

Coalition building and functioning

Mobilizing communities for teen pregnancy prevention: Associations between coalition characteristics and perceived accomplishments

Michelle C. Kegler, Dr.P.H., M.P.H.^{a,*}, Clayton W. Williams, M.P.H.^b,
Carol M. Cassell, Ph.D.^c, John Santelli, M.D., M.P.H.^d, Scott R. Kegler, Ph.D.^e,
Susanne B. Montgomery, M.P.H., Ph.D.^f, Mary Lou Bell, M.A., M.B.A.^g,
Yolanda G. Martinez, Ph.D.^h, Jonathan D. Klein, M.D., M.P.H.ⁱ, Peter Mulhall, Ph.D.^j,
Jeffrey A. Will, Ph.D.^k, Vicki Harris Wyatt, Ph.D., L.P.C.^l, Toni L. Felice, Ph.D.^m,
and Sharon C. Hunt, M.A.ⁿ

^aDepartment of Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, Atlanta, Georgia

^bLouisiana Public Health Institute, New Orleans, Louisiana

^cCritical Pathways, Albuquerque, New Mexico

^dApplied Sciences Branch, Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, Georgia

^eOffice of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, Georgia

^fSchool of Public Health, Loma Linda University, Loma Linda, California

^gThe Bell Group, Austin, Texas

^hOffice of Minority Health, Orange County Health Department, Ocoee, Florida

ⁱDepartments of Pediatrics and Community and Preventive Medicine, University of Rochester School of Medicine, Rochester, New York

^jDepartment of Community Health, Center for Prevention Research and Development, Institute of Government and Public Affairs, University of Illinois, Champaign, Illinois

^kDepartment of Sociology, The Florida Center, Center for Community Initiatives, The University of North Florida, Jacksonville, Florida

^lThe Wyatt Group Counseling and Consulting Center, Oklahoma City, Oklahoma

^mDepartment of Applied Research, Family Health Council, Inc., Pittsburgh, Pennsylvania

ⁿInstitute for Human Development, University of Missouri, Kansas City, Missouri

Abstract

Purpose: To describe coalition membership, examine associations between coalition processes and short-term coalition outcomes, and assess the relative contribution of key coalition processes to perceived accomplishments in teen pregnancy prevention coalitions.

Methods: A self-administered survey was distributed to active members of 21 teen pregnancy prevention coalitions in 13 communities. The overall response rate was 67%, with 471 surveys returned. Process measures included staff competence, member influence in decision making, and coalition functioning. Short-term outcome measures included perceived accomplishments, member satisfaction, member participation, and coalition viability.

Results: About 50% of coalition members represented health or teen pregnancy prevention or youth development service organizations, with 13% participating primarily as residents or youth. None of the process measures were associated with coalition viability (defined as active 2 years post-survey). Many bivariate associations between coalition processes and other short-term outcomes were significant at the individual and coalition levels of analysis. In a multivariate random coefficients model, coalition functioning ($p < .001$) and member influence in decision making ($p = .019$) were significantly associated with perceived coalition accomplishments.

Conclusion: Consistent with research on coalitions that have addressed other health issues, good coalition processes were associated with short-term indicators of effectiveness in these teen preg-

*Address correspondence to: Dr. Michelle C. Kegler, Department of Behavioral Sciences and Health Education, Rollins School of Public

Health, Emory University, 1518 Clifton Road NE, Atlanta, GA 30322.
E-mail address: mkegler@sph.emory.edu

nancy prevention coalitions. Coalition processes were not associated with coalition viability 2 years post-survey, however, suggesting that other factors influence coalition survival. © 2005 Society for Adolescent Medicine. All rights reserved.

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The Centers for Disease Control and Prevention (CDC) Division of Reproductive Health established the Community Coalition Partnership Programs for the Prevention of Teen Pregnancy in 1995. CDC awarded cooperative agreements to 13 communities, each with a population of 200,000 or more, a teen birth rate 1.5 times higher than the national average, and an established lead agency and coalition that had demonstrated readiness to address the causes of teen pregnancy. Similar to many federally funded prevention initiatives in the 1990s, CDC's funded communities were required to use a coalition approach. Coalitions have considerable appeal to funders, community researchers, and practitioners committed to solving complex public health issues such as teen pregnancy. Coalitions are grounded in principles of participatory democracy and have the potential to engage residents in community life [1–3]. Active community involvement is believed to increase the likelihood that interventions will meet genuine community needs, be culturally appropriate, and facilitate local ownership, thereby increasing the likelihood of institutionalizing the coalition and its programs [4–7].

