

ABSTRACT

STONE-WIGGINS, BRENDA PATRICIA. Predicting the Interest of Coalition Members in Utilizing Technical Assistance Support Systems. (Under the direction of Roger E. Mitchell.)

Objective: Technical assistance (TA) systems have emerged as an important capacity-building strategy to increase the effectiveness of community prevention coalitions. However, the availability of TA does not necessarily translate into utilization. This study explored whether coalition members' interest in utilizing TA is predicted by coalition member characteristics (i.e., age, education, gender, commitment, perceived skills, perceived benefits of participation, perceived coalition strength), coalition leader characteristics (i.e., leader's interest in TA), and coalition functioning (i.e., effectiveness with regard to structure, collaboration and programming).

Methods: This cross-sectional study utilized existing data from coalition members (n=168), coalition leaders (n=22), and ratings of coalition programming from community key informants (n=141), all of which were associated with 22 health-oriented, community prevention coalitions. The dependent variable was the coalition members' self-identified interest in TA. Principal component analysis confirmed that the 13-item Interest in TA scale represented a single factor.

Analysis: Hierarchical Linear Modeling (HLM) analyses indicated that 12% of the variance in member interest in TA was due to group level factors. HLM was used to examine the relationships among the predictors and members' interest in TA

Results: Members' perceived skills was significantly related to members' interest in TA ($T=3.48$, $df=160$, $p=0.001$) as predicted. Commitment was also significantly and

positively related to interest in TA ($T=2.38$, $df=160$, $p=0.019$). In addition, members who perceived their coalition as weak were significantly more likely to be interested in TA ($T=-2.63$, $df=160$, $p=0.010$). Coalitions weaker in structure, collaboration and programming (as rated by leaders and key informants) were also more likely to have members interested in TA, although not at a level that reached significance. The small number of cases at the coalition level may have limited statistical power.

Conclusion: Members who perceived their coalition as weak were more interested in TA, suggesting that weaker coalitions may be accessible to TA providers. However, members with lower commitment and skills had less interest in utilizing TA. Suggestions for future research and intervention are discussed.

Predicting the Interest of Coalition Members in Utilizing
Technical Assistance Support Systems

by
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DEDICATION

To God be the glory. Amen

BIOGRAPHY

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INTRODUCTION

Valued for their collaborative, problem-solving approach to complex public health issues, community prevention coalitions have been increasingly supported by funding organizations. However, scientific evidence of coalitions' effectiveness has been limited. Therefore, government organizations and funders have sought to increase the capacity of these community organizations. They have provided technical assistance systems to bridge the gap between community science and practice; but such assistance has not always been utilized. This study explores factors that may predict coalition members' interest in utilizing the available technical assistance (TA) systems. This study furthers the literature by exploring how member- and coalition-level characteristics jointly predict coalition members' interest in technical assistance.

Importance of Community Coalitions as a Prevention Mechanism

For nearly three decades, community coalitions have been an important health promotion and disease prevention strategy. The increased popularity is reflected in the more than 50-fold increase in the number of coalition citations in the scholarly literature. The 80 citations in 1980-1984 increased to 2,394 in 1990 to 1994. Within the next five years (1995-1999), the number increased to 4,295 (Berkowitz, 2001). A large proportion of this increase can be attributed to the federal government. It funded community coalitions to address a variety of public health issues such as asthma (Gilliam, Barrington, Davis, Lacson, Uhl & Phoenix, 2003; Jolly, Gibbs, Napp, Westover & Uhl, 2003; Jourden & Etkind, 2004), substance abuse (Fawcett, Lewis, Paine-Andrews, Francisco, Richter & Williams, 1997;

Hallfors, Cho, Livert & Kadushin, 2002; Yin, Kaftarian, Yu & Jansen, 1997), and tobacco control (Kegler, Steckler, Malek & McLeroy, 1998). For example, Center for Substance Abuse Prevention (CSAP) coalitions received almost a half billion dollars during the 1990s to reduce substance abuse (Hallfors et al, 2002). The rapid dissemination of this innovation in public health practice has also been accelerated by efforts of the federal agency, Centers for Disease Control and Prevention (CDC) (Merzel & D'Afflitti, 2003; Kegler et al, 1998).

Likewise, the non-profit sector also invested heavily in community coalitions during this period. One example is the Kansas Health Foundation funded *Project Freedom*, a community collaborative of more than 600 individuals, groups and clubs. The Foundation's aim was to reduce the use and abuse of illegal drugs and alcohol among 12 to 17 year olds (Paine-Andrews, Fawcett, Richter, Berkley, Williams & Lopez, 1996). Another significant long-term commitment came from the Robert Wood Johnson Foundation for its *Fighting Back* initiative. The initial investment was \$15.2 million for a 4-year initiative; but it was expanded for an additional five-year implementation phase with individual grants up to \$3 million per community (Green & Kreuter, 2002).

Support for community coalitions grew because promotion of coalitions was appealing for a number of reasons (Hallfors et al, 2002). The intuitive appeal of community coalitions was the potential for communities to come together, pool their collective resources, and solve their own problems more effectively than some outside entity. That appeal was partially due to the perception of value-added outcomes or synergy from multi-level collaboration among stakeholders (Brinkerhoff 2002; Lasker & Weiss, 2003). That is

to say, people working together are thought to accomplish more and produce a better outcome. Ideally, broad-based collaboration assured a better understanding of the local context, buy-in from local constituencies, strategies to engage hard-to-reach populations, and the opportunity to leverage limited resources. For policymakers, it was a way to distribute the available funds and increase the reach of current service efforts. For some, this movement also represented the opportunity to shift from a government-dominated model to a community empowerment model (Kurland & Zeder, 2001). However, how prepared were the community coalitions for these roles? How reasonable was it to expect that community coalitions could accomplish these tasks?

Effectiveness of Community Coalitions

As the popularity of community coalitions increased, the focus shifted to effectiveness of this social intervention. Community action theory (Butterfoss & Kegler, 2002) provided a model of how community coalitions are thought to develop (i.e., formation, maintenance and institutionalization phases), act to build community capacity and achieve the desired health and social outcomes. Essentially, a core group of citizens mobilize stakeholders from key sectors of the community to assess the needs, develop a plan of action, pool resources, and implement strategies to effect system and community change. The components of the coalition action theory as well as other models and frameworks of collaborative community problem-solving (Lasker, Weiss & Miller, 2001; Lasker et al, 2003) propose a basic causal pathway from coalition functioning (a proximal outcome) to

distal (long-term) social and health outcomes that are mediated by the intermediate outcome, synergy.

However, empirical evidence of the effectiveness of coalitions is limited. Coalition literature can be characterized as focusing on three indicators of coalition effectiveness: coalition functioning, synergy, and, the ultimate outcome, community-level change (i.e., improvement in health status and systems). Coalition functioning reflects how effective the organization is in developing internal structure and processes. In a comprehensive search of peer-reviewed coalition literature published between 1980 and 2004, Zakocs and Edwards (2006) identified 55 factors that have contributed to building a successful collaborative organization. Interestingly, the majority (n=19, 73%) of the 26 empirical studies focused on coalition functioning, the proximal indicator of effectiveness. The authors identified several aspects of this literature which suggest caution in drawing firm conclusions. First, case study methodology was used most often; therefore, the results could not necessarily be generalized to other coalitions. Second, only two studies tested an a priori model of coalition theory. Last, Zakocs and Edward found that different researchers defined and measured the same construct differently. To address these challenges, Zakocs and Edwards (2006) concluded that interdisciplinary collaboration is necessary for theoretically grounded coalition research.

An intermediate measure of coalition effectiveness is the extent of the collaboration. Termed coalition synergy, this level of collaboration enables “individuals and organizations to accomplish more than they could achieve independently (Butterfoss & Kegler, 2002, p. 175).” In their Coalition Action Theory, collaboration among the partner organizations—

specifically comprehensive assessment and planning, member engagement, and pooled member and external resources—is indicated by synergy. It is the product of partners working together to address a community problem. Analysis of cross-sectional data (Weiss, Anderson & Lasker, 2002) from 66 community partnerships with 815 respondents (at least 75% response rate for each coalition) supported the hypothesized relationship between coalition functioning and this intermediate indicator of effectiveness. Higher levels of synergy were related to two factors: more effective leadership ($\beta = .41, p < .05$) and greater partnership efficiency ($\beta = .27, p < .05$).

However, the central issue surrounding coalitions is how effective they are in improving population-wide health outcomes. To answer that question, Roussos and Fawcett (2000) reviewed 34 studies detailing 252 community partnerships that focused on a variety of health issues. They found inherent challenges in evaluating distal population-level outcomes (i.e., short funding period, extended time required to effect change and poor community indicators, to name a few). Even in the more rigorous studies, they found serious methodological problems (i.e., “weak outcomes, contradictory results, or null effects”) (p. 380). The majority of the coalitions assessed proximal outcomes such as individual-level change in knowledge, attitude, and belief. Only ten studies showed a small statistical effect that suggested community coalitions may be capable of achieving the promise of community-level change. Their accomplishments included changes such as: 43% reduction in lead poisoning among children in New York City within 4 years (Freudenberg & Golub, 1987 cited by Roussos & Fawcett) and a 50% reduction in Boston’s infant mortality rate

among African Americans within 2 years (Plough & Olafson, 1994 cited by Roussos & Fawcett). Based on their comprehensive review, Roussos and Fawcett concluded that the overall results were “insufficient to make strong conclusions about the effect of coalitions on population-level outcomes (p. 375).”

In another review (Kreuter, Levin et al, 2000), possible explanations were offered for the scarcity of published literature to document a change in health status or system:

- 1) Collaborative mechanisms are inefficient and/or insufficient for carrying out planning and implementation tasks;
- 2) Expectations of health status/health systems change outcomes are unrealistic; and,
- 3) Health status and health system changes may occur but may go undetected because it is difficult to demonstrate a cause-and-effect relationship (p. 52).”

In other words, either community coalitions cannot produce the change or the current methodology is not sophisticated enough to measure it.

Besides failing to demonstrate effectiveness, other researchers concluded that coalitions may have the potential to create adverse effects (Hallfors et al, 2002). Between 1988 and 2003, the Robert Wood Johnson Foundation (RWJF) conducted an \$87.9 million national program to assist 15 communities of 100,000 to 250,000 people in 11 states to implement three categories of anti-drug strategies (i.e., environmental, individual, and efforts focused on the supply, cost, and availability of alcohol and drugs). In their review of the strategies implemented by the *Fighting Back* communities, the evaluators found no

evidence to support the positive outcomes that were hypothesized to be associated with implementing more comprehensive and higher dose strategies. In fact, coalitions that targeted adults actually did worse on related performance indicators over time than the matched control communities.

