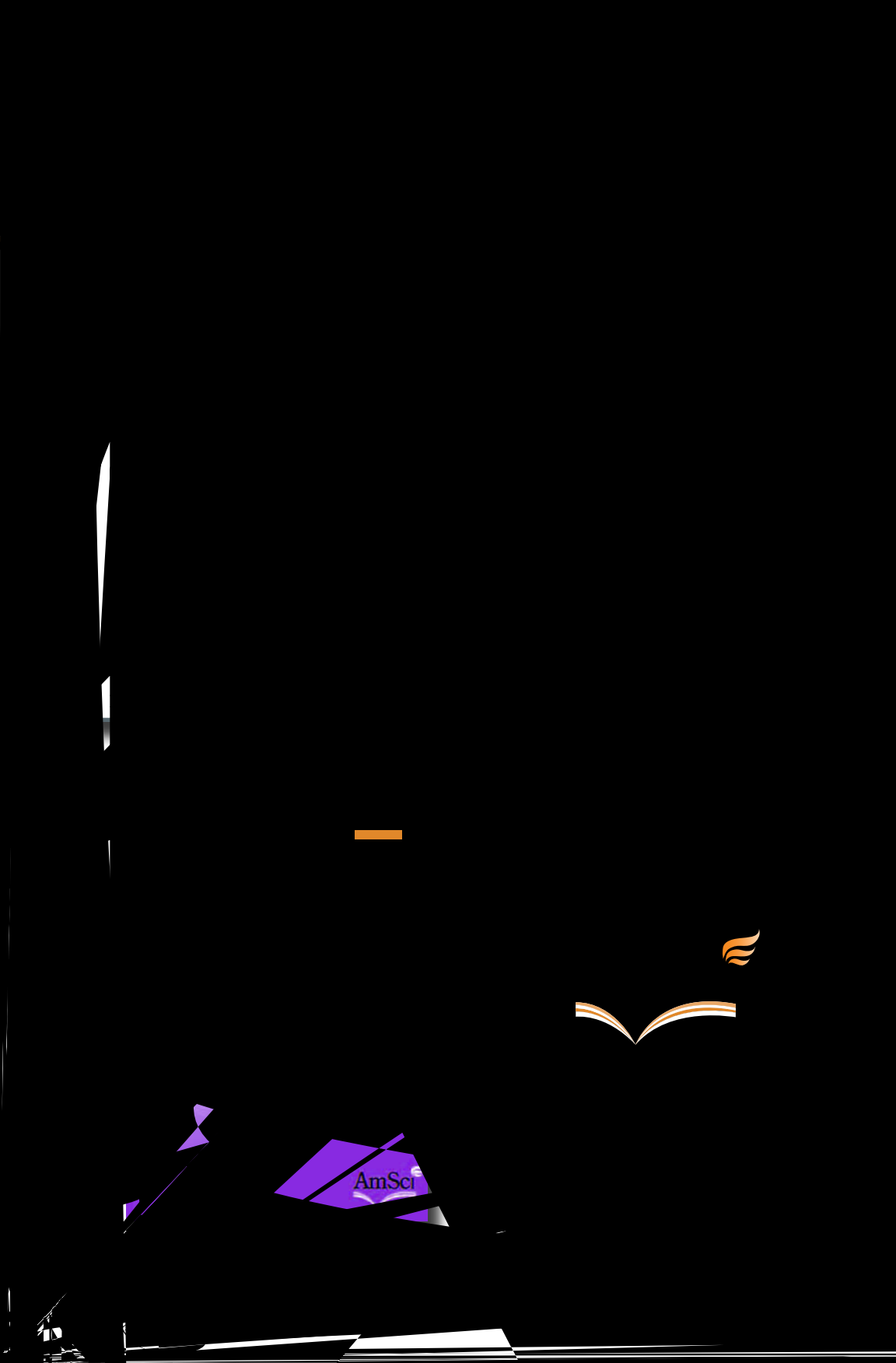
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ANALYSIS OF THE PRIVATE, COLLECTIVE, AND RELATIONAL SELF-COGNITIONS AMONG HAN AND TIBETAN CHINESE[1, 2, 3]

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Summary.—Di erences in the concepts of private, collective, and relational selves between two Chinese ethnic groups, the Han and Tibetan—adhering to the philosophies of Confucianism and Tibetan Buddhism, respectively—were examined. 128 students (54 men, 74 women; *M* age=20.9 yr., *SD*=2.2) completed the revised Twenty Statements Test and self-reference paradigm. Study 1 found that for Han participants relational and private selves were ranked similarly and as more important than the collective self. Studies 2 and 3 found that adjective words describing private and relational selves were recalled in greater proportions than words describing the collective self. Tibetan participants showed no significant di erences between the three self-cognitions. The findings correspond to di erences in self-identity among these two subcultures.