Pooling social and material resources to achieve a common goal that members could not achieve independently is a defining characteristic of a coalition [8,9]. Lasker and colleagues describe partnership synergy as the mechanism through which collaborative approaches such as coalitions gain advantage over more traditional single organization efforts [10]. They and others argue that synergy created by pooling the knowledge, skills, perspectives, and other resources of diverse members leads to more creative solutions and more comprehensive and integrated programs [3,10–12]. Other commonly accepted benefits of coalitions include the potential to involve community members in new and often broader issues without the burden of sole responsibility, to mobilize individuals and groups for collective action, to build constituencies for particular issues, to change community norms and social environments, to share costs and risks associated with tackling community problems, and to minimize duplication and facilitate coordinated action [8,13–17].

By creating a mechanism through which residents and organization and group representatives can work together to address problems, coalitions also potentially enhance community capacity. Coalitions can create new leaders, expand social and organizational networks, add to knowledge and skills, and enhance a sense of community [12,18,19]. These areas are key components of a com-

munity's capacity to "identify, mobilize and address social and public health problems," and each is an important outcome of coalition-based initiatives [18].

Much of the research on coalitions examines dimensions of coalition functioning (communication, decision-making, staffing, leadership, organizational climate) and short-term and intermediate indicators of effectiveness such as member participation and satisfaction, action plan quality, and implementation [12,20–26]. Collectively, these studies show that coalitions with more frequent and productive communication, greater member influence in decision-making, more skilled staff and leadership, and positive organizational climates have higher levels of member participation and satisfaction. Action plan quality appears more related to staffing and leadership than do other dimensions of coalition functioning [21–24]. Communication, organizational structure and climate, staff time, and resource mobilization were correlated with implementation in one of the few studies that used implementation as an indicator of effectiveness [24].

Although evidence has steadily accumulated over the past decade that supports associations between coalition functioning and short-term outcomes, no such evidence has demonstrated coalition effectiveness in achieving health or social outcomes. Two recent literature reviews documented only modest evidence of positive outcomes associated with collaborative partnerships, including coalitions [27,28]. Since then, another major and well-funded coalition-based effort, the Robert Wood Johnson Foundation Fighting Back initiative against substance abuse, reported disappointing results [29]. Kreuter et al and others offer several explanations for the lack of evidence linking collaborative efforts to longer-term outcomes [28]. First are the well-documented difficulties associated with evaluating any community-based health promotion initiative, including secular trends in key outcomes, complex models of action in which coalitions are typically only one component, small sample size when the unit of analysis is the community, and constantly changing community environments [28,30–34]. Second, Kreuter et al speculate that collaborative mechanisms may not be suited to planning and implementing prevention strategies [28]. Hallfors et al and Florin et al found that public awareness efforts were the most common activities in coalitions they studied [29,35]. Although awareness activities may be an appropriate first step for some communities, they alone are unlikely to lead to

Table 1
Description of teen pregnancy prevention coalitions by community

Community and coalition	Number of coalition members	Response rate	Type of coalition	Percent of members involved < 1 year
Chicago, IL				
A	7	57.1	Community-wide	0
B	22	63.6	Community-wide	15.4
C	15	20.0	Community-wide	33.3
Jacksonville, FL	84	60.7	Community-wide	22.9
Kansas City, MO				
A	19	78.9	Community-wide	26.7
B	8	100.0	Steering committee	62.5
Milwaukee, WI	87	43.7	Community-wide	26.7
Oklahoma City, OK	53	84.9	Network of partners	7.5
Orlando, FL	36	91.7	Community-wide	9.1
Philadelphia, PA				
A	35	51.4	Neighborhood	35.7
B	55	36.4	Neighborhood	20.0
Pittsburgh, PA				
A	45	62.2	Community-wide	40.0
B	14	100.0	Teen advisory group	85.7
Rochester, NY	59	78.0	Community-wide	22.2
San Antonio, TX	60	85.0	Community-wide	22.0
San Bernardino, CA				
A	16	87.5	Community-wide	42.9
B	50	76.0	Neighborhood	33.3
C	31	71.0	Community-wide	47.6
Yakima, WA	11	81.8	Community-wide	0
Total	707	66.6		26.6

significant changes in health status. Third, coalition-based projects often have limited time and resources. Changes in health outcomes may be an unrealistic expectation for a three- to five-year intervention [1,25,27,28].

