Asia-Pacific Edu Res (2013) 22:21–31
DOI 10.1007/s40299-012-0021-5

# Asian Civic Values: A Cross-Cultural Comparison of Three East Asian Societies

**Young Ha Cho · Tae Jun Kim**

Published online: 19 November 2012


**Abstract** This study cross-culturally explored the way that East Asian lower-secondary school students perceive the peculiar matters of Asian civic values specific to Korea, Chinese Taipei, and Hong Kong using the Asian Regional Module data of the 2009 International Civic and Citizenship Education Study. Methodologically, exploratory and confirmatory factor analyses were employed to explore the factor model that successfully fits the three East Asian societies. Latent mean analysis was then conducted to measure between-nation mean differences. Overall, East Asian students tended to be negative against an undemocratic government and unfairness based on guanxi and moderately critical of the issues related to the independence of the judiciary. Asian identity and democratic values for a civil society were both accepted as valuable with moderate respect for the morality of politicians and the preservation of traditional culture. As perceiving collectivist and Confucian contexts positively, these societies have also developed some aspects assimilated from Western democratic contexts. However, the degree to which the students perceive was similar for some civic values but different for some others.

**Keywords** Asian civic values · Measurement invariance · Latent mean analysis · East Asian students

Y. H. Cho (✉)
The Graduate School of Education, Kyung Hee University, 26 Kyunghee-daero, Dongdaemun-gu, Seoul 130-701, South Korea
e-mail: youcho@khu.ac.kr

T. J. Kim
Korean Educational Development Institute, Seoul, South Korea
e-mail: tjkim@kedi.re.kr

## Introduction

In general, three influential factors can explain the development of East Asian societies: historical (e.g., colonialism and East Asian geopolitics), economic (e.g., world trade, foreign capital, the free market, and economic crisis), and cultural (e.g., Asian values against Westernization). These factors must be associated with the base of their civic values (Kennedy 2004). In particular, the tenets of Confucianism have been broadly recognized as a salient aspect that has underpinned the civic values base (Glazer 1997; Vickers 2002).

East Asian civic values hold sacred a sense of community or collective entity in which individuals are subject to a greater good, spirituality, and harmony based on Confucian values, morality, and commitment oriented to a common set of values and responsibility toward family and community (Karsten et al. 2002; Lee 2004b; Print 2000). However, East Asian civic values have also undergone a process of hybridization with Western ideas by the indigenization process. Therefore, in a contemporary East Asian civil society, it becomes difficult to distinguish what is Western and what is not (Lee 2004b; Vickers 2002).

As East Asia has recently achieved economic growth that rivals the West, there have been attempts to identify distinctive civic values contextually Asian (Huntington 1996; Kennedy 2004; Kennedy and Fairbrother 2004; Lee 2004a; Liu 2004; Print 2000). For example, the Western perspective tends to dichotomously characterize East Asian civic values as collectivist by contrasting them to the individualistic perspective in which Western civic values are constructed. It makes the mistake of predicating that East Asians have a stronger emphasis on *We-ness* than *I-ness*; however, they define their civic values not simply as collectivist but as relationalist, which places a high value

on subtle relationships between individualism and collectivism. Lee (2004a, p. 27) elaborates:

> There is a wealth of meaning in relation to the term "self" in the East. Self-cultivation is a term most commonly used that refers to a continuous process of self-enrichment. The expression is closely linked to Western concepts of growth, actualization, and realization. However, self-cultivation also contains a moral sense and a collective sense within it.

In this view, East Asia can be seen as an inseparable and inter-relational civil society between self and collectivity in which individuals participate with a collective self-consciousness. When comparing East Asian civic values to those of the West, Kennedy and Fairbrother (2004) have described them as more moral and personal than civic and public.

Some scholars have been working to comprehensively identify the considerable diversity of the content and conduct of civic values from a cross-cultural perspective. The works of International Association of the Evaluation of Educational Achievement (IEA) is notable (Cogan and Morris 2001; Isac et al. 2011; Leung and Print 2002; Peterson and Knowles 2009). Since 1999, IEA has investigated the way that young people are educated as citizens and perceive their civic roles (Schulz et al. 2010). Their long labor is meaningful in that civic values are not static but constantly changing (Kennedy 2004). The cross-cultural approach has been contributing to not only identifying differences and similarities, but witnessing the transformation of the concepts and practices of civic values in a global society as well.

In this context, this study aimed to play a role in identifying the salient features of East Asian civic values through scientific investigation. To that end, this study set out to cross-culturally explore the way that East Asian lower-secondary school students perceive the peculiar matters of Asian civic values specific to Korea, Chinese Taipei, and Hong Kong. The authors joined the 2009 International Civic and Citizenship Education Study (ICCS) of IEA as representing Korea for data collection and national report. Specifically, the Asian Regional Module (ARM) of ICCS was the focus of this analysis.

## Civic Values and Civic Learning in East Asia

Civic values, as abstract and enduring beliefs or guiding principles that affect our civic attitudes and behaviors, underpin what is taught in schools with respect to institutional, legal, ethical, political, and cultural systems of a civil society (Cummings et al. 1988; Karsten et al. 2002). East Asian civic values, which are associated with a common good, moral codes, and harmonious community involvement (Karsten et al. 2002), contextually share a common base of Confucianism (Glazer 1997) and extend into the areas of national identity, civic life and community, social cohesion and diversity, democratic values, rights and responsibilities, civil society and citizenship, and personal civic values (Print 2000). Indeed, East Asian civic values have thus tended to be integrated into a combination of moral and nationalistic education (Leung and Print 2002). The section that follows briefly reviews the educational context of civic values specific to Korea, Chinese Taipei, and Hong Kong.

### Korea

Confucianism is the local and global identity maker of Koreans (Reed 2004). In Korea, collectivism based on Confucian ethics emphasizes social harmony and group solidarity. These traits contextually characterize Korean society, which highly values duty and obligation to group solidarity, stable and predetermined friendship maintenance, emotional dependence, and group decision-making (Paik 2001).

