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INFLUENCE OF CULTURE ON TRIPARTITE SELF-CONCEPT DEVELOPMENT IN ADOLESCENCE: A COMPARISON BETWEEN HAN AND UYGHUR CULTURES^{1, 2}

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MARHABA MAMAT

age = 16.3 yr., = 4
mid-, late- and post-adolescence were asked to
ments Test, and the items generated by the p
relational, and collective self-statements. The p
differentiated by personal and social orientation
were further coded into family and friend focus
ual's self, or personal relationship, became inc
Han cultural groups, whereas the collective asp
identity, became increasingly important with
These findings seem to show the development o
collective interdependent self-construals. Furt
the need for further research into the develop
in self-construal.

People from different cultures tend to have different concepts of the self (Markus & Kitayama, 1991). In particular, there are substantial differences between Western and East Asian cultures. According to the independent and interdependent self-construals theory of Markus and Kitayama, independent self-construal, which is relatively prevalent in individualis-

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tic cultures of the West, orients individuals to attend to self-focused information, whereas interdependent self-construal, which is relatively more prevalent in collectivistic cultures of East Asia, orients the individual to information about his or her social group (Hofstede, 1980; Markus & Kitayama, 1991). According to this theoretical dichotomy, Chinese culture has been characterized as an interdependent culture (Zhu & Zhang, 2002; Zhu, Zhang, Fan, & Han, 2007). Brewer and Chen (2007) examined the self-construals of Han and Uyghur groups and found within-cultural variability in the interdependent self in these Chinese groups. Specifically, Uyghur participants showed the characteristics of collective interdependent self-construal, and Han participants fitted well with a relationally interdependent self-construal (Mamat, Huang, Shang, Zhang, Li, Wang, ., 2014). However, there are still some questions to answer about whether the cultural differences in self-construal between Uyghur and Han groups are inherited or acquired during development, and if the latter, how these differences might develop in response to significant changes in an individual's social world. To address these questions, the current research used a cross-sectional sample to compare the private, relational, and collective aspects of the self during adolescence between participants developing in Han and Uyghur cultures.

There is considerable evidence that people have three cognitive representations of the self (Greenwald & Pratkanis, 1984; Triandis, 1989; Brewer & Gardner, 1996): the private self (cognitions related to traits, states, and behaviors, e.g., "I am honest"), the relational self (cognitions related to one's relationships, e.g., "I am a son"), and the collective self (cognitions related to one's group, e.g., "I am Chinese"). Researchers have postulated that the relative importance of three cognitive representations of the self is affected by the social context in different cultures (Triandis, 1989; Brewer & Gardner, 1996). According to the three-tier hierarchy of motivational potency in the self-system, a series of experiments showed that the private self was most potent (meaning the individual has a strong motive to seek self-verification), then the relational self, and the collective self was much less potent (Sedikides, Gaertner, Luke, O'Mara, & Gebauer, 2013). Gaertner, Sedikides, and Cai (2012) explained that the prominence of the private self might occur because the private self is more primary to motivations.

A series of studies has provided support for the prominence of the private self compared with relational and collective selves. In one study, insulting or non-insulting feedback was delivered to the private self or the collective self, and the results showed that the insulting feedback directed at the private self instigated more anger than insulting feedback directed at the collective self (Gaertner, Sedikides, & Graetz, 1999). In an-

other study, Gaertner, (2012) tested the effect of imagined surgical removal of the individual, relational, and collective selves by asking the participants to respond to "the emotional impact of losing the self." They tested the extent to which the participants would experience three negative mood states (sad, unhappy, blue) and three positive mood states (content, pleased, happy). The results showed that compared with relational and collective self, imagined loss of the private self elicited stronger reactions. In addition, meta-analysis has indicated that the primacy of the private self generalized to various types of groups (Gaertner, Sedikides, Vevea, & Iuzzini, 2002); for example, a recent study of Han participants in China provided evidence of the primacy of the private self (Huang, 2014). Taken together, these studies indicate that the primacy of the private self is a universal phenomenon in various cultural and age groups.

Adolescence has historically been considered a period of rapid and dramatic change, with a great effect on the development of self-concept (Erikson, 1968). Prior research has indicated that specific social experiences during the sub-phases of pre- (approximately 8–11 yr.), early- (12–14 yr.), mid- (15–17 yr.), and late (18–21 yr.) adolescence were likely to affect their self-concept (Smetana, Campione-Barr, & Metzger, 2006; Tanti, Stukas, Halloran, & Foddy, 2008).

As mentioned above, the private self is prominent compared with the relational self and collective self. The content of the private self could change with the progress of adolescence. In pre-adolescence, the descriptions of the private self comprised physical characteristics, personal abilities, and preferences (Montemayor & Eisen, 1977; Lu, 1990). However, in the private self of early- and mid-adolescence, interpersonal or social characteristics and relatedness to others become salient, such as friendly, fair, or shy (Damon & Hart, 1986; Rosenberg, 1986). Moreover, Tanti, (2008) also postulated that while the private self was most important, it tended to become more socially oriented with the process of adolescence; they provided evidence for this argument with participants from Western cultures. In addition, a study of Chinese adolescents also found that as adolescence progressed, the self-representation became more focused on interpersonal or social characteristics (Lu, 1990).

