .05$.

parentheses after the standardized coefficients. Model fit was good ($\chi^2/df = 2.11$, GFI = .89, CFI = .90, RMR = .05, RMSEA = .05). The significant path coefficients indicate that agentic self-enhancement predicted personal adjustment for European Americans and Mexicans, but not Filipinos, and communal self-enhancement predicted personal adjustment in all three groups. In contrast, of the six paths (two in each culture) relating self-enhancement to interpersonal adjustment, only one was statistically significant.

Self-enhancement of agentic traits predicted *lower* interpersonal adjustment in the European American sample. This is consistent with previous findings in American samples that self-enhancement is viewed negatively by peers (e.g., John & Robins, 1994; Robins & Beer, 2001).

To formally test Hypothesis 6, which predicted that in all cultures self-enhancement is more strongly related to personal than interpersonal adjustment, we examined a series of constrained SEM models. First, we constrained, in one cultural group at a time, the paths from agentic self-enhancement to personal and interpersonal adjustment to be equal. This constraint significantly reduced model fit in the European American sample ($\Delta\chi^2$ [1] = 14.6, $p < .01$) and in the Mexican sample ($\Delta\chi^2$ [1] = 6.12, $p < .05$), but not in the Filipino sample ($\Delta\chi^2$ [1] = .20, $p > .05$). That is, self-enhancement of agentic traits was, as hypothesized, a better predictor of personal than interpersonal adjustment in two of the three cultural groups.

Second, we constrained, in one cultural group at a time, the paths from communal self-enhancement to personal and interpersonal adjustment to be equal. This constraint significantly reduced model fit in the Mexican sample ($\Delta\chi^2$ [1] = 9.01, $p < .01$) and in the Filipino sample ($\Delta\chi^2$ [1] = 11.95, $p < .01$), but not in the European American sample ($\Delta\chi^2$ [1] = 1.73, $p > .05$). That is, self-enhancement of communal traits was also a better predictor of personal than interpersonal adjustment in two of the three cultural groups. Overall, these results indicate that, in most cases, self-enhancement was a better predictor of personal than interpersonal adjustment, as predicted by Hypothesis 6.

In Hypothesis 7, we predicted that self-enhancement would be a better predictor of personal adjustment in individualistic cultures than in collectivistic cultures. To formally test this hypothesis, we constrained the paths from agentic self-enhancement to personal adjustment to be equal across the three cultural groups, as well as the paths from communal self-enhancement to personal adjustment. The fit of this model was not significantly worse than the freely estimated model in Fig. 1 ($\Delta\chi^2$ [4] = 6.01, $p > .05$). Thus, contrary to Hypothesis 7, we cannot conclude that self-enhancement of agentic or communal traits is a better predictor of personal adjustment in individualistic cultures than in collectivistic cultures.

Although not hypothesized a priori, the path coefficients in Fig. 1 suggested that agentic self-enhancement might be a better predictor of personal adjustment in individualistic than collectivistic cultures, and communal self-enhancement a better predictor of personal adjustment in collectivistic than individualistic cultures. We tested this possibility by constraining, one culture at a time, the paths from agentic and communal self-enhancement to personal adjustment to be equal. However, in each of the three cultural groups, the constrained model was not significantly worse, than the freely estimated model (in the European American sample, $\Delta\chi^2$ [1] = .52, $p > .05$; in the Mexican sample, $\Delta\chi^2$ [1] = .21, $p > .05$; and in the Filipino sample, $\Delta\chi^2$ [1] = 1.59, $p > .05$). We attribute the lack of significant results here and for Hypothesis 7 to the multicollinarity of the agentic and communal self-enhancement predictors, which shared considerable variance in predicting personal adjustment.

4. Discussion

Our hypotheses were consistent with an integrated cultural trait psychology perspective on accuracy and enhancement in trait self-assessment. We organize our discussion around

the three aims of the study: (a) to determine the universality versus culture-specificity of both accuracy and enhancement in trait self-assessments: (b) to test alternative theoretical explanations of self-enhancement; and (c) to determine the extent to which trait self-enhancement predicts adjustment across cultures. Despite the lack of support for some hypotheses, we found some support for both trait and cultural psychology perspectives.

4.1. Accuracy in trait self-assessment

Supporting trait perspectives, individuals in all four cultural groups described their traits with moderate to high accuracy, with peer ratings as the criterion. This result is consistent with the relatively small number of studies that have examined interobserver agreement across cultures. Most of these studies have found comparable levels of agreement, including in Asian samples (Heine & Renshaw, 2002; Malloy et al., 2004; McCrae et al., 2004; Spirrison & Choi, 1998; Yik et al., 1998).