Korean national civics curriculum basically has three distinctive features: the principle of expanding communities, reconciliation of traditional civic norms with universal values, and specifically defined core civic values (Roh 2004). According to the relevant literature (Park 2001; Roh 2004), the principle of expanding communities incorporates four specific realms that make up a person's life: (a) personal; (b) family, neighborhood, and school; (c) social; and (d) national and ethnic. Each realm expands from the person outward. The second feature of Korean national civics curriculum is the harmonization between traditional civic norms and universal values. The curriculum actually puts more weight on the former and thus aims to nurture a desirable Korean citizen rather than a desirable global citizen. Finally, regarding core civic values, 20 values are specifically described under a classification of the four realms of life: (a) personal—respect for life, sincerity, honesty, independence, and temperance; (b) family, neighborhood and school—piety, filial duty, etiquette, cooperation, and love for school and hometown; (c) social—law abiding, caring for others, environmental protection, justice, and maintaining a sense of community; and (d) national and ethnic—love for the state, the nation and humankind, security consciousness, and peaceful reunification.

It is characteristic of the curriculum that traditional ethics and cultural values are paid more attention to educate and train young Koreans not to become inordinately and irresponsibly individualistic in the process of modernization and Westernization (Park 2001; Roh 2004).

### Chinese Taipei

The politics of Mainland China has always been integrated into civic education in Chinese Taipei. However, the lifting of martial law in 1987 has resulted in significant alterations to their socio-political structure from an authoritarian and uniform state to a more democratic and diversified one.

Before 1987, Chinese Taipei remained committed to nation-building with a strong sense of national identity that was in opposition to the Republic of China, which took the rigid position of there being only "one-China." Thus, civic education in Chinese Taipei aimed at encouraging socio-political conformity and moral responsibilities by modeling good citizens who understood their rights and responsibilities, upheld the law, obeyed the national authority, and willingly served the community and country. Traditional Chinese culture was closely linked to traditional norms, patriotic thoughts, and a specific set of values in their civics curriculum. After 1987, during what is considered the post-authoritarian period, the Chinese Taipei government has pursued pluralistic and multicultural values that were influenced by new social studies focusing on democracy and critical thinking advocated in the U.S. Therefore, the civics curriculum has newly emphasized two focuses, *understanding Taiwan*, for which two sets of values, traditional Chinese cultural values (e.g., benevolence, filial piety, etiquette, frugality) and global and non-cultural-specific values are combined, and *civics and morality*, which consist of civic virtues and civic knowledge.

Scholars have identified civic values of Chinese Taipei: self-cultivation, family values, democratic values, fair government, economic life, social cohesion/diversity, civil society, and national identity (Liu 2000, 2001, 2004; Morris and Cogan 2001). Among these, collectivism is still one of the critical principles that encourage students to be committed to community, national sovereignty, and the autonomy of local government, but multiculturalism attempts to infuse diversity issues into the civics curriculum. Self-cultivation is also the foundation of the development and practice of moral dispositions and behaviors. In addition, Confucianism plays a central role in valuing the virtues of loyalty, filial piety, benevolence, and whole person.

### Hong Kong

The Sino-British Joint Declaration of 1984 would eventually end more than 150 years of British colonial rule, and in July 1997, Hong Kong was returned to Chinese sovereignty. Before 1997, Hong Kong, which was geographically more subject to Chinese rather than British influences, maintained the consensus-based governance among Britain, China, and Hong Kong. Accordingly, the national approach of the school civics curriculum was characteristically depoliticized, desensitized, and decontextualized by avoiding controversial issues and minimalizing the promotion of national identity and the development of political participation skills (Lee 2004c; Morris and Morris 2000). In other words, Hong Kong at that time decided to promote a cultural China based on Confucianism at the expense of a political China (Kuah-Pearce and Fong 2010).

In the early 1980s, Hong Kong began a process of social change that encouraged public involvement in the political process due to several factors: the impending return to Chinese sovereignty, the emergence of well-educated middle class, and the advent of the society's affluence. Scholars (Kuah-Pearce and Fong 2010; Lee 2004c; Leung and Ng 2004; Morris and Cogan 2001; Morris and Morris 2000) have noted that Hong Kong is markedly different in comparison to other East Asian societies. Hong Kong citizens have been displaying a low level of loyalty to the state, and thus, a low level of national identity. Since they have long been ideologically restrained, civic identity could not be fully developed. At that time, Hong Kong was at the forefront where the East met the West (a mixture of traditional Chinese and modern Western identities). Not surprisingly, Hong Kongers have shown a tendency to be more individualistic and lack a sense of community.

As Hong Kong became more politicized after post-colonization, the national curriculum has begun to not only reconcile Chinese values (local identity) with the concepts of democracy (global identity) but also construct a strong relationship between the values that the state has identified as valuable for national identity to shift the nature of the political environment. Accordingly, the interests of community have emerged focusing on such values as mutuality, social cohesion, family value, and social harmony. At the same time, a set of democratic values (e.g., justice, fairness, tolerance, and people's lifestyle) has been equally respected. Furthermore, interpersonal and moral values have been emphasized more than the ones associated with the relationship between individuals and the state. In this respect, the context of Hong Kong's civic values has become similar to other East Asian societies.

## Methods

### Asian Regional Module and Participants

As intentionally considering regional culture differences to be a critical issue, ICCS innovatively developed three regionally specialized modules—European, Latin American, and Asian—and included them in its main survey instrument so as to explore region-specific aspects of geographically situated groups of countries. Most of the 38 ICCS participant countries took part in one of the three regional modules (Schulz et al. 2010).