Thus, the shift of content of the private self from individual orientation to social orientation has been shown in both Western and East Asian cultures. For the private self, the importance of the social trait self-statements would be expected to increase throughout adolescence in both the Han and Uyghur cultural groups, while the importance of personal trait self-statements would decrease.

As mentioned, Chinese culture has been characterized as a collective culture that emphasizes the interdependent self (Qi & Zhu, 2002; Zhu & Zhang, 2002; Zhu, ., 2007). To further clarify the influence of ethnic culture on the self, it is proposed that the self-construal of the Uyghur group would be collective interdependent (representing the self in terms of one's group memberships), whereas the self-construal of the Han group would be relational interdependent (representing the self in terms of one's close relationships) (Mamat, ., 2014). The premise for the differences in self-construal between these two cultures is that Uyghur culture is based on Islam, which emphasizes the solidarity of all Muslims (Ma, 2003). Their shared religion promotes group integration, unity, and cohesiveness within the Uyghur ethnic group (Niu, 2007; Tang, 2008). The culture in the Uyghur society is called *Jamaat*, "a group of," "group," and "concentration"—in modern Uyghur, the word "*Jamaat*" represents "the public" and "the community" (Ekbal, 2012). Some scholars believe that the *Jamaat* culture creates a highly united civil life in Uyghur culture and extends the border of the family unit (Anvar, 2012). Thus, in *Jamaat* culture individuals have a strong awareness of family (Rexit, 2011).

In comparison, influenced by Confucianism, Han culture emphasizes distinguishing relationships of different levels of intimacy and hierarchy and assigning importance to others based on their relationship with the self. As a result, individuals in the Han culture tend to develop a relationship network with the self at the center, with relationships of higher (lower) importance closer to (farther away from) the center (Fei, 2006; Yang, 2009). Some scholar such as Zhang (2005) claimed that the Chinese self depends completely on its connections with others. Ho (1995) refers to the self in Han culture as the "relational self." In addition, according to the study of Mamat, . (2014), an Uyghur group had stronger collective self than a Han group, whereas the Han group showed stronger relational self. Therefore, it has been posited that self-construal in Uyghur culture is collective interdependent, whereas self-construal in the Han culture was relational interdependent.

Therefore, based on the theoretical analysis and findings of previous research, it could be inferred that with the development of social knowledge adolescents in Uyghur culture would become increasingly familiar with the Islamic *Jamaat* culture, developing the collective self and increasing the family orientation in the relational self. In contrast, adolescents in the Han culture would become increasingly familiar with Confucianism, developing the relational self and the friendship orientation in the relational self. Therefore, the importance of the collective self should increase with age during adolescence in the Uyghur cultural group, whereas the importance of the relational

self will increase during adolescent development in the Han cultural group. Also, the relational self of the Han cultural group would increasingly become friend-oriented during adolescence, while the relational self in the Uyghur group would increasingly become family-oriented.

In the present study, the goal was to investigate cultural influence on the development of the private self, relational self, and collective self during adolescence in participants from Han and Uyghur backgrounds. To achieve this goal, participants were chosen from among Uyghur adolescents who studied at an Uyghur school as representative of development influenced by Uyghur culture. In Uyghur schools, all courses are taught in Uyghur, the content of the courses reflect the Uyghur culture, and all examinations are also taken in Uyghur. In contrast, to control the influence of confounding factors other than culture between ethnic Han and Uyghur groups, the authors chose only the Uyghur adolescents from Han schools to represent development influenced by the Han culture. In the Han school, all courses are taught in Han, the content of the courses reflects the Han culture, and the examinations are taken in Han. According to Ismayl (2009), the Uyghur students who study in Han schools achieve a double identification with Han culture and their own ethnicity. Based on the Dynamic Constructivist approach to culture (Hong, Morris, Chiu, & Benet-Martinez, 2000), individuals can acquire more than one cultural meaning system, and whether a system comes to the fore in one's mind depends on the extent to which the construct is highly accessible. In current research, the Uyghur participants from the Han school were administered the task in the Han language, to activate their self-construals within the context of the Han culture. The self-construals of the Uyghur participants who studied in a Han school and finished the task in Han were considered influenced by Han culture.

Participants were recruited from five different age groups representing the sub-phases of adolescence (pre-, early-, mid-, late-, and post-adolescents). The participants were instructed to write down spontaneous self-statements, and these self-descriptions were coded for the proportion of the private, relational, and collective self-statements generated by the participants. According to Tanti, et al. (2008), the private self-statements were further coded for their personal or social focus, whereas the relational self-statements were also differentiated on family or friend orientation. Based on the theoretical analysis and findings of previous research, four hypotheses are proposed.

