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Empowerment and Sense of Community: Clarifying Their Relationship in Community Organizations

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The research reported here tested the factor structure of a measure for sense of community in community organizations, and it evaluated sense of community's potential as an empowering organizational characteristic within an organizational empowerment framework. Randomly selected community organization participants ($N = 561$) were surveyed as part of a study of a substance abuse prevention initiative located in the northeastern United States. Confirmatory factor analysis verified the putative structure of the sense of community measure tailored to community organizations. Hierarchical regression analyses indicated that community organization sense of community significantly predicted intrapersonal empowerment after controlling for demographics, participation, alienation, and other empowering organizational characteristic. Findings imply that organizational sense of community should be considered as an empowering organizational characteristic in community-based health education.

Keywords: *empowerment; sense of community; community; community organizations*

Empowerment occupies a central position in community-based health education efforts (Holden, Evans, Hinnant, & Messeri, 2005; Zimmerman, 2000), and recently a conceptual framework of organizational empowerment (OE) was developed (Peterson & Zimmerman, 2004). Although they hypothesized how components of the OE model might be elaborated or interrelated, research has just begun to empirically explore many of these possibilities (Griffith et al., 2005; LeRoy, Benet, Mason, Austin, & Mills, 2004). Within the OE framework, this article evaluates adding community organization

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sense of community as an empowering organizational characteristic. As a necessary preliminary step, we test the hypothesized factor structure of a sense of community measure designed for community organizations. Contrasted with psychological empowerment (PE), OE refers to organizational efforts that generate PE among organization participants as well as organizational effectiveness needed for goal achievement (Peterson & Zimmerman, 2004). Understanding the relationship between sense of community and empowerment would seem to be important, but surprisingly few studies have empirically considered their relationship in any detail (Itzhaky & York, 2003; Peterson & Reid, 2003; Speer, Jackson, & Peterson, 2001), and no study to date has shown how organizational sense of community is related to OE processes and PE.

Although it is generally held that citizen participation in community organizations is a crucial route to increasing capacity for confronting the diversity of challenges to a community's health (Singer & Kegler, 2004), much remains to be learned about how to tailor internal organizational functioning of community organizations to catalyze individual development and system change (Altman & Feighery, 2004; Miller & Shinn, 2005). With respect to community organizations, empowering organizational processes and sense of community are variables pointed to as worthy of study (Maton & Salem, 1995; Peterson, Lowe, Aquilino, & Schneider, 2005), but they are not often studied in concert with one another, and important measurement issues remain to be resolved for sense of community (Long & Perkins, 2003). A review by Boyd and Angelique (2002) pointed to the sparseness of research on sense of community within organizations, noting that the principal setting for study of sense of community in organizations was the workplace rather than community organizations. They also concluded that joint consideration of empowerment and sense of community among participants in broad-based community organizations would increase understanding of both constructs. In a qualitative study, Hughey and Speer (2002) illustrated how organizational sense of community was related to empowerment and power. Although some research on empowerment (e.g., Maton & Salem, 1995; Peterson & Speer, 2000) suggests that sense of community is an element of social support and it is implicitly included as such in the OE framework, this study evaluates it as an additional and distinct empowering organizational characteristic. The present study tests a measure of sense of community for community organizations, and it explores how organizational sense of community might be included as an empowering organizational characteristic within the OE framework.

Shown in Figure 1 is the conceptual model for our study. It shows how organizational sense of community may relate to other empowering organizational process and to empowerment. Included in the lower portion of the study model are the three putative components of the Community Organization Sense of Community (COSOC) instrument that we test (Hughey, Speer, & Peterson, 1999): (1) relationship to organization, (2) organization as mediator, and (3) bond to the community. Component 1, relationship to organization, includes items that measure interpersonal bonding within the organization. This is customary for sense of community measures (e.g., Obst & White, 2004), but this dimension adds perceptions of an organization's engagement with the community. Particularly relevant to community organizations, Component 2 refers to the extent to which a community organization serves as a bridge or mediating mechanism to other groups and the broader community. Together, Components 1 and 2 tap issues of balancing internal organizational dynamics and relations with external groups (Salem, Foster-Fishman, & Goodkind, 2002) that were recently highlighted in a study of a range of health promotion efforts (Cheadle, Senter, Solomon, Beery, & Schwartz, 2005). Component 3 references individual attachment to city or town. Hughey et al. (1999) presented evidence of construct validity for the COSOC that was compatible

