Civic Intentions and Actions:
Exploring Civic Engagement among College Students in Mainland China

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Abstract

For the study discussed in this article, the authors developed a survey instrument to assess civic engagement among college students in China. Derived from focus-group interviews and extant literature on civic engagement, the survey was administered to 587 students from three universities in Southern China. Exploratory factor analysis was conducted on a randomly split-half sample, and a subsequent confirmatory factor analysis was conducted on the other split-half sample to evaluate measurement structure and measurement invariance of the survey. A total of 22 items were included in the final measurement model. The authors identified five first-order factors from the survey (i.e., helping others, community service, acting on social problems, civic salience, and civic responsibilities), which loaded on two second-order factors (i.e., civic actions and civic attitudes). The authors also tested measurement invariance across male and female participants in the sample. Implications of the second-order factor structures and measurement invariance in future research on civic engagement in China are discussed.

Keywords: civic engagement, Chinese college students, survey development, civic intentions, civic actions

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Measures of civic engagement have been developed primarily using samples of Western youth and adults (e.g., Bobek, Zaff, Li, & Lerner, 2009). However, the expression of civic engagement—defined as intentions and actions focused on strengthening the well-being of one's community or broader society (Zaff, Boyd, Li, Lerner, & Lerner, 2010; Zaff et al., 2011)—may differ by context, namely political context, such as between youth and young adults in democratic and non-democratic societies. In an effort to address this measurement gap, the present study was designed to develop civic-engagement measures for college students in China. For most youth, the college years represent the developmental period that aligns with their transition to adulthood, when civic engagement begins to crystallize into a civic identity (Finlay, Wray-Lake, & Flanagan, 2010; Jennings, 1993).

Civic engagement is a multifaceted construct that involves an intention to improve one's community or broader society as well as participation in activities that could lead to such improvements (Flanagan & Faison, 2001; Sherrod, 2007; Sherrod & Lauckhardt, 2009; Zaff et al., 2010). Much research has examined the discrete components of this construct, while other recent theoretical and measurement efforts have analyzed the components as part of a civic-engagement whole (Zaff et al., 2010). However, the majority of these scales have been derived from data collected from samples in the United States, and the scales—and even their conceptual structure—may differ based on contextual factors such as community and societal norms, and the structure and actions of a given government. For example, Welzel and Dalton (2014) compared allegiant civic cultures, in which citizens perform civic duties that reinforce the societal and governmental status quo, with more assertive cultures, in which citizens are more likely to challenge the status quo. They found that non-democratic countries comprise more allegiant cultures than democratic countries. Their study, however, explored these concepts at the societal level; they did not examine measures of civic engagement within a non-democratic country. This connection between societal norms and individual actions were evident in the results of a survey conducted in mainland China (Chen, 2000; Hsin-Chi & Siu-Kai, 2002): Political orientations favoring stability of the existing system and adherence to the government's rule were positively associated with voting and other activities that

supported candidates in non-competitive elections. However, this pro-regime orientation was negatively associated with more adversarial forms of participation such as protest or raising concerns about government activities and public policy to political figures.

The benefits of assessing intentions and actions as a whole become clear when focusing on differences between democratic and non-democratic societies. In the United States and most democratic societies, there are numerous opportunities for and few structural constraints preventing civic participation (Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; Levine, 2015; Verba, Schlozman, & Brady, 1995). Thus, youth can engage in a variety of civic activities, such as what Lachelier (2012) defined as "dutiful" and "actualizing" engagement (see also Van Liere, Arney, & Arney, 2016). Both constructs represent action-based commitments to one's civic roles, with dutiful engagement being more conventional (e.g., voting) and actualizing engagement more activist (e.g., public demonstration). However, grasping the intentions around each type of activity is necessary to foster a full understanding of engagement. For instance, voting can be a pro-regime or anti-regime act, depending on the candidates and the political climate, whereas not voting can signal political apathy or intentional protest. Likewise, boycotting a company because of political allegiances can represent an act either in support of or against a given cause, depending on the intentions.

China offers a unique opportunity to study civic engagement in a non-democratic society, especially among college students. Over the past 20 years, China's emerging economy has grown to rival that of the United States (Morrison, 2013). Partially as a result of this accelerated economic growth, rates of higher education attendance in China have risen to approximately one quarter of all 18- to-22-year-olds (KPMG, 2010). In addition, the rise of the Internet has provided a platform for citizens to obtain insights into societies around the world and to engage interactively with their peers in China and in other countries (Hassid, 2012; Shirk, 2010).