**Table 1** Scales of the ARM

| Scale | No. of items |
|---|---|
| Undemocratic government | 5 |
| Obedience to authority | 4 |
| Preservation of traditional culture | 4 |
| Integrity of the legal system | 5 |
| Corruption in public service | 3 |
| Personal morality of politicians | 5 |
| Asian identity | 7 |
| Good citizenship | 7 |
| Guanxi | 5 |
| Total | 45 |

The Asian participants[1] collaborated in the development of the ARM, which contained conceptual elements reflecting Asian social and cultural features. Through a thorough literature review and data analyses, the Asian researchers incorporated local history, traditions, norms, and cultures upon the ARM conceptual framework that focused mainly on Asian democratic issues. The framework is organized based on four civics and citizenship content domains: civic society and systems, civic principles, civic participation, and civic identities. In that, IEA (2007, p. 13) defined:

> Civic society and systems comprises the mechanisms, systems, and organizations that underpin Asian societies. Civic principles refer to the shared ethical foundations of Asian civic societies. Civic participation deals with the nature of the processes and practices that define and mediate the participation of Asian citizens in their civic communities. Civic identities refer to the personal sense that an individual citizen has of being an agent of civic action with connections to multiple communities.

The ARM data inform us of the way that Asian adolescents perceive the specific matters of Asian civic values to be assessed within the framework of the four civics and citizenship content domains.

The draft was primarily designed to contain a total of 97 items under 18 Asian region-specific scales. The draft was pilot-tested in 2008 using 1,092 sampled around 14-year-old students from the five Asian participants. After the scalability analyses of the piloted data, 9 scales with a total of 45 items were finally confirmed for the ARM (Table 1).

The structure of the ARM is 9-factor-based with a Likert-type scale ranging from 1 (strongly agree) to 4 (strongly disagree). We will use the term, *original 9-factor model*, for this structure of ARM hereafter. The following example items were used for each scale measurement: undemocratic government (e.g., "as long as everyone can enjoy prosperity, it does not matter whether the government is democratic or not"); obedience to authority (e.g., "even if you have a different opinion, you should always follow the advice of elders when making important decisions"); preservation of traditional culture (e.g., "my country needs to maintain its unique cultural identity against the influence of other cultures"); integrity of the legal system (e.g., "everyone is equally treated by the law"); corruption in public service ("it is acceptable to bribe government officials to get things done effectively"); personal morality of politicians (e.g., "politicians have the responsibility to make sure that their family behaves morally"); Asian identity (e.g., "I think of myself as an Asian citizen"); good citizenship (e.g., "a person who obeys the law is a good citizen"); and guanxi[2] (e.g., "if there are many candidates in an election, we should only vote for the people from our hometown/local area").

The main survey data were collected between October 2008 through June 2009 from 38 participant countries' lower-secondary school students with an approximate average age of 14 years. The Asian students, based on their civic learning experiences in school settings, responded to the ARM that was also administered as part of the main survey. This study analyzed the responses of 13,158 lower-secondary school students of Korea, Chinese Taipei, and Hong Kong from the overall ARM dataset. The students' average age in these three East Asian countries was 14.38 years old (Table 2).

## Analytic Procedure and Techniques

Latent mean analysis (LMA) was conducted using structural equation modeling to comparatively delve into the way that the East Asian students perceive Asian civic values. A cross-cultural comparison should make sure that the same construct is being measured in each society being compared. Since this study deals with three different East Asian societies, it is not easy to construct invariant ground to measure between-nation differences. LMA is a proper technique to use in this case. LMA, compared to traditional statistical techniques potentially using error-laden composites, theoretically takes error-free constructs when testing hypotheses including latent constructs (Hancock 1997) and thereby is relatively safe from measurement errors (Hong et al. 2003). However, configural, metric, and scale invariances should be assumed so that different societies are validly compared by latent variable means

[1] Chinese Taipei, Hong Kong, Indonesia, Korea, and Thailand.

[2] A Chinese social concept based on the exchange of favors in which personal relationships are considered more important than laws and written agreements.

**Table 2** Demographics

| Country | *n* | Mean age | Female (%) | Male (%) |
|---|---|---|---|---|
| Korea | 5,235 | 14.72 | 2,273 (43.4) | 2,962 (56.6) |
| Chinese Taipei | 5,144 | 14.20 | 2,474 (48.1) | 2,670 (51.9) |
| Hong Kong | 2,779 | 14.23 | 1,369 (49.3) | 1,410 (50.7) |
| Total | 13,158 | 14.38 | 6,116 (46.5) | 7,042 (53.5) |

(Steenkamp and Baumgartner 1998). It means that research results across countries cannot be compared until the measurements are comparable (Blunch 2008). To test the assumptions that the latent variables are under the same scale, the invariance tests across the three East Asian societies were performed using maximum likelihood estimation method.

Prior to LMA, we attempted to confirm the factor structure that most successfully fit to the ARM data of the three East Asian societies. In so doing, exploratory and confirmatory factor analyses (EFA and CFA) were employed. As briefly stated earlier, the ARM was deductively developed based on theoretical hypotheses. The ARM developers first set up hypothetical assumptions to measure Asian-specific civic values, and then survey questions were prepared based on the assumptions. Therefore, the ARM already expects a hypothetically set number of factors (i.e., the original 9-factor model in Table 1). Accordingly, it is quite necessary to test the validity of the original factor structure of the ARM.

EFA was performed using maximum likelihood estimation with oblique rotation, and factor loading less than ±.40 was set as the cut-off criterion. CFA was also conducted based on maximum likelihood estimation. Model fit tests in CFA mainly depended on three fit indices—the non-normed fit index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). According to the previous literature (Bentler and Bonnett 1980; Hong et al. 2003; Hu and Bentler 1999; Landis et al. 2000; Schumacker and Lomax 2010), a value greater than .90 is desirably accepted for TLI and CFI. With regard to RMSEA, a value of .06 is reasonably accepted as a cut-off. Browne and Cudeck (1993) more specifically suggested a RMSEA value less than .05 as a good fit, between .05 and .08 as a reasonable fit, and above .10 as a bad fit. Although extremely sensitive to sample size, the significance of $\chi^2$ square test was also examined to determine model fit. PASW 18.0 and AMOS 18.0 were used for EFA and CFA.

