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Development and Validation of an Organizational Competency Scale (OCS) for Elder Civic Engagement Programs: A Pilot Study

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ABSTRACT

This pilot study developed and validated an organizational competency scale (OCS) for elder civic engagement programs. The OCS was used to comprehensively measure the organizational competencies at the micro, mezzo, and macro levels. Thirty-two formal organizations in the State of Texas participated in this study. Based on the factor analyses of data collected from these organizations, the original 31-item OCS was reduced to a 28-item, seven-factor scale. The derived factors were client discovery with support, client-centered planning and management, client assessment and training, integration of diverse groups, promotion of adaptation between groups, integration of resources to address the structural constraints, and promotion of social recognition and social justice. Findings from the reliability tests and hierarchical regression analysis supported the reliability and criterion-related validity of the OCS. As a reliable and valid tool, the OCS can be used by formal organizations to evaluate the current competencies, identify areas for improvement, and find future directions for organizational development. It can also serve as practice guidelines to help organizational practitioners integrate available resources within the multi-level systems to better engage older participants. To further test the stability of the OCS and evaluate the overall fit of the structural model, additional research is needed.

KEYWORDS

American elders; civic engagement; organizational competency

Introduction

Owing to improved health, increased longevity, enhanced education, and more income, today's American elders are being increasingly seen as active contributors to society rather than unwanted burdens. They can help address urgent social needs through a wide range of civic activities such as political participation, social connectedness, lifelong learning, community services, volunteer work, and encore career (Cullinane, 2008; Hinterlong & Williamson, 2006–2007). In turn, American elders active engagement in civic activities has also been found beneficial to their physical, mental, and social well-being (Brown et al., 2011; Li & Ferraro, 2006; Van Willigen, 2000). Because of this win-win scenario, it is not surprising that more and more American elders are now being called upon to participate in various civic activities. Given the burgeoning older population in the US, all types of formal organizations are expected to play a pivotal role in accommodating and engaging the very large

and growing number of American elders through structured programs. However, one of the major challenges facing formal organizations nowadays is that they need to rebuild their competencies to respond to the new demands of today's American elders as well as of society as a whole (Harvard School of Public Health & MetLife Foundation, 2004).

Although the significance of developing the organizational competencies to better engage American elders has already been recognized among scholars, there are very few studies, if any, that empirically investigate American elders civic engagement from such a perspective. Particularly, very few assessment tools have been developed to evaluate and inform an organization's competencies to engage older adults from a relatively holistic view. To fill the research gap, this pilot study specifically developed and validated an organizational competency scale (OCS) with elder civic engagement programs in the State of Texas. Here,

American elders civic engagement refers to their participation in civic activities that occur through organizational settings, which benefits individuals, communities, and society at large. Organizational competencies are defined as a formal organization's abilities to empower American elders to get involved in activities organized under its civic engagement programs.

Literature Review

The importance of American elders civic engagement has been increasingly stressed over the past decades, especially since the 2005 White House Conference on Aging in which it was selected as a featured topic of discussion (Morrow-Howell & Freedman, 2006–2007; O'Neill, 2006–2007). So far, great efforts have been made to help leverage American elders participation in civic activities. For example, both the Gerontological Society of America and the American Society of Aging launched initiatives in 2004 to advance theory, research, and practice that addressed civic engagement in an older America (Cullinane, 2006–2007). In this context, today's American elders, particularly baby boomers are, unsurprisingly, becoming active contributors to society through vital engagement in civic activities. They have produced an invaluable windfall for needy individuals and communities (Freedman, 2002). As of early 2017, for instance, approximately 2,43,500 Americans aged 55 and older served about 74.6 million hours to meet the needs of 2,88,800 children, 6,49,820 elders, and 3,32,100 veterans through three Senior Corps programs (Corporation for National & Community Service, 2017).

The positive effects of American elders civic engagement have been well-documented. A substantial body of literature indicates that American elders civic engagement is beneficial to themselves (Githens, 2007; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Parisi et al., 2015), to others (Rebok et al., 2004), to communities (Carlton-LaNey, 2006–2007; Morrow-Howell, Hong, & Tang, 2009), and to society at large (Gottlieb & Gillespie, 2008; Halvorsen & Emerman, 2013). What is more, a set of factors that influence American elders civic engagement

have also been identified, including demographic characteristics (Ahn, Phillips, Smith, & Ory, 2011), health indicators (Banerjee, Perry, Tran, & Arafat, 2010), socioeconomic status (Tang, 2008), resource possession (Carr, 2009), engagement patterns (Hinterlong, 2008), and structural factors (Martinson & Minkler, 2006).

