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5 **Unique Prevalence of the Better-than-average Effect in the Moral Domain**
6 **under Self-protection among Young Japanese Adults**

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Abstract

The better-than-average effect (BTAE) is considered uniquely prevalent in the moral domain due to its widespread occurrence and independence from psychobehavioral characteristics. However, it is unclear whether it manifests in the contexts of self-enhancement and self-protection, and over a wide range of psychobehavioral characteristics. We examined the BTAE in four domains based on combinations of social values and motivations and explored the relationship between the four domains and 22 characteristics. The results reveal that the BTAE existed in the moral domain in the presence of the self-protection motive; moreover, it was not associated with the characteristics. This study demonstrated that the BTAE is uniquely prevalent in the moral domain in the context of the self-protection motive, potentially reflecting sociocultural dynamics.

Keywords: Better-than-average effect, motivation, social value, personality trait

Introduction

Most people view themselves through “rose-tinted glasses,” considering themselves above average (Alicke et al., 1995). For example, people generally believe that they are more talented, moral, lucky, and healthy than their peers. This effect was first found to be a tendency shared by a majority of the population in 1985 and was termed the better-than-average effect (BTAE) (Alicke, 1985); subsequently, it has been repeatedly confirmed (Alicke, 1985; Ziano et al., 2020). The BTAE is robust and pervasive across age groups (Albery & Messer, 2005; Kurman, 2002; Zell & Alicke, 2011), occupations (Bergquist, 2020; Linder & Sperber, 2020; Van Lange et al., 1997), and cultures (Cai et al., 2011; Sedikides et al., 2003).

The BTAE has been explored for decades in terms of social values and motivations. Regarding the former, the BTAE has been examined with respect to morality and competence (Fiske et al., 2007; Goodwin et al., 2014; Wojciszke, 2005). Moral traits—such as kindness and hypocrisy—can be profitable or harmful to others, whereas competence traits—such as intelligence, efficiency, and capability—tend to be self-profitable (benefitting the possessor) (Wojciszke, 2005). A previous study observed that people exhibited the BTAE in both the moral and competence dimensions, with the former being more salient (Tappin & McKay, 2017). The main motives associated with the BTAE are self-enhancement and self-protection (Alicke & Govorun, 2005; Sedikides et al., 2015). The former drives people to improve their self-views (e.g., “I am holier than others”), and the latter drives them to defend themselves and eschew negative self-views (e.g., “I am less evil than others”). Although both motives serve to promote and maintain positive self-views (Sedikides & Alicke, 2018), previous studies have suggested that the BTAE is greater for positive traits than for negative traits, implying a more salient effect of the self-enhancement motive (El-Alayli & Wynne, 2015; Lee, 2012; Zell et al., 2020).

Studies have explored the relationship between the BTAE and individual differences in psychobehavioral characteristics, and an absence of any link between the two has recently been

reported. Theoretically, the BTAE serves to promote positive self-views (Alicke et al., 1995) and is particularly influenced by the domains most important to a given individual (Campbell et al., 2002; Gebauer et al., 2013; Sedikides & Alicke, 2018). For example, individuals with high self-esteem have been shown to exhibit the BTAE in both the moral and competence domains, whereas among narcissists, the BTAE was evident only in the competence domain. This difference in the moral domain was thought to stem from the fact that morality is not important to narcissists, whereas it is crucial to those with high self-esteem. Subsequently, the “self-centrality breeds self-enhancement” principle was proposed, which holds that people assume that they are superior to others in terms of their central attributes (Gebauer et al., 2013). However, a recent study suggested that the mechanisms of the BTAE in the moral domain differ from those in the competence domain, due to the former’s detachment from psychobehavioral characteristics (Tappin & McKay, 2017). Contrary to an earlier finding of an association between the BTAE in the moral domain and self-esteem (Campbell et al., 2002), Tappin (2017) indicated that in the moral domain the BTAE was not related to self-esteem or the moral identity that forms the basis of moral self-definition (Aquino & Americus, 2002). Owing to the apparent lack of a significant association with any psychobehavioral characteristics, researchers considered the BTAE to be uniquely prevalent in the moral domain (Tappin & McKay, 2017).