1. The proportion of private self-statements will be highest across all the different sub-phases of adolescence in both Han and Uyghur cultural groups, relative to relational and collective self-statements.

. Social orientation will increase in private self-statements throughout adolescence for both the Han and Uyghur cultural groups, while the proportion of statements with individual orientation will decrease.

. The proportion of collective self-statements will increase through the stages of adolescence in the Uyghur cultural group, whereas the proportion of relational self-statements will increase through the adolescent stages of the Han cultural group.

. The proportion of friend-relationship self-statements is expected to increase across stages in the Han cultural group, while the family-relationship self-statements will increase for the Uyghur cultural group.

METHOD

The participants were 982 Uyghur adolescents of five different age levels (Table 1). The pre-adolescents in the Han and the Uyghur cultural groups were from the fourth grade at the first primary school and the fifth primary school in Urumqi, respectively. The early adolescents in the Han and Uyghur cultural groups were first grade students studying at the 13th Middle School in Urumqi and the Lukqin Middle School in Shanshan County, respectively. The mid-adolescents in the Han and Uyghur cultural groups were fourth grade students of secondary school at the 68th Middle School in Urumqi and the 1st Middle School of Shanshan County, respectively. The late-adolescents in the Han and Uyghur cultural groups

TABLE 1
MEAN AGES AND NUMBERS OF PARTICIPANTS IN EACH GROUP

Age Group	Cultural Group	Age (yr.)				Number of Participants		
				Min.	Max.	Total	Males	Females
Pre-adolescent	Han	10.28	0.82	8	13	100	48	52
	Uyghur	10.65	0.61	10	12	97	42	55
Early-adolescent	Han	12.99	0.74	12	15	99	46	53
	Uyghur	13.04	0.72	11	15	101	50	51
Mid-adolescent	Han	15.60	0.56	15	17	101	54	47
	Uyghur	15.57	0.63	14	17	93	35	58
Late-adolescent	Han	18.97	0.78	18	21	99	44	55
	Uyghur	18.90	0.85	17	21	100	64	36
Post-adolescent	Han	23.38	1.58	21	27	92	36	56
	Uyghur	24.09	2.33	21	33	100	41	59

were first-year students at Beijing Normal University and Xinjiang University, respectively. Finally, participants who had graduated from college and had full-time jobs were recruited as the post-adolescent group, because the self-concept at this stage is relatively stable compared with that in adolescence (Gecas & Mortimer, 1987). The post-adolescents in the Han and Uyghur cultural groups were night school students at Beijing Normal University and the Xinjiang Education Institute, respectively.

Self-statements were elicited from the participants using the method of the Twenty Statements Test (TST; Kuhn & McPartland, 1954). This test measures self-construal and is personalized to the respondents because the responses are spontaneous and self-directed (Jones, Sensenig, & Haley, 1974). However, according to Becker, Vignoles, Owe, Brown, Smith, Easterbrook, . (2012), previous studies using the TST to access identity content have sometimes been criticized for priming an individualized, decontextualized, introspective "self" that may be closer to Western culture than to other cultural conceptions of self. In the current study, the main focus was the cultural differences in the relational self-statements and collective self-statements between Han and Uyghur cultural groups. To achieve a culturally decentered version of this task, a modified version of the TST was used (Becker, ., 2012), in which the original question "who am I?" was changed to "who are you?" The authors also used a new decentered version of the instructions by Becker, . (2012): "In the numbered spaces below, please write down anything that can describe you. You can write your answers as they occur to you without worrying about the order, but together they should summarize the image you have of who you are. Your answers might include social groups or categories you belong to and personal relationships with others, as well as characteristics of yourself as an individual. Some may be things that other people know about, and others may be your private thoughts about yourself. Some things you may see as relatively important, and others less so. Some may be things you are relatively happy about, and others less so."

The instructions were translated into Uyghur and Han by the current research team and were further back-translated into English by an ethnic Uyghur English language professional and an ethnic Han English language professional according to standard procedures. For the incomparable parts of the two English versions of instructions, some adjustments were made to the Uyghur and Han versions based on agreements achieved among the research team.

The participants filled in an informed consent form first, then completed the TST task, which was conducted at the participating schools and

the university in groups of 10 to 30 participants. The participants were informed that the goal of the present study was to explore how they evaluate themselves. The participants of the Uyghur cultural group wrote down the self-statements in Uyghur, whereas the participants of the Han cultural group wrote down the self-statements in Han Chinese. Informed consent was obtained prior to the task from the participants or their parents. This study was approved by a local ethics committee.

According to the method described by Brewer and Gardner (1996), the items generated by the participants were first coded into one of three categories, which were private self-statements (e.g., "I am pretty"), relational self-statements (e.g., "I am a son"), or collective self-statements (e.g., "I am Chinese"). The private self-statements were further differentiated into personal orientation statements (e.g., "I am a musician") and social orientation statements (e.g., "I am amiable"). The authors also further coded the relational self-statements as representing a family focus (e.g., "I am the big sister") or a friend focus ("I am best friends with Xiao Ming"). A subset of self-statements (25%) was double coded by a second rater who was unaware of the purpose of the study. The agreement between the two coders was acceptable (Han: $\kappa = .84$; Uyghur: $\kappa = .87$). The proportion of statements for each code, as a function of the total number of items generated by each participant, were the primary dependent measures of this study. There was no significant group difference in total number of items generated (Han: $M = 10.24$, $SD = 3.76$; Uyghur: $M = 11.17$, $SD = 4.08$).