Evaluating the impact of teen pregnancy prevention coalitions is no easier. Although birth rates declined over the last decade, it is virtually impossible to detect, much less attribute, contributions made by the 13 coalition-based teen pregnancy prevention programs [36]. The purpose of the Community Coalition Partnership Programs for the Prevention of Teen Pregnancy was to demonstrate that community partners could mobilize and organize community resources in support of comprehensive, effective, and sustainable programs to prevent initial and repeat pregnancies. Over time, the coalitions adopted a youth development approach; activities primarily involved creating supportive environments to reduce adolescent risk behaviors that lead to pregnancy and related problems. One purpose of this paper is to assess whether communities can mobilize and organize teen pregnancy prevention resources using a coalition approach. Additional goals include examining whether patterns among coalition processes and short-term coalition outcomes observed in other coalition studies also exist in teen pregnancy prevention coalitions, and assessing the relative contributions of key coalition processes to perceived accomplishments of the coalitions.

Methods

Study participants

The study population consisted of all teen pregnancy prevention coalition members from each of 13 CDC-funded communities—Boston, Chicago, Jacksonville, Kansas City, Milwaukee, Oklahoma City, Orlando, Philadelphia, Pittsburgh, Rochester, San Antonio, San Bernardino, and Yakima. A total of 21 coalitions were reported in the 13 community sites. Boston, with two initial coalitions, did not have an active coalition in the 12 months prior to survey administration and was excluded from the analysis. Most communities had community-wide coalitions; many had at some time also had one or more neighborhood coalitions (Table 1). Coalitions were guided by local CDC-funded program staff who were housed by a hub agency that functioned as the program's institutional home. Each site's director and lead evaluator defined coalition membership based on the unique structure of that community's program. Although the term coalition is applied to all the groups for the purpose of this article, at the local level they were also referred to as steering committees and networks of partners. All study participants identified themselves as active members of their community teen pregnancy prevention initiatives and had participated in coalition activities within the 12 months prior to survey administration.

Local evaluation staff conducted the surveys. Surveys

were distributed to 707 members across the communities, and 471 individuals returned completed surveys. The overall response rate was 67%. Thirty-eight respondents who reported that they had not participated in coalition activities in the 12 months prior to survey administration were excluded from the analysis. Response rates varied significantly by coalition, ranging from 20% to 100% (Table 1). Three coalitions with response rates of less than 50% were excluded from selected analyses, as described below.

Study procedures

The questionnaire was designed by a workgroup composed of evaluators from the CDC-funded community sites, CDC consultants, and CDC staff. Communities were given the opportunity to add or remove certain questions; however, a core set of questions was retained to facilitate cross-site analysis. The protocol was approved by the CDC Human Subjects Office and determined to be exempt from Institutional Review Board review.

Questionnaires were printed and distributed to local evaluation staff for distribution to coalition members in November 2000. The questionnaires were distributed by mail or at coalition meetings and returned directly to local evaluation staff in December 2000 and January 2001. Respondents were assigned unique identification numbers and only local evaluation staff members could connect the numbers with respondent names. Follow-up procedures for nonrespondents differed slightly from site to site; the majority of local evaluators made contact at least three times after the initial mailing via telephone, reminder postcards, additional mailings, or a combination of methods. Once follow-up measures were completed, questionnaires were sent to a CDC contractor for coding and entry into a cross-site database.

Measures

Although the coalition member survey varied slightly by community, it consisted of 18 core questions used to create variables for the cross-site analyses. Specific items were adapted from survey instruments used in similar coalition research and scales were constructed to measure many of the constructs [20,22,24]. In addition to excluding from scale construction the three coalitions whose response rates were less than 50% (Chicago C, Milwaukee, Philadelphia B), one coalition was excluded because it had fewer than five respondents (Chicago A), and two more were excluded because too few of the returned surveys contained data patterns complete enough to support the statistical analyses described in the Analysis section (Pittsburgh B, Yakima). For the remaining 13 coalitions, individual items were examined for completeness; any item that was missing for more than 20% of respondents was excluded from the construction of scales. For any particular scale, individual respondents were assigned scores for that scale only if they provided definitive answers for at least 70% of the scale

items. When an individual's response pattern satisfied this criterion, any missing item responses were imputed by substituting the coalition average for that item. Scales scores were then calculated by summing item responses as described below.

Short-term coalition outcomes (dependent variables).

Perceived accomplishments. Coalition accomplishments were assessed by asking respondents to evaluate the extent to which nine possible accomplishments were achieved. Possible accomplishments included seeking support for coalition programs and services from community leaders, contributing to successful youth development and teen pregnancy prevention strategies in the community, increasing cooperation among agencies and organizations involved in youth development, and raising enough funds to initiate and ensure the continuation of its programs. Response options ranged from 4 = a great deal to 1 = not at all. Two items were missing responses for more than 20% of respondents and were excluded from the accomplishments scale. Thus, seven items were summed to form a measure of perceived accomplishments with a Cronbach's alpha of .90.