## Results

### Validity Tests

Prior to EFA, the original 9-factor model was tested using CFA. However, only 44 items were used for this validity test. One particular item was intentionally eliminated for CFA since all of Hong Kong participants did not respond to that item, which belongs to the factor "undemocratic government" ("It is acceptable for the government to break the law when it considers it necessary").

According to the CFA result, the original 9-factor model's fit indices were reasonably acceptable as adequate but not fully satisfied ($\chi^2$ (866) = 23226.437, $p < .000$, TLI = .878, CFI = .893, RMSEA = .044). Since TLI and CFI were slightly less than .90, which was the desirably acceptable criterion set in this study, we carried out EFA to determine the existence of any other models that better fit the ARM data of the three East Asian societies.

According to the EFA results (Table 3), a plural number of factor structures were found to fit the ARM data of the three East Asian societies. However 9- and 10-factor models included one or two factors, constituent items all of which had less than ±.40 factor loading. In addition, a 9-factor model, as compared with the original 9-factor model, showed a moderately different pattern of factor structure. Hence, these factor models may have been inadequate even though their fit indices were good.

In general, it is desirable to choose the model with the least number of factors unless difference of model fit is less than .01. Although it was adequate in terms of RMSEA (.042), a 7-factor model failed to prove a significant fit difference in comparison with an 8-factor model (RMSEA = .036), fit of which was also acceptable. Thus, we, using CFA by country, compared their fit indices to determine whether the 7-factor model better fit the ARM data than the 8-factor model. In addition, we also compared the original 9-factor model with the 7- and 8-factor models.

The 7-factor model consisted of a total of 37 items (the factor loadings of 7 items were under the cut-off criterion and so eliminated) under seven factors named *Undemocratic Government*, *Obedience to Authority*, *Preservation of Traditional Culture*, *Integration of the Legal System*, *Asian Identity*, *Good Citizenship*, and *Guanxi*. Some items in this model were relocated from the original 9-factor structure. For example, young East Asian students perceived as *Guanxi* issues the following two items ("It is acceptable to bribe government officials to get things done effectively" and "It doesn't matter if a public official uses resources from the institution where s/he works for his/her personal benefits") that were originally grouped in *Corruption in Public Service* under the original 9-factor model. In addition, the two items, which were originally classified into *Personal Morality of Politicians* of the original 9-factor model ("Politicians have the responsibility to make sure their family obeys the law" and "Politicians have the responsibility to make sure their family behaves morally"), were re-classified into *Good Citizenship* in the 7-factor model.

**Table 3** Results of exploratory factory analyses

| Model | $\chi^2$ | *df* | *p* | RMSEA | % of variance explained |
|---|---|---|---|---|---|
| 6-factor | 31,300.841 | 697 | .000 | .047 | 41.538 |
| 7-factor | 24,005.727 | 659 | .000 | .042 | 43.256 |
| 8-factor | 16,879.176 | 622 | .000 | .036 | 45.065 |
| 9-factor | 13,586.915 | 586 | .000 | .034 | 46.065 |
| 10-factor | 10,886.768 | 551 | .000 | .031 | 46.974 |

On the other hand, the 8-factor model contained a total of 38 items accepted by the cut-off criterion (factor loading less than ±.40). Interestingly again, the two items originally from *Corruption in Public Service* were re-grouped in *Guanxi* for the 8-factor model. The eight factors were named *Undemocratic Government*, *Obedience to Authority*, *Preservation of Traditional Culture*, *Integration of the Legal System*, *Personal Morality of Politicians*, *Asian Identity*, *Good Citizenship*, and *Guanxi*.

According to Table 4, the 8-factor model fits the ARM data better than the 7- and original 9-factor models. We thereby concluded that the 8-factor model is plausible across the three East Asian societies (Table 5 for details). From the results, configural invariance can be seen as being achieved. It means that the pattern of fixed and non-fixed parameters is identical across Korea, Chinese Taipei, and Hong Kong.

## Descriptive Statistics

Table 6 presents the descriptive statistics. Since this study employed the maximum likelihood estimation, the normality assumption must be met to prevent distorted results. Hong et al. (2003) suggested that the normality assumption of all the variables were well met under the skewness <2 and kurtosis <4 condition. Both skewness and kurtosis coefficients for the three East Asian societies were all less than the cut-off criteria.

## Tests of Invariance

Invariance tests were hierarchically performed by order of nested models. The fit indices of model 1 (baseline) presented in Table 7 supported the identical configuration of salient and nonsalient factor loadings across the three East Asian societies. In addition, the baseline structure was revealed to be fit to the data of the three East Asian societies now that three $\chi^2$ values obtained by country summed to the $\chi^2$ value for model 1.

In order for the obtained ratings to be meaningfully compared, confirmation that the East Asian students responded in a same way was required. To examine this, metric invariance was tested by constraining factor loadings to be equal. Under metric invariance that scale intervals can be seen as equal across the three East Asian societies, score difference on the items can be accepted as a meaningful resource to compare between-nation differences (Steenkamp and Baumgartner 1998).

The $\chi^2$ square difference can be useful to test statistical significance of the fit improvement between the nested models 1 and 2. As shown in Table 8, the $\chi^2$ difference value was 985.427 with 60° of freedom at a statistically significant level of .001. Based on this result only, the metric invariance was not supported. However, the $\chi^2$ square difference test is not desirable to be taken as the only criterion to determine the fit of nested models because it is often of little value by sample size (Hong et al. 2003; Schumacker and Lomax 2010). Since the sample size of this study is considerably large, rejection by the $\chi^2$ square difference test is easily expected. To make a more accurate decision about the nested models' fit, the $\chi^2$ square difference test is better used and compared with such main fit indices as TLI, CFI, and RMSEA (Hong et al. 2003). Since these three fit indices did not substantially deteriorate, metric invariance can be seen as being fairly supported.