Another surprising finding was that when coalitions focused high doses of funding and staff time on specific strategies, they produced a statistically significant inverse relationship with the desired outcomes. In an attempt to explain this adverse finding, these researchers suggested several possibilities: the high risk nature of the selected communities, the negative influence of some stakeholders in tipping the political balance and the adoption of popular but not evidence-based strategies. Requiring each community to engage and maintain broad-based stakeholder involvement in the coalition and to utilize diverse strategies was the unique aspect of Fighting Back's bottoms-up, autonomous model. But, it was not pilot tested for either efficacy or beneficial effects prior to full implementation. The authors suggested that perhaps the emphasis on meeting the funder's requirement to maintain broad participation diluted the focus and resources necessary for successful implementation.

In summary, the evidence from the literature does not support widespread effectiveness of coalitions in achieving desired outcomes. As demonstrated by Roussos and Fawcett's review, population-level outcomes are possible, albeit very limited. On the other hand, community coalitions also have the potential to cause harm rather than achieve positive outcomes (Hallfors et al, 2002). Even though coalitions have fallen short of the

promise of community-level change, they still appeal to governmental and philanthropic funders (Berkowitz, 2001). Despite the weak evidence for coalitions' effectiveness, interest in this collaborative community strategy continued (Hallfors et al, 2002; Roussos & Fawcett, 2000). However, in light of the increasing demand for accountability and evidenced-based practice (Green & Kreuter, 2002), funders sought to justify their continued investment in this strategy. Was there a way to improve coalitions' effectiveness?

Emergence of Technical Assistance as an Intervention Strategy

The provision of training and technical assistance has been proposed as one means to cultivate the coalitions' capacity to plan, implement, and evaluate evidence-based prevention programs (Feinberg, Gomez, Puddy & Greenberg, 2008; Flaspohler, Duffy, Wandersman, Stillman & Maras, 2008; Mitchell, Florin, & Stevenson, 2002; Roussos & Fawcett, 2000). Governmental and philanthropic funding organizations contributed to this capacity-building effort by investing in technical assistance systems to support their community prevention programs (Maxwell & Husain, 2005; Nicola, 2005; Feinberg, Greenberg, & Osgood, 2004; Gilliam et al, 2003; Green & Kreuter, 2002; Paine-Andrews et al, 1996). As a result, various models emerged.

General approaches to technical assistance included peer learning and support, coalition-building manuals and web-based resources (Fawcett, Schultz, Berkowitz, Wolff & Nagy, 2001). However, formal technical assistance systems and training had the capacity for more targeted services, tailored skills development sessions, as well as individualized telephone and onsite consultation from professionals with diverse backgrounds (e.g.,

community psychology, organizational development and public health) (Chavis, Florin, Felxi, Mizrahi & Morrison, 1992; Feinberg, Greenberg & Osgood, 2004; Florin, Mitchell & Stevenson, 1993; Spoth, Redmond, Shin, Greenberg, Clair & Feinberg, 2007). Technical assistance was offered through group sessions (i.e., facilitated retreats, coordinated regional meetings of multiple coalitions) as well as individualized meetings to address the developmental needs of a specific coalition (Wolff, 2001). In addition to the coalition members, it was particularly important to provide technical support for coalition leaders. They varied in the knowledge and skill set needed to develop and lead a collaborative organization. Depending on the local infrastructure, coalition leaders also lacked adequate supervision and mentoring (i.e., no direct supervision, supervisor unskilled in coalition work, etc.).

Recognizing the need to address these capacity issues, funding organizations diplomatically offered technical assistance through a variety of TA delivery models. Typically, they funded an intermediary organization (or coordinated network of organizations) to support community coalitions during and beyond their initial one- or two-year planning phase. For example, in Turning Point's National Excellence Collaborative' model of "adequate technical assistance", each collaborative was assigned a professional staff person in the national program office to provide TA as needed (Nicolas, 2005). For its *Fighting Back* initiative, the Robert Wood Johnson Foundation funded two national program offices to provide technical assistance to the 15 sites (Green & Kreuter, 2002, Hallfors et al,

2002; Saxe, Reber, Hallfors, Kadushin, Jones & Rindskipf, 1997; Zakocs & Guckenbug, 2007).

In another model, the Kansas Health Foundation funded a university-based technical assistance and evaluation provider, the Kansas University Work Group for Community Health and Development, to assist in the implementation of its *Project Freedom Replication Initiative* in three additional communities (Paine-Andrews et al, 1996). TA focused on the provision of targeted technical assistance as well as general information and planning, leadership development, coalition building, implementation, and sustainability. The Work Group's TA model included site-based one-on-one consultation with coalition-building and substance abuse experts and support materials such as planning guides and computer software.

Similar to the non-profit sector, federal agencies also offered TA support. The nation's public health organization, CDC, utilized a system that included a network of TA providers at the national level as well as peer resource persons at the organizational level to support its HIV prevention community planning grantees (Gilliam et al, 2003). With this structure, CDC tailored its support to meet the developmental needs of the grantees (specialized TA for the more experienced grantees; basic and more intensive TA for the less experienced ones).

Another large-scale capacity building model was supported by the federal Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Treatment (CSAT) (Maxwell & Husain, 2005). For its large network of grantees that

began with 41 in 1998 and expanded to over 500 grants by 2003, CSAT took a more active role to assure that the grantees met the desired outcomes. Grantees submitted data to a web-based system that CSAT monitored. Those grantees that showed signs of struggling were offered TA related to specific programmatic issues. However, this prescriptive approach to TA strained the relationship between CSAT and the grantees who felt that the accountability measures were time-consuming and distracted from their real mission. In response to this issue, CSAT incorporated an incentive-disincentive program and worked to build trust, good communication, and flexibility into its capacity-building efforts.

Providing adequate technical assistance and support is viewed as necessary to the successful development of efficient and effective coalitions and to their accomplishing the desired outcomes (Florin et al, 1993; Wandersman, Duffy, Flashpohler, Noonan, Lubell, Stillman et al, 2008). Both sectors have invested substantial resources to provide technical assistance and utilized a variety of models. Utilization of a contracted provider was a common approach. Most often, the contractors offered the technical assistance and left it to the community organizations to utilize it. When a TA provider closely monitored the coalitions' progress toward benchmarks and prescribed technical support to improve an identified weakness, the community implementers sometimes resisted that approach (Maxwell & Husain, 2005). So, what is an acceptable but effective approach to supporting them? Roussos and Fawcett (2000) argued for more research to understand how to build the capacity of community coalitions and how to focus technical assistance to specific domains of capacity.

Some of the earlier coalition researchers (Florin et al, 1993) proposed a developmental approach to designing a technical assistance intervention. These authors aligned capacity building tasks along the stages of coalition development (i.e., initial mobilization, establishing organizational structure, building capacity for action and planning for action). Informed by the members' assessment of capacity building needs, the researchers proposed ways that training and technical assistance could assist coalitions at each level of development. For example, technical assistance at the initial stage could focus on "appropriately targeted recruitment strategies" to help the coalition assure diversity in its stakeholders and representativeness of all key community sectors. At the next stage, leadership techniques in establishing the organization (i.e. to focus on the coalition's tasks, maintain active participation, etc.) could be helpful. These researchers took a collaborative, consumer-oriented approach to designing TA support and helping the participating coalition to build an "enabling system" to meet their needs. Their approach contrasted with an externally-driven model of the coalition member as passive recipient of TA that was determined and required by a contracted provider. Even so, Florin, Mitchell and Stevenson found more than a third (13 of 35, 37%) chose not to participate in the consortium that included five intermediary support organizations.

Expanding from a developmental to an ecological approach, Flashpohler, Duffy, Wandersman, Stillman and Maras (2008) developed a taxonomy that defined levels of capacity (i.e., individual, organizational, and community) by types of capacity building (i.e., general and innovation-specific). This approach recognized the importance of attending to

the implementation processes as well as the fidelity to evidence-based innovation. At the organizational level, general capacity would contribute to overall functioning and coalition capacity to implement evidence-based strategies to accomplish its distal outcomes and impacts. That would involve developing leadership skills, enhancing organizational structure and creating external linkages and relationships. On the other hand, innovation-specific capacity at the organizational level would include technical and fiscal resources that are necessary to implement a particular innovation. A specific example of the latter would be providing funds as well as the necessary technical skills needed to plan and implement evidence-based strategies and to evaluate the efforts. The individual-level component of the taxonomy focuses on increasing the capacity of the coalition members (i.e., experiences, commitment, perceived capability, etc.).

Similar to Florin, Mitchell and Stevenson's approach, these researchers delineated two perspectives about what drives the design of the technical assistance intervention. The research-to-practice model is an externally driven, evidence-based approach with funding requirements compared to the more community-centered model that considers the interests, needs, capacity and resources of the organization and community. Under the former model, a TA support system would likely take a more diagnostic and prescriptive approach to assure fidelity to the funder's requirements.

In their Interactive Systems Framework (ISF), Wandersman, Duffy, Flaspohler, Noonan, Lubell, Stillman, et al. (2008) conceptualized an organizing framework for addressing the gaps in the existing models and a mediating or linking system between the

Prevention Synthesis and Translation System (i.e., developers, funders) and the Prevention Delivery System (i.e., implementers, coalitions). As the linking system, the Prevention Support System provides two primary functions: innovation-specific capacity-building and general capacity-building at the three levels (i.e., individual, organizational, and community). General capacity can be developed separately or in conjunction with support for a specific innovation. These emerging theoretical models in the technical assistance literature improve our understanding of how to design technical assistance intervention (i.e., configuration, focus of capacity building, dose strength). Specifically, what capacities need to be developed? How does the support system assess existing capacity and match the type and amount of TA to the need?

Technical Assistance Intervention and Coalition Functioning

Although theoretical models suggest the value of TA, there have only been a few empirical studies to actually examine the effects of TA on coalition functioning. For example, the *Getting to Outcomes (GTO)* demonstration and evaluation project assessed the collaborative Prevention Support System intervention model and tried to link technical assistance with improved capacity (Chinman, Hunter, Ebener, Paddock, Stillman, Imm & Wandersman, 2008). The researchers sought to improve general capacity at the individual level (i.e., attitudes, perceived self-efficacy and implementation behaviors) as well as innovation-specific (i.e., evidence-based practice) capacity-building at the organizational level for two substance abuse prevention coalitions with a few paid staff and a large number of volunteers. Four non-GTO prevention programs served as the comparison group of

program-level performance. Participants in the coalitions' six participating GTO programs received a GTO manual, annual training (two sessions), and ongoing TA for two years on implementing the 10-step GTO model.