Based on explorations of the significance, current status, positive outcomes, and influencing factors of American elders' civic engagement, a number of insightful strategies have been put forth to help increase older adults participation in civic activities. These strategies include advocating for policy changes (Gomperts, 2006–2007), building community infrastructures (Henkin & Zapf, 2006–2007), expanding corporate retiree volunteer programs (Gonyea & Googins, 2006–2007), promoting organizational development (McBride, 2006–2007), and recruiting helping professionals (Anderson & Dabelko-Schoeny, 2010). Most of these strategies were theoretically proposed and have not been empirically studied. Nonetheless, recognizing the crucial role of formal organizations in institutionalizing American elders' civic engagement, several scholars have focused attention on evidence-based strategies at the organizational level. Existing studies are mainly concerned with how formal organizations can be well prepared to attract, recruit, and retain older adults in their programs (Evans & Carnegie, 2009; Morrow-Howell et al., 2009; Sellon, 2014; Tang, Morrow-Howell, & Hong, 2009b). For example, according to a two-wave study of 253 American elders from 10 volunteer programs, Tang, Choi, and Morrow-Howell (2010a) found that organizational supports like provision of flexible activities, appropriate training, and other ongoing supports were positively associated with volunteer commitment and socioeconomic benefits. Therefore, these supports could serve as a significant facilitator for volunteer recruitment and retention. Likewise, using data from the Current Population Survey, Tang and Morrow-Howell (2008) investigated how American elders accessed organizational volunteer roles and suggested that voluntary organizations should clearly publicize their program goals, disseminate relevant information in a timely manner, reach out to potential participants

directly, and use current participants to recruit potential ones. In this way, voluntary organizations would be able to provide American elders with greater access to their programs.

Besides the concrete strategies at the organizational level, several scholars who are primarily from the Center for Social Development at Washington University in St. Louis proposed an institutional capacity perspective to study American elders civic engagement (Morrow-Howell & Greenfield, 2012; Sherraden, Morrow-Howell, Hinterlong, & Rozario, 2001; Tang et al., 2009b). As they explain, institutional capacities refer to “the abilities of businesses, non-profit organizations, educational institutions, and religious organizations to engage older adults” (Morrow-Howell & Greenfield, 2012, p. 47) and encompass five basic dimensions, that is, expectations, access, information, facilitation, and incentives (McBride, 2006-2007). More specifically, Hong, Morrow-Howell, Tang, & Hinterlong (2009) collected data from 51 program directors across the nation and revealed an eight-factor Institutional Competency Scale, including role specification, role flexibility, skill development, cash compensation, role recognition, dissemination, accommodation, and integration. In addition, Tang, Morrow-Howell, & Choi (2009a) investigated 374 older participants from 13 volunteer programs and concluded that institutional facilitation that was measured by role flexibility, compensation, and recognition should be enhanced to ensure inclusive engagement opportunities for older adults from diverse backgrounds, especially for those who had low socioeconomic status.

A review of the literature on American elders civic engagement shows that there has been mounting research on civic engagement as a behavior or action per se, including its significance, current status, positive outcomes, and influencing factors. Yet, very few researchers have examined the external mechanisms like organizational development which facilitate such behavior or action. A small number of scholars have proposed an institutional capacity perspective and empirically explored organizational-level strategies for increasing older adults civic engagement. However, there are still at least two

limitations of these studies. On the one hand, the Institutional Capacity Scale primarily measures concrete organizational arrangements and does not evaluate an organization’s abilities to address relevant affairs at multiple levels other than the organizational level. On the other hand, the institutional capacity perspective was only tested with voluntary organizations and applied to American elders’ volunteerism. Other types of formal organizations and civic activities such as educational institutions and lifelong learning have not yet been investigated from the institutional capacity perspective.

To overcome these shortcomings, this pilot study developed an OCS to comprehensively measure the organizational competencies at the micro, mezzo, and macro levels. Also, the OCS was used to collect data from different organizations that offered various activities other than volunteering. To be specific, four major research questions were addressed in the study:

1. What are the main characteristics of elder civic engagement programs and their sponsoring organizations?
2. What is the overall factor structure of the OCS?
3. What is the internal consistency reliability of the OCS?
4. What is the criterion-related validity of the OCS?

Based on the development, validation, and modification of the OCS, practical applications to pertinent organizations and future research directions were further described and discussed.

Methods

Study Participants

In order to develop and test the OCS with elder civic engagement programs, a pilot study was conducted in the State of Texas. Because purposive sampling is thought to be very useful for exploratory research and instrument pretesting (Rubin & Babbie, 2008), it was employed in this study to obtain potential participants. To be specific, three eligibility criteria were used to screen and identify pertinent programs: (1) the program was developed, implemented, and managed by a formal organization, (2) its primary goal was to

engage Texans aged 55 and over in civic activities, and (3) these activities were organized on a regular rather than a sporadic basis. The directors or coordinators of identified programs were invited to participate in a questionnaire survey that aimed to assess their organizational competencies and program outcomes. Through Google's web search and Facebook's public search, 152 elder civic engagement programs were identified. Nonetheless, only 32 program directors or coordinators agreed to participate and completed the questionnaires. Thus, the response rate for this study was 21%.

Measures

Organization and Program Characteristics

Nine items were used to gather basic organization and program information. Among these items, five were concerned with the organization's location, type of organization (e.g., government agency, educational organization, or social service organization), level of organization (e.g., local, statewide, or national level), financial nature of the organization (e.g., for-profit or non-profit), and sources of income of the organization (e.g., membership fees, sales of goods and services, government funding, and donations from individuals and corporations). Another four items were about the goals of the elder civic engagement program, the types and frequency of activities organized under the program, and the involvement of social workers in the development and management of the program.