As researchers such as Markus and Kitayama (1991) have noted, it is likely that the construction and meaning of "self" for the majority of people in Eastern and Western societies would likely di er (e.g., significant disparities regarding interdependent versus independent connotations). However, di erences in self-cognitions within Eastern cultures have largely been neglected. In the present study, this gap is bridged by investigating the concepts of private, collective, and relational selves in two Chinese ethnic groups, the Han and Tibetan people, using self-reported questionnaires and a revised self-reference paradigm (Rogers, Kuiper, & Kirker, 1977).

Culture and Self-reference

The significance of the "self" has been crucial to the study of philosophy and religion for centuries (Banaji & Prentice, 1994). Self-construal is also the most widely investigated cognitive structure in cultural psychology. Numerous studies have shown strong evidence that the di er-

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ences in thinking styles between typical Westerners and Chinese have led to disparities between how each culture regards the meaning of self-representation (Chiu & Hong, 2006; Zhu & Han, 2008). Markus and Kitayama (1991) have proposed that the emphasis of Western cultures on self-identity resulted in individuals who value autonomy, are more likely to prioritize self-focused information, and attend to the self more than others (including intimate others). By contrast, East Asian cultures emphasize fundamental social connection, resulting in individuals with an interdependent self who are generally sensitive to information related to significant others and attend to intimate others as much as to themselves.

A common way to test the categorization of Markus and Kitayama (1991) is to use a self-reference paradigm in which participants are first required to judge whether a trait is suitable to describe themselves (self-reference) or another person (other-reference). After this encoding phase, the participants undergo a memory test of recalling as many words as they can in order to determine whether self-reference traits are better recalled than other-reference traits. Westerners show better memory of self- than intimate-other-reference traits (Klein, Loftus, & Burton, 1989; Conway & Dewhurst, 1995; Heatherton, Wyland, Macrae, Demos, Denny, & Kelly, 2006). This is called the self-reference e ect (Symons & Johnson, 1997). In comparison, the Chinese recalled self- and intimate-other-reference traits equally well, suggesting that the Chinese self may include significant others while this may not be the case for Western self-references (Zhu & Zhang, 2001; Qi & Zhu, 2002). The self-reference paradigm is an e ective way to detect the cultural di erences in self structures (Markus & Wurf, 1987; Hong, Morris, Chiu, & Benet-Martinez, 2000; Wagar & Cohen, 2003) because it is relatively resistant to social desirability biases or temporary task demands that might either exaggerate or obscure cultural di erences. Moreover, the self-reference paradigm is a solid measure of how elaborate and organized information is encoded in one's long-term memory. Hence, the present study adopted the self-reference paradigm for examining the di

& Goto, 1991; Brewer & Gardner, 1996; Finlay & Trafimow, 1998; Kühnen & Hannover, 2000; Kühnen, Hannover, & Schubert, 2001), conditional probability analyses (Trafimow, *et al*., 1991; Trafimow & Finlay, 2001), and factor analyses (Cheek & Briggs, 1982; Singelis, 1994).

Within-culture Variation

The definition of independent/interdependent self-construal has been frequently used, such that not all researchers have understood the necessity to consider the within-culture variability (Kashima, Kobubo, Kashima, Boxall, Yamaguchi, & Macrae, 2004). Moreover, some previous psychological research has tended to speak of the East in global terms, without giving sufficient attention to differences among Asian religious-philosophical traditions (Ho, 1995). Many researchers have realized that individualism and collectivism have many varieties. For instance, the collectivism of the Israeli kibbutz is not the same as that of the Korean chaebol (Triandis, 1995; Triandis, 2001). At the individual level, private, collective, and relational selves are not mutually exclusive and may coexist regardless of culture (Brewer & Gardner, 1996; Brewer & Chen, 2007). Despite these findings, many existing cross-cultural studies have focused on the comparison between Western and Eastern cultures while ignoring the differences within these cultures and between individuals.