Member participation in the coalition. Respondents were given a list of 11 possible coalition roles and asked to indicate whether they had served in each role during the past 12 months. Roles included planning coalition meetings or activities, attending meetings, training other coalition members, organizing community activities and programs, helping raise funds, sharing data or preparing media or marketing materials, and working directly with youth. The number of roles/activities was summed for each respondent.

Satisfaction with planning process. Member satisfaction was assessed with one question that asked respondents to indicate how satisfied they were with the coalition planning process. The item consisted of a 4-point Likert-type scale with 1 = not at all satisfied and 4 = extremely satisfied.

Coalition viability. The viability of each coalition was based on whether it was still active in 2003 (two years post-survey). CDC staff, local evaluators, and project directors provided this information. Coalitions that had maintained structure and focus, evolved into new structures, taken on new issues, or reduced activity levels but were still active were considered viable. Each coalition scored 1 for active in 2003 and 0 for inactive in 2003.

Coalition processes (independent variables).

Coalition functioning. Respondents were asked to indicate how much they agreed or disagreed with 10 statements about coalition functioning. Topics included working relationships, good communication, realistic plans given resources, strong emphasis on accomplishing work within specific time periods, clearly defined roles, and several other dimensions of coalition functioning. Response options

ranged from 4 = strongly agree to 1 = strongly disagree. Items were summed to create a coalition functioning score with a Cronbach's alpha of .86.

Hub agency/staff competence. Respondents were asked to indicate how much they agreed or disagreed with 10 statements related to hub agency staff. Statements covered experience levels in teen pregnancy prevention and youth development, and whether staff informed the coalition of goals and objectives, provided enough information about coalition activities, shared results of a needs and assets assessment, helped members plan and implement activities, helped partners find resources needed to implement programs, and several other functions. Response options ranged from 4 = strongly agree to 1 = strongly disagree. Items were summed to create a hub agency staff competence score with a Cronbach's alpha of .92.

Member influence in decision-making. Decision-making influence was measured by summing eight items that assessed how much influence a member had on coalition decisions such as setting goals and objectives, selecting or designing programs, and setting activity budgets. Each item consisted of a 4-point Likert-type scale with 4 = a lot of influence and 1 = no influence. Cronbach's alpha for this measure was .93.

Descriptive variables.

Demographics. Demographic variables assessed in the survey included gender, age, and race/ethnicity.

Type of involvement. Respondents were asked how long they had been involved with the coalition and whether they participated as neighborhood residents or concerned youth or adults, or as representatives of particular groups or organizations.

Sector representation. Those who reported representing groups or organizations were asked to indicate the types of organizations they represented from a list of 13 options. Examples included business community, local government, service agency involved with teen pregnancy prevention or youth development, health organization, religious organization, and media/communications organization.

Benefits and difficulties associated with involvement. Benefits were assessed by asking respondents to indicate how much they valued each of 11 possible benefits, using a 4-point scale in which 4 = very much a benefit and 1 = not at all a benefit. Example benefits included learning new skills, getting to know other organizations or people involved in teen pregnancy prevention, gaining personal recognition and respect from others, and improving the lives of people in the community. Difficulties were assessed by asking respondents to describe how much they currently experienced each of nine potential difficulties, with response options ranging from 1 = not at all a difficulty to 4

= very much a difficulty. Example difficulties included takes too much personal time, feel unwelcome in a committee or working group, conflicts with the mission of my organization or group, and the coalition is not fully using my skills.

Analysis

Demographic characteristics and items comprising perceived benefits and difficulties associated with involvement, perceived accomplishments, member satisfaction, and member participation were examined descriptively using SAS software (Version 8.2, SAS Institute, Cary, NC) for the 16 coalitions whose response rates were greater than 50%. Bivariate and multivariate analyses were conducted with the 13 coalitions for which scales were constructed. Bivariate relationships between coalition viability (active or inactive in 2003) and all process and short-term outcome variables were evaluated using the rank sum test [37]. To examine bivariate relationships between coalition process variables and the remaining short-term coalition outcomes, correlations were calculated at the individual and coalition levels. Analysis of correlations at the coalition level was completed because coalition members share similar experiences, structures, and processes, thereby contributing to possible intraclass correlations within coalitions. Aggregating individual-level responses, however, brings to mind the usual cautions associated with the "ecological fallacy," thus motivating examination of correlations based on individual responses. The ecological fallacy is characterized by aggregated data implying correlations stronger than those that actually exist at the individual level [38]. The correlations also provided useful information for selecting an appropriate set of predictors for the multivariate phase of analysis.