RESULTS

Sex did not have a significant main effect or significant interactions on the proportion on the private self, the relational self, and the collective self (Main effect: $F_{1,962} = 2.35$, $p = .09$, $\eta^2 = 0.05$; interaction with the Self: $F_{8,962} = 0.94$, $p = .33$, $\eta^2 = 0.001$; three-way interaction with the Self and the Group: $F_{8,962} = 1.58$, $p = .12$, $\eta^2 = .02$).

TABLE 2
MEAN PROPORTIONS OF PRIVATE, RELATIONAL, AND COLLECTIVE SELF-STATEMENTS FOR PRE-, EARLY-, MID-, LATE-, AND POST-ADOLESCENTS AS A FUNCTION OF CULTURE (N=982)

Cultural Group	Pre-adolescent		Early-adolescent		Mid-adolescent		Late-adolescent		Post-adolescent	
Han	(N=100)		(N=99)		(N=101)		(N=99)		(N=92)	
Private	0.64	0.24	0.71	0.16	0.60	0.21	0.58	0.18	0.56	0.17
Relational	0.24	0.19	0.21	0.13	0.23	0.15	0.27	0.12	0.32	0.16
Collective	0.12	0.13	0.08	0.10	0.17	0.15	0.15	0.15	0.11	0.12
Uyghur	(N=97)		(N=101)		(N=93)		(N=100)		(N=100)	
Private	0.61	0.23	0.60	0.20	0.64	0.18	0.50	0.21	0.46	0.19
Relational	0.31	0.20	0.28	0.17	0.21	0.15	0.15	0.12	0.15	0.11
Collective	0.07	0.11	0.12	0.12	0.13	0.14	0.35	0.21	0.38	0.20
Total	(N=197)		(N=200)		(N=194)		(N=192)		(N=192)	
Private	0.63	0.23	0.65	0.19	0.62	0.20	0.54	0.20	0.51	0.19
Relational	0.27	0.19	0.25	0.15	0.22	0.15	0.21	0.13	0.23	0.16
Collective	0.09	0.12	0.10	0.11	0.15	0.15	0.25	0.20	0.25	0.21

The three-way interaction between Group, Self-level, and Culture was significant ($F_{8,972}=20.74, p<.001, \eta^2=0.08$). To examine Hypothesis 3, the three-way interaction was assessed by further simple effect by follow-up 5(Group) \times 3(Self-level) mixed-design ANOVAs of the Han and Uyghur cultural groups (Table 3).

TABLE 3
RESULTS OF 5(GROUP) \times 3(SELF-LEVEL) MIXED-DESIGN ANOVAs OF THE HAN AND UYGHUR CULTURAL GROUPS

Source				Effect Size
Han group				
Self	2	31.97	817.56‡	0.63
Self \times Group	8	0.31	7.99‡	0.06
Error	972	0.04		
Uyghur group				
Self	2	19.92	442.90‡	0.48
Self \times Group	8	1.59	35.58‡	0.23
Error	972	0.04		

.— = Mean squares, effect size = partial η^2 . ‡ $p<.001$.

The results of the Han cultural group showed a significant interaction between the Group and Self-level ($F_{8,486}=7.99, p<.001, \eta^2=0.06$),

Further simple main effect showed that the proportion of private self-statements tended to decrease across adolescent groups ($F_{4,486}=4919.85$, $p<.001$, partial η^2

TABLE 4
MEAN PROPORTIONS OF THE PERSONALLY- AND SOCIALLY-ORIENTED PRIVATE SELF-STATEMENTS FOR
PRE-, EARLY-, MID-, LATE-, AND POST-ADOLESCENTS AS A FUNCTION OF CULTURE (N = 982)

Private Self-state- ment Orientation	Pre- adolescent		Early- adolescent		Mid- adolescent		Late- adolescent		Post- adolescent	
Han Group										
Personal	0.87	0.16	0.76	0.21	0.75	0.26	0.70	0.26	0.58	0.26
Social	0.14	0.16	0.24	0.21	0.26	0.26	0.30	0.26	0.43	0.26
Uyghur Group										
Personal	0.84	0.20	0.85	0.19	0.91	0.14	0.71	0.29	0.67	0.27
Social	0.16	0.20	0.15	0.19	0.09	0.14	0.29	0.29	0.32	0.27