To explore the Eastern self-concepts on a deeper level, the current study focused on two important Asian traditions (i.e., Confucianism and Tibetan Buddhism) and investigated the private, collective, and relational self-cognitions of two Chinese ethnic groups that practice them (i.e., Han and Tibetan, respectively). According to the independent/interdependent and individualism/collectivism frameworks, there should be no difference between the notions of self-construal of Confucianism and Tibetan Buddhism. Nonetheless, they have very distinct conceptions of selfhood and identity, specifically because Confucianism is a secular philosophy governing human relationships. The Han people in China are deeply influenced by Confucianism and hold the belief that particular duties arise from specific situations of an individual in relation to others; e.g., "A youth, when at home, should be filial, and abroad, respectful to his elders. He should be earnest and truthful. He should overflow with love to all, and cultivate the friendship of the good. When he has time and opportunity, after the performance of these things, he should use it for the study of the classics (Confucius)" Hence, the social actions of an individual must obey the perceptions of one's relationships with other people. As a result, it is crucial for each individual to realize his role in society. One researcher even used the term "relational self" to refer to the self in Confucian cultures (Ho, 1995). When it comes to the relationship between collective self and relational self in Confucianism, researchers must attend to one of the

basic virtues promoted by Confucius, *Ren* (Chinese: ; "love for humaneness" or "benevolent love") – altruism for other individuals within a community. The basic feature of *Ren* is the di erentiation of love, which stems from the theory that di erences do exist between the "love of the kindred" and "showing a ection toward people in general." The love of an individual can be compared to a concentric circle graph, with the love of family at the center, followed by the love to kindred, nation, and the rest of the world (Confucian Analects, 1992; Works of Mencius, 1992). Love is more important when it is closer to the center of the concentric circle. Hence, based on the concept of *Ren* in Confucianism, the collective self is important but not as important as the relational self.

By contrast, Tibetan Buddhism, as practiced by most Tibetan people, holds the worldview that "everything is empty, including life," and denies the existence of a permanent ontological self; e.g., "When faced with the

self-reference words would be recalled in similar proportions to private self-reference words, while recall for collective self-reference words will be lower than both relational and private self-reference words.

Hypothesis 2. Recall of words related to private, collective, and relational aspects of self will be significantly di erent between Han and Tibetan participants. Specifically, among the Han group recall of words related to the three aspects of self will di er, while this will not be the case for the Chinese Tibetan participants from the Tibetan Buddhism subculture.

Study 1: Relative Importance of Private, Collective, and Relational Selves

Method

This questionnaire survey served as a preliminary investigation on the di erent kinds of self-cognition in Confucianism and Tibetan Buddhism.

Participants

Twenty-four Han participants (7 men and 17 women; M age = 21.4 yr., SD = 1.6) between the ages of 19 and 24 yr. were recruited. All participants were self-identified as non-religious. In addition, 24 Tibetan participants (7 men and 17 women) between the ages of 18 and 23 (M age = 19.6 yr., SD = 1.1) were recruited; all identified themselves as Tibetan Buddhists. All the participants were recruited from undergraduate students at Minzu University of China. The Tibetan participants, whose native language was Tibetan, had studied in Beijing for less than a year when they participated in this experiment. There was no significant di erence of educational level (years) between Han (M = 13.4, SD = 0.5) and Tibetan participants (M = 13.3, SD = 0.6) (t_{46} = 0.55, p = .66). Duration of living independently (years) of Han (M = 1.5, SD = 0.8) and Tibetan participants (M = 1.4, SD = 0.7) was similar (t_{46} = 0.81, p = .81). All 48 participants were right-handed and came from the Southwest China region. They reported no significant abnormal neurological history and all had normal or corrected-to-normal visual acuity. Informed consent was obtained prior to the study. Participants were told that their responses were anonymous and that they could withdraw at any time. The participants finished the study within half an hour, and they were paid for their participation.