The next step was testing whether "group differences in the observed items are due to differences in the means of the underlying construct(s)" (Steenkamp and Baumgartner 1998, p. 80). The scale invariance test was performed by constraining the intercepts to be the same across the three East Asian societies. The $\chi^2$ difference value between models 2 and 3 did not support the scale invariance. Moreover, TLI, CFI, and RMSEA also apprehensively deteriorated. Partial measurement invariance was therefore tested to continue the multigroup analyses (Byrne 2010) and revealed that the significant increase in $\chi^2$ value and fit indices resulted from a lack of scale invariance of the following indicators: 1D, 2A, 2C, 2D, 2F, 3A, 3D, 4C, 4E, 5H, 6H, 7C, 7D, 7E, and 8A. The partial scale invariance model (model 3–1) by relaxing these indicators yielded substantial improvement in fit as compared to the full-scale invariance model (model 3). Hence, the model 3–1 was evaluated against model 2. Although $\chi^2$ difference value between these two models did still not support the partial scale invariance due to the large sample size, TLI, CFI, and RMSEA were substantially improved compared to the full-scale invariance. Provided that at least one item at each latent construct is invariant, multigroup analyses can continue on the basis of the partial scale invariance (Byrne 2010; Hong et al. 2003; Steenkamp and Baumgartner 1998).

## Latent Mean Analysis

Since configural, metric, and partial scale invariances were fairly accepted, latent mean differences were computed.

**Table 4** Model fit indices by country

| Model | $\chi^2$ | *df* | TLI | CFI | RMSEA |
|---|---|---|---|---|---|
| Korea | | | | | |
| 7-factor model | 8,102.096 | 608 | .865 | .883 | .048 |
| 8-factor model | 6,675.102 | 637 | .895 | .910 | .042 |
| Original 9-factor model | 8,470.239 | 866 | .886 | .900 | .041 |
| Chinese Taipei | | | | | |
| 7-factor model | 1,1152.768 | 608 | .853 | .873 | .058 |
| 8-factor model | 9,296.519 | 637 | .880 | .896 | .051 |
| Original 9-factor model | 11,633.678 | 866 | .869 | .885 | .049 |
| Hong Kong | | | | | |
| 7-factor model | 5,558.069 | 608 | .846 | .867 | .053 |
| 8-factor model | 4,545.618 | 637 | .880 | .897 | .046 |
| Original 9-factor model | 5,753.731 | 866 | .868 | .885 | .044 |

However, factor 2 (obedience of authority) was excluded in this computation since the constituent indicators were all revealed as not invariant across the three East Asian societies at the partial scale invariance.

For LMA, the means of latent variables for a reference group should be constrained to zero while estimating ones for other groups. Under this setting, the estimated latent mean values for other groups represent mean differences from those for the reference group. This study set Korea as a reference group with its latent mean parameters fixed at zero and compared the mean differences with Chinese Taipei and Hong Kong. However, Chinese Taipei was also set as a reference group only when the latent mean differences between the two Chinese societies were computed. The results were distinctively presented within the bold and shaded boxes of Table 9.

According to the latent mean parameter estimates in Table 9, the mean scores of Korean students were higher than those of Chinese Taipei students in regard to preservation of traditional culture, personal morality of politician, Asian identity, and good citizenship while the mean score of Chinese Taipei students was higher for guanxi. The mean scores of Korean students were higher than those of Hong Kong students with regard to undemocratic government, preservation of traditional culture, and personal morality of politicians whereas the mean score of Hong Kong students was higher for good citizenship.

Comparing the two Chinese societies, the mean scores of Hong Kong students were higher than those of Chinese Taipei students with regard to preservation of traditional culture, personal morality of politicians, Asian identity, and good citizenship, whereas the mean scores of Chinese Taipei students were higher for undemocratic government and integrity of legal system. There was no mean difference regarding guanxi.

The latent mean difference, however, needs to be translated into Cohen's *d* value to understand their effect size based on common metric (Hong et al. 2003). This index can be calculated by dividing the means of the three East Asian societies by pooled standardized deviation across the countries (Vogt 2005). The effect size is generally interpreted under the rule of $d < .2$ (small); $d < .5$ (moderate); $d < .8$ (significant) (Cohen 1988). Homogeneity assumption should be met in order for the pooled standardized deviation for the *d* value computation to be used. The assumption can be tested by fixing the variance values to be equal across the three East Asian societies. In Table 8, the $\chi^2$ difference value obtained by comparing model 3–1 and 4 was 397.309 with 16° of freedom. The assumption was rejected at the significant level of .001. However, the variance values can be seen as being fairly equal across the three East Asian societies since TLI, CFI, and RMSEA values nearly did not change. The *d* value can therefore be computed.

In Table 9, the computed *d* value between Korea and Chinese Taipei was .308 for preservation of traditional culture, which is moderate by Cohen's rule. The *d* values for personal morality of politician, Asian identity, and good citizenship were all small. The *d* values between Korea and Hong Kong were moderate with respect to undemocratic government and integrity of the legal system but small for preservation of traditional culture and good citizenship. On the other hand, the *d* values between the two Chinese societies were moderate with respect to undemocratic government, integrity of the legal system, personal morality of politician, and good citizenship but small for preservation of traditional culture and Asian identity.

## Discussions

In an attempt to identify the salient features that provide an insight into East Asian civic values, this study cross-culturally explore the way that young East Asian students perceive the specific matters of Asian civic values using the ARM dataset of Korea, Chinese Taipei, and Hong Kong.