The results for the Han cultural group showed a significant interaction between Group and Private Orientation ($F_{4,485} = 19.04, p < .001$, partial $\eta^2 = 0.14$), and the analyses of simple effects showed that the proportion of Personal private self-statements tended to decrease through adolescence ($F_{4,485} = 661.76, p < .001$, partial $\eta^2 = 0.54$). Scheffé tests showed that the proportion of Personal private self-statements generated by the pre-adolescents were significantly higher than the early- ($p = .028$), the mid- ($p = .019$), and the late-adolescents ($p < .001$); the proportion for post-adolescents was significantly lower than the early- ($p < .001$), the mid- ($p < .001$), and the late-adolescents ($p = .029$). In contrast, the proportion of Social private self-statements tended to increase through adolescence ($F_{4,485} = 4760.32, p < .001$, partial $\eta^2 = 0.89$). Scheffé tests showed that the proportion of Social private self-statements generated by the pre-adolescents was lower than for the early- ($p = .040$), the mid- ($p = .009$), and the late-adolescents ($p < .001$); the

TABLE 5
RESULTS OF 5 (GROUP) \times 2 (PRIVATE ORIENTATION) MIXED-DESIGN
ANOVAS OF THE HAN AND UYGHUR CULTURAL GROUPS

Source				Effect Size
Han				
Private Self	1	51.08	468.08‡	0.49
Private Self \times Group	4	2.07	19.03‡	0.14
Error	485	0.11		
Uyghur				
Private Self	1	86.33	843.65‡	0.64
Private Self \times Group	4	2.06	20.17‡	0.14
Error	484	0.10		

— = Mean squares, effect size = partial η^2 . ‡ $p < .001$.

proportion for post-adolescents was higher than for the early- ($p < .001$), the mid- ($p < .001$), and the late-adolescents ($p = .01$).

The results of the Uyghur cultural group showed the same tendency: the interaction between the Group and Private Orientation was also significant ($F_{4,484} = 20.39$, $p < .001$, partial $\eta^2 = 0.14$). The analyses of simple effects showed that the proportion of Personal private self-statements tended to decrease through adolescence ($F_{4,484} = 392.60$, $p < .001$, partial $\eta^2 = 0.41$). Scheffé tests showed that the proportion of Personal private self-statements generated by the late- and post-adolescents was significantly lower than for the pre- ($p = .002$ and $p < .001$), the early- ($p = .001$ and $p < .001$), and the mid-adolescents ($p < .001$). In contrast, the analyses of simple effects showed that the proportion of Social private self-statements tended to increase through adolescence ($F_{4,485} = 6069.28$, $p < .001$, partial $\eta^2 = 0.91$). Scheffé tests showed that the proportion of Social private self-statements generated by the late- and post-adolescents was significantly higher than for the pre- ($p = .002$ and $p < .001$), the early- ($p < .001$), and the mid-adolescents ($p < .001$). Overall, both Han and Uyghur participants showed decreasing personal private orientation and increasing social private orientation in private self-statements, which was consistent with Hypothesis 2.

To further examine Hypothesis 4, a $5(\text{Group}) \times 2(\text{Culture}) \times 2(\text{Relational Focus})$ ANOVA was conducted on the relational self-statements by examining the proportions of family- and friend-focused self-descriptions reported by the participants. There was a significant main effect of Relational Focus ($F_{1,859} = 206.77$, $p < .001$, partial $\eta^2 = 0.19$), which indicated that the participants generated more friend- than family-focused private self-statements. The three-way interaction was also significant ($F_{4,859} = 8.43$, $p < .001$, partial $\eta^2 = 0.04$), and the follow-up $5(\text{Group}) \times 2(\text{Relational Focus})$ mixed-design ANOVAs of the Han and Uyghur cultural groups were run separately (Table 6).

The Han cultural group's results showed a significant interaction between Relational Focus and Group ($F_{4,445} = 5.46$, $p < .001$, partial $\eta^2 = 0.05$). The analyses of simple effects showed that the proportion of the friend-focused self-statements tended to increase through adolescence ($F_{4,445} = 2104.42$, $p < .001$, partial $\eta^2 = 0.81$). Scheffé tests showed that the proportion of friend-focused self-statements generated by the pre-adolescents was significantly lower than for the mid- ($p = .004$) and the post-adolescents ($p = .002$). In contrast, the simple effects showed that the proportion of family-focused self-statements tended to decrease through adolescence ($F_{4,445} = 428.56$, $p < .001$, partial $\eta^2 = 0.48$). Scheffé tests showed that the proportion of Relational Focus self-statements generated by the pre-adolescents was significantly higher than for the mid- ($p = .007$), the late- ($p = .084$), and the post-adolescents ($p = .002$). These results were consistent with Hypothesis 4.

TABLE 6
RESULTS OF 5(GROUP) × 2(RELATIONAL ORIENTATION) MIXED-DESIGN ANOVAS
OF THE HAN AND UYGHUR CULTURAL GROUPS

Source				Effect Size
Han group				
Relation Orientation (RO)	1	32.19	158.96‡	0.26
RO × Group	4	1.11	5.46‡	0.05
Error	445	0.20		
Uyghur group				
RO	1	15.77	64.15‡	0.13
RO × Group	4	1.69	6.89‡	0.06
Error	414	0.10		

— =Mean squares, effect size=partial ². ‡ <.001.