Analyses by group assignment did not find any difference in general capacity building at the individual level at the end of two years between the two groups. However, each unit of participation in GTO intervention was significantly associated with increases in the individual-level capacity (i.e., increased ratings on Attitude Index, Behavior Index, and self-efficacy score: 1.18, $p < .002$; 3.05, $p < .000$; and 1.98, $p < .01$, respectively). Overall, GTO organizations that received the full two-year intervention experienced almost three-fold improvement in program-level performance ratings compared to non-GTO organizations (46% vs. 12%). However, the most improvement was associated with three innovation-specific capacity areas: outcome evaluation – decision making, process evaluation mechanics and continuous quality improvement (CQI) mechanics. However, after removing the outliers (i.e., highest TA support-outcome evaluation step; lowest TA support-best practices step), the analysis did not find a significant relationship between the number of TA hours provided and how the programs functioned after one year.

Another study provided insight into the relationship between dosage of TA and its impact on functioning of the coalition during the initial three-year implementation period for *Communities That Care* (Feinberg, Ridenour & Greenberg, 2008). These researchers found a low, but significant correlation between TA dosage (mean minutes of off-site communications and on-site meetings) in the previous year and level of functioning in

subsequent year (i.e., 2004 and 2005, $r=.22$, $p<0.05$). However, longitudinal analyses of the stability of TA and coalition functioning over the three-year period did not support the impact of dose of TA, regardless of level of perceived TA need. Also, the researchers did not find a relationship between baseline level of functioning, perceived need for TA, and on-site or off-site TA. Although not a significant finding, onsite TA dosage in 2004 for younger coalitions ($n=66$) was significantly associated with coalition functioning in 2005 (standardized path coefficient (critical value): $.21$ (2.59) $p<.01$), but not significant for onsite TA in 2003 and coalition functioning in 2004: $.14$ (1.31) $p<.19$).

Mitchell, Stone-Wiggins, Stevenson and Florin (2004) did a “dose-response” study using longitudinal data from 41 community coalitions to explore the effects of TA on intermediate community outcomes (i.e., collaboration, programming). These researchers examined changes in key informants’ reports of coalition activity and effectiveness in their communities. Perceived collaboration and coordination among coalitions increased from baseline ($M = 2.66$, $SD = .77$) to follow-up ($M= 3.05$, $SD = .77$), a statistically significant difference ($t = 3.898$, $df = 1,27$, $p < .001$). However, they did not find a statistically significant relationship between the amounts of technical assistance utilized (none/some project TA, minimal/moderate non-project TA) and levels of change in collaboration. Specifically, minimal TA was less than seven hours per quarter (mean =2.0); moderate, more than 7 hours (mean=19.9). Controlling for baseline levels of collaboration and programming, the results showed no effects of project TA or non-project TA on levels of

collaboration at follow-up (time 2). These findings did not show a positive influence from TA on overall coalition effectiveness.

The paucity of empirical literature makes it difficult to determine which factors (e.g., type of coalition, stage of coalition development, mode of TA delivery) may influence the effectiveness of TA interventions. However, one salient issue may be the degree of participation in TA by coalition members. To the extent that a critical mass of coalition members do not participate in available TA opportunities, it becomes less likely that TA will have its desired effect.

Engaging Coalitions in Technical Assistance

In spite of the investment by funding institutions and the increasing knowledge about the design of prevention support systems (i.e., types of capacity building, etc.), coalitions do not always use this resource. Availability does not ensure utilization. If the coalition members do not consistently and appropriately use the available resource, they are not likely to achieve the desired effect. Although empirical research on the coalition members' participation in TA is sparse, the available studies showed less than ideal engagement.

A study of 41 health-related community coalitions (Mitchell et al, 2004) provided perspective on initial utilization of TA, utilization over the life of the project as well as reasons for not engaging in the TA services offered by the TA provider. At baseline (end of the first quarter, year one), only 27% of the leaders reported using the TA services offered by the project staff even though nearly all (94%) reported that they were aware of it. For the non-users, factors included: being unable to determine what kinds of TA were needed

(28.5%), not having a need for any services at baseline (23.8%), not having a need for the offered TA services (10%), or receiving TA from a non-project source (10%).

Unexpectedly, not using available TA was most associated with the leaders' lack of a clear sense of what the coalition needed, rather than any issues with what TA was offered.

After the initial assessment, the study also monitored coalitions' use of available TA services over a 15-month period. Nearly half (46%) of coalitions that were offered TA failed to utilize any of the available services. For those that did, the average amount of TA for the period was less than a workday per quarter (4.54 hours). And according to the coalition leaders, the TA staff initiated the majority (66%) of those TA contacts. A most interesting findings was that the coalitions were more likely to utilize a non-project TA resource than the services offered by the project's TA staff ($r = .38, p < .02$). Leaders from a majority of the coalitions (79%) reported using non-project TA sources, averaging 15.1 hours per quarter (nearly 3.5 times the amount of TA from project staff). The reason for choosing non-project TA did not seem to be associated with the quality of the project TA by the project staff since the leaders rated the resource very high in its responsiveness to their needs (i.e., 93%, responses of "very strongly" and "strongly" agreed).

Feinberg, Greenberg and Osgood (2004) investigated utilization of initial training sessions during the planning year of prevention coalitions. The evaluation included 21 coalitions (n=203 leaders¹) that received funding in 1994, 1996 and 1997 (i.e., 9, 6 and 12 coalitions respectively). A community-based prevention initiative, the *Communities That*

¹ These researchers (Feinberg et al, 2004) used the term "leaders" to refer to "community leaders" who were actually members of the coalition, not the coalition leader (e.g., a paid or volunteer coordinator or director).

Care model used evidence-based prevention programs to promote positive youth development and to reduce risky adolescent behaviors such as alcohol and drug use. The funding agency hired a licensed provider to conduct three TA sessions during the planning year: Key Leader, Risk/Resource, and Promising Approaches. Overall, a total of 87 (of 203, 43%) coalition leaders attended at least one training session but the total attendance per session varied (64, 73 and 55 respectively). But only 41 (20%) of the surveyed leaders attended all three trainings; 23 (11%) attended only two sessions; 23 (11%), only one session. What is interesting is that all of the training sessions occurred before the coalition received funding. As such, the leaders may have been less committed to the attending the training. The researchers explained that some of surveyed leaders joined the coalition after some or all of the initial training sessions.

In a longitudinal study of the *Communities That Care* coalitions, Feinberg, Ridenour and Greenberg (2008) also found variability in how communities used the available TA by the mode of delivery: onsite (i.e. consultation delivered face-to-face with coalition members) and offsite (i.e., phone or email contact). The average minutes per month of off-site TA per coalition was 69.63 (n=116, SD=62.85) for 2003; for 2004, an average of 72.84 (n=116, SD=51.44). By comparison, the average use of onsite TA each month was higher than offsite in both years: 2003, 98.16 (n=116, SD=116.81); 2004, 131.79 (n=116, 129.14). Off-site TA showed a moderate degree of stability over the two years of data. The low stability in on-site TA reflected fluctuation from a high level in one year to a lower level in the subsequent year.

In another longitudinal study, Chinman, Hunter, Ebner, Paddock, Stillman, Imm and Wandersman (2008) also found variability in the pattern of TA use in the *Getting to Outcomes (GTO)* intervention. The objective was to build the individual capacity of participants (i.e., self-efficacy) and effective program performance (i.e., choosing evidence-based strategies; implementing and evaluating the strategies). The researchers tracked the amount of participation in training and technical assistance by year, type (i.e., in-person, phone, and email), provider and GTO step. Over the course of the three-year intervention, programs received one to three hours of TA per week (78 to 322 hours overall). The amount of TA delivered to each program varied according to the year in which they initially received TA (waves 1, 2 and 3), availability of the TA provider and the tasks for which they wanted TA. At both time points, less than half of the GTO participants utilized TA: wave 2, 40% (n=77) and wave 3, 43% (n=68).

In summary, it is clear from these studies that TA was an under-utilized resource. From 20% to 46% of coalition members participated in recommended TA opportunities. It is difficult to know whether there is a minimum threshold of participation that is necessary for a TA intervention to have its desired effect. However, one would suspect that efforts to get coalition members to use an evidence-based intervention or a new evaluation planning process (e.g., GTO) would require a critical mass of participation from members. The following sections will examine (1) measurement of coalition members' interest in TA and (2) factors that predict coalition members' interest in technical assistance.

Measuring Interest in Technical Assistance

Reliable measurement of coalition members' interest in TA is a necessary step in understanding how to engage these key stakeholders with technical assistance support systems. Interest may be related to general and/or innovation-specific capacity. Both types of capacity should be considered when improving the effectiveness of coalitions as prevention delivery systems (Wandersman, et al, 2008). Therefore, it is important to assess members' perspective about both. Although the research is very limited and in some cases exploratory in nature, these studies provide insight into how researchers have attempted to measure interest in TA among coalition members.

Could members' interest in TA be linked to the functioning of the coalition in varied domains? Feinberg, Greenberg, and Osgood (2004) used a multi-method measurement strategy to measure interest in TA that included interviews with program directors, the most active coalition members (those identified by the directors) and community leaders from different sectors (called key leaders in this study) (n=203). Each respondent rated the project's need for further training or technical assistance in eight specific areas: leadership development, coalition building, diversity/cultural awareness, fundraising/development, effective prevention approaches, program evaluation and monitoring, program implementation, and risk/protective factor focused prevention framework. However, the authors did not describe how these domains were selected and whether they represented independent dimensions. Need for TA in each area was measured on a 3-point scale (1, not

needed; 2, might be useful; and 3, definitely needed). Member scores in each of these areas were aggregated to the level of the coalitions (n=21).