To investigate the combined influence of coalition process variables on the accomplishment scale, we used PROC MIXED in SAS to fit random coefficient multiple regression models to the study data [39,40]. In this type of mixed model, the influence of each coalition is treated as a random effect at one level, whereas item responses are measured at a lower (individual) level. To be conservative, statistical tests of significance employ the coalition as the primary unit of analysis. This approach allows simultaneous recognition of underlying relationships (fixed effects) and unique traits affecting outcomes at both individual and coalition levels (random effects). For the mixed-model approach to be statistically valid, random coefficients as well as residuals associated with individual responses should be normally (or near-normally) distributed. Conformity to this assumption was evaluated by applying formal statistical tests and visual diagnostic methods (normal Q-Q plots) to estimated random coefficients and individual residuals [41].

Results

Coalition descriptions

Table 1 lists each coalition by community, along with its size and response rate. Three coalitions had a clear neighborhood focus and 13 coalitions were community-wide, with some focusing efforts in central city areas. Other collaborative arrangements included a steering committee, a network of partners, and a teen advisory group. Each coalition's percentage of new members varied significantly, ranging from 85.7% of members involved for less than 1 year in Pittsburgh B (teen advisory group) to 0% in Chicago A and Yakima. On average, 26.6% of survey respondents were relatively new (less than one year) members. Fewer than half ($n = 9$) of the coalitions were still active in 2003, including six of the 13 community-wide coalitions and one of the three neighborhood coalitions.

Member characteristics across all coalitions and by coalition type are presented in Table 2. The majority of members were women (74.6%). In terms of race/ethnicity, African Americans (37.0%) and Caucasians (42.7%) were well represented, with lower percentages of Hispanics (14.6%), American Indians (1%), and Asians/Pacific Islanders (1.6%). About a third of members lived in neighborhoods served by the coalition and only 12.8% participated primarily as residents or youth. Organizational representatives dominated the membership, with most members representing teen pregnancy prevention/youth development service organizations (27%) or health organizations (20%). Several community sectors were poorly represented, constituting less than 5% of members: business, college or university, religious organization, parent organization, voluntary community organization, recreation/sports, juvenile justice, and media/communications.

Benefits and difficulties associated with involvement

Benefits associated with participation in the coalition are listed in Table 3. Across respondents, networking was viewed as the most significant benefit, followed closely by improving the lives of people in the community, learning, and gaining support. Gaining new skills had the lowest mean score but was still viewed as a benefit. None of the difficulties associated with coalition membership (Table 3) were viewed as substantial. Of those listed, time away from organizational commitments and inconveniently timed meetings and events were viewed as most substantial. Feeling unwelcome, conflict with the organizational mission, and disagreeing with coalition goals or activities were viewed as least significant.

Short-term outcomes

According to respondents, top coalition accomplishments included seeking support from community leaders,

Table 2
Description of coalition members

Characteristic	Total members	
	n	%
Gender (n = 378)		
Male	96	25.4
Female	282	74.6
Age (n = 380)		
10–14	13	3.4
15–19	14	3.7
20–29	55	14.5
30–39	79	20.8
40–49	110	28.9
50–59	95	25.0
60+	14	3.7
Race/ethnicity (n = 384)		
Black/African American	142	37.0
Caucasian	164	42.7
Hispanic/Latino	56	14.6
American Indian/Alaska Native	4	1.0
Asian/Pacific Islander	6	1.6
Multiracial	12	3.1
Live in neighborhood served, % Yes (n = 358)	116	32.4
Participate as resident or youth, % Yes (n = 384)	49	12.8
Participate as group or organization member (n = 384)	330	85.9
Community sector representation ^a (n = 385)		
Business community	8	2.1
Local government	28	7.3
Elementary or secondary school	27	7.0
College or university	15	3.9
Teen pregnancy prevention/youth development service organization	104	27.0
Health organization	78	20.3
Religious organization	15	3.9
Parent organization	2	.5
Volunteer community organization	14	3.6
Recreation/sports	3	.8
Juvenile justice	10	2.6
Media/communications	3	.8
Other	46	11.9
Do not represent a sector	56	14.5

^a Respondents were allowed to select more than one sector, so percentages do not total 100.

increasing cooperation among youth development agencies, contributing to successful youth development strategies, and sharing resources among community agencies and organizations (Table 4). Raising funds to initiate and ensure the continuation of its programs ranked lowest in the list of possible accomplishments. The satisfaction measure was limited to satisfaction with the planning process. Respondents appeared somewhat satisfied with this dimension of coalition activities (mean score 3.2). The most common participation roles were attending coalition meetings (95.2%) and incorporating youth development and teen pregnancy prevention into their work (87.4%). Less common roles included helping raise funds (29.2%) and training coalition members (17.8%).