The Uyghur cultural group's results showed that there was also a significant interaction between Relational Focus and Group ($F_{4,414}=6.89, <.001$, partial ²=0.06). The analyses of simple effects showed that the proportion of friend-focused self-statements tended to decrease through adolescence ($F_{4,414}=1281.22, <.001$, partial ²=0.74). Scheffé tests showed that the proportion of friend-focused self-statements generated by the post-adolescents was significantly lower than for the pre- ($p=.011$), the early- ($p<.001$), and the mid-adolescents ($p<.001$). In contrast, the analyses of simple effects showed that the proportion of family-focused self-statements tended to increase through adolescence ($F_{4,414}=416.33, <.001$, partial ²=0.48). Scheffé tests showed that the proportion of family-focused self-statements generated by the post-adolescents was significantly higher than for the early- ($p=.007$) and the mid-adolescents ($p=.004$). These results were also consistent with Hypothesis 4.

DISCUSSION

The present research explored the development (pre-, early-, mid-, late-, and post-adolescence) of within-cultural variability in an interdependent self-construal by comparing the changes in the tripartite self-concepts (private, relational, and collective) of Han and Uyghur cultural groups in China. All four hypotheses were supported. Results of this study present interesting developmental changes in the self-construal during adolescence within two distinct Chinese cultures and give insights to the influences of ethnic culture on self development.

First, based on the theory of Sedikides, (2013), it was hypothesized that the proportion of private self-descriptions would be most common throughout adolescence in both the Han and Uyghur cultural groups,

and the findings were consistent with this hypothesis. This finding is in accordance with the previous research of Tanti, 2008, which showed that the private self was more prominent and important than the relational self and collective self across adolescence in Western culture (Tanti, 2008). However, there was a subtle difference in the development tendency of private self-statements between participants of Western culture and participants of the present study. Specifically, in Tanti's research the private self-statements increased through adolescence, being lowest in pre-adolescence; in contrast, the present research showed decreases of private self-statements in both Han and Uyghur cultural groups, and the lowest proportions were found in post-adolescents. This discrepancy was consistent with the differences between independent and interdependent self-construals (Markus & Kitayama, 1991): in independent self-construal the individual's uniqueness is more stressed, while in interdependent self-construal social relationships and group identities are more emphasized. The current study provided further evidence of this cultural difference from a developmental perspective.

The prediction regarding the discrepancy between the Han and Uyghur groups considering the development of the collective self and the relational self was also well-supported. With regard to the Han cultural group, as predicted, prominence of the relational self in the Han cultural group's self-statements steadily developed through adolescence and peaked in late adolescence. However, in the Uyghur cultural group the participants' self-statements showed an increase in references to the col-

characteristics of independent self-construal in Western culture, which empathizes individual qualities instead of social connections. In contrast, the present study showed development of the relational self and collective self in different ethnic groups from East Asian cultures, which reflect the social orientation feature of interdependent self. The current study also suggests a development process for the relational self and collective self in East Asian culture and insights into the formation of within-culture diversity of interdependent self.

Regarding the changes within the private self, it was hypothesized that the content of the private self would become more socially oriented in both Han and Uyghur cultural groups. Indeed, the content of the private self of both the Han and Uyghur cultural groups showed a greater use of social self-statements. Rosenberg (1986) proposed that all adolescents would experience a shift from individual orientation to social orientation in private self-statements. Importantly, this finding is also consistent with the theory and research of Kroger (1989), who claimed that the consolidation of personal identity is a primary focus of late adolescence, in which an integration or balance between personal and social aspects of the private self is achieved (Brewer, 2003). The result was also consistent with the finding that adolescents from Western culture showed a shift from the personal private self to the social private self (Tanti, 2008).

It was also hypothesized that the relational self would become more friend-focused in the Han cultural group and more family-focused in the Uyghur cultural group. As predicted, there was also a discrepancy in the content of the relational self between the participants in the Han culture and the Uyghur culture. In the Han cultural group, the participants' results showed an increase of friend-focused relational self-statements. This finding was consistent with the results among Western adolescents (Tanti, 2008) and Huang (2014) among ethnic Han adolescents, indicating peer relations are the most important in the development of adolescents (Harter, 1990). It also fitted well with the characteristics of relational interdependent self-construal (Brewer & Chen, 2007), which empathizes relationships more than group identity compared with collective interdependent self-construal. More interestingly, regarding the Uyghur cultural group, in the subgroups older than mid-adolescence there was a shift of importance from the friend-focus of the relational self to a family focus, supporting the inference that the influence of Jamaat culture might develop the family orientation of Uyghur adolescents' relational self. Brewer and Chen (2007) also considered the family as a small interpersonal group. Treating the family as an in-group, a group reference effect was found (Johnson, Gadon, Carlson, Southwick, Faith, & Chalfin, 2002; Bennett & Sani, 2008; Bennett, Allan, Anderson, & Asker, 2010), suggesting that in-

creased family focus of the relational self reflects the development of the collective interdependent self-construal (Brewer & Chen, 2007; Mamat, , 2014).