In a non-democratic country like China, there may be more structural constraints to civic participation such as non-competitive elections (Chen & Zhong, 2002), suppression of citizen political actions, and lack of opportunity for open discussion of issues impacting the livelihoods of citizens (Cai, 2008). A dutiful action, such as voting in a village election, may be adversarial in its

resistance to the current regime, requiring substantial courage and effort to vote for an opposition candidate. A more nuanced understanding of the civic roles, responsibilities, and participation within a non-democratic country can be gained by examining the meanings that its citizens are given within a political system—meanings that disempower, suppresses, or constrain those citizens who seek to improve their communities (Chen & Zhong, 2002).

Most of the current civic-engagement research in China has focused on voting in village elections (e.g., Shi, 1999; Zhong & Chen, 2002). In the 1990s, villages in rural areas of China were given increasing independence to conduct competitive elections and then to make decisions independent of the central government. The independence and competitiveness of such elections, however, have been called into question (Zhong & Chen, 2002). Some findings have suggested that creating the perception of competitiveness encourages more people to vote and to voice their opinions to village leaders (Shi, 1999). Other evidence, however, has demonstrated that those with a democratic orientation tend to stay away from village elections, either because they do not believe the elections are fair and/or because they consider their non-participation in the elections to be a form of protest (Jennings, 1997; Shi, 1999; Zhong & Chen, 2002).

A small number of recent studies have examined the civic intentions and/or civic participation of college students and other young people in China. Using data from a 2007 survey of approximately 2,000 college students from 12 universities, Li (2009) found that the vast majority of student respondents (80%) were oriented toward helping others in their communities and participating in more political activities in order to help others in their society; however, fewer than 50% reported taking part in civic activities. (Fifty percent is most likely an overestimation, since the researchers included participation in university clubs as civic activities, even if the clubs were not created to improve their community or society.) Other studies (e.g., Chan, Wu, Hao, Xi, & Jin, 2012; Zhong, 2014) have examined the role that the Internet and social media play in both encouraging civic participation and providing a platform for expressing civic actions. These studies have found that online participation, such as through the social network site Weibo, can increase an individual's political self-efficacy and covaries with an increase in online political participation (Chan et al., 2012). Although informative to understanding the level of civic participation and the role that the Internet can play in encouraging civic participation among young people in China,

these studies have used single-item measures of civic intentions and participation. Using individual items as proxies for complex constructs increases the possibility of significant measurement error (Cronbach & Shavelson, 2004). Using multiple items to tap underlying constructs, in particular using latent constructs based on multiple indicators, can provide a more precise estimate of these complex constructs.

In this study, we examined the conceptual structure of civic engagement among students in China. Our goal was to produce strong measures for inquiries about civic engagement in China and other non-democratic societies. The findings from an exploratory, qualitative study using a focus group method (Zaff, Zhang, Pan, & Zhen, 2014), as well as from the extant civic engagement literature were subsequently used to design a survey on civic engagement. More specifically, in this study, we (1) developed civic- engagement scales consonant with the lived experiences of Chinese college students and (2) assessed the structure and validity of those scales.

Method

Participants. Study participants were recruited from three universities in Guangzhou, Guangdong Province, in mainland China. We distributed a survey in person to a non-random sample of 900 students attending the same universities as those who participated in the exploratory, qualitative study (Zaff et al., 2014). Of these, 700 were returned, and we retained 587 surveys from respondents who completed at least 80% of the questions. Thus, the real response rate to the survey was 65%. The mean age of respondents was 20.5 years ($SD = 1.50$), and more than half of the respondents (55%) were female. More than two thirds of the participants were either freshmen (34%) or juniors (38%), and approximately one quarter were either sophomores (19%) or seniors (7.7%). One percent of the sample comprised graduate students. Additionally, 61% of the respondents' mothers had not completed high school. Although the universities were based in a large city, 40% of the participants reported that they were from rural areas, while 32% were from suburban areas and the remaining 28% from urban areas. These demographics were consistent with the demographics of the overall student population at the three universities.