Table 3
Benefits and difficulties associated with coalition involvement^a

Perceived benefits and difficulties	n	Mean	SD
Perceived benefits^b			
Network with others in teen pregnancy prevention.	327	3.7	.51
Network with others in youth development.	329	3.7	.48
Improve the lives of the people in the community.	326	3.6	.64
Learn more about teen pregnancy prevention.	331	3.5	.68
Learn more about youth development.	329	3.5	.67
Gain support by working with others in the community.	328	3.5	.69
Support my organization's concerns or mission.	318	3.5	.65
Gain satisfaction by being involved in an important project.	320	3.5	.68
Gain personal recognition and respect from others.	303	3.1	.84
Gain new skills.	299	3.0	.92
Perceived difficulties^c			
Takes too much time from my organizational commitments.	307	2.0	.88
Meetings or events are at inconvenient times.	320	2.0	.86
The coalition has difficulty reaching its goals and objectives.	293	1.9	.96
Takes too much personal time.	315	1.8	.81
The coalition is not fully using my skills.	297	1.7	.88
I personally disagree with the goals or activities of the coalition.	301	1.4	.75
Conflicts exist with the mission of my organization.	301	1.3	.62
I feel unwelcome in a committee or working group.	316	1.3	.73

^a Questions not asked in Rochester.

^b Response options ranged from 1 = not at all a benefit to 4 = very much a benefit.

^c Response options ranged from 1 = not at all a difficulty to 4 = very much a difficulty.

Bivariate analysis

Almost all correlations between coalition processes and short-term outcomes were significant at the individual level (Table 5). Perceived accomplishments is most strongly correlated with staff competence ($r = .59, p < .001$) and coalition functioning ($r = .60, p < .001$). Similar strong relationships exist among member satisfaction, staff competence, and coalition functioning. Influence in decision making is strongly correlated with member participation ($r = .52, p < .001$) and less strongly correlated with perceived accomplishments ($r = .25, p < .001$) and satisfaction with the planning process ($r = .33, p < .001$).

Individual-level correlations may be contrasted with correlations at the coalition level. Similar relationships exist, although they are noticeably stronger than parallel correlations at the individual level (Table 5). For example, the correlation between coalition accomplishments and staff competence is $.80 (p < .001)$, and the correlation between accomplishments and coalition functioning is $.76 (p < .01)$.

Coalition viability, measured at the coalition level, was not significantly related to any coalition-level process variables (staff competence, influence in decision-making, coalition functioning). Nor was it significantly associated with any other outcome variable (perceived accomplishments, satisfaction with the planning process, member participation) at the coalition level. Even when the analyses were limited to community-wide coalitions, no statistically significant relationships were observed.

Multivariate analysis

The bivariate analysis revealed a strong association between the coalition functioning and staff competence measures. It is inadvisable to combine strongly correlated predictors in a multivariate model due to well-known problems arising from multicollinearity. To circumvent this problem, the coalition functioning scale and the decision-making scale were selected as candidate predictor terms for the multivariate analysis using perceived accomplishments as the outcome of interest.

The initial random coefficients model included main effects and an interaction term. The interaction was not significant ($p = .31$) and was subsequently dropped. In the resulting main effects model (Table 6), coalition functioning is significant ($p < .001$), as is influence in decision making ($p = .019$). The magnitudes of estimated coefficients suggest that functioning has a greater influence on perceived accomplishment ($b = .52$) than does influence in decision-making ($b = .10$). Formal statistical diagnostics indicate that random coefficients in the final model may not strictly satisfy the normality assumption, although visual diagnostics indicate that the departure is not extreme. A similar conclusion may be drawn from an analysis of individual residuals.

Also of interest are the variance estimates associated with random coalition influences. All scales were centered about their respective means, such that estimates of the random intercept offsets reflect coalition differences near the center of the response scales rather than at the lower

Table 4
Short-term indicators of effectiveness: perceived coalition accomplishments, member satisfaction with planning process, and member participation