One limitation of the current study was the recruitment of Uyghur students who studied in a Han school as a Han cultural group. It could be argued that the Uyghur adolescents studying at a Han school could be influenced by both Uyghur culture and Han culture, confounding the results. However, comparing the results from these Uyghur adolescents who studied in a Han school and a recent study of ethnic Han adolescents (Huang, 2014), there was no difference concerning the development of private self, relational self and collective self between these two groups. This may indicate that the Uyghur students who studied in a Han school were well-immersed in Han culture. Besides, by comparing Uyghur students who studied in Han and Uyghur schools, some other confounding factors such as social status were avoided.

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self development in adolescents are needed. Future research can investigate the development of within-cultural differences in an independent culture in adolescence, and also the within-cultural differences in an interdependent culture by focusing on other cultures across different ethnicities.

REFERENCES

- ANVAR, Z. (2012) A study of Uyghur family education and traditional cultural heritage. Unpublished doctoral dissertation, East China Normal Univer., Shanghai, China. [in Chinese]
- BECKER, M., VIGNOLES, V. L., OWE, E., BROWN, R., SMITH, P. B., EASTERBROOK, M., HERMAN, G., SAUVAGE, I., BOURGUIGNON, D., TORRES, A., CAMINO, L., LEMOS, F., FERREIRA, M., KOLLER, S. H., GONZALEZ, R., CARRASCO, D., CADENA, M., LAY, S., WANG, Q., BOND, M. H., TRUJILLO, E. V., BALANTA, P., VALK, A., MEKONNEN, K. H., NIZHARADZE, G., FULOP, M., REGALIA, C., MANZI, C., BRAMBILLA, M., HARB, C., ALDHAFRI, S., MARTIN, M., MACAPAGAL, M., CHYBICKA, A., GAVRELIUE, A., BUITENDACH, J., GALLO, I., GUNER, E., & YAMAKOĞLU, N. (2012) Culture and the distinctiveness motive: constructing identity in individualistic and collectivistic contexts. *Journal of Cross-Cultural Psychology*, 43(4), 833.
- BENNETT, M., ALLAN, S., ANDERSON, J., & ASKER, N. (2010) On the robustness of the group reference effect. *Journal of Cross-Cultural Psychology*, 40(2), 349-354.
- BENNETT, M., & SANI, F. (2008) Children's subjective identification with social groups: a group-reference effect approach. *Journal of Cross-Cultural Psychology*, 39(3), 381-387.
- BREWER, M. B. (2003) Optimal distinctiveness, social identity, and the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity*. New York: Guilford Press. Pp. 480-491.
- BREWER, M. B., & CHEN, Y. R. (2007) Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Journal of Cross-Cultural Psychology*, 38(1), 114, 133-151.
- BREWER, M. B., & GARDNER, W. (1996) Who is this "we"? Levels of collective identity and self representations. *Journal of Cross-Cultural Psychology*, 27(1), 71, 83-93.
- DAMON, W., & HART, D. (1986) Stability and change in children's self-understanding. *Child Development*, 57(2), 102-118.
- EKBAL, M. (2012) A study of mutual relations of civil society groups of Jamaat in Uyghur folk rural society. Unpublished doctoral dissertation, Xinjiang Univer., Urumqi, China. [in Chinese]
- ERIKSON, E. H. (1968) *Identity and the life cycle*. New York: W. W. Norton.
- FEL, X. (2006) *Chinese culture and psychology*. Shanghai, China: Shanghai People's Press. [in Chinese] (Original work published 1948)
- GAERTNER, L., SEDIKIDES, C., & CAI, H. (2012) Wanting to be great and better but not average: on the pancultural desire for self-enhancing and self-improving feedback. *Journal of Cross-Cultural Psychology*, 43, 521-526.
- GAERTNER, L., SEDIKIDES, C., & GRAETZ, K. (1999) In search of self-definition: motivational primacy of the individual self, motivational primacy of the collective self, or contextual primacy? *Journal of Cross-Cultural Psychology*, 30(1), 76, 5-18.
- GAERTNER, L., SEDIKIDES, C., VEVEA, J., & IUZZINI, J. (2002) The "I," the "We," and the "When": a meta-analysis of motivational primacy in self-definition. *Journal of Cross-Cultural Psychology*, 33(5), 574-591.