In later research, these same researchers (Feinberg, Gomez, Puddy & Greenberg, 2008; Feinberg, Ridenour & Greenberg, 2008) expanded their multi-method approach to include self-report of coalition members' and staff's need for TA. But instead of interviews, the researchers developed and tested a confidential web-based questionnaire. As in the previous study, respondents indicated the degree of technical assistance needed in eight different areas (e.g., coalition building, program evaluation, fundraising, leadership development and effective prevention approaches, etc.). They also collected measures over three years (2003-2005). The items were combined to form the scale, *Technical Assistance Needed* (8 items, $M = 4.58$, $SD = .96$, $\alpha = .86$). At the second wave, two items were added to the scale (10 items, $M = 4.85$, $SD = 1.07$, $\alpha = .92$). Two-week test-retest reliability for the *TA Needed* scale was moderate ($r=.70$, $p<.01$). As an additional measure, the six regional TA providers rated the sites in terms of perceived priority for TA (i.e., high, moderate and low need). Analyses indicated a moderate but statistically significant association between how TA providers and coalition members rated need for TA over the three years, ($r=.47$, $.39$ and $.54$ respectively at $p<.01$ for all values).

Could members' interest in TA be related to different developmental domains of the coalition? In an exploration of this question, Stone-Wiggins (2008) tested a measurement model on survey data from 183 coalition members (22 coalitions) to identify the underlying capacity building domains in thirteen self-reported areas of interest for TA. Guided by the

coalition action theory, the researcher hypothesized that the coalition members' interest in technical assistance would model the three domains of coalition functioning described in the literature (coalition structure, collaboration, and programming). However, confirmatory factor analysis indicated that the a priori three-factor model of members' interest in technical assistance was significant (chi square=92.425, df=32, $p<.000$); therefore, the model was not a "good fit" to the data. Other descriptive indices (RMSEA=.11; CFI=.93) also did not meet the established, acceptable ranges. Although different types of TA may still need to be matched to different types of coalition needs, coalition members did not display such differentiation in their expression of interest in TA. Therefore, it seems that there is not yet an empirically supportable measure of TA interest that distinguishes among multiple domains.

To summarize, measures of interest in TA had moderate to high reliability (.86 to .92). There was a statistically significant association between the assessment of need by the TA providers and members. None of the researchers reported the correlation between the need for TA as identified by the coalition leaders and the members. Also, one study failed to find a link between interest in TA and developmental domains. However, principal component analysis with varimax rotation assessed a reliable global factor, Interest in Technical Assistance. The Cronbach's alpha statistics for the sample of coalition members was .92. That global measure of Interest in TA will be is the dependent measure for this study. It is more fully discussed in the methods section.

Predicting Coalition Members' Interest in Technical Assistance

Multi-level measures have been used in previous studies about technical assistance (Feinberg, Greenberg, Osgood, Anderson & Babinski, 2002). Multi-level modeling suggested a possible link between training and individual level characteristics (members' knowledge and attitudes) and coalition level characteristics (i.e. internal and external functioning). Therefore, one can make a reasonable argument for predictors of interest in TA at multiple levels (i.e., member, leader and coalition).

In this study, the researcher examined the hypothesized relationships between the members' self-reported interest in TA and predictors at the individual and organizational levels (Figure 1 and Figure 2 respectively). At each level, the model predicts whether there is a significant or non-significant (NS) relationship between the predictors and the members' self-reported interest in TA. If significant, the model predicts whether it is a positive (+) or negative (-) relationship. The covariates and the member-level and coalition-level predictors are discussed in the following sections.

Covariates

Member's Age, Gender and Education. Since members of the coalitions will likely differ on these demographic variables, they will be covariates in this study. Feinberg, Greenberg and Osgood noted that their sample was "generally highly educated" (i.e., only 16% of the 203 participants did not have a Bachelor's degree). Members of the GTO programs were significantly more educated than the comparison non-GTO program (i.e., measured as percent of high school graduates, 90.5% and 77.4% respectively, $p < .05$)

(Chinman, Hunter, Ebener, Paddock, Stillman, Imm & Wandersman, 2008). It is assumed that higher educated members would be more skilled. However, the relationship of age, gender and education to members' interest in TA was not defined in previous research. It is possible that older, more educated coalition members may be less interested in TA, particularly general capacity building.

Member's Commitment. One would expect that committed members are more likely to participate actively in the coalition. In the Communities That Care study (Feinberg, Greenberg & Osgood, 2004), the program directors identified "the most active and knowledgeable" members of the coalition to be interviewed. They found that participants who knew more about the CTC model perceived less of a need for technical assistance. In other studies, however, commitment has been positively associated with member's expertise ($r=.41$), operational understanding ($r=.34$) and experience ($r=.34$) (Rogers, Howard-Pitney, Feighery, Altman, Endres & Roesler, 1993). Therefore, no hypothesis will be made with regard to commitment. It will be included as a covariate.

Member-Level Characteristics

The hypothesized relationship between the member-level characteristics and self-reported interest in TA are presented in Figure 1. The rationale and support for the selected variables are discussed below.

Member's Perceived Skills. The skills and years of experience in community prevention that members bring to the coalition are valuable assets. Members' expertise have

been positively correlated to members' outcome efficacy ($r=.50$). With member experience and communication, member expertise explained 38% of the variance in member outcome

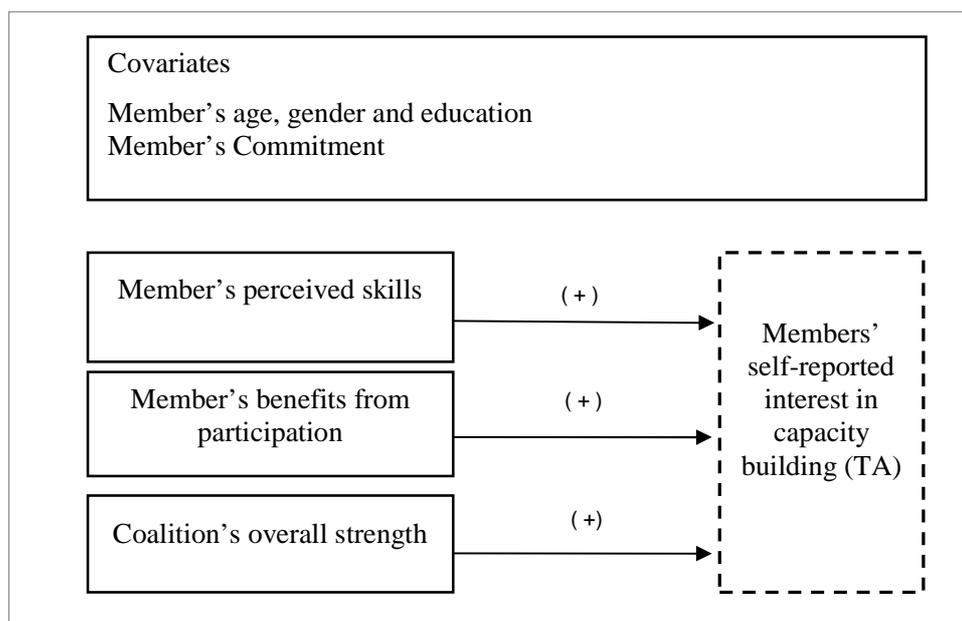


Figure 1

Hypothesized relationship between member-level predictors and members' self-reported interest in technical assistance

efficacy (Rogers et al, 1993). The community-level average of the prevention Attitude/Knowledge domain for key leaders from the community significantly correlated with lower perceived need for TA ($r = -.45, p < .05$) (Feinberg, Greenberg & Osgood, 2004). However, significant relationship at the aggregate level does not necessarily dictate the relationships at the individual level. Perhaps, members perceive that they have basic skills and experiences that are a resource to the coalition. The more skilled coalition members are more likely to be interested in TA, particularly if it is innovation-specific capacity building. A significant,

positive relationship between member's perceived skills and self-reported interest in TA is hypothesized.

Member's Benefits from Participation. Benefits to participation (i.e., personal and social) has been positively correlated with psychological empowerment ($r = .79$) (McMillan, Florin, Stevenson, Kerman & Mitchell, 1995). Perceived benefit could provide a sense of responsibility to contribute ("give back") to the community. It is possible that an empowered, very active member would have less interest in TA. On the other hand, when "learning a new skill" or receiving information is an expected benefit from participating in the coalition, members would likely have a higher interest in training and TA. One would also expect that members would participate if the benefits from participating in the coalition exceed the costs. A significant, positive relationship between perceived benefit and self-reported interest in TA is hypothesized.

Member's Perception of Coalition's Overall Strength. Feinberg, Greenberg and Osgood (2004) speculated that global perceptions of a coalition's strength or weakness could influence whether technical assistance was needed. Individual perceptions of greater coalition strength are assumed to be associated with greater individual interest in TA. Inclusion of this variable will allow examination of this issue. A significant, positive relationship between member's perception of the coalition's overall strength and members' self-reported interest in TA is hypothesized.

Coalition-level Factors

The hypothesized relationship between members' self-reported interest and the leader's interest in TA and coalition-level characteristics (i.e., coalition functioning) are shown in Figure 2. The members are expected to want TA when the coalition is functioning less effectively.

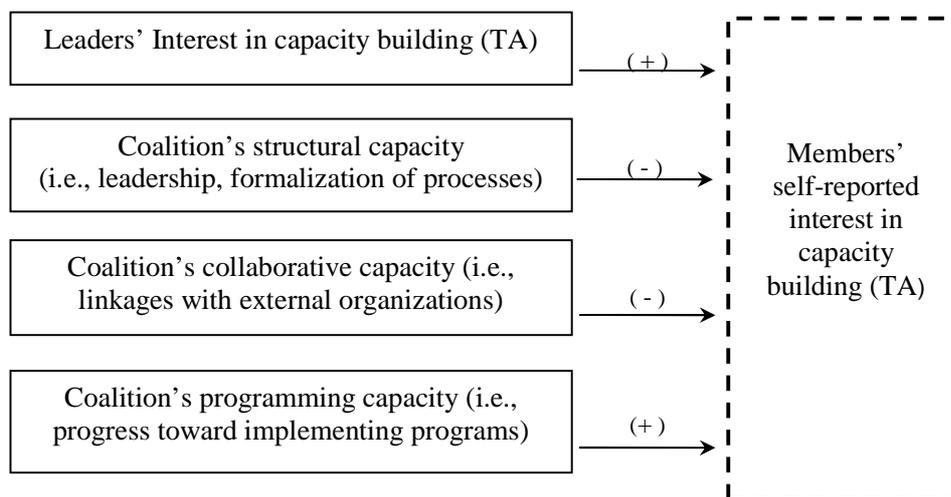


Figure 2

Hypothesized relationship between coalition-level predictors and members' self-reported interest in technical assistance

Leader's Interest in TA. Leadership style was the second most frequent factor associated with coalition effectiveness (Zakocs & Edwards, 2006). Leadership skills have been positively correlated with member satisfaction (Kegler et al, 1998; Rogers et al, 1993) and member outcome efficacy (Rogers et al, 1993). Kumpfer, Turner, Hopkins and Librett (1993) found that an empowering style of leadership positively correlated with team

efficiency and overall satisfaction. Typically, it has been coalition leaders that assess the need for TA. Feinberg, Greenberg and Osgood (2004) found program directors and community leaders did not significantly differ on the perceived need for TA items ($p < .05$) except for one item, leadership development. The difference was close to being significant ($p < .053$). The community leaders reported a greater need for leadership development than the program directors. Also, leaders that attended training had lower perceived need for general (i.e., coalition building) and innovation-specific (i.e. program implementation, risk/protective factors) (Feinberg, Greenberg & Osgood, 2004). Although the authors did not explain, it is likely that the training was required or offered by the funder. In that case, perceived need was not the motivator for participating in training. It is likely that coalition members' rating of interest in TA would also differ from that of the coalition leader, particularly related to leadership development and internal functioning. While the members may perceive low levels of functioning (i.e., report high levels of problems) and want TA, the leader may not see the problem and not report a need for technical assistance (i.e. optimistic bias). Considering the influence of the leader with the members, however, a significant, positive relationship between leader's interest in TA and members' self-reported interest in TA is hypothesized.