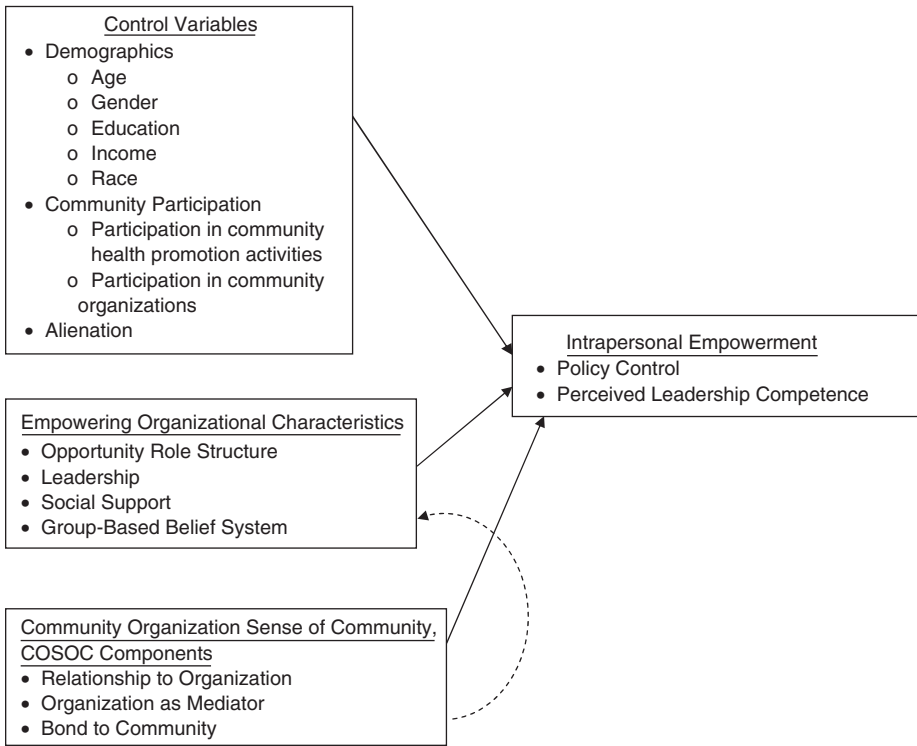


Figure 1. Conceptual model for the study.

with this conceptual structure as well as good subscale reliabilities. However, in the development of the COSOC they employed inappropriate exploratory factor analysis. Prior to analyzing interrelationships between organizational sense of community, organizational empowerment processes, and empowerment in a sample of community organization participants, this study will test the fit of the COSOC's model to our data using the preferred confirmatory factor analysis (CFA). From these findings, we turn to relationships between sense of community, empowering organizational processes, and PE.

The Present Study

The purposes of this study are twofold: (a) to (dis)confirm the factor structure of the COSOC and (b) to describe organizational sense of community's contribution to the intrapersonal component of PE. The predominant use of exploratory factor analysis has been criticized as inappropriate for determining the fit of measurement findings with putative conceptual structures, including number of factors (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Instead, Fabrigar et al. (1999) recommended confirmatory factor analysis as the correct method of analysis. In the sense of community measurement literature, a widely referenced conjecture about the structure of sense of community (McMillan & Chavis, 1986) holds that it is a multidimensional four-factor construct. However, empirical attempts to test for multidimensionality using exploratory

factor analysis often fail and point instead to sense of community as a unidimensional construct (Long & Perkins, 2003). Moreover, studies using the more appropriate CFA procedure to examine the measure (Long & Perkins, 2003; Obst & White, 2004; Peterson, Speer, & Hughey, 2006) failed to confirm the hypothesized four-factor solution, and each suggested revisions to items or concepts to correct discrepancies.

Guided by our study's model in Figure 1, we examine relationships between intrapersonal empowerment, organizational sense of community (using the COSOC), empowering organizational processes, and several control variables. Based on previous research (Hughey et al., 1999; Itzahky & York, 2003; Speer et al., 2001), we expected organizational sense of community to predict intrapersonal empowerment after controlling for other variables that have previously been empirically related to empowerment, such as demographics, participation, and alienation (e.g., Holden, Crankshaw, Nimsch, Hinnant, & Hund, 2004), and other empowering organizational characteristics (Maton & Salem, 1995). To supplement our test of the COSOC's construct validity, we expected moderate, positive correlations with community participation and a negative correlation with alienation.