Two issues remain to be addressed in BTAE research. First, the two social-value aspects of the BTAE (the BTAE in the moral and competence domains) have not been addressed separately with respect to two motivations, i.e., in the context of self-enhancement and self-protection. Motivation might have distinct effects on social-value-specific activation of the BTAE. We speculated that the self-protection motive was stronger than the self-enhancement motive in the context of morality, contrary to the prevailing view that the self-enhancement motive dominates the BTAE (El-Alayli & Wynne, 2015; Lee, 2012; Zell et al., 2020). This hypothesis is based on a moral-judgment study reporting that people were more likely to report

not engaging in immoral behavior than engaging in moral behavior (Klein & Epley, 2016). This finding indicates that self-protection is a stronger motivator than self-enhancement in the context of morality; the same may also be true for self-evaluation. Second, we aimed to address two conflicting hypotheses about individual differences in psychological characteristics in the moral domain. As mentioned previously, Tappin and McKay (2017) examined the “self-centrality breeds self-enhancement” principle. They identified limited evidence of this principle in the moral domain as being independent of two scales (i.e., moral identity and self-esteem) relevant to morality. In addition to the previously mentioned three scales (self-esteem, moral identity, and narcissism) (Campbell et al., 2002; Tappin & McKay, 2017), we determined that other qualities related to both social value and motivation should be measured in this study.

In the present study, we address the two key issues. First, we examined the BTAE independently in four domains (positive morality, negative morality, positive competence, and negative competence). Although earlier studies reported evidence of the BTAE in social values (Tappin & McKay, 2017) and motivations (Sedikides et al., 2015), when combining the two we assumed that the BTAE would be detected in all domains except positive morality, in accordance with an earlier moral-judgment study that demonstrated distinct effects of motivation on morality (Klein & Epley, 2016) or that the BTAE would be present in all four domains in accordance with a meta-analysis of BTAE studies that reported general dominance of the self-enhancement motive (Zell et al., 2020). Second, we examined the associations of the BTAE with a large number of psychobehavioral characteristics, to clarify which of the two hypotheses was supported. In addition to self-esteem, moral identity, and narcissism, which were analyzed in previous studies (Campbell et al., 2002; Tappin & McKay, 2017), we included two scales related to social values: the Power to Live Scale (Sugiura et al., 2015) and the General Self-Efficacy Scale (Bandura, 1977), as well as two scales related to motivation: the Social-Desirability Scale (Paulhus & Reid, 1991) and a depression scale (Radloff, 1977). We

assumed that no association would be found in the context of the moral domain., and that the BTAE would be uniquely prevalent in the moral domain, thus violating the “self-centrality breeds self-enhancement” principle.

Method

Ethics Statement

The ethics committee of the International Research Institute of Disaster Science, Tohoku University (2019-007) reviewed and approved the survey protocol.

Participants

We conducted an online survey using NEO Marketing (Tokyo, Japan). To achieve the power to detect a small effect greater than 90% ($d = 0.2$, $\alpha = 0.05$) and to overcome the limited quality of online survey data (Chmielewski & Kucker, 2020), we sought to recruit 1,300 participants; in total, we recruited 1,272. We first excluded 8 participants whose responses showed inconsistencies between registered and reported demographic information, 141 satisfiers (i.e., people who met only the minimum requirement to finish the survey or who responded thoughtlessly) who provided the same responses to all questions, 123 satisfiers who responded “not at all seriously” to the question “*How seriously are you answering the questionnaire?*”, and 322 satisfiers whose reaction times were less than 8 minutes (based on the internal consistency of three well-established scales; see supplemental material for further details regarding this criterion, and for the results of analyses not excluding satisfiers). Thus, valid data from 678 participants were analyzed (307 males; age range: 20–29 years; mean age = 25.79 ± 2.79 years). We report all measures, manipulations, and exclusions in this study. Data, R code, analyses, and supplemental material can be retrieved from https://osf.io/xm5hw/?view_only=c27fa75eb0ab461bb68e51316e17f8af.

Procedure

After completing the online consent form, participants were presented with basic

demographic information questions (sex and age), self- and average-other evaluation items ($n = 160$), items on psychobehavioral characteristics ($n = 148$), and an attention-test item ($n = 1$).

Materials

We conducted a preliminary survey to ensure the validity of the 80 domain-specific adjectives used as stimuli in the study. One group of participants was instructed to categorize 592 personality-trait-related adjectives from two corpora into four domains, and we finally obtained 160 adjectives (Aoki, 1971; Murakami, 2002). Another group of participants was asked to rate these 160 adjectives according to three properties (social value, valence, and familiarity). Ultimately, 80 adjectives were selected as stimuli. The details of this survey and the word list are provided in the supplemental material. Table 1 shows the mean social value, valence, and familiarity scores of the adjectives in the four domains.