Organizational Competency Scale (OCS)

Informed by the existing literature, a 31-item, five-point Likert-type measurement tool called the OCS was developed by the first author to measure the organizational competencies at the micro, mezzo, and macro levels. Participants were asked to read through all items and circle the number that best applied to them (1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, and 5 = Always). The micro-level organizational competencies were evaluated with 13 items, which inquired about the assessment of older participants needs, difficulties, strengths, and experiences, about the application of assessment results to activity design and

management, about the provision of training and supervision for older participants, and about the tolerance of different paths towards successful aging. For the mezzo-level organizational competencies, eight items were constructed to evaluate the program staff's frequency of diversity training, their cultural competence, and the integration of diversity into organizational practices. Ten items were used to assess macro-level organizational competencies. These items were about the program staff's abilities to identify and explain structural barriers to older participants, to advocate for greater provision of engagement opportunities and supporting resources, to cooperate with other stakeholders to disseminate and expand engagement opportunities, and to make older participants potential and contributions visible to their communities.

Outcomes of Elder Civic Engagement Programs

Ten five-point Likert items were constructed to evaluate the outcomes of elder civic engagement programs. Participants were asked to rate their level of agreement with the 10 items, with response choices ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). These items described the achievement of program goals; the inclusion of diverse older adults; a fit between older participants and organized activities; older participants regular commitments to these activities; the retention of older participants in the program; the positive effects of the program on older adults, neighborhood residents, and communities; the provision of greater access to social resources and opportunities; and the attainment of social approval and recognition.

Data Collection and Analysis

The pilot study was approved by the Indiana University Institutional Review Board (IRB) on November 11, 2016. After obtaining IRB approval, the authors contacted the potential participants via email, Facebook, and phone call between November 2016 and March 2017. Study participants were informed about the purpose and procedures of the study, about the risks and benefits of participation, and about the assurance of confidentiality, anonymity, and voluntary

participation. Both online and paper-based questionnaires were used. The authors delivered the survey link to the potential participants via email and Facebook in November 2016 and then sent the first, second, and third follow-up messages to non-respondents in December 2016, February 2017, and March 2017, respectively. As requested by one participant who preferred to fill out a paper questionnaire, a hard copy of the survey and a stamped envelope were mailed to him via the US postal service. At the end of March 2017, the data collection was completed. In total, 31 participants submitted their responses online and one participant returned his questionnaire by postal mail.

The Statistical Package for the Social Sciences (SPSS, Chicago, IL) was used for data analysis. First of all, descriptive analyses were run to delineate the main characteristics of elder civic engagement programs and their sponsoring organizations. Secondly, separate exploratory factor analyses were performed to empirically derive factors within each organizational competency subscale and thus to generate an overall factor structure of the OCS. Thirdly, Cronbach's alphas were computed to check the internal consistency reliability for each subscale and for the entire scale before and after the deletion of certain items. Finally, hierarchical regression analyses were performed to test the criterion-related validity of the OCS. The summary score of the OCS was used to predict the outcomes of elder civic engagement programs.

Results

Organization and Program Characteristics

Table 1 presents the main characteristics of organizations and programs participating in this pilot study. Among these organizations, 62.5% ($n=20$) were at the local level, 28.1% ($n=9$) at the statewide level, and 9.4% ($n=3$) at the national level. Just over one-third of the organizations were social service organizations ($n=11$, 34.4%) and the same proportion were recreational organizations ($n=11$, 34.4%). A quarter of the organizations were government agencies ($n=8$, 25.0%) and only one was an educational

organization ($n=1$, 3.1%). The majority of organizations ($n=30$, 93.8%) were nonprofit and none defined themselves as for-profit organizations. Almost all of the organizations had multiple sources of income such as sales of goods and services ($n=17$, 53.1%), membership fees ($n=15$, 46.9%), government funding ($n=14$, 43.8%), donations from individuals ($n=7$, 21.9%) and corporations ($n=3$, 9.4%), and funds from charitable foundations ($n=3$, 9.4%).

When it comes to specific programs offered by the sponsoring organizations, the most frequently reported program goals were enriching older adults later lives ($n=28$, 87.5%), followed by maintaining older adults connectedness to social networks ($n=26$, 81.3%), helping older adults achieve self-actualization through paid or unpaid work ($n=16$, 50.0%), addressing an urgent social problem or issue ($n=15$, 46.9%), and maintaining optimal physical ($n=14$, 43.8%) and

Table 1. Organization and program characteristics ($N=32$).