Our accuracy results might also support cultural psychology perspectives. Interobserver agreement was lower in the Asian collectivistic culture, the Philippines. One explanation is that behavior is more contextual in collectivistic cultures, so that people who view an individual's behavior in different contexts will agree less in their trait assessments (Markus & Kitayama, 1998; Triandis, 1995). The definitiveness of this interpretation is reduced, however, by the lower variability in self and peer ratings in the Philippine sample, which could attenuate interobserver correlations. Filipino raters exhibited greater reticence to use the end points on the rating scales. Although this might reflect a response style, reduced variability might also be consistent with cultural psychology perspectives. Markus and Kitayama contended that people in collectivistic cultures find the task of introspecting about their traits to be less natural than do people in individualistic cultures. If so, they might be less comfortable making the definitive ratings associated with the end points of scales. Similarly, Choi and Choi (2002) argued that the moderate responses of Asians on rating scales reflect not response styles, but genuinely moderate self-views that result from embracing multiple and even contradictory aspects of the self. Finally, Lee and Ottati (1993) suggested that members of collectivistic cultures might actually be more homogeneous (i.e., less variable) in their traits because of the emphasis on group harmony, restraint, and conformity. Overall, our finding that individuals in all four cultural groups described their traits with some accuracy is very definitive, whereas the possibility of cultural differences in accuracy involving the Philippine sample is theoretically plausible, but less definitive.

Our finding that interobserver agreement was as high in Mexico as in the United States is of interest, given findings by Malloy et al. (2004). Malloy et al. also found that Mexicans exhibited as much interobserver agreement as Americans, but that Chinese did not. When Malloy et al. reasoned that both Mexicans and Americans are socialized to evaluate others in terms of traits, they attributed to Mexicans a trait orientation typically attributed to people in individualistic cultures. Malloy et al. suggested an alternative interpretation of their results, however. They argued that one cannot predict behavioral consistency or interobserver agreement from a simple individualism-collectivism distinction. Rather, one must specify the conditions for consistency, which may vary across cultures. For example, they argued that prescriptions for social behavior in China are associated with dyadic relationships, whereas prescriptions for social behavior in Mexico are more generalized and extend across both family and friendship contexts. As a result, behavioral

consistency in China is limited to particular social dyads, whereas behavioral consistency in Mexico—and hence consensus in trait ratings—extends across family and friendship contexts.

Finally, interobserver agreement was as high in the Asian American sample as in the European American sample. Thus, any tendency for Asian cultures to exhibit lower consensus in trait ratings did not extend to Asian Americans. A plausible explanation is that most Asian American college students are highly acculturated to American society and thus observe and evaluate traits in a manner typically attributed to individualistic cultures.

In any case, there are now two studies that indicate that Mexicans exhibit as much interobserver agreement as Americans (including Asian Americans), whereas Filipinos, Chinese, and Japanese in Asia may exhibit less interobserver agreement (Heine & Renshaw, 2002; Malloy et al., 2004). These studies raise the possibility that reduced interobserver agreement is characteristic of Asian cultures, rather than collectivistic cultures generally. If so, cultural psychology theory, as it relates to individualism-collectivism and trait consistency, will need to be refined. Studies of additional collectivistic and Asian cultures are needed to resolve this issue.

4.2. Enhancement in trait assessments

Contrary to cultural psychology hypotheses, when self-enhancement was indexed relative to aggregate peer ratings, European Americans did not exhibit greater self-enhancement than the other cultural groups. The only cultural effects involved the Asian Americans, who exhibited more self-effacement for communal traits than agentic traits, and exhibited greater self-effacement for Emotional Stability, relative to the other three groups. The Asian American findings might be explained by several phenomena. First, on average, Asian American college students tend to be more modest and report greater anxiety (i.e., lower Emotional Stability) than European Americans (Sue & Sue, 1987; Zane, Sue, Hu, & Kwon, 1991). Second, in previous studies, Asians have tended to exhibit self-critical rather than self-enhancing tendencies (Heine, 2005; Heine et al., 2001; Heine & Renshaw, 2002). In the present study, these self-effacement tendencies did not extend, however, to self assessments of achievement-seeking and intellect, perhaps reflecting strong academic achievement motives in our Asian American sample (Leong & Serafica, 1995).