METHOD

Participants

Participants in this study included 561 randomly selected community residents located in the northeastern United States. These participants were part of a larger study that surveyed community residents as part of an evaluation of a substance abuse prevention initiative. A total of 661 residents participated in the larger survey (response rate = 59%). Of the 661 survey participants, a total of 561 completed all COSOC items and were included in our analysis. Because this study tested the factor structure of the COSOC, we included only those cases with complete data, consistent with previous studies using CFA to test measures of sense of community (Long & Perkins, 2003; Peterson et al., 2006). Of this remaining sample, 57% ($n = 561$) were women. Racially and ethnically, the sample was 56% White, 22% Hispanic, 13% African American, and 9% Asian. Of the participants, 14% were age 18 to 24, 49% were 25 to 44, 23% were 45 to 64, and 14% were age 65 or older. In addition, 34% reported annual income of less than \$30,000, 16% reported income between \$30,000 and \$39,999, and 50% reported income of \$40,000 or more. Educationally, 6% had less than high school, 30% had completed high school, 23% had some college, 25% had a college degree, and 16% had a graduate degree.

Measures

Community Organization Sense of Community. The measure of sense of community was the 11-item COSOC (Hughey et al., 1999). Items are shown in Table 1. Based on the Hughey et al. (1999) conceptual structure, the COSOC measure employed multiple referents in the same measure. Items herein used represented the three components: (1) relationship to organization, (2) organization as mediator, and (3) bond to community. The first component, relationship to organization, referred to participants' bonds with their community organization, reflecting many of the qualities customarily considered

Table 1. Community Organization Sense of Community (COSOC) Items

Item	Item Wording
COSOC 1	Everyone in the community organization is pushing in different directions.
COSOC 2	No one in the community organization responds to what I think is important
COSOC 3	Most members of the community organization forget the meaning of brotherhood/sisterhood when they get out of the meetings.
COSOC 4	The community organization gets overlooked in this city.
COSOC 5	The community organization gets very little done in this community.
COSOC 6	Because of the community organization, I am connected to other groups in this city.
COSOC 7	The community organization helps me to be around important people.
COSOC 8	The community organization helps me to be a part of other groups in this city.
COSOC 9	I would really live in a different town, this city is just not the place for me.
COSOC 10	This city is a good place for me to live.
COSOC 11	Living in this city gives me a sense of community.

sense of community (Long & Perkins, 2003). Importantly, this factor also included perceptions of extraorganization engagement. The second component, organization as mediator, was designed to tap perceptions of the mediating feature of community organizations (Berger & Neuhaus, 1977), the potential for community organizations to take individual concerns as part of organized effort into relationship with other organizations, settings, and institutions. This mediating characteristic of community organizations has the potential to address what Sarason (1993) referred to as transcendence, "a belief that one is part of a larger scheme of things" (p. 188). The third component, bond to community, resembled other measures of sense of community and referenced participants' relationship to place, town, or city. Cronbach's alphas were .75, .76, and .80 for the relationship to organization ($M = 3.39$, $SD = 0.92$), organization as mediator ($M = 3.18$, $SD = 1.12$), and bond to community ($M = 2.81$, $SD = 0.94$) subscales, respectively.

Empowering Organizational Characteristics. Two self-report measures were used to assess perceptions of four empowering organizational characteristics as shown in the OE framework (Peterson & Zimmerman, 2004): (a) leadership, (b) opportunity role structure, (c) social support, and (d) group-based belief system. The two measures were the Organizational Characteristics Scale (Maton, 1988) and Quinn and Spreitzer's Competing Values Model of Organizational Culture Scale (Quinn & Spreitzer, 1991). The Organizational Characteristics Scale (Maton, 1988) used a 5-point Likert-type scale to measure perceptions of organizational characteristics in community-based organizations. Three organizational characteristics were measured with this scale: (a) leadership, (b) opportunity role structure, and (c) social support. Leadership referred to the extent to which individuals with formal or informal responsibility within a group were interpersonally and organizationally talented, dedicated to the organization, or responding well to the group. Typical of the five items in the scale is "The group leadership is very talented as far as group operations are concerned." Opportunity role structure concerned to the extent to which members were encouraged to assume a variety of formal roles within an organization. Typical of the five items in the scale for opportunity role structure is "Positions of responsibility are spread among members of the group." Social support involved the degree to which organizational members provide and receive emotional and other types of support.