It is reasonable to assume that coalition members who see their coalition struggling with certain domains may be more interested in TA in those domains. Literature on technical assistance supports that premise (Feinberg, Gomez, et al, 2004). As hypothesized, these researchers found a statistically significant ($p < .01$) negative relationship between assessed

need for TA as measured by the web-based *Need for Technical Assistance* scale and ratings of areas of functioning by the TA providers (board cohesion, $r = -.52$; model execution, $r = -.43$; coalition-community relations, $r = -.44$; and coalition efficiency, $r = -.42$). The perception of high need for assistance at the member-level correlated with low ratings by the technical assistance providers on coalition functioning. The model (*Figure 2*) depicts the hypothesized relationship between the level of coalition functioning in three specific areas (i.e., structural, collaborative and programming capacity) and the members' ratings of interest in TA.

Structural Capacity. In general, members were more likely to have an interest in general capacity if the coalition was having problems with leadership and coalition functioning. Mean perceived technical assistance was significantly but negatively correlated ($r = -.40$, $p < .10$) with the index for the *Internal Functioning* domain (e.g., financial, organizational and human resources; participation of board members, perceived benefits from participating, clear plan, and sense of direction) (Feinberg, Greenberg, Osgood, 2004). For this study, a significant, negative relationship between the coalition's structural capacity and members' self-reported interest in TA is hypothesized.

Collaborative Capacity. Since synergy (i.e., collaboration) is an intermediate effectiveness outcome for coalitions (Lasker et al, 2001; Weiss, Anderson & Lasker, 2002), it was considered for a coalition-level factor. Collaboration with community sectors represented and diversity explained 34% of the variance in policy change (Hays et al, 2000). Research findings on the relationship between need for TA related to low collaborative

capacity was mixed. Coalitions that identified a need for TA related to Coalition-Community Relations were also rated low on this domain by the TA provider ($r = -.44$, $p < .01$) (Feinberg, Gomez, et al, 2006). In another study, need for TA was not significantly related ($p < .07$) to the External Linkages domain that focuses on the quality of the coalition's relationship with community such as number of community sectors (Feinberg, Greenberg & Osgood, 2004). For this study, a significant, negative relationship between collaborative capacity and members' self-reported interest in TA is hypothesized.

Programming Capacity. Members are likely to be interested in innovation-specific capacity for planning, implementing and evaluating evidence-based intervention. For example, "model execution" was one of the TA need areas identified by coalition members that significantly correlated to the low functioning rating by the TA provider ($r = -.43$, $p < .01$) (Feinberg, Gomez, Puddy and Greenberg, 2006). For the GTO intervention, assistance with planning and process and outcome evaluation was the highest TA use. Greater need for technical assistance was related to the multi-method domains: Community Readiness ($r = -.50$, $p \leq .05$ and Perceived Effectiveness ($r = -.54$, $p \leq .05$) (Feinberg, Greenberg, Osgood, 2004). The researchers found that members of higher functioning coalitions were more interested in fundraising/development (Feinberg, Greenberg, Osgood, 2004). Also, the authors did not find optimistic bias (i.e., perceive high levels of problems but identify low need for technical assistance). It seems reasonable to expect that readiness for programming capacity will predict member's interest in TA. A significant, positive

relationship between programming capacity and members' self-reported interest in TA is hypothesized.

Mixed-model analyses in HLM have been used to explore the influence of the leader's and the community informants' perceptions of need for technical assistance. The analyses adjusted for the community-level variance associated with individuals clustered within community coalitions or programs (Feinberg et al, 2004). The predictors were the two domains of functioning that significantly correlated with mean technical assistance need: Readiness ($r = -.50, p < .05$) and Perceived Effectiveness ($r = -.54, p < .05$). Site-level aggregate of both domain variables were entered separately in the model as Level I predictors and then jointly as Level II predictors in the second HLM model. Perceived effectiveness influenced mean need for TA at the individual level ($p < .05$). In the third HLM model, perceived effectiveness approached significance as the single variable entered as the level 1 and level 2 predictors ($p = 0.10$).

This study will examine the coalition members' interests in TA, controlling for individual and coalition level factors. It seeks to answer these questions. Are members' interest in TA related to member characteristics? Are members' interest in TA related to the leader's interest in coalition? Does perceived coalition functioning predict members' interest in TA? A better understanding of these relationships will inform the design of technical assistance systems to meet the interest of community coalition members and hopefully increase utilization of available assistance. The goal of training programs is to "attend to their expectations, motivation, and sense of self-efficacy (Durlak & DuPre, 2008, p. 338)"

because it is this goal more so than mastering specific intervention skills that affect their future performance.

The strength of this study is that it utilizes a more comprehensive model to examine the effects of coalition member and coalition-level characteristics (i.e. leader's interest in TA and coalition functioning) in predicting members' interest in technical assistance. It contributes to the prevention and capacity building literature in several ways. First, it focuses on the coalition members' interest in technical assistance which may differ from the leader's and/or TA provider's perspective. Feinberg, Greenberg and Osgood (2006) combined the data from leaders and members. In addition, the selected members were those identified by the project directors as the most active and knowledgeable. In the Dirigo study, all members were recruited to participate to complete the survey. Also, leaders were surveyed separately. Second, it informs the design and implementation of effective technical assistance systems for prevention coalitions. Finally, hierarchical linear modeling (HLM) analysis will be used to evaluate the independent effect of individual members that are nested within coalitions by controlling for individual and coalition level predictors.

The null hypothesis (H_0) being tested is 1) that coalition members' interest in technical assistance will not differ from the coalition leaders' interest and 2) that coalition members' interest in TA will not be related to ratings of coalition functioning. The alternate hypotheses are:

Hypothesis 1a: Member's interest in TA will be significantly and positively related to member's perceived skills controlling for covariates (i.e., member's education and age)

and the member-level variables of: commitment, benefits from participation, and perceived overall strength of the coalition.

Hypothesis 1b: Member's interest in TA will be significantly and positively related to *member's benefits from participation*, after controlling for covariates (i.e., member's education and age) and other member-level variables (i.e., commitment, perceived skills, and perceived overall strength of the coalition).

Hypothesis 1c: Member's interest in TA will be significantly and positively related to *member's perception of coalition's overall strength*, after controlling for covariates (i.e., member's education and age) and other member-level variables (i.e., commitment, perceived skills, and member's benefits from participation).

Hypothesis 2a: Member's interest in TA will be significantly and positively related to the *leader's interest in TA*, after controlling for covariates (i.e., member's education and age); the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition).

Hypothesis 3a: Members' interest in TA will be significantly and negatively related to *perceived coalition's capacity in structure*, after controlling for covariates (i.e., member's education and age) and the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition).

Hypothesis 3b: Members' interest in TA will be significantly and negatively related to *perceived coalition's capacity in collaboration*, after controlling for covariates (i.e.,

member's education and age) and the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition).

Hypothesis 3c: Members' interest in TA will be significantly and positively related to perceived *coalition's capacity in programming*, after controlling for covariates (i.e., member's education and age); the member-level variables of commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition.

METHODS

This study entailed secondary analysis of data collected by Dirigo Prevention Coalition, a three-year federal demonstration grant funded by the Center for Substance Abuse Prevention (CSAP) (Mitchell et al, 2004; Mitchell, 1999). Dirigo's primary purpose was to provide technical assistance to community-based coalitions that were addressing diverse health issues such as tobacco control, substance abuse, breast and cervical cancer, cardiovascular disease, and juvenile delinquency prevention in the state of Maine. Fostering greater collaboration and cooperation among the funding agencies and among the coalitions at the local level was another objective.

The technical assistance system included a central team of four staff persons with expertise in training, evaluation, and community development. Dirigo designed and offered technical assistance services in areas where coalition leaders reported there being a need. Technical assistance efforts involved a statewide training calendar, the Dirigo newsletter, and statewide conferences. Beginning in August 1996 and ending in October 1998, data collection included annual surveys of the coalition members, annual semi-structured phone interviews with the coalition leaders (i.e. chairs or coordinators), and a brief telephone interview with community key informants. The three questionnaires used in this study included the Dirigo Annual Members Survey, Annual Coalition Leader Interviews, and the Dirigo Annual Key Informant Interviews. Subscales from the instruments are included in Appendices 1-3.

Procedures

Member Survey. Completed by coalition members in 1996, the member survey had single and multi-level questions covering the member's background information, their level (i.e. roles, hours spent on activities per month) and type (i.e., voluntary or paid) of participation in the coalition as well as items related to 12 coalition domains.

Leader Interview. A second questionnaire was used for the 1996 telephone interviews with coalition leaders. It included 45 multi-level closed and open-ended questions spanning eight domains: respondent's background, coalition meetings, coalition members, coalition structure, external linkages, resources, functioning, and interest in technical assistance.