Indicator and items	n	Mean	SD
Perceived coalition accomplishments ^a			
Sought support for its program activities and services from community leaders.	325	3.4	0.70
Increased cooperation among agencies involved with youth development.	340	3.4	0.72
Contributed to successful youth development strategies in the community.	334	3.4	0.71
Increased sharing of resources among community agencies and organizations.	322	3.4	0.70
Increased cooperation among agencies involved with teen pregnancy prevention.	321	3.3	0.72
Helped build understanding and acceptance of diverse views on how to prevent teen pregnancy.	334	3.3	0.81
Contributed to successful teen pregnancy prevention strategies in the community.	328	3.2	0.77
Provided necessary training to implement its programs.	295	3.1	0.87
Raised enough funds to initiate and ensure the continuation of its programs.	220	2.6	0.95
Member satisfaction with planning process	352	3.2	0.78
	Total n	Number reporting yes	Percent reporting yes
Member participation in coalition and related activities			
Attend coalition meetings.	378	360	95.2
Incorporate youth development and teen pregnancy prevention into my work.	350	306	87.4
Add an assets-oriented approach to the delivery of programs supported by my organization.	315	234	74.3
Work directly with youth.	361	263	72.9
Plan meetings of the coalition.	365	234	64.1
Assist in the planning and staging of programs.	363	213	58.7
Organize activities and programs in my community.	360	207	57.5
Select, implement, or evaluate activities and programs.	357	182	51.0
Share data or prepare media/marketing materials.	345	165	47.8
Help raise funds for activities and programs.	346	101	29.2
Train coalition members.	343	61	17.8

^a Response options ranged from 1 = not at all to 4 = a great deal.

extremes. The estimated standard error of the random intercept offsets is approximately 1.0, whereas the estimated standard deviation of individual response residuals is approximately 2.9. Because both are measured on the same scale, this result suggests that membership in a particular coalition may have an influence on shaping views, although the overall variation is apparently more attributable to individuals than to their coalitions.

Discussion

This study examined whether patterns between coalition processes (staff competence, member influence in decision-making, coalition functioning) and short-term outcomes observed in other coalition research also exist in teen pregnancy prevention/youth development coalitions. Previous research, largely conducted with coalitions formed to address alcohol, tobacco, and/or other drugs, has consistently shown that good coalition processes are associated with member satisfaction and participation [12]. The current study found that staff competence and coalition functioning were strongly correlated with member satisfaction. Staff competence was linked to member satisfaction in two stud-

ies of tobacco control coalitions [20,24]. Communication, influence in decision-making, leadership, and organizational climate have been linked to member satisfaction in other coalition research [20,22,24]. Member participation can also be viewed as a short-term coalition outcome. In the current study, influence in decision-making was strongly correlated with member participation. This, too, is consistent with findings from other studies [22].

Constructs similar to perceived coalition accomplishments were used as intermediate coalition outcomes in at least one other study [42]. In an examination of state-level tobacco coalitions, Gottlieb et al found that organizational barriers, personnel barriers, and formality of structure were related to perceived effectiveness and perceived activity [42]. In the current study, staff competence and coalition functioning were strongly correlated with perceived accomplishments at the individual and coalition levels. At the individual level, decision-making influence was also significantly correlated with perceived accomplishments. In the final multivariate model, which simultaneously recognized individual and coalition-level influences, decision-making and coalition functioning were significantly related to perceived coalition accomplishments, with coalition function-

Table 5
Individual- and coalition-level correlations between coalition processes and short-term outcomes

	Short-term outcomes		Coalition processes		
	Satisfaction w/planning	Member participation	Staff competence	Decision-making	Coalition functioning
Individual-level analysis (n = 330)					
Short-term outcomes					
Perceived accomplishments	.59***	.14*	.59***	.25***	.60***
Satisfaction with planning process		.11	.60***	.33***	.67***
Member participation			.15**	.52***	.13
Coalition processes					
Hub agency/staff competence				.27***	.77***
Influence in decision making					.26***
Coalition-level analysis (n = 13)					
Short-term outcomes					
Perceived accomplishments	.81***	-.06	.80***	-.40	.76**
Satisfaction with planning process		.15	.83***	-.06	.78**
Member participation			.39	.58*	.43
Coalition processes					
Hub agency/staff competence				.11	.88***
Influence in decision-making					-.03

* $p < .05$; ** $p < .01$; *** $p < .001$.

ing appearing to have a greater influence. Thus, coalitions with good communication, realistic plans, a focus on work, and member influence in making decisions were viewed as accomplishing more than were coalitions with lower levels of functioning on these and related dimensions.

Another purpose of the study was to provide insight into whether communities could use coalitions to successfully mobilize resources to address teen pregnancy prevention and youth development. Findings from this study suggest that it is not an easy task. For the most part, coalition members were the usual players—women working for teen pregnancy prevention, youth development, or health organizations. Although about a third lived in the community served by the coalition, relatively few (12.8%) participated as residents (or youth). Moreover, the coalitions that formed appeared fairly fragile, as evidenced by a significant number that disbanded during or before the final year of the project (when funds were substantially diminished and devoted largely to evaluation activities). Some that survived had undergone significant restructuring and taken on new issues. Theoretical work on coalitions predicts that they cycle through stages of development over time, as they add new issues, recruit new members, update plans, and as funding sources change [12].