- GECAS, V., & MORTIMER, J. T. (1987) Stability and change in the self-concept from adolescence to adulthood. In T. Honess & K. Yardley (Eds.),
. London, UK: Routledge & Kegan Paul. Pp. 266-286.
- GREENWALD, A. G., & PRATKANIS, A. R. (1984) The self. In R. S. Wyer & T. K. Srull (Eds.),
. Vol. 1. Hillsdale, NJ: Erlbaum. Pp. 129-178.
- HARTER, S. (1990) Processes underlying adolescent self-concept formation. In R. Montemayor, G. R. Adams, & T. P. Gullotta (Eds.),
. Vol. 2. Newbury Park, CA: Sage. Pp. 205-239.
- HO, D. (1995) Selfhood and identity in Confucianism, Taoism, Buddhism, and Hinduism: contrasts with the West.
. 25, 115-139.
- HOFSTEDE, G. H. (1980) ff
. Beverly Hills, CA: Sage.
- HONG, Y. Y., MORRIS, M. W., CHIU, C. Y., & BENET-MARTINEZ, V. (2000) Multicultural minds: a dynamic constructivist approach to culture and cognition.
. 55(7), 709.
- HUANG, W. (2014) Tripartite self-concept development: shifts in the individual, relational, and collective self in Chinese adolescents. Unpublished doctoral dissertation, Peking Univer., Beijing, China. [in Chinese]
- ISMAIL, Y. (2009) Sociological analysis of construction of ethnic identity: an example of "Min Kao Han."
. 3, 65-75. [in Chinese]
- JOHNSON, C., GADON, O., CARLSON, D., SOUTHWICK, S., FAITH, M., & CHALFIN, J. (2002) Self-reference and group membership: evidence for a group-reference effect.
. 32(2), 261-274.
- JONES, R. A., SENSENIG, J., & HALEY, J. V. (1974) Self-descriptions: configurations of content and order effects.
. 30(1), 36.
- KROGER, J. (1989) . (2nd ed.) London, UK: Routledge.
- KUHN, M. H., & MCPARTLAND, T. S. (1954) An empirical investigation of self-attitudes.
. 19(1), 68-76.
- LU, S. (1990) The development of self-conceptions from childhood to adolescence in China.
. 20(2), 129.
- MA, Z. (2003) Trace back to the origin of Islam ethnic viewpoint.
. 5, 16-19. [in Chinese]
- MAMAT, M., HUANG, W., SHANG, R., ZHANG, T., LI, H., WANG, Y., LUO, W., & WU, Y. (2014) Relational self versus collective self: a cross-cultural study in interdependent self-construal between Han and Uyghur in China.
. 45(6), 959-970.
- MARKUS, H. R., & KITAYAMA, S. (1991) Culture and the self: implications for cognition, emotion, and motivation.
. 98(2), 224.
- MONTMAYOR, R., & EISEN, M. (1977) The development of self-conceptions from childhood to adolescence.
. 13(4), 314.
- NIU, X. (2007) Equality, toleration, incorporation, and peace—sociological explanation of Islam's concept of harmony.
. 10, 62-64. [in Chinese]
- OYSEMAN, D., & LEE, S. S. (2008) Does culture influence what and how we think? Effects of priming individualism and collectivism. *BuduatinnPsychologist* 9825Tw[325]6.95474ld-

- QI, J., & ZHU, Y. (2002) The self-reference effect of Chinese college students. *Journal of Social Psychology*, 25(3), 275-280. [in Chinese]
- REXIT, I. (2011) The function of Jamaat in Uyghur rural areas. Unpublished doctoral dissertation, Shanxi Normal Univer., Xi'an, China. [in Chinese]
- ROSENBERG, M. (1986) Self-concept from middle childhood through adolescence. In J. Suls & A. G. Greenwald (Eds.), *Handbook of self-concept*. Vol. 3. New York: Erlbaum. Pp. 107-136.
- SEDIKIDES, C., GAERTNER, L., LUKE, M. A., O'MARA, E. M., & GEBAUER, J. E. (2013) Chapter five—a three-tier hierarchy of self-potency: individual self, relational self, collective self. *Journal of Social Psychology*, 153(2), 235-295.
- SMETANA, J. G., CAMPIONE-BARR, N., & METZGER, A. (2006) Adolescent development in interpersonal and societal contexts. *Journal of Social Psychology*, 146(3), 255-284.
- TANG, D. (2008) The group integration functions of Islam. *Journal of Social Psychology*, 148(1), 91-97. [in Chinese]
- TANTI, C., STUKAS, A. A., HALLORAN, M. J., & FODDY, M. (2008) Tripartite self-concept change: shifts in the individual, relational, and collective self in adolescence. *Journal of Social Psychology*, 148(4), 360-379.
- TRIANDIS, H. C. (1989) The self and social behavior in differing cultural contexts. *Journal of Social Psychology*, 129(5), 506-520.
- YANG, Y. (2009) Guanxilization or categorization: psychological mechanisms contributing to the formation of the Chinese concept of "us." *Journal of Social Psychology*, 149(1), 49-67.
- ZHANG, S. Y. (2005) *Self-concept and self-reference effect*. Beijing, China: Peking Univer. Press.
- ZHU, Y., & ZHANG, L. (2002) An experimental study on the self-reference effect. *Journal of Social Psychology*, 142(2), 120-128.
- ZHU, Y., ZHANG, L., FAN, J., & HAN, S. (2007) Neural basis of cultural influence on self-representation. *Journal of Social Psychology*, 147(9), 1310-1316.