Overall the perceptible pattern of Asian civic values was similar across the three East Asian societies. The students tended to be negative against undemocratic governments and unfairness based on guanxi. They were also moderately critical of the matters specific to independence of the judiciary. Asian identity and democratic values were both accepted as valuable for a civil society. Moreover, the morality of politicians and the preservation of traditional culture were moderately respected. Some of these findings reconfirm a collectivist and Confucian contexts of Asian civic values. However, some others signal that these societies have developed some aspects assimilated to the

**Table 5** The composition and parameter estimates of the 8-factor model

| Parameter | Korea | Chinese Taipei | Hong Kong |
|---|---|---|---|
| Factor 1: Undemocratic government | | | |
| 1B | 1.000 (.679) | 1.000 (.715) | 1.000 (.724) |
| 1D | 1.078 (.769) | 1.124 (.811) | 1.053 (.785) |
| 1E | .976 (.667) | 1.016 (.727) | .914 (.674) |
| Factor 2: Obedience of authority | | | |
| 2A | .878 (.670) | .859 (.669) | .940 (.699) |
| 2C | .930 (.721) | .858 (.631) | .929 (.677) |
| 2D | 1.033 (.783) | 1.053 (.777) | .994 (.719) |
| 2F | 1.000 (.720) | 1.000 (.765) | 1.000 (.724) |
| Factor 3: Preservation of traditional culture | | | |
| 3A | .854 (.627) | .911 (.740) | .890 (.669) |
| 3B | .688 (.481) | .719 (.486) | .760 (.554) |
| 3C | .786 (.584) | .893 (.703) | .908 (.708) |
| 3D | 1.000 (.696) | 1.000 (.793) | 1.000 (.741) |
| Factor 4: Integrity of the legal system | | | |
| 4A | 1.140 (.627) | 1.030 (.487) | 1.283 (.542) |
| 4B | 1.343 (.814) | 1.458 (.784) | 1.454 (.668) |
| 4C | .390 (.287) | .438 (.243) | .703 (.365) |
| 4D | .880 (.641) | 1.443 (.824) | 1.501 (.781) |
| 4E | 1.000 (.587) | 1.000 (.544) | 1.000 (.477) |
| Factor 5: Personal morality of politicians | | | |
| 5F | 1.000 (.686) | 1.000 (.812) | 1.000 (.780) |
| 5G | 1.180 (.811) | 1.070 (.819) | 1.113 (.848) |
| 5H | .999 (.700) | .566 (.351) | .649 (.407) |
| Factor 6: Asian identity | | | |
| 6A | 1.000 (.610) | 1.000 (.634) | 1.000 (.592) |
| 6D | 1.325 (.721) | 1.288 (.799) | 1.294 (.740) |
| 6E | 1.542 (.806) | 1.411 (.859) | 1.488 (.846) |
| 6F | 1.461 (.813) | 1.352 (.849) | 1.449 (.813) |
| 6G | 1.459 (.800) | 1.213 (.795) | 1.430 (.779) |
| 6H | 1.178 (.714) | 1.214 (.789) | 1.089 (.606) |
| Factor 7: Good citizenship | | | |
| 7B | 1.000 (.480) | 1.000 (.507) | 1.000 (.496) |
| 7C | 1.145 (.484) | 1.154 (.569) | 1.328 (.636) |
| 7D | 1.131 (.558) | 1.275 (.680) | 1.308 (.646) |
| 7E | 1.257 (.690) | 1.375 (.790) | 1.278 (.736) |
| 7F | 1.293 (.703) | 1.452 (.806) | 1.418 (.728) |
| 7G | 1.198 (.527) | 1.186 (.565) | 1.147 (.527) |
| Factor 8: Guanxi | | | |
| 8A | 1.000 (.672) | 1.000 (.716) | 1.000 (.749) |
| 8B | 1.039 (.605) | 1.062 (.677) | .969 (.662) |
| 8C | 1.062 (.664) | 1.118 (.720) | 1.102 (.746) |
| 8D | 1.252 (.738) | 1.322 (.804) | 1.108 (.728) |
| 8E | 1.271 (.794) | 1.309 (.812) | 1.129 (.765) |
| 5A | .706 (.479) | .860 (.594) | .861 (.597) |
| 5C | .694 (.493) | 1.044 (.616) | .896 (.587) |

*Note* Values of parameter estimates are unstandardized (standardized in parentheses), and all values are statistically significant at $\alpha = .001$

context of Western democratic values. These findings enable us to assume that Asian civic values have gone through a period where the East and the West have been melded together in a globalized era. We also witnessed that the degree to which the students perceive was similar for some civic values but different for some others. Although there should be many factors that combine to account for the results, civic education and national civics curriculum in their school settings reviewed earlier clue us in on developing our discussions.

First, the East Asian students, irrespective of their nationality, defined themselves as Asian citizen by being proud of their economic, democratic, cultural, and traditional development. As discussed, their national civics curriculums have shown indefatigable zeal in advancing students' national and ethical love for the states. Since such educational efforts in school settings have been interlinked with the recent trend that the East Asian societies have economically developed, and thus, their cultures and traditions have received worldwide attentions, Asian identity seems to have been formed and perceived positively among the students.

Second, guanxi was not accepted as unequivocally positive in the East Asian context. The students had a negative point of view in regard to unethical government officials who abuse guanxi for personal and public benefits and political participation based on regionalism, school relations, and kinship. Furthermore, the unfair employment of government positions by kinship was perceived as being simply unacceptable. That is, fairness and justice have become rooted in the core of Asian democratic values. Such democratic values distinct from traditional East Asian contexts have been commonly defined as core universal elements composing the national civics curriculums of the three East Asian societies. It means that these societies have educationally attempted to foster young citizens who are able to decide what is ethical, just, fair, right, and lawful for a democratic society. The students indeed respected democracy for a civil society and defined a good citizen as a person who abides by the law and is morally and mentally mature. Moreover, they demanded a democratic standard and process for government and a moral sense for politicians. These results can be taken to assume that East Asian civic values have been reconciled with Western democratic values.