Other coalitions have faced similar difficulties in recruiting diverse and broad representation across community sectors. Studies of tobacco-control coalitions have found that health and education sectors are strongly represented, with less involvement from other parts of the community [20,24]. Although low participation from some community sectors such as business and media may be expected, the relatively homogeneous nature of many coalitions has implications for the notion of partnership synergy [10]. If coalitions have a

collaborative advantage over other forms of community-based health promotion because of the potential pooling of diverse perspectives, knowledge, skills, and other resources, what is the advantage when diversity is limited?

Similarly, the ideal of coalitions as vehicles for engaging residents in community life is also difficult to realize. Kaye describes several reasons for this, including the following: community organizers are rarely hired to work with coalition-based projects; problems and, to a lesser extent, solutions are often predetermined and there is little room for grassroots input; coalitions often have track records of coming and going and may not be trusted; and coalitions often develop cultures that are at odds with and intimidating to potential grassroots participants [43]. Despite these challenges, this study shows that, across the participating communities, hundreds of people were engaged in efforts to prevent teen pregnancy and promote positive youth development. Participants felt strongly that the coalitions successfully sought support for programs and services from community leaders, increased cooperation among agencies, contributed to successful youth development strategies in the community, and increased resource sharing among community agencies and groups. Members also benefited per-

Table 6
Multivariate associations between coalition processes and perceived accomplishments

Model ^a	b	p Value
Final model for coalition accomplishments		
Coalition functioning	.52	<.0001
Decision-making influence	.10	.0196

^a Based on a random coefficients multiple regression model.

sonally from increased networking and new knowledge about teen pregnancy prevention and youth development. Expanded networks and new knowledge should, in theory, enhance capacity for addressing future community problems [18,19].

In the current study, none of the process variables, including staff competence, decision-making influence and coalition functioning, were related to coalition viability. This suggests that factors external to the coalitions may be more important to sustainability of coalition structures than internal coalition processes. Factors such as the impetus for formation (e.g., external funding opportunity, response to a community need), history of collaboration, and community context may be more critical for longevity [12]. It may also be unrealistic to expect communities to sustain all elements of externally prompted initiatives for extended lengths of time. Maintaining coalitions is only one dimension of sustainability of an initiative. Other aspects of sustainability, not examined in the current study, include success in securing funding for the coalition's effective programs, and success in maintaining coalition principles and values, connections and capacity, and program effects [44].

This research has several limitations. First, the study was cross-sectional, making it difficult to infer causality. Second, response rates varied significantly across the coalitions, ranging from 51.4% to 100% among the coalitions included in the main analyses. Those not responding to the survey may have different perceptions of the coalitions and the associated accomplishments than did those completing the survey. Third, data were collected only from active coalition members; this may have biased results in a positive direction because less satisfied members may have left the coalitions. Fourth, data were self-reported and some measures were limited in scope. For example, satisfaction was limited to satisfaction with the planning process. Fifth, coalitions appeared to be at various stages of development; some were several years old and fairly stable, others were newly formed or recently restructured. Finally, several different types of collaborative arrangements existed within the coalitions examined. It may be that relationships unique to different types of structures were masked by analyzing all structures collectively as coalitions.

This study has implications for research and practice. The findings that staff competence, influence in decision-making, and coalition functioning are related to perceived accomplishments suggest that careful attention must be paid to establishing and maintaining coalition processes and structures. Coalition leaders and staff should strive to involve members in making decisions, define roles clearly, exhibit strong communication, emphasize work and completion of tasks, and foster strong working relationships with lead agencies. Important staff competencies and practices include experience in relevant health issues, sharing of information, assisting partners in implementing programs and obtaining resources, and maintaining relationships be-

tween members. Regular self-assessments could help coalitions monitor some of these key processes and make adjustments as needed. Many such self-assessment tools exist and typically cover: shared vision and goals, structure, inclusivity and participation, shared decision-making, effective communication, facilitative leadership, and effective meeting management, among other topics [45–47].

Additional research is needed to examine relationships among coalition processes, intermediate outcomes, and longer-term outcomes such as changes in policies, programs, practices, and, ultimately, behavior and health status. Longitudinal qualitative research on coalitions would also be useful, to shed light on how coalitions evolve through stages of development and recycle through stages, and the events that trigger such movement. Further research is also needed to examine how variables such as history of collaboration, geographic setting, target area, grassroots involvement, and number of funding sources influence coalition effectiveness and sustainability. Research on various models of collaboration is needed to provide guidance on the types of collaborative approaches that are most appropriate in various contexts. A deeper understanding of coalitions and the circumstances in which they are preferred over other approaches to community-based health promotion would greatly advance our health promotion efforts, including promotion of positive youth development and teen pregnancy prevention.

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