Typical of the five items from the scale used in this study is "I receive as much support and help as I presently desire from the group." Cronbach's alphas for the present study were .81, .73, and .76 for the leadership ($M = 3.62$, $SD = .92$), opportunity role structure ($M = 4.04$, $SD = .81$), and social support ($M = 3.82$, $SD = .88$) scales, respectively. Quinn and Spreitzer's Competing Values Model of Organizational Culture Scale (Quinn & Spreitzer, 1991) was used with a 5-point Likert-type scale to measure the group-based belief system of organizations. Group-based belief system refers to the extent to which an organization's values and culture focus on human relations, teamwork, and cohesion to inspire personal growth and shared vision among members. Typical of the five items for group-based belief system is "There is a focus on human relations, teamwork, and cohesion within the group." Cronbach's alpha was .86 for the group-based belief system scale in this study ($M = 3.82$, $SD = .88$).

Community Participation. To measure participation in community health promotion settings, we used two variables. First, respondents were asked how often they participated in various community organizations, such as health groups, block clubs, issue or service organizations, or faith groups, during the past 3 months ($M = 1.89$, $SD = .80$). The second participation variable, participation in community health promotion activities, consisted of eight items that asked about the frequency of behaviors, such as letters to influence policies, participation in public events, participation in data gathering efforts, public meeting preparations, or meeting attendance, over a 3-month period ($M = 1.69$, $SD = .62$). Respondents answered on a 4-point scale reflecting how often they participated in each organization or activity: 1 = *not at all*, 2 = *at least once*, 3 = *2 to 4 times*, 4 = *5 or more times*.

Alienation. Alienation was included as a measure for assessing divergent validity and was measured using a nine-item abbreviated version of Dean's (1961) scale. Alienation items, based on a 5-point Likert-type scale, were designed to assess feelings of social isolation (e.g., "I don't get to visit friends as often as I would like"), normlessness (e.g., "Ideas change so much that I wonder if we'll ever have anything to depend upon"), and powerlessness (e.g., "Sometimes I have the feeling that other people are using me"). Cronbach's alpha in this study for the alienation scale was .61 ($M = 2.97$, $SD = .73$).

Intrapersonal Empowerment. An abbreviated version of the Sociopolitical Control Scale developed by Zimmerman and colleagues (Zimmerman & Zahniser, 1991) was used to assess the intrapersonal component of PE. Four items measured beliefs about policy control (e.g., "I enjoy political participation because I want to have as much say in running government as possible"). Four items measured perceived leadership competence (e.g., "I can usually organize people to get things done"). The mean of the eight items comprised the overall score. Cronbach's alpha was .68 for the intrapersonal empowerment scale in this study ($M = 3.46$, $SD = .79$).

Procedures

Data were collected as part of a larger study evaluating a community-based substance abuse prevention intervention in the northeastern United States. Using a household telephone directory in electronic format, all residences with phone numbers in the study area were selected as the study population. A simple random sample was then selected. The survey was administered by eight trained surveyors through telephone interviews, typically lasting between 20 and 30 minutes.

RESULTS

The purposes of this study were to test the factor structure of the COSOC and subsequently examine its relative contribution to predicting intrapersonal empowerment for participants in community organizations. Two analyses were performed. First, confirmatory factor analysis was conducted using AMOS 4.01 (Arbuckle & Wothke, 1999) to simultaneously test the first- and second-order structure of the COSOC in which three dimensions (i.e., relationship to organization, organization as mediator, bond to the community) were hypothesized as related to a higher-order factor—organizational sense of community. Second, hierarchical regression analyses were conducted to determine whether the COSOC predicted intrapersonal empowerment after controlling for variables that have been previously shown to influence empowerment—demographics, participation, alienation, and empowering organizational characteristics.