Survey Measures and Procedure

The survey was developed through a multi-method process, informed by previous focus groups with college students (Zaff et al., 2014), a review of the extant literature on civic engagement, and a review of existing measures on civic engagement (e.g., Zaff et al., 2010).[1] An initial 43-item measure was developed focusing on civic intentions and civic actions. A final 22-item measure emerged focusing on: helping behaviors (i.e., helping others through donations or direct actions); community services (i.e., formal volunteering); acting on social problems (i.e., perceived propensity to act on a social problem); civic salience (i.e., importance to oneself of acting civically); and civic responsibility (i.e., feeling a duty to act civically). The first three constructs describe civic actions (dutiful and actualizing), and the final two describe civic intentions. The following sections describe how we reduced the survey instrument from 43 to 22 items.

Helping others. Four items were used to assess how often students had participated in helping behaviors over the previous 12 months. Items were rated on a four-point scale (1 = never, 2 = seldom, 3 = sometimes, and 4 = always). Examples of questions included asking respondents how often they "donate money or supplies to poor people" and "look after the elderly, children, or other people who need care."

Community service. Four items assessed how often students had participated in community service in the previous 12 months. Items were rated on a four-point scale (1 = never, 2 = seldom, 3 = sometimes, and 4 = always). Examples of questions included asking how often respondents "participate in public services organized by NGOs" and "volunteer to provide services to others on campus and/or in the community (such as computer repair, house cleaning, etc.)."

Acting on social problems. Six items were used to assess participants' perception of how they took action to solve a social problem. Items were rated on a four-point scale (1 = not at all like me, 2 = somewhat like me, 3 = quite a lot like me, and 4 = exactly like me). Examples of questions included, "When you find a specific social/community problem, you will discuss the possible solutions

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[1] Fifteen focus groups were conducted with a total of 150 college students across the same campuses in which the survey was administered. The results of the focus groups go beyond the scope of this article but are available upon request from the corresponding author.

with others" and "To solve a social issue, you will post your concern on the Internet and make known so that more people will know about it."

Civic salience. Four items were used to assess students' propensity to participate in civic activities. The items presented a series of statements about civic activities and asked how important the listed civic activities were to the respondents. Items were rated on a four-point scale (1 = not at all important, 2 = somewhat not important, 3 = somewhat important, and 4 = very important). Examples of questions included, "Participate in social events that affect the development of the society" and "Pay attention to social issues in the community."

Civic responsibility. Four items were used to assess participants' perception of how important the listed civic activities were to them. Items were rated on a four-point scale (1 = not at all important, 2 = somewhat not important, 3 = somewhat important, and 4 = very important). Examples included, "When you notice someone in your neighborhood who may need help, you will try to provide assistance" and "Participate in volunteer groups and activities."

Problem-solving orientation. The positive problem orientation (PPO) subscale and the rational problem-solving (RPS) subscale of the social problem-solving inventory-revised (SPSI-R; D'Zurilla, Nezu, & Maydeu-Olivares, 2002) were used to examine the convergent validity of the civic-engagement scale. The PPO and RPS subscales are well-developed, each comprising five items measuring the extent to which participants try to solve a problem in a positive and/or rational manner. The problem-solving orientation subscales have been found to be reliable and have good convergent and predictive validity across participants from different cultural and ethnic backgrounds (D'Zurilla et al., 2002; Hawkins, Sofronoff, & Sheffield, 2009).

Analysis Plan

For the psychometric analysis of the survey, we first evaluated face validity of each item and the distribution of responses to decide whether to keep or delete that item. We then conducted an exploratory factor analysis (EFA) with varimax rotation with a randomly selected split-half sample. Factor loading of each item with a cutoff point of .4 was evaluated for the extracted civic engagement scales, whereby an iterative process was used to remove those items that either loaded on more than one factors or that did not load on any of the

extracted factors. As a result of this second step, five subscales emerged with a minimum of 22 items and maximum internal consistency of .92 for the overall survey.

A series of CFA models were then tested to evaluate simultaneously the structure of the civic-engagement scale in another split-half sample. First, the hypothesized, correlated, five-factor model of the civic-engagement scale was tested. Second, the five-factor model was compared to the fit of a one-factor model that assumes that all items load on a single underlying dimension. We also tested the fit of two hypothesized models in which the five factors loaded either on a single second-order factor or two second-order factors.