Table 1

Average social value, valence, and familiarity scores in four domains (standard deviation is in parentheses)

	Moral Positive	Moral Negative	Competent Positive	Competent Negative
Social value	2.414 (0.249)	2.748 (0.121)	5.287 (0.289)	4.629 (0.464)
Valence	5.811 (0.535)	1.843 (0.234)	5.549 (0.439)	2.411 (0.333)
Familiarity	5.378 (0.686)	4.739 (0.417)	5.509 (0.455)	5.091 (0.476)

Note. Social-value scores were from 1 (*very moral*) to 7 (*very competent*); valence scores were from 1 (*very positive*) to 7 (*very negative*); and familiarity scores were from 1 (*not familiar at all*) to 7 (*very familiar*)

Measures

Self- and average-other evaluations. Participants were instructed to complete self- and average-other evaluations. Both evaluations used the same 80 adjectives. The order in which the adjectives were presented was randomized across participants in both evaluations. For the self-evaluation, the participants were instructed to rate the extent to which each adjective described them personally, from 1 (*not at all*) to 7 (*very much*). For the average-other evaluation,

the participants were instructed to rate the extent to which each adjective described others of the same sex and age, from 1 (*not at all*) to 7 (*very much*) (Figure 1).

Figure 1

Self- and average-other evaluation instrument

Please rate how well the following adjectives that describe an individual's characteristics apply to " Self " on a 7-point scale from 1 (not at all) to 7 (very well).						
	1 (not at all)	2	3	4	5	6 7 (very much)
warmhearted	☐	☐	☐	☐	☐	
heartless	☐	☐	☐	☐	☐	
steady	☐	☐	☐	☐	☐	
powerful	☐	☐	☐	☐	☐	
stupid	☐	☐	☐	☐	☐	

Please rate how well the following adjectives that describe an individual's characteristics apply to " Average other " on a 7-point scale from 1 (not at all) to 7 (very well).						
	1 (not at all)	2	3	4	5	6 7 (very well)
cautious	☐	☐	☐	☐	☐	☐
smart	☐	☐	☐	☐	☐	☐
heartless	☐	☐	☐	☐	☐	☐
powerful	☐	☐	☐	☐	☐	☐
polite	☐	☐	☐	☐	☐	☐

Psychobehavioral characteristics. The internal consistency of the scales was measured using Cronbach's α (range: 0.65–0.93).

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965), which has been translated into Japanese (Yamamoto et al., 1982). Items included statements such as "I'm positive about myself" (Cronbach's $\alpha = 0.89$). Participants rated items from 1 (*not at all*) to 5 (*very much*).

Narcissism was measured using the 35-item Narcissistic Personality Inventory (Raskin & Terry, 1988), which has been translated into Japanese (Konishi et al., 2006). This inventory assesses five factors: the need for attention (e.g., "I want to show myself in a positive light when I have a chance"; Cronbach's $\alpha = 0.90$); sense of grandeur (e.g., "I'm a person with a special talent"; Cronbach's $\alpha = 0.92$); leadership (e.g., "I think I'm a good leader"; Cronbach's $\alpha = 0.93$); positive regard toward the body (e.g., "I like to see my body"; Cronbach's $\alpha = 0.87$); and self-conviction (e.g., "I always understand my behavior"; Cronbach's $\alpha = 0.75$). Participants rated items using a six-point scale ranging from 1 (*not at all*) to 6 (*very much*).

Moral identity was measured using the nine-item Moral Identity Scale (Aquino, K., &

Reed II, A., 2002), which has been translated into Japanese (Kawamura et al., 2017). This scale measures the importance ascribed to morality with respect to two factors: internalization (e.g., “Becoming a person with these characteristics will make me feel better”; Cronbach’s $\alpha = 0.75$) and symbolization (e.g., “By looking at the groups I belong to, people around me will think that I have these characteristics”; Cronbach’s $\alpha = 0.81$). Participants rated items using a five-point scale ranging from 1 (*I don’t think so at all*) to 5 (*I very much think so*).

Self-efficacy was measured using the 16-item General Self-Efficacy Scale (Sakano & Mitsuhiko, 1986). This scale measures individuals’ beliefs about their ability to solve a wide range of problems based on three factors: motivation to act (e.g., “I’m confident whenever I do something”; Cronbach’s $\alpha = 0.79$); anxiety about failure (e.g., “After finishing work, I always feel that I have failed”; Cronbach’s $\alpha = 0.77$); and social competence (e.g., “I have a better memory than others”; Cronbach’s $\alpha = 0.69$). Participants responded “yes” or “no” to all items.