Third, love for traditional culture was explicit among the students. They commonly respected their unique traditional and cultural identities with a high sense of responsibility to preserve it. Traditional and cultural values seem to have been well maintained and passed down through the generations in these societies. Chinese Taipei students perceived the uniqueness and preservation of their tradition and culture more positively than Korean students did. This

**Table 6** Standard deviation, mean, skewness, and kurtosis by country

| Factor | 1[a] | 2[b] | 3[c] | 4[d] | 5[e] | 6[f] | 7[g] | 8[h] |
|---|---|---|---|---|---|---|---|---|
| Korea ($n$ = 5,139) | | | | | | | | |
| M (SD) | 3.12 (.60) | 2.89 (.60) | 2.00 (.51) | 2.41 (.61) | 1.77 (.57) | 1.86 (.54) | 1.98 (.44) | 3.20 (.52) |
| Skewness | −.55 | −.29 | .34 | .12 | .48 | .35 | −.12 | −.56 |
| Kurtosis | .61 | .25 | 1.22 | −.16 | .47 | .77 | 1.03 | .53 |
| Chinese Taipei ($n$ = 4,955) | | | | | | | | |
| M (SD) | 3.11 (.67) | 2.52 (.64) | 1.77 (.53) | 2.42 (.57) | 1.90 (.58) | 1.84 (.59) | 1.87 (.49) | 3.21 (.59) |
| Skewness | −.63 | .04 | .54 | .13 | .41 | .53 | .34 | −.91 |
| Kurtosis | .45 | .06 | 1.40 | .18 | .83 | .77 | 1.35 | .97 |
| Hong Kong ($n$ = 2,630) | | | | | | | | |
| M (SD) | 2.87 (.65) | 2.45 (.60) | 1.89 (.50) | 2.14 (.51) | 2.00 (.56) | 1.91 (.50) | 1.93 (.47) | 3.19 (.57) |
| Skewness | −.41 | .27 | .51 | .23 | .28 | .35 | .11 | −.85 |
| Kurtosis | .15 | .32 | 1.81 | .42 | .66 | 1.49 | .87 | 1.09 |

*Note* [a] Undemocratic government, [b] Obedience of authority, [c] Preservation of traditional culture, [d] Integrity of the legal system, [e] Personal morality of politicians, [f] Asian identity, [g] Good citizenship, and [h] Guanxi

Likert-type scale from 1 (strongly agree) to 4 (strongly disagree); Overall mean: factor 1 (3.065), 2 (2.653), 3 (1.885), 4 (2.359), 5 (1.868), 6 (1.863), 7 (1.928), and 8 (3.203)

**Table 7** Selected fit indices for invariance tests

| Model (nested) | $\chi^2$ | $df$ | TLI | CFI | RMSEA |
|---|---|---|---|---|---|
| Model 1: Configural invariance (baseline) | 20,517.256 | 1,911 | .885 | .901 | .027 |
| Model 2: Metric invariance | 21,502.683 | 1,971 | .883 | .896 | .027 |
| Model 3: Scale invariance | 32,588.687 | 2,047 | .824 | .838 | .033 |
| Model 3–1: Partial scale invariance | 23,552.093 | 2,017 | .874 | .886 | .028 |
| Model 4: Factor variance invariance | 23,949.402 | 2,033 | .873 | .884 | .028 |

**Table 8** Results of $^2$ square difference tests

| Model | $\Delta\ \chi^2$ | $\Delta df$ | ΔTLI | ΔCFI | ΔRMSEA |
|---|---|---|---|---|---|
| Test of metric invariance: model 1 vs model 2 | 985.427 | 60 | .002 | .005 | .000 |
| Test of scale invariance: model 2 vs model 3 | 11,086.004 | 76 | .059 | .058 | .006 |
| Test of partial scale invariance: model 2 vs model 3-1 | 2,049.41 | 46 | .009 | .010 | .001 |
| Test of factor variance invariance: model 3-1 vs model 4 | 397.309 | 16 | .001 | .001 | .000 |

**Table 9** Results of latent mean analysis by country

| Factor | Korea | Chinese Taipei | | Hong Kong | | | |
|---|---|---|---|---|---|---|---|
| | Latent mean | Latent mean | Effect size ($d$) | Latent mean | Effect size ($d$) | Latent mean | Effect size ($d$) |
| Undemocratic government | .000 | .006 | .011 | −.231*** | .414 | **−.237*** ** | **.424** |
| Preservation of traditional culture | .000 | −.158*** | .308 | −.059*** | .115 | **.098*** ** | **.191** |
| Integrity of the legal system | .000 | −.009 | .020 | −.113*** | .245 | **−.105*** ** | **.228** |
| Personal morality of politicians | .000 | −.076*** | .148 | .033 | .064 | **.108*** ** | **.210** |
| Asian identity | .000 | −.031*** | .076 | .013 | .032 | **.043*** ** | **.105** |
| Good citizenship | .000 | −.031*** | .093 | .051*** | .152 | **.083*** ** | **.248** |
| Guanxi | .000 | .050*** | .100 | .013 | .026 | **−.037** | **.074** |

*Note* The latent mean values for Koreans were set to zero * $p < .05$, ** $p < .01$, *** $p < .001$; Korea is a reference group. However, the latent mean and $d$ within bold and shaded box are for Hong Kong compared to Chinese Taipei set to zero as a reference group

result can be cautiously assumed as a product of their national civics curriculum that clearly defines '*understanding Taiwan*' as one of the main civic educational concentrations to cultivate traditional Chinese cultural values. Viewed in this light, Chinese Taipei students seem to place a premium on respecting traditional culture more than Korean students.

However, the legal system of the three East Asian societies has not been perceived as independent enough to uphold fairness and equality. Hong Kong students were relatively less critical in perceiving fairness and justice of their legal system in comparison with the counterparts. That is, Hong Kong seems to have maintained the legal system to guard people's rights based on democratic values relatively well. As mentioned, their civic education has long been influenced by a mixture of Western and traditional Chinese contexts. Since their national civics curriculum has pursued the democratized civic systems for the society, their schools have presumably emphasized a just and fair legal system for individuals and civic communities more than their counterparts.

Last but not least, we should admit that the analysis of this study is structurally limited. LMA is indeed useful to construct invariant ground to measure. However, LMA can only depict how latent mean in one country is higher or lower to the counterpart (even if it is born for such purpose) even though the ARM data provide rich information. Since LMA could not explain more than the latent mean difference, it was not possible to identify causal factors that relate to the way that the students perceived Asian civic values. Thus, there was the methodological limit to our ability in discussing the results.