Key Informant Interviews. The last of the three datasets included a semi-structured telephone interview with the key informants. The instrument included 17 questions that covered five domains: awareness (recognition) of community groups that did health promotion and disease prevention work, familiarity with and involvement in the coalition, perceived effects of the coalition's programs, impact of coalition, and rating of the coalition's progress. This dataset was completed in 1997; however, the questions covered a period that began in spring 1996 and coincided with the period covered by the coalition members' and leaders' data collection. The three dataset of members, leaders, and community key informants respectively were linked by a common coalition ID.

Participants

Coalition Members

From the Dirigo Annual Members Survey data, there were 183 members from 22 (of the 41) coalitions, having from one to 17 members for each coalition. Background and demographic information on the members are provided in Table 1. The age of coalition members ranged from 16 to 88 with a mean age of 47.66 years ($SD=11.4$; $n=181$). The majority of the coalition members were white (97.2%, $n=180$), married (74.3%; $n=179$), and female (75.43%; $n=182$). Nearly three-fourths of the members (71.2%, $n=177$) reported being employed full-time and having a household income (from all sources) between \$30,000 to \$79,999 (69.4%, $n=170$). The highest grade or year of school completed ranged from 11th grade to earning a medical degree (mean=16.1, $SD=2.253$, $n=177$).

Coalition Leaders

Coalition leaders comprised the second data source, with one leader representing each of the 41 coalitions. Thirty-two of the 41 leaders were paid coalition staff (7 full-time and 25 part-time) and 9 were volunteers, working an average of 19 hours per week. On average, leaders had served 31 months ($SD=27.5$, $n=41$) in this leadership position. The majority of the leaders (15 of 41, 36.6%) came from the health care sector; human services was the second most represented sector (17.1%). Their years of experience in prevention and health promotion ranged from one to 36 years (mean of 13, $SD=8.8$, $n=41$). The highest level of education completed ranged from 12th grade to earning a professional degree

Table 1

Demographic Characteristics of Coalition Members

Variable	Statistics	# respondents
Gender		
% Female	75.4	182
Age (in years)		
Mean	47.66	181
SD	11.41	
Marital Status		
% Married	74.3	179
Not currently married	25.7	
Racial Group		
% White	97.2	180
% Asian	.6	
% Native American	.6	
% Other	1.7	
Employment		
% Full-time	71.2	177
% Part-time	16.4	
% Not currently employed	12.4	
Highest grade/year of school		
Mean	16.1	177
SD	2.25	
Household income (all sources)		
% 10,000 to 19,999	1.3	170
% 20,000 to 29,999	10.6	
% 30,000 to 49,999	33.5	
% 50,000 to 79,999	35.9	
% 80,000 or more	18.2	

N=183

(mean=16.63, SD=2.42, n=41). However, this study will include just the leaders from those 22 coalitions for which there were member data.

Community Key Informants

The third data source was the Dirigo Annual Key Informant Interview (n=141) that included key community informants (i.e. school nurses, local health officials, government officials, and the school superintendent from each community) who were thought to be knowledgeable about community coalition activities. A brief interview was conducted with four key informants from the communities served by 36 (of the 41) coalitions that were still active and willing to participate in the data collection. Two key informants could not be located; a third one refused the interview, for a sample of 141. Key informants had been in their positions for an average of 6 years and had worked in the area for an average of 15 years, ranging from less than 1 year to 55 years. Seventy-nine percent of the respondents lived in the area about which they were being questioned. Again, this study will include averaged responses for those key informants representing the 22 coalitions for which there were member data.

Measures

Dependent Variable

The dependent measure for this study is the coalition members' self-identified interest in technical assistance. In the annual survey, members were asked to indicate the level of interest (1=no interest, 2=minor interest, 3=moderate interest, and 4=great interest) that they had in receiving TA in several specific areas. Those thirteen items are presented in Table 2. On average, there is less than moderate interest in all TA areas except four (i.e., linking with other community groups, developing new prevention strategies, implementing

Table 2

Survey Items for Members' Interest in Technical Assistance

28. How much interest would you have in obtaining assistance for your coalition in developing its capabilities in the follow areas:	Freq	Mean	Median	SD	Skew	Kurtosis
a. Mobilizing (e.g. recruiting new members, representation from new community sectors)?	167	2.93	3.0	.872	-.368	-0.668
b. Structuring the coalition (e.g. establishing subcommittees, rules and procedures)?	167	2.34	2.0	1.022	.248	-1.043
c. Leadership development (e.g. meeting management, decision-making, conflict resolution)?	166	2.48	2.0	1.001	.050	-1.051
d. Developing member's skills (e.g. in health promotion/prevention; policy advocacy)?	167	2.85	3.0	.948	-.382	-.792
e. Identifying community resources / linking with other community groups working on the same problem?	168	3.01	3.0	.823	-.403	-.535
f. Collaborating with other community groups working on different but related problems (e.g. they work on violence prevention; you, on substance abuse prevention)?	166	2.95	3.0	.907	-4.97	-.576
g. Assessing community needs for program planning?	166	2.87	3.0	.935	-.464	-.643
h. Developing new health promotion / prevention program strategies?	167	3.10	3.0	.852	-.659	-.245
I. Expanding the mission of the coalition into new problem areas (e.g. expanding from substance abuse prevention into violence prevention)?	167	2.67	3.0	1.044	-.302	-1.071
j. Getting activities and programs implemented?	167	3.11	3.0	.892	-.781	-.134
k. Evaluating specific programs / activities?	168	2.97	3.0	.878	-.425	-.650
l. Reviewing and refining the array of general health promotion / prevention strategies used by coalition?	166	2.87	3.0	.884	-.322	-.682
m. Planning for the future of the coalition / institutionalization of its work?	166	3.05	3.0	.910	-.646	-.450

Note: Responses for TA items are: (1) no interest, (2) minor interest, (3) moderate interest and (4) great interest.

programs and institutionalizing the coalition's work). Nineteen of the 183 cases had at least one missing value on this measure; however, fourteen of the nineteen cases had from 11 to 13 missing values, indicating that fourteen individuals did not answer question 28.

Therefore, those 14 cases were excluded from the analysis. Those missing cases were members of eight different coalitions, ranging from one to 4 members per coalition.

Using SPSS 14.0, the researcher performed principal component analysis with varimax rotation to reduce the thirteen items in the 'interest in technical assistance' subscale to the smallest optimal number of interpretable factors. The final members sample size (169 usable responses) is acceptable but less than optimal; since, as a general rule, 300 cases is considered good for factor analysis unless there are several high loading marker variables ($>.80$) (Tabachnick & Fidell, 2001). The factor analysis provided three factors with eigenvalues of at least one. A factor loading of .40 was determined to be the lowest acceptable loading; although in exploratory analysis, a loading of .30 or higher is acceptable after factors are rotated (Grimm & Yarnold, 1997). Based on the factor extraction data (i.e., top three eigenvalues being 6.653, 1.088, and 1.010), one factor was identified. The scree plot and percentage of variance explained (67.3%) indicated that the factor was substantially above chance levels. The dependent variable is the mean of the 13-item subscale. The Cronbach's alpha reliability statistic for the scale was .92. The intra-rater reliability of averaged items for each coalition was .91 in the one-way random effects model (95% confidence interval: .89, .93). In the HLM analysis, the averaged response for the 13 items will be assigned to each coalition member.

Predictor (Independent) Variables

For the HLM analysis, the models will include will be member-level variables as covariates (i.e., demographic variables, members' commitment). Other member-level (level I) will be included predictors: two composite variables-- perceived skills, perceived benefits--and a single measure, perceived strength of the coalition. Coalition-level (level II) predictors will be the coalition leader's interest in TA, the leader's ratings of the coalition's structural and collaborative capacity and the key informant's rating of programming capacity. The scales, survey items, number of cases, and the alpha for the covariates and predictor variable at the two levels are summarized in Table 3 and discussed below.

Covariates

Member's Age, Gender and Education. These demographic variables will be included as covariates to control for potential differences in composition of the coalition membership. Their use is consistent with a previous study (Hallfors et al, 2002). Education (i.e., "highest grade or year of school completed") was recoded as (0=No bachelor's degree, 1=Bachelor's degree and above).

Members' Commitment (4 items, n=167). The items are: "Over the next 12 months, how likely are you to (attend coalition meetings regularly, devote time outside of meetings to the coalition, attempt to influence your group or organization to devote resources to increase community health promotion/ prevention activities, attempt to increase linkages between your organization and other organizations for community health promotion and prevention activities) (5=very likely, 4=likely, 3=neither likely or unlikely,

Table 3

Summary of Variables by Number of Items and Cronbach's Alpha

Variable name	# of Items	Cronbach's Alpha	# cases
<i>Covariates</i>			
Member's age	1	n/a	167
Member's gender	1	n/a	169
Member's education	1	n/a	163
Member's commitment	4	.83	167
Member-level Predictors (Level 1)			
Member's perceived skills	3	.81	166
Member's perceived benefits	6	.86	169
Member's perception of coalition strength	1	n/a	166
Coalition-level Predictors (Level II)			
Leader's interest in TA	8	.80	39
Coalition's structural capacity index	29	.86	13
Leaders' rating of sector representation	10	.41	21
Formalization	13	.89	22
Leadership roles	4	.84	22
Coalition's collaborative capacity (Leaders' rating of the coalition's external linkages)	9	.38	22
Coalition's programming capacity (Key informants' rating of implementation)	1	n/a	19

2=unlikely, 1=very unlikely)?" The alpha for the scale is .83.

Member Level Predictors

Three characteristics of coalition members will be explored as potential predictors of members' interest in TA: perceived skills, perceived benefits from participating in the coalition and perception of the coalition's overall strength. A description of the subscales, the item and reliability statistic for each measure are discussed.

Members' Perceived Skills (3 items). The items include: "I can (could) contribute content knowledge about health promotion/prevention programs to the group. I can (could) contribute expertise in the implementation of health promotion and prevention programs. I can (could) help the group to influence the adoption of local policies for health promotion and prevention (5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree)." The alpha for this scale is .81.

Members' Perceived Benefits (6 items). The items are: "How much of each benefit are you getting from working with your coalition (i.e., gain support by working with other members of the community; gain personal recognition and respect from others; learn new skills; receive information about community services, events, etc; provide a 'sense of community; fulfill a sense of responsibility to contribute to the community) (4=very much, 3=somewhat, 2=not very much, 1=not at all a benefit)? The alpha is .86.

Members' Perception of the Coalition's Overall Strength (1 item). "Overall, how strong is your coalition (1=very strong, 2=somewhat strong, 3=somewhat weak, 4=very weak)?" This item was reverse coded so that 1=very weak, 2=somewhat weak, 3=somewhat strong, and 4=very strong.