Social desirability was measured using the 24-item Balanced Inventory of Desirable Responding instrument (Paulhus & Reid, 1991), which has been translated into Japanese (Tani, 2008). This scale measures two factors: self-deception (e.g., “I am a completely rational person”; Cronbach’s $\alpha = 0.78$) and impression management (e.g., “If necessary, I sometimes lie”; Cronbach’s $\alpha = 0.68$). Participants rated the items from 1 (*not at all*) to 7 (*very much*).

Depression was measured using the 20-item Center for Epidemiologic Studies Depression Scale (Radloff, 1977), which has been translated into Japanese (Shima et al., 1985). This measures symptoms of depression in the preceding 2 weeks (e.g., “I thought my life was a failure”; Cronbach’s $\alpha = 0.91$). Participants rated the items from 1 (*less than 1 day*) to 4 (*5–7 days*).

The 34-item Power to Live Scale measures a comprehensive set of psychological and behavioral characteristics (Sugiura et al., 2015) and includes eight factors: leadership (e.g., “To resolve problems, I gather together everyone involved to discuss the matter”; Cronbach’s $\alpha =$

0.85); problem-solving (e.g., “When I am fretting about what I should do, I compare several alternative actions”; Cronbach’s $\alpha = 0.76$); altruism (e.g., “When I see someone having trouble, I have to help them”; Cronbach’s $\alpha = 0.83$); stubbornness (e.g., “I am stubborn and always get my way”; Cronbach’s $\alpha = 0.70$); etiquette (e.g., “I take the initiative in greeting family members and people living in the neighborhood”; Cronbach’s $\alpha = 0.65$); emotional regulation (e.g., “During difficult times, I endeavor not to brood”; Cronbach’s $\alpha = 0.68$); self-transcendence (e.g., “I am aware that I am alive and have a sense of responsibility in life”; Cronbach’s $\alpha = 0.70$); and active well-being (e.g., “In everyday life, I have habits that are essential for relieving stress or giving me a change of pace”; Cronbach’s $\alpha = 0.67$). Participants responded using a six-point scale ranging from 1 (*not at all*) to 6 (*very much*).

Attention test. Participants were asked “How seriously are you answering the questionnaire?” and responded on a scale ranging from 1 (*not at all seriously*) to 6 (*very seriously*).

Analysis

The BTAE score represents the extent to which participants view themselves positively. A positive score indicates that the participants believe that they are better than others, while a negative score indicates that they consider themselves worse than others. It is calculated according to the difference between the self- and average-other evaluation scores. For the negative conditions (i.e., negative morality and negative competence), BTAE scores are reverse-coded because people prefer not to be described by negative adjectives. For example, regarding “immoral,” if participants rate themselves as “2” and the average other as “4,” they perceive themselves as less immoral than others. The BTAE score is “2,” a reversal of the original “-2.”

Analyses were performed using R software (version 4.1.1; R Core Team, 2019) and the tidyverse (version 1.3.1; Wickham et al., 2019), psych (version 2.1.6; Revelle, 2019), reshape2

(version 1.4.4; Wickham, 2007), lsr (version 0.6; Navarro, 2015), ggplot2 (version 3.3.5; Wickham, 2016), and gridExtra (version 2.3; Auguie, 2017) packages.

We performed repeated-measures ANOVA to examine the effect of social value and motivation on the BTAE score. To determine whether the BTAE existed in all four domains, we conducted a one-sample t -test. We used the Bonferroni method to correct for multiple comparisons (four domains). We also conducted correlation analyses to explore the relationships between BTAE scores in the four domains and psychobehavioral characteristics. The results were corrected by the Bonferroni method (88 tests; BTAE scores in four domains $\times$ 22 characteristics). Considering the large sample size, we set $|r| > .3$ as the effect size threshold (Cohen, 1992).

Results

The BTAE in the four domains

Table 2 presents the mean self-evaluation and average-other evaluation scores, and the reliability coefficients, for the four domains (range: 0.92–0.96). **Error! Reference source not found.** illustrates the mean BTAE scores in the four domains and the data points for each participant (Allen et al., 2021).