Characteristics	<i>f</i>	%
<i>Level of organization</i>		
Local level	20	62.5
Statewide level	9	28.1
National level	3	9.4
<i>Type of organization</i>		
Recreational organization	11	34.4
Social service organization	11	34.4
Government agency	8	25.0
Educational organization	1	3.1
<i>Financial nature of the organization</i>		
Non-profit	30	93.8
For-profit	0	0.0
<i>Sources of income of the organization</i>		
Sales of goods and services	17	53.1
Membership fees	15	46.9
Government funding	14	43.8
Donations from individuals	7	21.9
Funds from charitable foundations	3	9.4
Donations from corporations	3	9.4
<i>Goals of elder civic engagement program</i>		
Enriching older adults later lives	28	87.5
Maintaining older adults connectedness to social networks	26	81.3
Helping older adults achieve self-actualization	16	50.0
Addressing an urgent social problem or issue	15	46.9
Maintaining optimal physical function of older adults	14	43.8
Maintaining optimal cognitive function of older adults	14	43.8
Engaging older adults in lifelong learning	3	9.4
<i>Types of activities organized under the program</i>		
Recreational activities	22	68.8
Social connectedness	22	68.8
Volunteering	18	56.3
Community services	15	46.9
Encore work	10	31.3
Cultural activities	10	31.3
Lifelong learning	8	25.0
Political advocacy	2	6.3
<i>Frequency of activities organized under the program</i>		
Daily (workday)	13	40.6
Once or twice a week	6	18.8
Once or twice a month	12	37.5

cognitive ($n = 14$, 43.8%) function of older adults. In order to achieve these goals, eight types of civic activities were often organized, including recreational activities ($n = 22$, 68.8%), social connectedness ($n = 22$, 68.8%), volunteering ($n = 18$, 56.3%), community services ($n = 15$, 46.9%), encore work ($n = 10$, 31.3%), cultural activities ($n = 10$, 31.3%), lifelong learning ($n = 8$, 25.0%), and political advocacy ($n = 2$, 6.3%). These activities were organized on a regular basis 40.6% ($n = 13$) of the programs organized their activities from Monday to Friday, 37.5% ($n = 12$) once or twice a month, and 18.8% ($n = 6$) once or twice a week.

Factor Structure of the OCS

Separate factor analyses were conducted for the three-level organizational competency subscales. To begin with, the Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy for the micro-, mezzo-, and macro-level organizational competencies were 0.609, 0.667, and 0.732, respectively. Also, the Bartlett's tests of sphericity were statistically significant for the three-level organizational competencies (micro-level: $\chi^2 = 276.554$, $df = 78$, $p < 0.05$; mezzo-level: $\chi^2 = 110.796$, $df = 21$, $p < 0.05$; and macro-level: $\chi^2 = 160.765$, $df = 28$, $p < 0.05$). Generally, the KMO value greater than 0.5 and the significant value of Bartlett's test less than 0.05 indicate that the data are acceptable for factor analysis (Verma, 2013). Therefore, it was appropriate to perform factor analyses on the data collected from this pilot study. More specifically, principal component analysis was used as the extraction method and orthogonal varimax was used as the rotation method. The missing data were replaced with the mean.

According to the preliminary factor analyses, no items were deleted from the micro-level organizational competency subscale. However, for the mezzo-level organizational competency subscale, one item (Did the program staff work hard to recruit older adults from diverse backgrounds in the past 12 months?) was removed from the final analysis because it loaded on two factors with the same absolute value of the loadings (Factor 1: 0.483; Factor 2: -0.483). In addition,

two items (Did the program staff empower older participants to use their available resources to overcome some structural constraints in the past 12 months? and Did the program staff demonstrate good fundraising ability to support the development and implementation of your program in the past 12 months?) were deleted from the macro-level organizational competency subscale due to their low communalities (the former item: 0.249; the latter item: 0.195). Finally, items with factor loadings above 0.4 and factors with eigenvalues greater than one were retained.

Based on factor analyses, a three-factor solution was generated for the micro-level organizational competency subscale (Table 2). The first factor entitled "client discovery with support" included six items, had an eigenvalue of 4.555, and explained 35.04% of the variance. Usually, the factor loading with an absolute value less than 0.30 is considered as being low, between 0.3 and 0.5 as being moderate, and more than 0.5 as being high (Leech, Barrett, & Morgan, 2015). Thus, the six items had high factor loadings, ranging from 0.636 to 0.941. The second factor named "client-centered planning and management" encompassed four items, had an eigenvalue of 2.494, and accounted for 19.18% of the variance. The factor loadings of the four items ranged from -0.697 to 0.734. The third factor entitled "client assessment and training" contained three items, had an eigenvalue of 2.290, and explained 17.61% of the variance. The three items had high factor loadings, ranging from 0.800 to 0.859. In total, 71.84% of the variance was accounted for by these three factors.

For the mezzo-level organizational competency subscale, a two-factor solution was generated (Table 3). The first factor, integration of diverse groups, included four items, had an eigenvalue of 3.352, and explained 47.88% of the variance. The four items had high factor loadings, ranging from 0.801 to 0.926. The second factor, promotion of adaptation between groups, contained three items, had an eigenvalue of 1.656, and explained 23.66% of the variance. The three items had high factor loadings, ranging from 0.525 to 0.844. The two factors together accounted for 71.54% of the variance.