Several fit indices were used to determine the fit of the CFA models (Hu & Bentler, 1999). The χ^2 goodness-of-fit statistic and the root mean square error of approximation (RMSEA) were used to determine the fit of the model, with non-significant χ^2 values indicating model fit (e.g., Chen, 2007) and RMSEA values smaller than .08 indicating a good model fit (Brown & Cudeck, 1993). In addition, Tucker Lewis index (TLI) and comparative fit index (CFI) were computed, with values greater than .90 indicating a good fit and values of .95 or greater indicating an excellent fit (Hoyle, 1995).

Finally, based on the results of the CFA, we imposed a series of nested factor models to test measurement invariance across males and females. Changes in χ^2 and other fit indices, such as TLI and CFI values among the nested models, were evaluated. Because change in χ^2 is highly sensitive to a larger sample size, we adopted an alternative criterion to decide whether there was a substantive difference between the nested models—that is, a difference higher than .01 in CFI or TLI values indicating substantial differences between the two models (Brown & Cudeck, 1993).

Results

Item Analysis. As a first step in the data analysis process, face validity of scales was assessed based on the alignment between item wording and the theoretical structure of the survey. Ten items were excluded from the analysis because they asked event-specific questions that were not relevant to the Chinese context and were rated on dichotomous scales instead of Likert scales. An item about voting in national elections was deleted because national elections are considered non-

competitive (e.g., Zhong & Chen, 2002) and, therefore, may not necessarily have reflected participants' levels of civic engagement.

We then assessed the distribution of responses for each item. Items with skewed distribution may have indicated that the item was not sensitive enough to capture the variance across individuals. Skewness was used to assess the distribution pattern of each item. With a sample size of 260, absolute values larger than .30 indicate great skewness (Hopkins & Weeks, 1990). One item about solving social problems, one about reporting violations of laws or norms to relevant government agencies, and one about showing tolerance and respect for people different from the majority were deleted because of highly skewed distributions (1.47, .72 and -. 91, respectively). After the item analysis process, a total of 29 items remained. These items were labeled from "CE01" to "CE29."

Exploratory Factor Analysis

Based on a loading criterion of .4 and an eigenvalue threshold of 1.0, six factors were extracted from the model, explaining 57.3% of the variance. Within the six factors extracted from the EFA, two criteria were used to decide whether to keep or remove a specific item: (1) if an item loaded above .4 level on two or more factors and (2) the theoretical relevance of the item to the factor. Among the original items from the measurement model, one item about helping others was removed because it was theoretically designed to load with items that were civic actions, not with items that were about civic intentions. A selection of items that arguably blended intentions and actions were removed because they loaded on two different factors: providing volunteer services on campus/in the community, paying attention to social issues, paying attention to issues on campus, participating in public services, paying attention to policy changes, and helping underprivileged people. After the above items had been removed, Factor 6 was removed because it no longer contained any items. The final structure of the civic engagement scale then comprised five factors with a total of 22 items (see Table 1).

Table 1

Exploratory Factors Analysis Item Factor Loadings for Civic-Engagement Scales

Item	Factor					
	1	2	3	4	5	6
CE1. Donate money or living supplies to the people in need					.665	
* CE2. Help others when you are able to (such as helping seniors carry their luggage)		.683				
CE3. Visit seniors, left-behind children, or other people who need the care					.593	
CE4. Express your support to those who are being discriminated against.					.702	
CE5. Stop the discriminating behaviors of others					.580	
CE6. Disseminate information on recent legislations, environmental issues, health care, et al. on campus or in your community				.669		
* CE7. Participate in volunteering services on campus or in your community				.472	.435	
CE8. Participate in public services organized by NGOs.				.709		
CE9. Participate in public services organized by student associations on campus.				.597		
CE10. Conduct research projects on a specific social phenomenon in the society or in your community				.610		
CE11. You express your concern to the superintendent if you find anything on campus that needs an improvement			.654			
CE12. When there is a specific social (community) problem, you discuss with other people on the possible solutions.			.520			
CE13. You report to the social media when you discover social injustice.			.756			
CE14. When trying to solve a social problem, you call for more attentions from friends and family.			.669			