Table 2

Mean self-evaluation and average-other evaluation scores and reliability coefficients

	Moral		Competent	
	Positive	Negative	Positive	Negative
Self-evaluation	4.237 (1.005)	3.242 (1.073)	3.835 (0.904)	3.941 (1.097)
Cronbach's α	0.94	0.95	0.92	0.93
Other evaluation	4.194 (0.827)	3.603 (0.992)	4.002 (0.687)	3.714 (0.871)
Cronbach's α	0.94	0.96	0.90	0.93

Note. standard deviations are shown in parentheses

Repeated-measures ANOVA showed main effects of social value [$F(1, 677) = 132.653$, $p < 0.001$, $\eta^2_G = 0.042$] and motivation [$F(1, 677) = 15.672$, $p < 0.001$, $\eta^2_G = 0.004$]. The

interaction effect was also significant [$F(1, 677) = 100.910, p < 0.001, \eta^2_G = 0.010$].

The one-sample t -test indicated that the BTAE score for the positive moral condition did not differ significantly from 0 [$t(677) = 1.337, p = 0.726$, Cohen's $d = 0.051$, 95% CI: $-0.024, 0.127$]. The BTAE score for the negative moral condition was greater than 0, indicating that people considered themselves less immoral than others [$t(677) = 9.926, p < 0.001$, Cohen's $d = 0.381$, 95% CI: $0.303, 0.459$]. The BTAE scores for the positive and negative competencies were less than 0, indicating that the participants considered themselves less capable in the positive competency domain [$t(677) = -4.956, p < 0.001$, Cohen's $d = 0.190$, 95% CI: $0.114, 0.266$] and more incompetent than others [$t(677) = -5.234, p < 0.001$, Cohen's $d = 0.201$, 95% CI: $0.125, 0.277$]. The p -values were adjusted for multiple comparisons.

Figure 2

Raincloud plot. (A) The mean BTAE scores and (B) distribution of raw BTAE scores in the four conditions

Note. Error bars are the 95% CIs.

Correlations between the BTAE and psychobehavioral characteristics

Table 3 presents the results of correlation analysis in detail. For positive morality, the BTAE was positively correlated with altruism and self-transcendence on the Power to Live Scale. However, none of the associations between “negative moral BTAE” and psychobehavioral characteristics reached an $|r|$ of 0.3 (the largest coefficient was for impression management with social desirability; $r = 0.172$). On competence, both positive and negative BTAE conditions were associated with nine common characteristics, including leadership,

active well-being on the Power to Live Scale; motivation to act, and social competence on the General Self-efficacy Scale; self-esteem; sense of grandeur, leadership, and self-conviction on the Narcissistic Personality Inventory; and self-deception on the Social Desirability Scale. The BTAE scores for “positive competence” were additionally associated with problem-solving on the Power to Live Scale, and “negative competence” was additionally associated with emotional regulation on the Power to Live Scale and anxiety about failure on the General Self-efficacy Scale.

Table 3

Pearson correlation coefficients between the various types of the BTAE and psychobehavioral characteristics

	MP	MN	CP	CN
Power to live				
Leadership	0.246***	0.057	0.356***	0.411***
Problem-solving	0.230***	0.152**	0.398***	0.292***
Altruism	0.330***	0.087	0.192***	0.148*
Stubbornness	0.112	-0.013	0.232***	0.227***
Etiquette	0.270***	0.170***	0.257***	0.263***
Emotional regulation	0.226***	0.120	0.284***	0.315***
Self-transcendence	0.303***	0.148**	0.292***	0.245***
Active well-being	0.271***	0.122	0.367***	0.306***
Self-efficacy				
Motivation to act	0.208***	0.116	0.322***	0.455***
Anxiety about failure	-0.097	-0.103	-0.248***	-0.385***
Social competence	0.260***	0.098	0.413***	0.362***
Self-esteem	0.248***	0.127	0.395***	0.482***
Moral identity				
Internalization	0.221***	0.042	0.079	-0.027
Symbolization	0.163**	0.032	0.196***	0.252***
Narcissism				
Need for attention	0.168**	-0.023	0.255***	0.238***
Sense of grandeur	0.197***	0.026	0.390***	0.396***
Leadership	0.197***	0.018	0.375***	0.437***
Positive regard of the body	0.167**	0.020	0.272***	0.292***
Self-conviction	0.222***	0.088	0.390***	0.336***
Depression	-0.157**	-0.096	-0.235***	-0.281***
Social desirability				
Self-deception	0.157**	0.125	0.347***	0.432***
Impression management	0.127	0.172***	0.080	0.001

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (Bonferroni correction, 88 tests). $|r| > 0.3$ are in bold. MP: positive

morality; MN: negative morality; CP: positive competence; CN: negative competence.