Table 2. Three-factor solution for the micro-level organizational competencies.

Factor	Item	Factor loading
Factor 1: Client discovery with support (6 items)	• Did the program staff help older participants use their own strengths to maximize the engagement benefits in the past 12 months?	0.941
	• Did the program staff help older participants use their own strengths to address the difficulty in engaging organized activities in the past 12 months?	0.903
	• Did the program staff discuss with older participants about a possible path towards successful aging that might most suitable for them in the past 12 months?	0.846
	• Did the program staff talk with older participants about their unique experiences of aging in the past 12 months?	0.807
	• Did the program staff provide continuous supervision to facilitate older participants completion of activities in the past 12 months?	0.705
	• Did the program staff investigate older participants' difficulty in engaging organized activities in the past 12 months?	0.636
	Eigenvalue	4.555
	% of variance	35.041
Factor 2: Client-centered planning and management (4 items)	• Is a disengaged later lifestyle respected and embraced by your program?	0.734
	• Did the program staff design and organize activities according to older participants' unique experiences of aging in the past 12 months?	-0.705
	• Did the program staff address any issues or concerns raised by older participants about the organized activities in a timely manner in the past 12 months?	0.698
	• Did the program staff design and organize activities according to the engagement needs of older participants in the past 12 months?	-0.697
	Eigenvalue	2.494
	% of variance	19.181
Factor 3: Client assessment and training (3 items)	• Did the program staff assess the engagement needs of older participants in the past 12 months?	0.859
	• Did the program staff provide the necessary training for older participants in the past 12 months?	0.802
	• Did the program staff evaluate older participants perceived benefits of engaging in organized activities in the past 12 months?	0.800
	Eigenvalue	2.290
	% of variance	17.614
Cumulative %		71.835

Table 3. Two-factor solution for the mezzo-level organizational competencies.

Factor	Item	Factor loading
Factor 1: Integration of diverse groups (4 items)	• Did the program staff purposely assign older participants of different backgrounds to the same activity tasks in the past 12 months?	0.926
	• Did the program staff work hard to help diverse older participants integrate into the same activity groups in the past 12 months?	0.851
	• Did the program staff design and organize activities that balanced the needs of diverse older participants in the past 12 months?	0.826
	• Did the program staff obtain proper training about how to work with older adults from diverse backgrounds in the past 12 months?	0.801
	Eigenvalue	3.352
	% of variance	47.881
Factor 2: Promotion of adaptation between groups (3 items)	• Did the program staff demonstrate cultural competency when working with diverse older participants in the past 12 months?	0.844
	• Were the program staff able to cope with conflicts among older adults of diverse backgrounds in the past 12 months?	0.735
	• Did the program staff provide diverse older participants with an opportunity to share their civic engagement experiences with each other in the past 12 months?	0.525
	Eigenvalue	1.656
	% of variance	23.655
Cumulative %		71.536

Two-factor solution was generated for the macro-level organizational competency subscale (Table 4). The first factor entitled “integration of resources to address the structural constraints” contained five items, had an eigenvalue of 4.113, and explained 51.42% of the variance. The five

items had high factor loadings, ranging from 0.819 to 0.867. The second factor named “promotion of social recognition and social justice” included three items, had an eigenvalue of 1.905, and accounted for 23.82% of the variance. It had two items with high factor loadings

Table 4. Two-factor solution for the macro-level organizational competencies.

Factor	Item	Factor loading
Factor 1: Integration of resources to address the structural constraints (5 items)	• Did the program staff help older participants learn about the structural constraints that limited their civic engagement opportunities in the past 12 months?	0.867
	• Did the program staff work with older participants to advocate for the provision of more resources to overcome the structural barriers in the past 12 months?	0.828
	• Did the program staff use the mass media to disseminate elder civic engagement opportunities offered by your program in the past 12 months?	0.826
	• Did the program staff investigate the structural barriers to civic engagement facing American elders in the past 12 months?	.819
	• Did the program staff work with other organizations and agencies to disseminate elder civic engagement opportunities offered by your program in the past 12 months?	.819
	Eigenvalue	4.113
	% of variance	51.418
Factor 2: Promotion of social recognition and social justice (3 items)	• Did the program staff work hard to make older participants' potential and contributions visible to their communities in the past 12 months?	0.864
	• Did the program staff establish good partnerships with other organizations and agencies to create inclusive civic engagement opportunities for older adults in the past 12 months?	0.780
	• Did the program staff advocate for the provision of equal civic engagement opportunities for older adults in the past 12 months?	0.439
	Eigenvalue	1.905
	% of variance	23.817
Cumulative %		75.235

of 0.780 and 0.864, respectively, and one item with moderate factor loading of 0.439. The combination of these two factors explained 75.24% of the total variance.