Coalition Level Predictors

These coalition-level predictors include leader's interest in TA and three variables that will serve as proxy for coalition functioning: coalition's structural capacity score, coalition's linkage to external organizations (collaboration) and its progress in implementing programming. A description of each item and reliability statistic for each measure follows.

Leader's Interest in TA. The question posed to the leaders was "Over the next 12 months, how much technical assistance would you like your coalition to receive in nine specific areas (i.e., recruiting new member organizations, organizing and structuring the coalition, building knowledge and skills of individual members, building the coalition's organizational capacity, conducting a needs assessment, developing an action plan, implementing activities, monitoring and evaluating activities, and planning for maintenance of the coalition over the long term) (4=a lot, 3=some, 2=a little, 1=none)?" The subscale alpha is .80.

Coalition's Structural Capacity. This variable is a measure of coalition functioning related to developing the coalition's structure. Coalition structure is a composite of three subscales: sectors represented in the coalition, formalization within the coalition, and leadership roles within the coalition. The subscales are described below.

1) Sectors (11 items, alpha=.41). The items are: "Is this sector (business, faith, local government, human services agencies, volunteer services agencies, grassroots community organizations, health care, law enforcement, schools, general concerned citizen, and other) regularly represented on the coalition?" (Yes=1, No=0). The leader's responses for the

eleven items were averaged to calculate a sector score.

2) Formalization (13 items, $\alpha=.89$). The items are: “Does the coalition [have written by-laws, provide written agenda at each coalition meeting, have an organizational chart showing the coalition’s structure, keep written minutes, distribute written minutes to all members, hold meetings on a regular date and time, provide a standard orientation for new members, have a written policy on how membership is defined, have a written policy for member rotation, have written expectations for member participation, have a written description of procedures for leader selection, written description of the responsibilities of officers, and written description of the procedures for decision-making] (Yes=1, No=0)?” The formalization score was the mean response of the thirteen items for each leader.

3) Leadership (5 items, $\alpha=.84$). The items are: “Which of the following leaders/officers (chair/president, vice-chair/co-chair, secretary, treasurer/town financial clerk and other) does your coalition have?” (Present=1, absent=0). The leadership score was the mean of the leader’s response for the five items.

The predictor variable, structure, was constructed for each coalition by calculating the mean of the scores for the sector, formalization and leadership subscales. The mean rating for coalition structure was .58 ($SD=.23$, range .21 to .91, $n=22$).

Collaboration. This variable is the mean of the leader’s average rating of external linkages with various organizations in the community (9 items, $\alpha=.38$). The question is “How much contact did your coalition have with each of the following in your community during the past 12 months (business community, faith community, local government, human

services agencies, volunteer services organization, grassroots community organizations, health care sector, law enforcement, and local media)? (3=extensive [weekly/more], 2=moderate [monthly/more], 1=little [few times a year], 0=none).” On average, coalition leaders reported modest (mean of 1.67) linkages with other groups in the community, a few months out of the year. The variable is an index of discrete items (i.e., community sectors) rather than a latent construct that should high internal consistency.

Programming. The key informant’s perception of the coalition’s progress in implementing programming was used as a proxy for the community’s progress. “Overall, how would you rate the progress of (coalition name) in implementing programming for promoting health and preventing relevant health problems in our community (4=very much progress, 3=moderate progress, 2=some progress, 1=no progress).” All of the key informants reported that the coalitions had made progress (mean =2.99, SD=.05, range 2-4, n=150). An average rating of the responses was calculated for each coalition.

Analysis Plan

This study examines the relationship of member-level and coalition-level variables on the coalition members’ interest in technical assistance. Since the members are nested within community coalitions, the assumption of independent observations that is necessary for standard multiple regression analysis is violated. For instance, members within a respective coalition are more likely to have more similar interest in TA than they are to all other participants in the study. An important assumption in inferential statistics is that observations are independent, not associated with others in the group, since even a small

degree of dependence can substantially inflate the actual alpha (Grimm & Yarnold, 1997). In other words, one can reject the null hypothesis when it is true (Type I error). Therefore, hierarchical linear modeling (HLM 6.06 for Windows) will be performed to adjust for the effect of individual members that are nested within coalitions.

Increasingly, multi-level modeling is being recommended by community scientists to model the influences of organizational- and group-level characteristics on individual-level behavior (Luke, 2005). For this type of analysis, the rule of thumb is to have at least 10-15 cases per variable in the equation. Due to the less than ideal statistical power, this analysis will be exploratory. Some coalitions have as few as two members. To address these methodological issues that are associated with aggregating individual-level responses to the coalition level, some preliminary analytical steps will be undertaken prior to conducting the hierarchical linear modeling.

Null Model

To test the suitability of the data for aggregation, the researcher will use one-way analysis of variance (ANOVA) with each coalition as the response (independent) variable and the individual scale score for each of the predictor variables as the dependent variable to examine within coalition variance.

The Level 1 Model is: $Y_{ij} = \beta_{0j} + r_{ij}$

Where:

Y_{ij} is the outcome of member i in coalition j ($j=1 \dots 22$ coalitions);

β_{0j} is the mean outcome in coalition j ; and,

r_{ij} is the Level-1 error of member i in coalition j .

The Level 2 Model is: $\beta_{0j} = \gamma_{00} + \mu_{0j}$

Where:

γ_{00} is the grand mean outcome across coalitions;

μ_{0j} is the residual error variance at Level 2.

Hypothesis Testing

Member's interest in TA (Y_{ij}) is predicted by member's commitment (γ_{00}), perceived skills (γ_{01}), perceived benefits (γ_{02}), and perceived strength (γ_{03}); leader's interest in TA (γ_{10}); and coalition- level measures of structure (γ_{20}), collaboration (γ_{21}), and programming (γ_{22}). Education and age will be entered as individual-level covariates.

The equation is: $Y_{ij} = \beta_{0j} (\gamma_{00} + \gamma_{01} + \gamma_{02} + \gamma_{03}) + \beta_{1j} (\gamma_{10}) + \beta_{2j} (\gamma_{20} + \gamma_{21} + \gamma_{22}) + r (\mu_{0j} + \mu_{1j} + \mu_{2j})$.

RESULTS

Data Management

Before entering the data into HLM, exploratory statistical analysis and data imputation were completed in SPSS 17 to ready the data for the multi-level analyses (HLM 6.06). With deletion of the one case with missing values on multiple variables, there were 168 cases for which the majority of the cases had complete member-level data and for which the coalition-level data were also available. In general, there were few cases with missing values.

At the individual member-level, data had the following pattern of missing values: age (2 of 168 cases, 1.2%), education (6 of 168, 3.6%), commitment (1 of 168, .6%) and perceived strength of coalition (3 of 168, 1.8%). To retain these members in the dataset, the estimate from expectation maximization (EM) for the respective variables was substituted. A level-1 file (168 members, 22 coalitions) was created in HLM that included the three covariates (i.e., age, gender and education) and the member-level predictors (i.e., commitment, skills, benefits, and perceived strength of the coalition).

At the coalition level, there were 22 coalitions (168 members) with complete data on leader's interest in TA, structure and collaboration. Testing of the hypotheses related to these three coalition-level predictors was done using a sample of 22 coalitions and 168 members. However, only 19 coalitions (150 members) had complete data on programming, the fourth coalition-level variable. Given the small sample size and the large number cases with missing values on programming (three coalitions, 18 cases), it was decided not to

impute data for this variable. Therefore, the hypothesis related the relationship of programming to members' interest in TA was tested with 19 coalitions and 150 members.

Descriptive Statistics

HLM is based on the assumptions of normality (i.e., level-1 residuals are normally distributed) and homoscedasticity (i.e., level-1 residual variance is constant). Skewness and kurtosis of the distribution of the dependent and predictor variables were evaluated.

Descriptive statistics are summarized in Table 4. For all of the predictors, there were some skewness and kurtosis. In general, most variables were not considered too extreme (coefficient of skewness and kurtosis outside the range of -1 and +1) (Tabachnick & Fidell, 2001). However, based on these general indicators of normal distribution, gender, education -commitment and structure were exceptions. Gender was negatively skewed (-1.17). Education had a platykurtic (low peak) distribution with a coefficient of kurtosis of -1.42. Members' rating of commitment had a negatively skewed, bi-modal distribution (skewness, -1.11 and kurtosis, 2.0). The distribution of the structure variable was kurtotic (-1.45).

These skewness and kurtosis coefficients were compared to zero using a z distribution (i.e., coefficient divided the standard error) (Tabachnick & Fidell, 2001). Those tests were significant: skewness for gender (-6.23, $p < .01$) and kurtosis for education (-3.81, $p < .01$). Despite the significant tests, gender and education were not transformed since they were dichotomous variables. Commitment was also significant for skewness (-5.94, $p < .01$) and kurtosis (5.30, $p < .01$). The structure variable also tested significant for kurtosis (-1.52, $p < 0$). The commitment and structure variables were normalized by with a log transformation

Table 4

Descriptive Statistics for Members' Interest in TA and the Predictor Variables

	n	Range	Mean	SD	Skewness	Kurtosis
Members' Interest in TA	168	1.31 – 4.00	2.86	.65	-.27	-.47
Member-level predictors ¹						
Age	168	18 - 72	47.47	10.62	-.16	.24
Gender	168	0 - 1	.75	.43	-1.17	-.65
Education	168	0 - 1	.68	.47	-.77	-1.42
Commitment	168	1.00 - 5.00	4.08	.79	-1.11	1.98
Perceived Skills	168	1.33 - 5.00	3.93	.77	-.69	.30
Benefits	168	1.33 - 4.00	3.10	.64	-.58	-.03
Coalition strength (member)	168	1 - 4	2.97	.84	-.48	-.36
Coalition-level predictors ²						
Leader's interest in TA	22	2.11 - 4.00	2.72	.53	.98	.72
Collaboration	22	.78 - 2.44	1.60	.38	.08	.43
Structure	22	.21 - .91	.58	.23	.15	-1.45
Program	19	2.00 - 4.00	3.0	.63	-.49	-.75
Coalition strength (leader)	22	1 - 4	3.0	.87	-.95	.89

¹ N = 168. ² N = 22.

(skewness, .039; kurtosis, -.603 for commitment; kurtosis, -.90 for structure) and included in the models. However, the pattern of results using transformed and untransformed variables were similar. Therefore, the untransformed variable was used in the final analysis for both of the variables.