Discussion

The two primary purposes of this study were to demonstrate the presence of the BTAE in four domains, and examine the relationship between the BTAE and psychobehavioral characteristics. We observed that the BTAE existed only in the moral domain under the self-protection motive and did not correlate with any psychobehavioral characteristics. This supports the hypothesis that the BTAE is uniquely prevalent in the moral domain in the context of the self-protection motive.

The presence of the BTAE in the moral domain is consistent with Tappin & McKay's finding (2017); our participants believed they were superior to average others in the morality domain. Furthermore, we found motivation specificity (i.e., the self-protection motive) of the BTAE in this study, such that the perceived superiority occurred only in the context of the self-protection motive, which is consistent with a moral-judgment study (Klein & Epley, 2016).

Our findings expand on prior work indicating independent associations between the moral BTAE and psychobehavioral characteristics in the context of the self-protection motive. Compared to Tappin & McKay (2017), with respect to the context in which the BTAE occurs, we narrowed down the moral domain to the self-protection motive, and also analyzed 22 psychobehavioral characteristics relevant to both social values and motivations, as opposed to a limited number of characteristics relevant only to morality.

In the context of the self-protection motive, the unique prevalence of the BTAE in the moral domain may be attributable to the powerful defense mechanisms triggered by information that threatens important social values. Many studies have described the primary role of morality in cognitive domains. For example, morality has a high weight in impression management (Goodwin et al., 2014), promotes rapid information processing (Abele et al., 2021), is prominently perceived in perceptual decision-making (Hu et al., 2020), and is crucial to survival from the perspective of evolutionary psychology (Fiske et al., 2007). Regarding

motivation, the greater weight assigned to “badness” may explain why the BTAE is seen only in the context of the self-protection motive. From this perspective, people are highly motivated to avoid “bad” self-perceptions; negative traits are weighted more heavily, readily affect impression formation, and are difficult to disconfirm (Baumeister et al., 2001). Our participants exhibited a larger BTAE when evaluating immoral traits, regardless of their psychobehavioral characteristics.

Our results show that a negative BTAE score on the competence domain may result from the desire to strive for self-improvement. East Asians perceive themselves as “improvable”, and they are highly motivated to pursue better versions of themselves in terms of competence. For instance, Japanese participants who failed tasks were more persistent in subsequent ones than those who had succeeded (Heine et al., 2001). Thus, the negative “competence BTAE” may be related to the tendency to strive toward optimal performance.

On the other hand, both the moral BTAE and the competence BTAE may occur for the same reason, i.e., to fulfill social needs. As mentioned above, morality is essential for social interactions, as is competence. A previous study argued that the tendency toward self-effacement of East Asians is intended to avoid offending others, i.e., has a self-presentation function (impression management). It has even been reported in anonymous situations (Yamagishi et al., 2012). Therefore, our participants may have shown modesty in the competence domain to avoid potential social exclusion.

The controversy regarding the universality of the BTAE may arise from differences in the number of adjectives used in different domains. In studies that reported no BTAE in Japanese participants, 20 positive adjectives pertaining to the self-enhancement motive were used. Half of these adjectives were competence-related, and half—such as attractiveness, honesty, cooperativeness, and happiness—were from many different domains (Endo et al., 2000; Heine & Lehman, 1999). In studies using fewer competence-related adjectives, Japanese

participants rated themselves more positively than others (Brown & Kobayashi, 2002; Hamamura et al., 2007). Thus, when examining the BTAE, it is crucial to appropriate numbers of adjectives.

Our study had several limitations. First, we focused only on morality and competence; we did not consider sociability, even though it is a fundamental domain (Goodwin et al., 2014). Second, we did not randomize the order of self- and other evaluations; all participants completed the self-evaluation first. Future research in other cultural contexts is needed and needs to include measures of culture-specific social values.

Conclusion

We have demonstrated that the BTAE exists in the moral domain in the context of the self-protection motive, independent of self-perception (based on self-rated psychobehavioral characteristics). This study sheds light on the sociocultural dynamics of the moral BTAE in the context of the self-protection motive. Our results provide a framework for future studies to assess the BTAE, along with convincing evidence that the self-protection motive is vital for the BTAE.

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