Internal Consistency Reliability of the OCS

Cronbach's alphas were computed to check the internal consistency reliability for each subscale and for the entire scale. As a general rule of thumb, a Cronbach's alpha below 0.50 indicates low reliability, between 0.50 and 0.70 moderate reliability, between 0.71 and 0.90 high reliability, and above 0.90 excellent reliability (Hinton, Brownlow, McMurray, & Cozens, 2004). Table 5 presents a summary of the reliability tests before and after the deletion of invalid items identified by the factor analyses. As mentioned above, all 13 items were retained for the micro-level organizational competency subscale. The reliability of this subscale was high, with a Cronbach's alpha of 0.784. For the mezzo-level organizational competency subscale, the Cronbach's alpha was 0.794 before one item was deleted, indicating a high reliability of the subscale. After one item was removed, the Cronbach's alpha for this subscale increased to 0.806, showing a slight reliability improvement. Similarly, the Cronbach's alpha for the macro-level organizational competency

subscale was 0.858 before two items were deleted. After the two items were removed, the reliability of this subscale was slightly improved, with a resulting Cronbach's alpha of 0.877. By and large, the Cronbach's alphas for the entire scale were 0.927 and 0.928 before and after three items were deleted, respectively, which resulted in a scale of excellent reliability.

Criterion-Related Validity of the OCS

According to the previous factor analyses and reliability tests, the original 31-item OCS was reduced to a 28-item, seven-factor scale. The criterion-related validity of the modified OCS was checked by examining its ability to predict the outcomes of elder civic engagement programs through hierarchical regression analysis. Using *a priori* size calculator for hierarchical regression, the minimum sample size of 28 was required to achieve a power of 0.80, given a large effect size of 0.35 and a two-tailed alpha 0.50 (Abu-Bader, 2016). Thus, the sample size of this study was acceptable for hierarchical regression analysis. To be specific, the OCS score was calculated as the summed score across the 28 items, with a possible score range from 28 to 140. The program outcome score was calculated as the summed score across aforementioned 10 items, with a

Table 5. Internal consistency reliability of the OCS.

OCS	Cronbach's α before items deleted	Cronbach's α after Items Deleted
Micro-level organizational competencies	0.784	N/A
Mezzo-level organizational competencies	0.794	0.806
Macro-level organizational competencies	0.858	0.877
Overall organizational competencies	0.927	0.928

possible score range from 10 to 50. To investigate the unique contribution of the OCS, three variables with regard to the organization and program characteristics were added and controlled, that is, type of organization, level of organization, and frequency of activities organized under the program.

As shown in Table 6, in the first step of the hierarchical regression analysis, the combination of the three controlled variables explained only 3.9% of the variance in program outcomes ($R^2 = 0.039$). After the OCS was included at the second step, the four variables together accounted for 24.1% of the variance in program outcomes ($R^2 = 0.241$). The OCS alone contributed an additional 20.2% to the variance in program outcomes ($\Delta R^2 = 0.202$). As indicated by the Significant F change value ($p < 0.05$), this was a statistically significant contribution. Furthermore, with a beta of 0.560 ($p < 0.05$), the OCS also emerged as a significant predictor of program outcomes. In this sense, the OCS was a valid tool for determining the outcomes of elder civic engagement programs.

Discussion, Implications, and Limitations

Discussion of the Results

Previous studies primarily focused on voluntary organizations and American elders' volunteerism (Gonyea & Googins, 2006-2007; Morrow-Howell et al., 2003; Tang, Morrow-Howell, & Choi, 2010b; Tang et al., 2010a) and ignored other types of formal organizations as well as other forms of civic engagement. Therefore, this pilot study encompassed various organizations and civic activities to fill the existing research gap. Four types of organizations participated in this study, including social service organizations, recreational organizations, government agencies, and educational organizations, most of which were at the local level. Almost all of the organizations defined themselves as nonprofit organizations and had multiple sources of income such as

Table 6. Hierarchical Regression Results.

	R	R^2	ΔR^2	β	t	p
<i>Step 1</i>	0.197	0.039				
Type of organization				-0.033	-0.145	0.886
Level of organization				-0.158	-0.791	0.436
Activity frequency				0.058	0.269	0.790
<i>Step 2</i>	0.490	.241	0.202*			
Type of organization				0.294	1.226	0.231
Level of organization				-0.123	-0.679	0.503
Activity frequency				0.071	0.367	0.716
OCS				0.560*	2.678	0.012

* $p < 0.05$.

membership fees, sales of goods and services, and government funding. Notably, even though some organizations sold goods and services or charged membership fees, the nonprofit nature was not changed because of their pursuit of collective goals (Weisbrod, 1988). Furthermore, these organizations provided American elders with all sorts of civic activities such as recreational activities, social connectedness, volunteering, community services, encore work, cultural activities, lifelong learning, and political advocacy, from which American elders benefited physically, mentally, and socially. Obviously, such findings are consistent with the previous studies on American elders volunteerism (Carlton-LaNey, 2006-2007; Githens, 2007; Rebok et al., 2004). However, this study included other types of civic activities in addition to volunteerism and reflected the multiple dimensionality of American elders civic engagement.