CFA results for the second-order COSOC are shown in Figure 2. According to the goodness-of-fit measures, the second-order factor model fit the data well (Goodness-of-Fit Index = 0.97; Adjusted Goodness-of-Fit Index = .95; Normed Fit Index = .95; Incremental Fit Index = .97; Tucker-Lewis Index = .96; Comparative Fit Index = .97; root mean square error of approximation = .05). The criterion for saliency of loadings was set at .30. All first- and second-order factor loadings were significant at the .05 level. Standardized first-order factor loadings fell between .51 and .89 and were aligned with the COSOC's putative framework. Standardized second-order factor loadings varied between .33 and .47. These results showed that the hypothesized model for the COSOC fit well for the data in our study, indicating that the COSOC's items represented first-order factors that coalesced into a second-order organizational sense of community factor.

Bivariate analyses revealed that the COSOC was significantly correlated with intrapersonal empowerment ($r = .31, p < .01$), participation in community health promotion activities ($r = .26, p < .01$), participation in community organizations ($r = .27, p < .01$), alienation ($r = -.33, p < .01$), and empowering organizational characteristics, namely, opportunity role structure ($r = .51, p < .01$), leadership ($r = .56, p < .01$), social support ($r = .53, p < .01$), and group-based belief system ($r = .45, p < .01$). Results of the hierarchical regression analysis are presented in Table 2. As can be seen in Table 2, the first model, which included demographic variables, predicted 7% of the variance in intrapersonal empowerment. The significant predictors in Model 1 were age ($\beta = -.10, p < .05$), education ($\beta = .16, p < .01$), and income ($\beta = .12, p < .05$). In the second model, inclusion of participation in health promotion activities and participation in community organizations explained an additional 11% of the variability in intrapersonal empowerment. The significant predictors in Model 2 were again age ($\beta = -.13, p < .01$), education ($\beta = .10, p < .05$), and income ($\beta = .10, p < .05$), plus one participation variable ($\beta = .29, p < .01$). The addition of alienation in Model 3 explained another 2% of the variability in empowerment. Alienation was a significant predictor in this model ($\beta = -.16, p < .01$), whereas only age and participation remained significant predictors in this step. Of particular interest, Model 4 included empowering organizational characteristics, and it explained an additional 2% of the variability in empowerment. Opportunity role structure was the only empowering organizational characteristic that was significant in Model 4 ($\beta = .14, p < .05$), whereas age and participation in community health promotion activities remained significant predictors in this step. Finally, Model 5 included the addition of the COSOC. COSOC ($\beta = .19, p < .01$) also explained an additional 2% of the variability in empowerment after controlling for the previously entered variables.

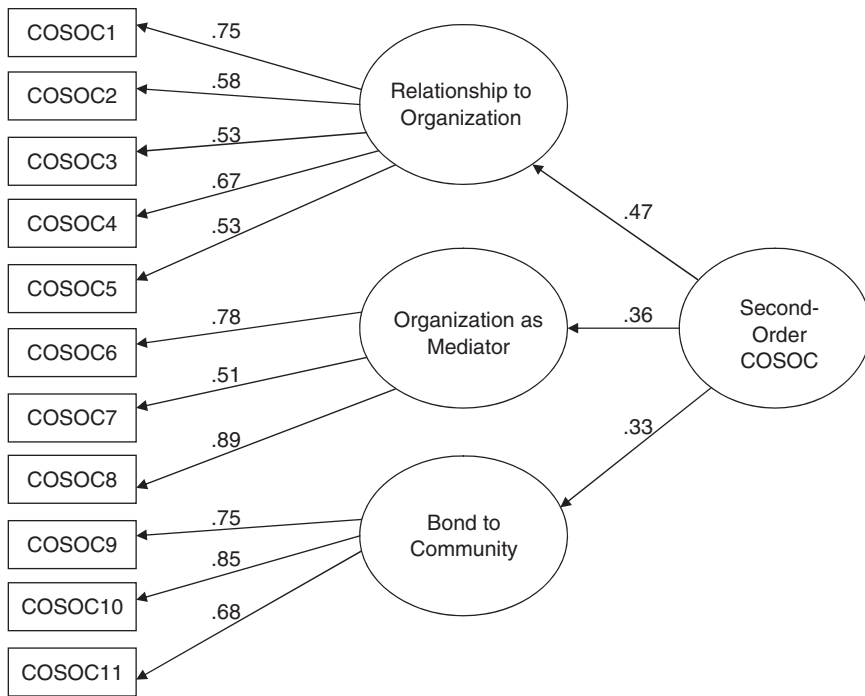


Figure 2. Second-order confirmatory factor analysis of the Community Organization Sense of Community Scale (COSOC).