## References


Bentler, P., & Bonnett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin,88*, 588–606.

Blunch, N. (2008). *Introduction to structural equation modeling using SPSS and AMOS*. Los Angeles, CA: Sage.

Browne, M., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. Bollen & J. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.

Byrne, B. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York, NY: Routledge.

Cogan, J., & Morris, P. (2001). The development of civics values: An overview. *International Journal of Educational Research,35*, 1–9.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Cummings, W., Gopinathan, S., & Tomoda, Y. (Eds.). (1988). *The revival of values education in Asia and the West*. Oxford: Pergamon.

Glazer, N. (1997). Diffusion of values and the Pacific Rim. In J. Montgomery (Ed.), *Values in education: Social capital formation in Asia and the Pacific* (pp. 49–69). Hollis, NH: Hollis.

Hancock, G. (1997). Structural equation modeling methods of hypothesis testing of latent variable means. *Measurement and Evaluation in Counseling and Development,30*, 91–105.

Hong, S., Malik, M., & Lee, M. K. (2003). Testing configural, metric, scale, and latent mean invariance across genders in sociotropy and autonomy using a non-western sample. *Educational and Psychological Measurement,63*(4), 636–654.

Hu, L.-T., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling,6*(1), 1–55.

Huntington, S. (1996). *The clash of civilizations and the remaking of world order*. New York, NY: Simon & Schuster.

IEA. (2007). *International civic and citizenship education study: Assessment framework*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement.

Isac, M., Maslowski, R., & van der Werf, G. (2011). Effective civic education: An educational effectiveness model for explaining students' civic knowledge. *School Effectiveness and School Improvement,22*(3), 313–333.

Karsten, S., Cogan, J., Grossman, D., Liu, M.-H., & Pitiyanuwat, S. (2002). Citizenship education and the preparation of future teachers: A study. *Asia Pacific Education Review,3*(2), 168–183.

Kennedy, K. (2004). Searching for citizenship values in an uncertain global environment. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 9–24). Norwell, MA: Kluwer Academic.

Kennedy, K., & Fairbrother, G. (2004). Asian perspectives on citizenship education in review: Postcolonial constructions or precolonial values? In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 289–301). Norwell, MA: Kluwer Academic.

Kuah-Pearce, K. E., & Fong, Y.-C. (2010). Identity and sense of belonging in post-colonial education in Hong Kong. *Asia Pacific Journal of Education,30*(4), 433–448.

Landis, R., Deal, D., & Tesluk, P. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods,3*(2), 186–207.

Lee, W. O. (2004a). Emerging concepts of citizenship in the Asian context. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 25–35). Norwell, MA: Kluwer Academic.

Lee, W. O. (2004b). Concepts and issues of Asian citizenship: Spirituality, harmony and individuality. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 277–288). Norwell, MA: Kluwer Academic.

Lee, W. O. (2004c). Citizenship education in Hong Kong: Development and challenges. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 59–80). Norwell, MA: Kluwer Academic.

Leung, Y. W., & Ng, S.-W. (2004). Back to square one: The "re-politicizing" of civic education in Hong Kong. *Asia Pacific Education Review,24*(1), 43–60.

Leung, Y. W., & Print, M. (2002). Nationalistic education as the focus for civics and citizenship education: The case of Hong Kong. *Asia Pacific Education Review,3*(2), 197–209.

Liu, M. (2000). Civics education in Taiwan: Values promoted in the civics curriculum. *Asia Pacific Journal of Education,20*(1), 73–81.

Liu, M. (2001). The development of civic values: Case study of Taiwan. *International Journal of Educational Research,35*, 45–60.

Liu, M. (2004). A society in transition: The paradigm shift of civic education in Taiwan. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 97–117). Norwell, MA: Kluwer Academic.

Morris, P., & Cogan, J. (2001). A comparative overview: Civic education across six societies. *International Journal of Educational Research,35*, 109–123.

Morris, P., & Morris, E. (2000). Constructing the good citizen in Hong Kong: Values promoted in the school curriculum. *Asia Pacific Journal of Education,20*(1), 36–52.

Paik, S. (2001). Introduction, background, and international perspectives: Korean history, culture, and education. *International Journal of Educational Research,35*, 535–607.

Park, H.-C. (2001). The values and virtues promoted in the proposed seventh course of study in civic education: Implications for democratic citizenship and democratic citizenship education in Korea. *Asia Pacific Education Review,2*(1), 66–73.

Peterson, A., & Knowles, C. (2009). Active citizenship: A preliminary study into student teacher understandings. *Educational Researcher,51*(1), 39–59.

Print, M. (2000). Civics and values in the Asia-Pacific region. *Asia Pacific Journal of Education,20*(1), 7–20.

Reed, G. (2004). Multidimensional citizenship, Confucian humanism and the imagined community: South Korea and China. In W. O. Lee, D. Grossman, K. Kennedy, & G. Fairbrother (Eds.), *Citizenship education in Asia and the Pacific: Concepts and issues* (pp. 239–255). Norwell, MA: Kluwer Academic.

Roh, Y.-R. (2004). Democratic citizenship education in the information age: A comparative study of South Korea and Australia. *Asia Pacific Education Review,5*(2), 167–177.

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 international report: Civic knowledge, attitudes, and engagement among lower-secondary school students in 38 countries*. International Association for the Evaluation of Educational Achievement.

Schumacker, R., & Lomax, R. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). New York, NY: Routledge.

Steenkamp, J. B., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research,25*, 78–90.

Vickers, E. (2002). Introduction: History, politics and identity in East Asia. *International Journal of Educational Research,37*, 537–544.

Vogt, P. (2005). *Dictionary of statistics and methodology: A nontechnical guide for the social scientists*. Thousand Oaks, CA: Sage.