Based on the factor analyses, the original 31-item OCS was reduced to a 28-item, seven-factor scale. The first three factors were related to the micro-level organizational competencies and thus focused on the provision of client-centered services. The first factor, client discovery with support, included six items relating to the discovery of older participants previous aging experiences, current engagement conditions, and future path towards successful aging. In particular, the discovery of older participants current engagement conditions included engagement difficulties, strength-based difficulty solving, engagement with support (supervision), and maximization of

engagement benefits. The second factor, client-centered planning and management, had four items. Three of the items examined the program staff's abilities to design and organize activities based on older participants' unique needs and previous experiences as well as to address any concerns or issues raised by older participants in a timely manner. These three items reflect a client-centered approach and therefore are closely linked to the second factor. The remaining item regarding the respect for disengaged later lifestyle seems irrelevant to the second factor. But when the concept of respect for diversity is introduced here as an intermediate item, the connection between the remaining item and the second factor becomes evident. As Corey (2011) claims, respect for all forms of diversity, clients values included, is a required quality for client-centered practitioners. In this sense, respect for disengaged later lifestyle indicates the client-centered approach as well. Despite the goal of engaging American elders, organizational practitioners also need to respect disengaged later lifestyles, which helps them better understand and address the diverse needs of older participants. The third factor, client assessment and training, encompassed three items. These three items inquired about the program staff's abilities to conduct the needs and outcome assessments and to offer necessary training for older participants.

The fourth and fifth factors represented the mezzo-level organizational competencies that were primarily concerned with the program staff's abilities to tackle the diversity issues within their programs. The fourth factor, integration of diverse groups, contained four items. Given different demographic characteristics, socio-economic status, and cultural backgrounds, the older population can be divided into demographically, socially, economically, or culturally stratified groups. Hence, it is very important for organizational practitioners to develop relevant competencies and activities to promote understanding and respect for people from such diverse backgrounds (Tang, Morrow-Howell, & Hong, 2009a; Zastrow, 2009). The fourth factor addressed the program staff's development of diversity competency through training and their endeavors to integrate different groups into the same activities to balance diverse needs and promote mutual understanding and benefits. The

fifth factor, promotion of adaptation between groups, had three items that examined how the program staff use their cultural competencies to address conflicts and enhance communications between diverse groups, which may further promote their mutual adaptation. Conflict resolution and shared conversations are thought of as two effective ways to promote mutual adaptation and adjustment between diverse groups (Margerum, 2011).

Last but not least, the sixth and seventh factors addressed macro-level organizational competencies. The sixth factor, integration of resources to address the structural constraints, included five items. Interestingly, these five items together reflected a process for addressing structural constraints. In an ideal situation, the program staff first are expected to investigate the structural barriers facing American elders, help their older participants learn about these structural constraints, and then empower older participants to overcome these barriers and constraints. Further, in order to remove the structural obstacles to civic engagement for potential participants, the program staff need to integrate the available resources like mass media and other organizations to disseminate their engagement opportunities. Hence, the sixth factor examined to what extent the program staff achieved this ideal situation. The seventh factor, promotion of social recognition and social justice, contained three items. It evaluated the program staff's abilities to achieve two types of social outcomes: one stressed the social contributions made by older participants and the other focused on the creation of equal and inclusive opportunities for all American elders. To sum up, the seven factors generated from the factor analyses were meaningful and could explain the organizational competencies at three different levels. Further, the results of the reliability tests and hierarchical regression supported that the modified OCS was a reliable and valid scale and could be applied to predict the outcomes of elder civic engagement programs.

Implications for Formal Organizations

Previous studies that use an institutional capacity approach mainly explore the organizational-level

competencies (Morrow-Howell & Greenfield, 2012; Sherraden et al., 2001; Tang et al., 2009b) and thus lack a holistic, multilevel competency perspective. This pilot study developed the OCS to measure the organizational competencies at three different levels, which adds to the existing literature. The OCS can be a useful tool to enhance the effectiveness of organizational practices aimed at increasing American elders participation in civic activities. On the one hand, formal organizations can use the OCS as an assessment tool to evaluate their own abilities to engage American elders. The OCS cannot only help them capture the overall competencies but also help them take a closer look at the competencies at three different levels. Based on the assessment results, formal organizations are able to identify their strengths and areas for improvement. As such, they can further find a clear direction for developing their competencies and enhancing their performance. For example, if an organization got high scores on the mezzo- and macro-level competency subscales but a low score on the micro-level competency subscale, it implied that this organization might need to spend more time with its older participants, to discover their needs, experiences, strengths, and difficulties, to create a good fit between participants and its program, and finally to maximize the engagement benefits of participants.

On the other hand, the OCS can serve as a quick-start guide for the organizational practices related to American elders civic engagement. As indicated above, the OCS score was a significant predictor of the outcomes of elder civic engagement programs. Therefore, it is very important for formal organizations to increase the OCS scores to achieve better program outcomes. One of the effective ways to help them get high OCS scores is to directly use the OCS as practice guidelines. A unique feature of the OCS is that it covers organizational practices at three different levels. At the micro-level, it basically requires practitioners to take a client-centered approach as well as a strengths perspective when working with older participants. At the mezzo-level, it focuses on the integration of diversity into group work so as to address the different demands of diverse groups within the older population and

then to enhance more open exchanges between different groups, especially between the disadvantaged and the advantaged. At the macro-level, it requires practitioners to clearly understand the structural constraints that limit American elders' civic engagement, to actively advocate for more opportunities and resources, and to effectively integrate available resources to achieve their program goals.