Item	Factor					
	1	2	3	4	5	6
CE15. When trying to solve a social problem, you conduct research to increase people's awareness.			.711			
CE16. When trying to solve a social problem, you post your concern online or make commons to increase people's awareness.			.700			
How important are the following activities to you?	.473					.414
* CE17. Pay attention to the breaking social issues.	.451					.469
* CE18. Discuss with friends and family on the break social issues.	.688					
CE19. Participate in social activities that can affect the development of the society	.448	.526				
* CE20. Pay attention to the social issues on campus (e.g., school safety, price change)	.668					
CE21. Pay attention to the social issues in your community (e.g., news in the community, activities)	.551	.410				
* CE22. Participate in public service activities	.691					
CE23. Pay attention to the policy changes in the government	.581	.472				
* CE24. Help the underprivileged population		.720				
CE25. Provide assistance to people on campus who need help		.610				
CE26. Provide assistance to people in your community who need help	.701					
CE27. Take actions to maintain social justice.		.695				
CE28. Support others' acts of justice.		.597				

Note: Extraction method: Principal component analysis with varimax rotation. Only loadings at or above .40 were included in the table.
* Items were removed from further analysis because they either loaded on more than one factor and/or did not load on factors that were theoretically consistent with the item.

Internal consistencies (Cronbach's α) were computed for the five civic-engagement scales on another randomly selected split sample. As extracted from the EFA results, five subscales emerged with a minimum number of items and maximum internal consistency: helping others (HO, 4 items, $\alpha = .73$), community service (CSE, 4 items, $\alpha = .81$), acting on social problems (SP, 6 items, $\alpha = .84$), civic responsibility (CR, 4 items, $\alpha = .83$), and civic salience (CSA, 4 items, $\alpha = .83$).

Confirmatory Factor Analysis

With this five-factor structure from the EFA, a series of models were tested to examine whether there was a more parsimonious and better fit model. Table 2 shows a summary of fit statistics for each of the models discussed in this section. The five-factor structure with the original items constituted the base model for confirmatory factor analysis (CFA) (Model 1). As Table 2 shows, Model 1 yielded a statistically significant Chi-square value ($\chi^2 = 319.86$, $df = 199$). However, the other indices of overall model fit indicated an adequate fit (RMSEA = .05, TLI = .93, CFI = .95), suggesting that the model has a good fit with the data.

Table 2
Summary of Fit Statistics across Confirmatory Factor Analysis Models for the Civic Engagement Scales

Model	χ^2	df	TLI	CFI	RMSEA	Model Comparison	$\Delta\chi^2$	Δdf
Model 1: First-order, five-factor (Baseline model)	319.86	199	.93	.95	.05			
Model 2: Second-order, single factor	382.67	204	.92	.92	.06	M2 vs. M1	62.81*	5
Model 3: second-order, dual-factor	329.96	203	.93	.94	.05	M3 vs.M1	10.10*	4
Model 4: first-order, single-factor	839.80	209	.63	.69	.11	M4 vs. M1	519.94*	10

Note. χ^2 = absolute goodness-of-fit statistic, CFI = comparative fit index, RMSEA = root mean square error of approximation, TLI = Tucker Lewis index.
*. $p < .001$

To assess whether the five first-order factors of civic engagement could support a single second-order civic engagement factor, we fit a second-order model in which we included only one second-order engagement factor (Model 2). The fit of Model 2 was statistically significantly worse than the first-order model in which it was nested, $\Delta\chi^2$=62.81, Δdf = 5, p < .001, and ΔCFI= .03—which was unsurprising, given our argument that research should distinguish between different dimensions of civic engagement.