Measures and Procedure

The revised Twenty Statements Test (TST; Kuhn & McPartland, 1954) according to Trafimow and Finlay (2001) and Trafimow and Madson (2003) was used to test the relative importance of the three types of self-cognition. Participants were asked to write down five personal characteristics

(namely, the private self-cognitions, which were defined for the participants as "personal qualities, attitudes, or beliefs"), five personal relationships (namely, the relational self-cognitions, which were defined for the participants as "the relationships one has with other people"), and five group memberships (namely, collective self-cognitions, which were defined for the participants as "the social groups you belong to") that they felt were important to the way they perceived themselves. Subsequently, they evaluated the importance of each item they wrote down in two ways. First, the items were ranked according to their importance for that individual, with 1 being the most highly ranked item and 15 being the least ranked item. Second, the importance of each item was rated on a scale from 1 to 99, with the larger value indicating greater importance. The order of these two tasks was counterbalanced.

Both rating and ranking procedures have their merits and drawbacks. According to Russell and Gray (1994), the advantage of rating is that, compared to ranking, it contains more information and statistical properties. However, respondents usually restrict their ratings to only a small region of the scale, which will induce less differentiation among the items in a target set. Using the ranking procedure can avoid this problem. As a result, in the present study the participants were asked to perform both the rating and ranking judgments. It should be noted that in the ranking task no two items could be ranked the same; however, in the rating task item ratings could be the same.

The instructions for the Twenty Statements Test were presented to Han participants in Chinese, and to Tibetan participants in the Tibetan language. All the Tibetan-language material in the present research was translated by a professor of Tibetan language at Minzu University of China, who was completely blind to the purpose of the study.

Analyses

The rankings of the items' importance were analyzed by Friedman's test, with private, collective, and relational selves as test variables. The ratings were analyzed by 2 (Ethnicity: Tibetan, Han) × 3 (Types of self cognitive structures: personal characteristics, personal relationship, and group memberships) × 5 (Ranking: most important, second, third, fourth, or least important) mixed ANOVAs. The between-participants factor was the ethnicity of the participants. The within-participants factors were Type and Importance. Pairwise comparisons were conducted with the least significant difference (LSD) test.

Results and Discussion

Age and sex did not have any significant effect on importance ranking or ratings. Table 1 presents the means of the importance rankings on the

TABLE 1

IMPORTANCE RANKING OF

1–15 rating scale. For Tibetan participants, there was no significant di erence among the distribution of the three types of self cognitive structures based on Friedman's test [$\chi^2(1)=0.78$, $p=.68$]. By contrast, for Han participants, the di erence was significant [$\chi^2(2)=9.92$, $p=.007$, $\varphi=0.64$]. Pairwise Friedman's tests revealed that private self and relational self were ranked as more important than collective self [$\chi^2(1)=8.17$, $p=.004$, $\varphi=0.58$; $\chi^2(1)=5.26$, $p=.02$, $\varphi=0.47$, respectively], and the di erences between private self and relational self were not statistically significant [$\chi^2(1)=0.00$, ns].

Table 2 presents the means of the importance ratings on the 1–99 rating scale. As expected, the Type × Ethnicity interaction was significant

($F_{2,45}=3.39$, $p<.001$, $\eta^2=0.13$). Further tests showed that the simple main e ect of Type for Han participants was significant ($F_{2,46}=4.86$, $p=.01$, $\eta^2=0.17$). Pairwise comparisons showed that the private self and relational self were rated as more important than the collective self ($t_{23}=2.15$, $p=.04$, Cohen's $d=0.59$; $t_{23}=3.68$, $p=.001$, Cohen's $d=1.20$), and the di erences between private self and relational self were not statistically significant ($t_{23}=1.02$, $p=.32$). However, no simple main e ect of Type was found for Tibetan participants ($F_{2,118}=1.88$, $p=.16$) (Fig. 1).

Significant main e ects of Importance, Type, and Ethnicity were found ($F_{4,43}=51.39$, $p<.001$, $\eta^2=0.83$; $F_{2,45}=7.20$, $p=.002$, $\eta^2=0.24$; $F_{2,46}=37.85$, $p<.001$, $\eta^2=0.45$). The Importance × Type and Importance × Type × Ethnicity interactions were not significant, whereas Importance × Ethnicity was significant ($F_{8,39}=1.46$, $p=.20$; $F_{8,39}=0.39$, $p=.92$; $F_{4,43}=8.59$, $p<.001$, $\eta^2=0.44$).