The failure of our European American sample to exhibit self-enhancement relative to peers is inconsistent with many previous studies of self-enhancement biases (Heine, 2005). However, few of these studies have operationalized self-enhancement in terms of self-peer differences in trait ratings. Heine and Renshaw (2002) did find modest self-enhancement in European Americans' self-ratings relative to peers. However, the authors noted that the magnitude of the self-enhancement tendencies were weaker than typically found using alternative designs or operationalizations of self-enhancement. There is also a potentially important difference between the peer raters in the present study and those used in previous studies. In American samples, John and Robins (1994) and Robins and Beer (2001) found self-enhancement relative to peers. However, the peer raters had no prior relationship with the rating targets and only assessed their group performance, not a range of personality traits, on a single task or during a single weekend. The peer raters in the Heine and Renshaw study knew each other before the study began—they were members of the same school organizations. However, they may not have been as close to

the self-targets as the school mates (likely friends) and parents that served as peer raters in the present study.

This raises the possibility that the European Americans in the present study did not exhibit self-enhancement relative to peers because the European American peers also provided enhanced ratings. Indeed, there is evidence of enhanced ratings by close peers in other cross-cultural studies. For example, Brown and Kobayashi (2002) found that Japanese students rated their friends and family members more favorably than they rated other students or adults. This interpretation is made plausible by our finding that European American self and peer raters averaged highest (i.e., in the more positive direction) on all of the trait dimensions. Most of these cultural mean differences were statistically significant. Given that a variety of agentic and communal traits were assessed, it is unlikely that the European Americans are actually higher on all of these traits. Rather, these results suggest that close schoolmates, friends, and relatives (but not casual or short-term acquaintances) may provide enhanced descriptions of rating targets. Furthermore, this peer-enhancement tendency may be greater in European Americans than in other cultural groups, offsetting, in self-peer designs, the tendency for European Americans to self-enhance. If valid, this interpretation is consistent with cultural psychology hypotheses predicting greater self-enhancement in European Americans.

4.3. Explanatory variables

Based on the work of Paulhus and John (1998), we hypothesized that variables linked theoretically to individualism and collectivism would be differential predictors of agentic versus communal self-enhancement, respectively. Although the individualism-collectivism distinction served to organize our findings, our results are better understood at the level of individual explanatory variables. This is because (a) not all of the individualistic and collectivistic variables cohered in the predicted manner; (b) some, but not all, of the variables within each set were effective predictors of self-enhancement; and (c) in most cultures, agentic and communal trait self-enhancement was differentially related to some explanatory variables (i.e., egoistic versus moralistic biases), but not others (i.e., the independent self-construal/autonomous self-expression composite).

Our results provided support for some of the self-enhancement explanations offered by cultural psychologists. In particular, the independent self-construal/autonomous self-expression composite predicted self-enhancement of agentic traits in three of four cultural groups, and self-enhancement of communal traits in the European American and Asian American samples. These results support the cultural psychology hypothesis that people with independent self-construals, for whom trait attributes are central to identity, and an internal frame of reference (i.e., autonomous self-expression), are motivated to describe their traits in an enhanced manner (Heine, 2003a; Kitayama et al., 1997; Markus & Kitayama, 1991b; Triandis, 1989). Our results corroborate previous studies that have reported positive correlations between independent self-construals and self-enhancement (Heine & Renshaw, 2002; Norasakkunkit & Kalick, 2002).

The cultural psychology hypothesis that self-enhancement is associated with implicit theories or beliefs about the traitedness of behavior was not supported (Church, 2000; Heine, 2003a; Heine, Lehman, Markus, & Kitayama, 1999). A possible explanation is that

such lay theories are too implicit or out of conscious awareness to be assessed with a self-report instrument. However, in previous studies the measure has correlated with Dweck's (2000) implicit entity theory measure in the manner expected, predicted judgments of behavioral consistency, and exhibited cultural mean differences that conformed to theory (Church et al., 2003; Church et al., 2005). This was the first study to examine implicit beliefs in relation to self-enhancement. Our conclusion is that implicit beliefs about the traitedness of behavior are too distal from self-enhancement to show much relationship. These beliefs involve generalizations about the traitedness of people's behavior in general, not one's own behavior. More important in predicting self-enhancement is how one views oneself, especially the extent to which one views oneself as an autonomous and unique entity (i.e., independent self-construals).