We then estimated a second-order model that distinguished among civic intentions and civic actions (Model 3). In the model, scales of helping others, community services, and acting on social problems loaded on one second-order factor (civic actions). Civic salience and civic responsibilities loaded on another second-order factor (civic intentions). Model 3 yielded significant chi-square change ($\Delta\chi^2$ = 10.10, Δdf = 4, p < .001). However, the other indices of overall model fit indicated an equal fit (RMSEA = .05, TLI = .93, CFI = .94, ΔCFI < .01), suggesting that it is acceptable to consider the structure of the measurement model across the sample (see Figure 1).
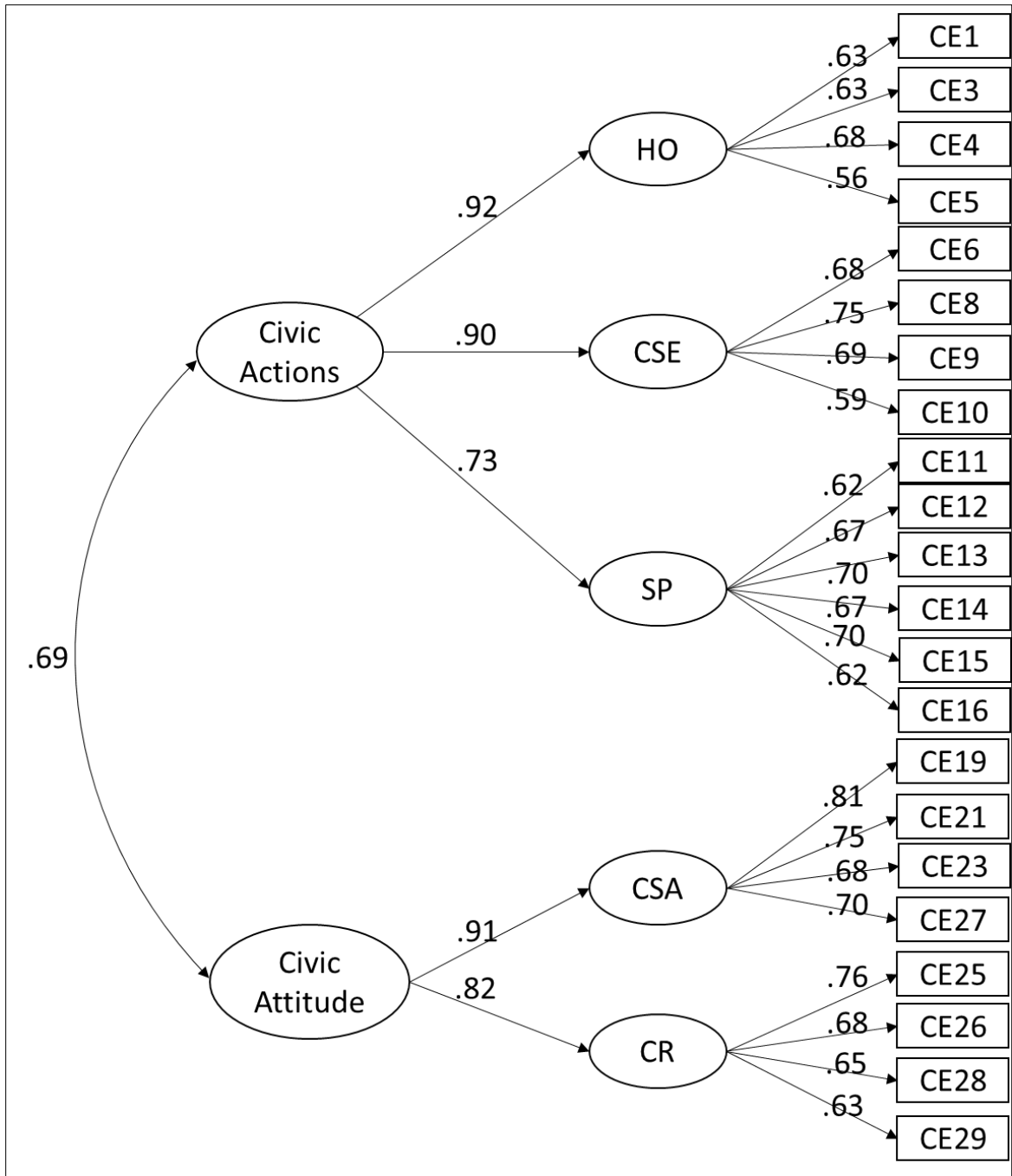
Figure 1. Path diagrams of factor structure of the civic engagement scale with standardized parameters. *Note.* HO = helping others, CSE = community service, SP = social problems, CSA = civic salience, CR = civic responsibility.

We also tested whether all the items could support a single first-order civic-engagement factor. We fit a first-order model in which we included only one civic-engagement factor (Model 4). The fit of Model 4 was significantly worse than the multiple dimensional first-order model in which it was nested, $\Delta\chi^2$ = 519.94, Δdf = 10, p < .001, and ΔCFI = .25.

Measurement Equivalence between Males and Females

To access measurement invariance for the study, configural, metric, scalar, and residual invariance were examined between males and females using the half sample (Chen et al., 2005). Table 3 summarizes fit statistics for measurement invariance. We imposed a baseline configure model with no constraints between males and females (Model 1b). As shown in Table 3, the goodness of fit indices suggest an adequate fit for the baseline model ($\Delta\chi^2$ = 650.53, df = 448, p < .001; RMSEA = .04, TLI = .91, CFI = .92). The results suggest the viability of the second-order factor structure of the civic-engagement model and indicate that the measurement factors are adequately constructed for males and females.