To the authors' knowledge, only two studies have used the same method to investigate the cultural di erence of self-cognition. Trafimow and Finlay (2001) found that Spanish-speaking Americans ranked and rated their groups as being more important than did English-speaking Americans. Trafimow and Madson (2003) further extended previous research by demonstrating that the relationships and traits are also considered more important than group mem-

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Han Chinese and ethnic Tibetans belonged to the same collectivist Chinese culture; however, they demonstrated significant di erences in the perceived importance of traits, groups, and relationships, which probably result from their di erent philosophical-religious thoughts. Based on the findings of Study 1, the influence of culture on long-term memory was investigated in the following two studies using the self-reference paradigm.

Study 2: Collective-self-reference in Han and Tibetan Participants

Method

Participants

Twenty Han participants (10 men, 10 women) between the ages of 18 and 28 years (M age = 21.8, SD = 2.5) and 20 Tibetan participants (10 men, 10 women) between the ages of 20 and 24 years (M age = 21.8, SD = 2.1) were recruited from undergraduate students at Minzu University of China. The educational levels in years were 13.4 for the Han group (SD = 0.5) and 13.3 for the Tibetan group (SD = 0.4). Years of living independently were 1.2 for the Han group (SD = 0.4) and 1.2 for the Tibetan group (SD = 0.4) (t_{38} = 0.68, p = .50; t_{38} = 0.41, p = 0.69). The inclusion criteria (right-handedness, visual acuity, etc.) were similar to that of Study 1. Informed consent was obtained prior to the study, and participants were paid for their participation. Participants finished the study within 50 min., and they were told that their responses were anonymous and that they could withdraw at any time.

Measure

The revised self-reference paradigm was used, as in previous studies (Johnson, Gadon, Carlson, Southwick, Faith, & Chalfin, 2002; Yang & Huang, 2007, 2009; Bennett, Allan, Anderson, & Asker, 2010). Participants were presented with adjectives and had to relate them to the self, a famous writer, own ethnicity (represents the collective self), or other ethnicity, and subsequently underwent a memory test.

Specifically, in the initial phase, participants were asked to make judgments about trait adjectives. Initial instructions did not indicate that a recognition test was expected. For each adjective, four judgments were made: (1) self ("Does this adjective describe you?"), (2) other ("Does this adjective describe Lu Xun?" for Han participants, "Does this adjective describe Don-grub-rgyal?" for Tibetan participants; both Lu Xun and Don-grub-rgyal are famous writers), (3) own ethnicity ("Does this adjective describe Han Chinese?" for Han participants, "Does this adjective describe Tibetans?" for Tibetan participants), and (4) other ethnicity ("Does this adjective describe Tibetans?" for Han participants, "Does this adjective describe Han Chinese?" for Tibetan participants).

Procedure

One hundred twenty adjectives were presented, and four judgments were made over 30 trials. Each trial began with a "+" sign presented at the center of the computer screen for 500 msec., and then a trait adjective was presented for 1,000 msec. The trait adjective then disappeared while the "cue" word (the cue of judgment task) remained on the screen for 2,000 msec., during which the participants made their responses. The order of the four judgments was counterbalanced using a Latin Square design.

Following the study phase, participants took a 3 min. break and then underwent the memory test in which they viewed the 120 adjectives previously presented along with 120 new words. They were asked to identify whether the word was old or new by pressing designated buttons. This task was completed without a time limit. In addition, when a trait adjective was identified as an old word, participants were further asked to make an R/K judgment (Tulving, 1985) on the item to indicate whether they were "remembering" (conscious recollection of specific details of the word that appeared in the earlier list) or "knowing" (having a feeling of knowing or being familiar even without an accompanying recollection experience).

All responses were manual; participants indicated their judgments using a left- or right-hand key press. The questions and trait words were presented in their own native languages (i.e., Chinese for Han participants and Tibetan language for Tibetan participants).