Implications for Social Work

Social work profession has long been concerned with the well-being of vulnerable populations such as children, women, and elders. Hence, it is not surprising that social workers pay particular attention to American elders' civic engagement, which has been proven beneficial for the physical, mental, and social well-being of older adults (Brown et al., 2011; Li & Ferraro, 2006; Van Willigen, 2000). By actively participating in civic activities, American elders can help address urgent human needs and promote social development, which is consistent with the objectives of social work as well. There is little doubt that social workers have an important role to play in increasing American elders' participation in civic activities. Anderson and Dabelko-Schoeny (2010) specifically call for the involvement of social workers in developing, implementing, and evaluating interventions that expand civic engagement opportunities for older adults, especially for disadvantaged elders. As a response to such call, the article can contribute to the social work knowledge base that informs the organizational practices aimed at promoting older adults civic engagement.

By developing and validating the OCS, this article supports the use of the OCS as a reliable and valid tool to facilitate social workers development of multilevel competencies. As guided by the OCS, social workers may need to focus on the exploration and discovery of older participants at the micro level. They should be able not only to identify older participants needs, difficulties, strengths, and choices related to civic engagement but also to empower older participants to recognize their capabilities, talents, and potential to contribute to society. At the mezzo level, social workers may need to develop diversity and

cultural competence to effectively serve older participants from diverse backgrounds. More importantly, social workers should help achieve mutual understanding, adaptation, and benefits between diverse groups, especially between advantaged and disadvantaged elders. As Hugman (2013) states, embracing diversity is not only an intrinsic requirement of social work profession but also a foundation of decent life for all human beings. Consequently, social workers should be devoted to fostering respect for diversity between different groups through shared engagement experiences (e.g., purposively assigning older participants from diverse backgrounds to the same activity group). At the macro level, social workers need to understand the socio-economic political constraints that limit older adults access to civic engagement, to remove whatever excludes older adults from civic engagement programs, and to seek equal opportunities for all older adults regardless of any physical, mental, and economic limitations. By developing multilevel competencies, social workers can play various roles in increasing older adults civic engagement such as therapists, program designers, developers, and evaluators, case managers, and policy advocates, to name a few (Anderson & Dabelko-Schoeny, 2010). In conclusion, this study lay the groundwork for the research-informed, evidence-based social work practice, help enhance the effectiveness of social work interventions aimed at increasing American elders civic engagement, and finally contribute to the promotion of older adults well-being.

Limitations of this Study and Future Research

There are at least three limitations of this study. First of all, the sample size of this study was acceptable but still small for factor analysis, which may threaten the correct estimation of the factor structure. Also, with small samples, the resulting factor structure could be unstable and needs to be further cross-validated. Secondly, the response rate for this study was only 21%, which may limit the generalizability of the findings. During the data collection, two kinds of incentives were used to increase the response rate, that is, a 1: 10 chance to win a \$20 gift card and provision of a summary of survey results. However,

these incentives seemed not attractive enough to potential participants and only one participant was enrolled in the monetary raffle. Two possible reasons may explain why potential participants were reluctant to take part in the survey: (1) the questionnaire contained a total of 51 items, which may be too long for potential participants; and (2) the chance of winning the \$20 gift card was not high. Thirdly, although the exploratory factor analysis was able to generate the overall factor structure of the OCS, it did not allow for a detailed specification of the relationships between observed variables and latent factors and for an accurate evaluation of the fit between the factor model and the observed data.

In order to overcome the above drawbacks, additional research is needed. Although there is no consistent rule about the adequacy of sample size for factor analysis, a larger sample size usually generates a more stable factor structure. As a result, more participants need to be recruited by improving the response rate and by extending the pilot study to other states or even the whole nation. Several strategies may be used to improve the response rate such as increasing the chance to win a gift card, reducing the length of the questionnaire, and using the current participants to recruit potential ones. In addition, a confirmatory factor analysis with a larger sample is needed to further test the stability of the seven-factor OCS and evaluate the overall fit of the structural model. To sum up, the further development, validation, and application of the OCS will provide more robust evidence to help formal organizations evaluate and enhance their competencies to better accommodate and engage American elders. As both a research kit and a practical tool, the OCS cannot only inform the development of formal organizations but also enable American elders to contribute to society through structured programs.

Conclusion

From a holistic organizational competency perspective, this pilot study developed and validated the OCS, which comprehensively measures the organizational competencies at the micro, mezzo, and macro levels. The factor analyses resulted in a 28-item, seven-factor scale, which can be used

as reliable and valid tool to inform and support the development of organizational competency to effectively engage American elders. In order to further confirm the factor structure and generalize the findings, more repetitive studies are needed that may involve more types of organizational settings and civic activities.

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