This final model accounted for 24% of the variability in intrapersonal empowerment, with the significant predictors including age, participation in community health promotion activities, alienation, and COSOC. After the participation variable, the COSOC had the strongest relationship to empowerment.

DISCUSSION

This article confirmed the factor structure of the Community Organization Sense of Community instrument, and it demonstrated sense of community's potential as an empowering organizational characteristic within the OE framework. Results of the study showed that organizational sense of community may be considered an empowering organizational characteristic and therefore a significant catalyst of empowerment. From convergent and divergent construct validity viewpoints, the COSOC was positively correlated, as expected, with intrapersonal empowerment, participation, and the four empowering organizational characteristics and negatively so with alienation. First- and second-order CFA confirms the dimensional structure of the COSOC and that its dimensions are facets of the underlying sense of community construct.

Also consistent with the study's model, hierarchical regression results indicated that the COSOC predicted intrapersonal empowerment after controlling for demographics, participation, alienation, and the empowering organizational characteristics of

Table 2. Hierarchical Regression Analysis of Intrapersonal Empowerment on Demographics, Participation, Alienation, Empowering Organizational Characteristics, and Community Organization Sense of Community (COSOC)

Variables	Model 1 Coefficients (SE)	Model 2 Coefficients (SE)	Model 3 Coefficients (SE)	Model 4 Coefficients (SE)	Model 5 Coefficients (SE)
Demographics					
Age	-.10* (.21)	-.13** (.03)	-.13** (.02)	-.12** (.02)	-.12** (.02)
Gender	-.05 (.07)	-.06 (.07)	-.06 (-.07)	-.06 (.07)	-.07 (.07)
Education	.16** (.03)	.10* (.03)	.08 (.03)	.08 (.03)	.08 (.03)
Income	.12* (.03)	.10* (.03)	.07 (.03)	.06 (.03)	.07 (.03)
Race	-.02 (.08)	-.01 (.08)	-.04 (.07)	-.04 (.07)	-.03 (.07)
Community					
participation					
Participation in community health promotion activities		.29** (.06)	.28** (.06)	.26** (.06)	.24** (.06)
Participation in community organizations		.08 (.05)	.08 (.05)	.06 (.05)	.05 (.04)
Alienation			-.16** (.05)	-.16** (.05)	-.11* (.05)
Empowering					
organizational characteristics					
Opportunity role structure				.14* (.06)	.11 (.06)
Leadership				.02 (.05)	-.02 (.05)
Social support				-.03 (.05)	-.06 (.05)
Group-based belief system				.04 (.06)	.04 (.06)
COSOC					.19** (.07)
R ²	.07	.18	.20	.22	.24
R ² change		.11	.02	.02	.02

* $p < .05$. ** $p < .01$.

opportunity role structure, leadership, social support, and group-based belief system. Community organization sense of community significantly predicted intrapersonal empowerment, and it accounted for as much variance, albeit small, as did the strongest empowering organizational characteristic. With respect to empowerment theory, Maton and Salem (1995) considered sense of community a part of social support, however our data suggest that it may be considered a distinct empowering organizational characteristic. The present findings support inclusion of organization sense of community in the OE framework (Peterson & Zimmerman, 2004).

The COSOC's dimensions suggest how sense of community may contribute to empowerment. Simultaneously integrating activities that enhance interpersonal bonding with those that focus on individual-, organizational-, and community-level relationships beyond the particular community organization may increase empowerment. Moreover, organizations that actively serve as bridges by linking participants to the interplay of institutions in their communities may be more effective in stimulating empowerment.

This may be particularly important when the need arises to navigate tensions between service delivery and advocacy (Cheadle et al., 2005; Salem et al., 2002). Development of organizational sense of community, as herein conceptualized within the OE framework, might provide a way to facilitate empowerment of individuals and organizations as well as improve the weak record of successful dissemination of health promotion programs noted by some (Lasker & Weiss, 2003; Miller & Shinn, 2005).