The 240 unique adjectives were selected according to Qi and Zhu (2002). One hundred and twenty adjectives were randomly divided into four groups, each comprising 30 words, which were presented for the four judgments. The other 120 words served as "new" words. The Tibetan language word lists in the four judgments were matched based on a ective valence, word length, and number of syllables. For each judgment, half of the words were positive adjectives and half were negative.

Analyses

Corrected recognition rates (i.e., the proportion of hits minus false alarms) in the recognition memory test were subjected to a 4 (Task: self, other, own ethnicity, other ethnicity) × 2 (R/K Judgment: remembering, knowing) × 2 (Ethnicity: Han, Tibetan) mixed repeated-measures ANOVA. *Post hoc* analyses were conducted with Bonferroni correction.

Results and Discussion

Means and standard deviations of recognition rates among the Han and Tibetan participants are presented in Table 3. Age and sex did not have any significant e ect on memory performance. As expected, a significant interaction in Task × R/K Judgment × Ethnicity was found ($F_{3, 32} = 8.35$, $p < .001$, $\eta^2 = 0.44$). Hence, a 4 (Task: self, mother, own ethnicity, other eth-

nicity)×2 (Judgment: R vs K) repeated-measure ANOVA was conducted for each ethnic group. For Han participants, the main e ects of Task ($F_{3,17}=27.03$, $p<.001$, $\eta^2=0.83$) and R/K Judgment ($F_{1,19}=68.81$, $p<.001$, $\eta^2=0.78$) were both significant, and their interaction was also significant ($F_{3,17}=23.01$, $p<.001$, $\eta^2=0.80$). Analyses of simple e ects showed that the main e ect of Task was significant only when R judgments were made ($F_{3,57}=16.95$, $p<.001$, $\eta^2=0.47$. *Post hoc* analyses suggested the self-reference adjectives were better remembered than those linked to Lu Xun—the standard self-reference e ect—for Han Chinese ($t_{19}=7.74$, $p<.001$, Cohen's $d=0.86$) and for Tibetans ($t_{19}=8.17$, $p<.001$, Cohen's $d=3.66$). The adjectives encoded in the own ethnicity condition were better recalled than those encoded in the other ethnicity condition ($t_{19}=6.73$, $p<.001$, Cohen's $d=0.69$). For Tibetan participants, the only significant e ect was the main e ect of R/K judgment ($F_{1,15}=14.35$, $p=.002$, $\eta^2=0.49$), thereby indicating that participants made more R responses than K responses.

TABLE 3
STUDY 2: MEAN RECOGNITION RATES (STANDARD DEVIATIONS) AMONG HAN AND TIBETAN GROUPS

Group	Self		Other		Own Ethnicity		Other Ethnicity		New	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Han group										
Recognition rates	0.80	0.10	0.63	0.15	0.69	0.13	0.60	0.15	0.23	0.22
Remember judgments	0.67	0.16	0.48	0.17	0.55	0.16	0.45	0.17	0.12	0.14
Know judgments	0.14	0.11	0.16	0.10	0.14	0.11	0.15	0.10	0.11	0.15
Tibetan group										
Recognition rates	0.81	0.16	0.78	0.21	0.73	0.21	0.75	0.17	0.34	0.17
Remember judgment	0.52	0.25	0.50	0.25	0.48	0.22	0.49	0.20	0.19	0.13
Know judgment	0.29	0.20	0.28	0.20	0.26	0.18	0.26	0.17	0.14	0.11

Note.—Recognition rates = the number of words participants reported to have seen / the number of words in each reference condition; New (False alarm rates) = the number of words participants reported to have seen / the number of new words.

The main e ect of Ethnicity was not significant ($F_{1,34}=3.69$, $p=.06$), suggesting no di erence in memory ability between the groups. The proportion of R responses was higher than K responses ($F_{1,34}=94.56$, $p<.001$, $\eta^2=0.73$). The main e ect of Task and its interaction with R/K Judgment were both significant ($F_{3,32}=8.76$, $p<.001$, $\eta^2=0.45$; $F_{3,32}=10.47$, $p<.001$, $\eta^2=0.50$).