Our measure of "normal narcissism," the NPI, served as a measure of egoistic bias and (inversely) modesty. Thus, our results supported both egoistic bias (Paulhus & John, 1998) and modesty (Brown & Kobayashi, 2003; Kurman, 2001, 2002) interpretations of self-enhancement. Only egoistic and moralistic biases differentially predicted self-enhancement of agentic and communal traits, respectively. This result supports Paulhus and John's proposal that individuals with egoistic biases have an exaggerated sense of self-worth with regard to intellectual and social competence—and thus self-enhance on agentic traits, whereas individuals with moralistic biases avoid disapproval by conforming to social norms—and thus self-enhance on communal traits. In summary, our results provided evidence for each of the theoretical explanations offered by cultural psychologists for self-enhancement, with the exception of implicit theories.

4.4. Self-enhancement and adjustment

In entering the debate over whether self-enhancement is healthy or unhealthy, we focused on Paulhus' (1998) suggestion that self-enhancement might have intrapsychic, but not interpersonal, adaptiveness. This might explain why studies find positive correlations between self-enhancement and self-esteem (Taylor & Brown, 1988, 1994), but neutral observers describe self-enhancers in negative or narcissistic terms (Colvin et al., 1995; John & Robins, 1994; Paulhus, 1998; Robins & Beer, 2001).

Our results supported the distinction between self and observer views of the adjustment of self-enhancers. On the one hand, in both individualistic (European American) and collectivistic (Mexican, Filipino) cultural groups, individuals who self-enhanced more, relative to peers, reported greater personal adjustment (the smaller sample of Asian Americans was not included in this analysis). Thus, even if traits are less central to identity in collectivistic cultures, having an enhanced or moderately inflated view of one's traits tends to be associated with more positive personal adjustment. On the other hand, self-enhancement was either unrelated (in the Mexican and Filipino samples) or inversely related (in the European American sample) to interpersonal adjustment, as indexed by peer ratings of friendliness, agreeableness, and emotional stability. Our European American results are consistent with previous studies that have linked self-enhancement to poorer adjustment as viewed by others (e.g., John & Robins, 1994; Robins & Beer, 2001). Again, the lack of inverse relationship between self-enhancement and peer-rated adjustment in the two collectivistic cultures might be due to an important difference between the peer raters in the present and previous studies. In the previous studies, the judges were neutral observers who had not known the

targets long. In contrast, our peer observers were previously known schoolmates, relatives, or acquaintances. At least in ingroup- or family-centered cultures such as Mexico and the Philippines, ingroup members such as known schoolmates, friends, parents, and other familiar acquaintances might provide healthier assessments of self-enhancers than more neutral observers or outgroup members would provide. Although plausible, further studies with a variety of ingroup and outgroup observers would be required to confirm this interpretation. In the meantime, our results enable us to conclude that self-enhancement is more strongly associated with intrapsychic than interpersonal adjustment in a variety of cultural groups, and the relationship between self-enhancement and personal adjustment is not limited to individualistic cultures.

4.5. Final comments

The overarching goal of the present study and some of our previous studies (Church et al., 2003; Church et al., in press) has been to test aspects of an integrated cultural trait psychology theory (Church, 2000). Although trait and cultural psychology perspectives are sometimes viewed as incompatible, we found support for both theoretical frameworks. Consistent with trait perspectives, respondents in all cultural groups described their traits with some accuracy. These results indicate that traits are real and observable and can be agreed upon by observers who know target individuals in different contexts. In addition, the relationship between trait self-enhancement and personal adjustment generalized well across cultures. Finally, the limited importance of the agentic versus communal trait distinction across individualistic and collectivistic cultures is probably most supportive of trait perspectives, because cultural psychologists would expect a greater role for culture in the formation, evaluation, and manifestation of different types of traits. The agentic versus communal distinction was not very important in our accuracy and self-enhancement results or in the prediction of adjustment from self-enhancement, but did show some differential relationships with egoistic versus moralistic biases. The apparent explanation is that self-enhancement of agentic and communal traits were substantially correlated across all cultural groups.

Consistent with cultural psychology perspectives, we observed the possibility of cultural differences in accuracy and consensus in trait assessments and found that self-enhancement was predictable from explanatory variables proposed by cultural psychologists. The evidence of cultural differences in self-enhancement was less definitive. When operationalized as self-peer discrepancies, cultural psychology perspectives were not supported. Although Asian Americans showed modest self-effacement tendencies for some traits relative to the other cultural groups, European Americans did not exhibit greater self-enhancement relative to peers than Mexicans and Filipinos. However, if we interpret our results as evidence of both self- and other-enhancement by European Americans, then cultural psychology perspectives would be supported. In any case, our findings indicate that a better understanding of personality processes across cultures will result from an integration of trait and cultural psychology perspectives.

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