Our findings have another implication for empowerment theory in that they provide support for the largely untested empowerment construct of ecological commonality (Maton & Salem, 1995). Ecological commonality refers to organizational characteristics that may stimulate empowerment across organizational contexts. In contrast, ecological specificity refers to organizational characteristics uniquely important for empowerment within specific settings. Prior survey research (Peterson & Hughey, 2002; Peterson & Speer, 2000) highlighted ecological specificity in empowerment theory. However, we found support for ecological commonality, showing that organizational sense of community and opportunity role structure predicted intrapersonal empowerment among organizational participants across a diverse array of community organizations. This implies that regardless of a community organization's mission, attention to organizational sense of community and opportunity role structure are likely to be common catalysts for members' intrapersonal empowerment. The present findings reinforce the need to carefully consider sense of community in the design, implementation, and appraisal of health education collaborations, particularly with respect to organizational processes intended to stimulate participation and empowerment.

IMPLICATIONS FOR PRACTICE

The present findings reinforce the importance of targeting the internal milieu of community organizations for promoting participation and empowerment, and they point to features of organizations that might be targeted for attention. One practice health educators might employ is to configure opportunity role structure as multifunctional; that is, encourage rotation of participants through iterative cycles in multiple organizational roles prior to and even in the midst of external action rather than individuals holding fixed positions in organizations. This practice could enable a broader range of participant access to boundary-spanning roles between organizations (Hughey & Speer, 2002). It is conceivable that funders may view intentional investment in such processes as inefficient, but it is our contention that devoting organizational resources to promote sense of community as an empowerment process may produce better long-term outcomes due to increased and sustainable organizational capacity.

These data also suggest that practitioners should intensify efforts to stimulate external action alongside interpersonal solidarity. This taps a vital empowerment dynamic (Speer & Hughey, 1995; Wallerstein & Duran, 2003). In a compelling record of conversations between Paulo Friere and Myles Horton, each focused on both individual experience and external action. Friere illustrated processes for internal change, "We have to invent with the people the ways for them to go beyond their state of thinking" (Bell, Gaventa, & Peters, 1990, p. 98). Horton spoke of his struggle with external action, "I decided long before that I wasn't interested in being good, I was interested in being good for something" (Bell et al., 1990 p. 102).

Accordingly, practitioners might pursue community building opportunities that extend beyond the confines of a particular issue or mission such as tobacco control. From the perspective of community organization as mediator (COSOC Factor 2), a tobacco partnership might increase participant sense of community and thereby catalyze empowerment

by serving as a vehicle for a subgroup of participants to confront a different or interdependent issue of more immediate perceived concern to participants. For instance, teen alcohol consumption or school violence might be pursued in a way that would link participants across community organizations. This would increase the value of the partnership to its participants and their community while setting a deeper foundation for joint action on tobacco control.

LIMITATIONS

Several limitations deserve mention. First, despite our reasonably high response rate, telephone surveys have traditionally been criticized as either biased against those without phones or not reliable with respect to complicated or sensitive issues. Second, the cross-sectional design limits causal interpretations. A third limitation is the study's restricted conception of empowerment, namely, intrapersonal empowerment. Although another empowerment measure of interpersonal empowerment might have generated different findings, the measure used here is frequently used in health education research. Fourth, this study is limited by not measuring organizational sense of community as an organization-level construct, instead tapping individual perceptions of organizational experiences relevant to sense of community. We acknowledge this limitation and recommend that future research attempt to capture organizational-level indicators. Direct observation or archival indicators of empowering organizational characteristics at the organizational level would be desirable and may yield stronger associations or reveal facets of OE not previously considered. Finally, it is important to consider the empirical question of how the COSOC's psychometric properties may be affected by method bias stemming from the mixed use of positively and negatively worded items, which has been suggested in prior research on neighborhood sense of community and intrapersonal empowerment. Despite the verification of the COSOC's structure and confirming validity data, future research might address this issue by testing new positively worded items in a revised COSOC for use in OE studies.

Balancing these limitations are several features of the present study, including probability sampling, a reasonably diverse achieved sample, multiple measures of participation, and the use of a validated and domain-appropriate measure of sense of community. Limitations are also offset by findings consistent with previous research showing relationships between empowerment and community participation (Holden et al., 2004). In addition, the question of how obtained relationships hold true for gender or economic resource categories should be addressed in future studies. Similarly, studies at the organizational level are indicated, provided they achieve sufficient sample sizes and include relevant strata of community organizations. Discovering how best to fashion OE processes in collaborative community-based health education endeavors by testing and further developing empowerment theory will likely generate and sustain broad-based and effective community participation to promote empowerment and change.

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