In an extension of the SRE to social rather than individual identities, Johnson, *et al*. (2002) found evidence for the group-reference e ect—the similar recall proportions for group adjectives as for the self adjectives—which

were significantly greater than in a control condition. Yang and Huang (2007, 2009) also explored the e ect of culture on the group reference e ect, and found that traits encoded in reference to Chinese were recalled by Chinese participants as easily as self-reference words and were better remembered than American-reference words; however, the results of American participants did not show this e ect.

Like Yang and Huang (2007, 2009), Han participants in the current study exhibited self- and group-reference e ects. These findings confirm the claim of Johnson, *et al*. (2002) that, "encoding information in reference to a group identity can pro er some of the same processing advantages previously documented for the personal self" (Johnson, *et al*., 2002, p. 266). However, the group-identity processing advantages were not as strong as personal self (self-reference words were recalled in greater proportions than own-ethnicity referenced words) in the current study. By contrast, there were no memory e ects (no self- or group-reference e ects) among Tibetan participants. These results further confirm the assumption that collective self-cognition can be influenced by cultural-religious beliefs. The following study was conducted to assess whether this reasoning can be applied to relational self.

Study 3: Relational-self-reference in Han and Tibetan Participants

Method

Participants

Twenty Han participants (10 men, 10 women) between the ages of 17 and 27 yr. (M age = 21.0, SD = 3.3) and 20 Tibetan participants (10 men, 10 women) between the ages of 18 and 22 yr. (M age = 20.1, SD = 1.4) were recruited from undergraduate students at Minzu University of China. The educational level in years for the Han group was 13.2 yr. (SD = 0.4) and for the Tibetan group 13.3 yr. (SD = 0.5), and years of living independently for the Han group were 1.1 yr. (SD = 0.3) and for the Tibetan group 1.2 yr. (SD = 0.4); both were equivalent between groups (t_{38} = 0.72, p = .48; t_{38} = 0.47, p = .64). The same inclusion criteria from the previous two studies were applied. Informed consent was obtained prior to the study, and participants were paid for their participation. Participants finished the study within 50 min., and they were told that their responses were anonymous and that they could withdraw at any time.

The measure, procedure, and analyses in Study 3 were the same as those in Study 2, except one modification according to Zhu, Zhang, Fan, and Han (2007): participants were asked to encode trait words in reference to the four conditions of self, other (Lu Xun for Han participants; Don-grub-rgyal for Tibetan participants), their mothers, and their fathers.

Results and Discussion

Means and standard deviations of recognition rates among the Han and Tibetan participants are presented in Table 4. Age and sex did not have any e ect on recognition rates. The main e ects of Ethnicity ($F_{1, 38} = 56.15$,

an interdependent self in East Asian cultures. The same result patterns, however, were not observed in Tibetans although they also belonged to the East Asian cultures.

General Discussion

The present research explored the self-reference e ect in Han and Tibetan participants given their di erent religious-philosophical views regarding the "self." Overall, both Hypotheses 1 and 2 were supported. For Han participants from a Confucian subculture, relational self was rated and ranked as important as the private self, while both were more important than collective self. Furthermore, the self-reference e ects were observed for relational and private selves to the same extent; however, the collective self was not associated with memory advantages. For Tibetan participants from the Tibetan Buddhist subculture, no di erence was found among the three types of self-cognitions or any self-reference e ect.

Variety of Collectivism and Interdependent Self

The data strongly suggest the diversity of collectivistic and interdependent selves at the cultural level. From the self-cognition perspective, the current results suggest that the independent/interdependent framework of the self should not be treated as a bipolar, single-dimension construct. As Oyseman, Coon, and Kemmelmeier (2002) noted, individualism and collectivism are not mutually exclusive opposites. No asocial individualists or selfless collectivists exist (the Han group, e.g., indicated that private self is the most important among the three types of self-cognition); rather, they represent two orientations that di er in the extent to which the individual/personal vs the collective/social are made salient and given priority. According to this notion, the Han group placed higher value on private and relational selves compared to the collectivistic self, whereas the Tibetan group's ratings did not di er. The patterns regarding private self and collective self in the Han group were similar to those observed in Western participants (Trafimow & Madison, 2003). The only significant di erence is that the Han group emphasized the relational self, producing a relational-self-reference e ect, which has not been observed in Western groups in previous research (Zhu & Zhang, 2002). The results for the Tibetan group seem odd at first glance. However, these could be attributed to the di erent religious-philosophical traditions of the two East Asian subcultures. The relations between culture, self, and memory are both dynamic and complex. According to Wang and Conway (2004), the religious and philosophical traditions at the cultural level may a ect the individual's memory content and organization, which, in turn, modify the self function memory serves.