Table 3

Fit Statistics of Measurement Equivalence between Males and Females on the Civic Engagement Scales

Model	χ^2	df	TLI	CFI	RMSEA	Model Comparison	$\Delta\chi^2$	Δdf
1b. Configural invariance	650.53*	448	.91	.92	.04	-	-	-
2b. First-order factor loading invariant	661.48*	465	.91	.92	.04	M2 vs. M1	10.95	17
3b. First and second order loading invariant	663.66*	468	.91	.92	.04	M3 vs. M2	2.18	3
4b. Factor loadings and intercepts of observed variables invariant	716.76*	490	.90	.91	.04	M4 vs. M3	53.10*	22
5b. Factor loadings, intercepts, and residual invariant	760.85*	512	.90	.90	.04	M5 vs. M4	44.09*	22

Note. χ^2 = absolute goodness-of-fit statistic, CFI = comparative fit index, RMSEA = root mean square error of approximation, TLI = Tucker Lewis index.
*. p < .01

We then constrained equal first-order factor loadings across males and females (Model 2b). Results showed that the difference between Model 2b and Model 1b was not significant ($\Delta\chi^2 = 10.95$, $\Delta df = 17$, $p > .05$). In addition, changes in CFI and TLI were no more than the cutoff point of .10 (Brown & Cudeck, 1993). These results indicated that the civic-engagement scale had equal first-order factor loadings across males and females.

When an additional constraint of second-order equivalence across males and females was applied to the model (Model 3b), results showed no significant difference between Models 3b and 2b ($\Delta\chi^2 = 2.18$, $\Delta df = 3$, $p > .05$). Changes in CFI and TLI were also within the cut point value of .10. These results indicated that the first- and second-order factor loadings of the civic-engagement scale were consistent across males and females.

We then imposed an additional constraint of equal intercepts of observed variables across males and females (Model 4b). In this model, the difference test of χ^2 was significant ($\Delta\chi^2 = 53.10$, $\Delta df = 22$, $p < .01$). However, changes in CFI and TLI were less than the cutoff point of .01, indicating that the model adequately represented the data and intercepts were consistent across males and females.

Finally, we examined whether there was residual invariance in the model across males and females. We imposed an additional constraint of equal structural residuals across males and females (Model 5b). There was a significant chi-square difference between Models 5b and 4b ($\Delta\chi^2 = 44.09$, $\Delta df = 22$, $p < .01$). However, changes in CFI and TLI did not reach the cutoff point of .10, suggesting that the substantial difference between Model 5b and Model 4b was acceptable. These results altogether indicated that the civic-engagement measurement model was configural, metric, scalar, and residual invariant across males and females, providing evidence that the survey could be appropriately used with male and female college students in China.

Descriptive Analysis and Validity Test

Theory suggests that civic engagement and the development of cognitive skills, such as problem solving, are related (Eyler, Giles, Stenson, & Gray, 2001; Finley, 2011). Therefore, we hypothesized that civic engagement and problem-solving skills would be positively correlated. As expected, all subscales of civic engagement were positively correlated with problem-solving orientations (rs

ranged from .15 to .40, $p < .05$; for detailed means, standard deviations, and correlations among measured variables, see Table 4).

Table 4
Means, Standard Deviations, and Correlations among Civic Engagement and Problem Solving (N=552)

		HO	CSE	SP	CSA	CR	PPO	RPS
Helping Others (HO)		1.00						
Community Service (CSE)		.61**	1.00					
Social Problems (SP)		.50**	.54**	1.00				
Civic Salience (CSA)		.46**	.40**	.46**	1.00			
Civic Responsibilities (CR)		.43**	.37**	.38**	.64**	1.00		
Positive Orientations (PPO)	Problem-Solving	.33**	.27**	.27**	.33**	.40**	1.00	
Rational Orientations (RPS)	Problem-Solving	.18**	.15*	.21*	.20*	.27*	.50*	1.00
Mean		2.54	2.33	2.15	2.56	3.08	3.63	3.59
SD		.58	.64	.62	.73	.63	.69	.69

Discussion

In this study, we tested a theoretical conceptualization of civic engagement in China that integrates civic intentions and actions. To do this, we reviewed theoretical frameworks developed in democratic societies (Flanagan & Faison, 2001) and conducted a set of focus groups with Chinese college students to determine their perceptions of their civic roles and responsibilities. Based on themes derived from the focus-group interviews and the extant literature (Sherrod, 2007; Sherrod & Lauckhardt, 2009; Zaff et al., 2010), we developed a survey instrument to assess civic engagement in a non-democratic country.