Confucianism and Self

This research provides evidence, from a cognitive processing perspective, that relational self is extremely important for Han participants. The data probably reflects the infl

studies. These findings concur with the philosophical teachings of Tibetan Buddhism.

Tibetan Buddhism holds a unique ecological view, in which everything is equal and life and the environment are inseparable from a whole. Everything is subject to decay and destruction. Therefore, to speak of the intrinsic self in Tibetan Buddhism is a contradiction (Sang, 2002; Ban, 2004; Liu, 2007). *Anātman*, one of the most important doctrines and maybe the core idea in Tibetan Buddhism, is usually translated into English as 'no self.' It's important to note that 'no self' does not mean that there is no self at all (Wattanasuwan & Elliott, 1999; Michalon, 2001; Mosig, 2006). This Buddhist concept of self advocates that there is no separate self that is permanent, fixed, or transcendental. Everything in the world, including self, is a process of ever-changing phenomena. To avoid su ering, people should not attach themselves to any kind of selfness (Wattanasuwan & Elliott, 1999; Michalon, 2001; Mosig, 2006). According to Walpola Rahula (1974), Buddhism posits that all the evil in the world can be traced to the harmful thoughts of 'me' and 'mine.' In fact, the doctrine *Anātman* requires the believers to constantly detach themselves from the illusion of the involvement of ontological self in their perceptions and experiences, and erase the boundaries of separateness that limit the personal ego, to become an interconnected integral part of the universe and emancipate themselves from su ering (Sang, 2006; Colzato, Zech, Hommel, Verdonschot, van den Wildenberg, & Hsieh, 2012). The path to salvation does not lie in the perpetuation of self or awareness of self but in its dissolution and transition into an inexplicable state of *nirvāna*, non-movement (Ho, 1995). *Anātman* in Buddhism is di erent from the self in other cultures.

It should also be pointed out, however, that the present study does not imply that Tibetan Buddhists would not be able to distinguish among the private, collective, and relational selves. As shown in Study 1, Tibetan participants could describe their thoughts about themselves, their community, and their relatives explicitly. What makes the Tibetan selves unique from that of other subcultures in China, is that they see "selfishness" as a pernicious source of su ering and advise that all forms of selfishness be avoided.

Two fMRI studies, which provided evidence for cultural and religious self-reflection influences on neural activity, are worth mentioning. Han, Mao, Gu, Zhu, Ge, and Ma (2008) found that self-referential processing induced increased activity in the ventral medial prefrontal cortex (vMPFC) for non-religious participants but in the dorsal MPFC for Christian participants. In addition, dorsal MPFC activity has been found to be positively correlated with the rating scores of the importance of Jesus' judgment in subjective evaluation of the personality of a person. Wu, *et*

al. (2010) examined the self-processing of Han and Tibetan ethnic groups. The ventral MPFC and left anterior cingulate cortex in Han participants showed stronger activation in self-processing compared with other-processing conditions. However, no typical self-reference pattern was identified in Tibetan participants on the behavioral or neural levels. These results suggest that religious-philosophical beliefs about the self may be associated with a di erent neural coding of self-referential processes. The current results indicate that the divergence of the two groups concurs with their performances on self-report questionnaire and cognitive tasks.

Limitations and Future Directions

Despite the support that these studies provide for the existence of cultural di erences on self among Asians, limitations should be noted. First, there were memory performance di erences between the two cultural groups, which have also been found in previous research (Zhu, *et al*., 2007). Future explorations are necessary to give a clearer perspective. Second, the current research scrutinized two East Asian subcultures to investigate their di erences. Clearly, additional cross-cultural investigations in a wider variety of individualist and collectivist cultures are necessary to address this issue. Moreover, future cross-cultural psychologists should take other important factors into consideration, including regional variation (Kashima, *et al*., 2004) and social class (Na & Kitayama, 2011; Varnum 1 Tn77 0 TD[( )2c pst

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