The study contributes to the literature on civic-engagement measurement in several ways. First, we fit a five-factor civic-engagement measurement model to our data and found empirical evidence to support such a structure. Second, we developed a survey instrument to assess young people's civic engagement in a non-democratic social background. This validated measure offers researchers a tool for examining civic engagement among young people in China and could very well be used to conduct inquiries in other non-democratic countries. Finally, consistent with findings from Western cultures (e.g., Flanagan & Levine, 2010; Zaff et al., 2010), the study also differentiate d civic intentions and civic activities in a group of Chinese college students.

Consistent with recent literature on civic engagement, the study findings support the hypothesis that civic engagement is a multidimensional construct consisting of both intentions and actions (Flanagan & Faison, 2001; Sherrod, 2007; Sherrod & Lauckhardt, 2009). The hypothesized second-order factor model demonstrates that responses to the measurement of civic engagement can be grouped into five reliable first-order factors. Moreover, we found that these five factors can be further grouped into two second-order factors (i.e., civic attitude and civic actions), which differs from previous research that has found a single, second-order construct (Zaff et al., 2010). The second-order factor model is more parsimonious than five first-order factors.

This study also explored the structure of civic engagement among college students in China. Recent research in the United States has focused on different types of civic actions, whereas civic intentions were embedded simultaneously in these actions (e.g., Lachelier, 2012; Van Liere et al., 2016). When there are numerous opportunities for and few structural barriers to civic participation, such

as in the U.S. and most Western countries, civic intentions and civic actions can be closely aligned; in fact, civic intentions are often indicated by the actions. However, depending on the social structure, a single civic action can result from different civic intentions. As discussed earlier, in a non-democratic society such as China, the distinction between civic intentions and civic actions can be significant. This study contributes to the literature by exploring the structural differences between civic intentions and civic actions among a sample of Chinese college students.

We must also acknowledge that this study had several limitations. First, although we had access to a relatively large sample of focus-group and survey participants, the sample was drawn from the student population at three large universities in one of the largest cities in China. Future studies should examine civic engagement within the various contexts and samples throughout China. This is particularly pertinent in a country as vast and diverse as China, ranging from coastal, urban centers to mountainous regions in the west, and whose population includes more than 113 million citizens representing ethnic minority groups (National Bureau of Statistics of the People's Republic of China, 2011).

Additionally, due to a relatively small sample size in the split sample for CFA, we only conducted measurement invariance tests across males and females. We do not know whether there is measurement invariance across other groups, such as ethnicities, region of origin, religious beliefs, or political orientation. Future research should examine measurement equivalence across different subgroups of Chinese young adults.

Moreover, the present data relied upon self-reports from students to assess civic engagement. Students may be influenced by sociopolitical constraints to answer in a socially desirable way about their own behavior or attitude, thus introducing bias into the results. Such concern is of particular importance given the possible constraints of authentic expression of civic views in a non-democratic society (e.g., Gibson, 1993), concerns that have been expressed in previous studies on political participation on the Internet (Chan et al., 2012).

College students in the focus groups reported using the Internet as a medium for civic action (Zaff, et al., 2014), which is also a powerful medium in the West and has become an important vehicle for political expression in China (e.g., Smith, Schlozman, Verba & Brady, 2009; Zhong, 2014). Future survey

development should include questions about Internet usage and should use more online tools for assessing civic actions and intentions. Such methods could provide deeper insights into the multitude of ways that youth and young adults in China are beginning to engage in civic life.

Conclusion

Our study examined the concept and structure of civic engagement among a sample of college students in southern China. These findings could support future studies examining the development of civic engagement, including the sociopolitical, familial, and peer factors that influence this development. Such studies could become increasingly important as China's citizenry becomes more educated, as more transparency is imposed on the government through the use of social media, and as citizens become more empowered to engage in civic actions.

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