A review of the distribution and central tendency statistics provided an understanding of the nature of the member-level and coalition-level data. The coalition displayed diversity in the age of its members, ranging from 18 to 72 years with a median of

47.9. The mean age of 47.5 years reflects the slight skewness of the distribution (-.16). The coalitions also had an equal number of members on each end of the age range: 30 or younger (n=12, 7.1%) and 65 and older (n=12, 7.1%). The majority of the members were females (75%). The members were highly educated with nearly three-fourths (125 of 168, 71%) of them having a college degree (mean=.71, SD=.45, n=168).

Members reported moderate interest in utilizing TA to develop the coalition's capacity in several areas (mean=2.86, SD=.65, n=168). The levels of interest in TA were none (1), minor (2), some (3) and great (4). There was wide variation in the distribution of responses, ranging from 1.31 to 4.00 (with a small amount of skewness, -.27 and kurtosis, -.47). The midpoint in the distribution was 2.9. On the low end, 11% of the members had less than minor interest in TA. Another 43% of the respondents indicated minor interest. Nearly half of the members (77 of 168, 46%) were interested in TA including the five members that expressed great interest. Overall, the level of interest was moderate.

Members reported that they would likely commit time to regularly attend coalition meetings and use their influence and resources on behalf of the coalition. The scores ranged from 1.00 (very unlikely) to 5.00 (very likely) with a median of 4.06. Only 6% responded that they were ambivalent or reluctant to commit time for these activities. Nearly half of the members (45%) reported high commitment. Overall members seemed highly committed (70% likely and very likely to engage in coalition activities).

On average, the members agreed or strongly agreed that they brought knowledge about health promotion and prevention programs, expertise in implementation, and influence

in adopting local polices for health promotion and prevention (mean=3.9, SD=.77, n=168). The responses ranged from strongly disagree (1) to strongly agree (5). Of interest is that nearly a third of the members (48 of 168, 29%) were uncertain (“neither agree nor disagree”) about their skills. The responses were negatively skewed (-.69) with a modest number of members (15 of 168, 8.9%) strongly disagreeing that their skills contributed to the coalition. Overall, almost two-thirds of the members agreed or strongly agreed to that they had skills to contribute to the coalition.

Overall, members expected some benefit from their involvement in the coalition. Member-level data indicated a near normal distribution (skewness=-.58 and kurtosis=-.03). The members’ scores ranged from low of 1.33 to a high of 4.00 (mean=3.10). The mid-point was 3.17. None of the members reported “no benefit at all” (rating of 1); however, a few came close. Nearly a third (30%) perceived “not very much” of a benefit. Overall, most members (108 of 168, 64%) reported “somewhat” or “very much” a benefit.

On average, members perceived their coalitions as “somewhat strong” with a mean of 3.0 (range 1-4, SD=.84, n=168). Only a small number (9 of 168, 5.4%) reported their coalition as “very weak” (skewness=-.48). Twenty-one percent stated somewhat weak. Overall, the majority perceived the coalition as strong (121 of 168, 72% rated them somewhat or very strong).

Likewise, the descriptive statistics for the coalition-level predictors were examined. Coalition leaders were questioned about how much technical assistance they would like to receive for their coalition in nine areas (1=none, 2=a little, 3=some and 4=a lot). On

average, leaders expressed an interest in TA (mean=2.72, SD=.53, n=22). Their responses had a positive coefficient of skewness (.98), a bias toward higher interest in TA. One leader wanted a lot of TA. All other leaders wanted some (73%) or a little (23%). Overall, the amount was moderate.

Collaboration was measured from the leaders' report of how much contact they had with community organizations in nine sectors (i.e. business, faith, government, etc.). In the 12 months prior to the survey, the leaders reported modest contact (mean=1.60, range=.78 – 2.44, n=22), somewhere between a little (a few times a year=1) and moderate (monthly or more=2) contact. None of the leaders had weekly or more extensive contact with the community organizations. Overall, the leaders reported little contact with the majority of the organizations (86%).

Coalition leaders also rated structural capacity, the mean score for the three subscales (i.e., community sectors, structural processes and leadership roles). Structure scores ranged from a low of .21 to a high of .91 (mean=.58, SD=.23, n=22). The coefficient of kurtosis (-1.45) indicated a rectangular shape to the distribution (i.e. no peaking of scores in the middle); however, skewness (.15) was minimal. The midpoint of the distribution was .53 points. Nearly a third of the coalitions are clustered at either end of the distribution. It seems that a number of coalitions are very loosely organized (.score of 20 - .40, 7 of 22, 32%) or highly structured (a score of .80 to .91, 6 of 22, 27%). The remaining coalitions fell in the middle.

On implementing programming for promoting health in the community, key informants rated all of the coalitions as having made some (2), moderate (3) or very much (4) progress in this area. On average, the respondents answered that the coalitions had made moderate progress (mean=3.0, n=19). Five coalitions (26%) fell below moderate progress. Nearly three-fourths of the coalitions (73%) had made some and moderate progress. There were no responses for three of the coalitions.

Leaders also rated the overall strength of their coalition. On a scale of very weak (1) to very strong (4), the average response was somewhat strong (mean=3.0, SD=.87, n=22). The majority (18 of 22, 82%) rated their coalition as somewhat strong (3) or very strong (4). The bivariate relationship between the two perspectives was positive and moderate ($r=.27$, $n=22$). The correlation was not significant.

Correlations

Multicollinearity occurs at higher correlations; and, inclusion of bivariate correlations of .70 or more are generally discouraged (Tabachnick & Fidell, 2001). To screen for multicollinearity, bivariate correlations between members' interest in TA (the dependent variable) and the member-level variables were calculated. Overall, the bivariate correlation coefficients indicated low to moderate relationships (ranging from -.17 to .53) (Tables 5 and 6).

Table 5

Correlations between Members' Interest in TA and the Member-level Predictors (n=168)

Variable	1	2	3	4	5	6	7
1. Age (in years)	--						
2. Gender	-.07	--					
3. Education (college degree, none)	-.07	-.04	--				
4. Member's commitment	-.05	-.10	.02	--			
5. Perceived skills	-.12	.05	.11	.34**	--		
6. Member's perceived benefits	-.11	.06	-.17*	.42**	.39**	--	
7. Coalition strength	.02	-.07	-.06	.31**	.15*	.42**	--
8. Member's interest in TA	-.02	.05	-.04	.32**	.38**	.21**	-.05

* $p < .05$, two-tailed. ** $p < .01$, two-tailed.

The covariates (i.e., age, gender and education) had a weak relationship to all of the member-level variables (coefficients ranging from $-.17$ to $.11$). As predicted, age and education had an inverse relationship to member's interest in TA. Gender was positively correlated to members' interest in TA ($r=.05$). Education was positively related to perceived benefits ($r=.17$, $p<.01$).

The correlation coefficients between members' interest in TA and their ratings of commitment, skills, and benefits were positive and modest but significant ($r=.32$, $r=.38$ and $r=.21$, $p<.01$, respectively). It seems that members with higher levels of commitment and higher levels of skills had more interest in TA. No relationship to commitment was hypothesized. Members' interest in TA was hypothesized to be negatively related to skills. The variable, benefits, was significant in the hypothesized direction. The relationship

between member interest in TA and perception of coalition strength was in the hypothesized negative direction but not significant.

Nearly all of the member-level predictors were positively and significantly related to each other. Commitment was moderately correlated to skills ($r=.34$, $p<.01$) and benefits ($r=.42$, $p<.01$), consistent with the literature (Rogers et al, 1993). Commitment also had a significant relationship to members' perception of the strength of their coalition ($r=.31$, $p<.01$). It seems that members with higher levels of commitment, higher levels of skills had more interest in TA and perceive more benefits from participating in the coalition and to perceive the coalition as strong. Likewise, skilled members also reported benefits from participation ($r=.39$, $p<.01$) and tended to perceive the coalition as strong ($r=.15$, $p<.05$), a positive but very low correlation. Members with more education (a college degree) perceived fewer benefits from participating in the coalition ($r= -.17$, $p<.05$). Conversely, those members with less education perceived more benefits from participating in the coalition. It is interesting that education did not significantly correlate to skills ($r=.11$). Having more education may not mean that members perceive that they have more skills to contribute to the coalition.

Correlations among the coalition-level predictors were also examined (Table 6). Coefficients ranged from $-.18$ to $.53$ with the strongest, positive relationship between collaboration and the leader's perception of coalition strength ($r=.65$, $p<.01$). Structure also had a significant, positive relationship to collaboration ($r=.53$, $p<.05$). As expected, the data also indicated a positive, significant (although weak) relationship between how members

Table 6

Correlations among the Coalition-level Predictors

Variable	n	1	2	3	4
1. Leader's Interest in TA	22	--			
2. Collaboration	22	-.00	--		
3. Structure	22	.24	.53*	--	
4. Program	19	-.06	-.18	-.08	--

* $p < .05$ level, two-tailed.

and leaders perceived the strength of the coalition ($r=.27$, $n=22$) and the relationship between how much interest the leaders and members had in TA ($r=.27$, $n=22$). None of the correlations reached the threshold that would be considered problematic with regard to multicollinearity.

Hierarchical Linear Models

The null hypothesis (H_0) being tested is 1) that coalition members' interest in technical assistance will not differ from the coalition leaders' interest and 2) that coalition members' interest in TA will not be related to ratings of coalition functioning. To test the alternate hypotheses, two-level models were estimated by means of restricted maximum likelihood of level-2 fixed effects and the variance-covariance components. Each variable was centered on its grand mean. The respective models for each of the alternate hypotheses and the results are discussed.

The first model (Table 7) was a random effect unconditional model to determine whether between-group variance in members' interest in TA was significant (i.e. indicate the

Table 7

<i>Intercept Only (Unconditional) Model of Members' Interest in TA</i>					
Fixed Effects	Coefficient	SE	T-Ratio	df	P-value
Intercept2, G_{00}	2.85	0.07	41.90	21	0.000
Variance					
Random Effects	SD	Component	df	χ^2	P-value
Intercept1, U_0	0.23	0.05	21	42.16	0.004
Level-1, R	0.62	0.38			

necessity of doing a multi-level model). The overall mean of members' interest in TA was 2.85 and there was significant between-group effect ($\chi^2 = 42.16$, $df = 21$; $p < .004$). The calculated intra-class correlation coefficient ($\rho = \tau_{00} + \sigma^2$) indicated that 12 % of the variance in members' interest in TA was between coalition and 88% was at the member level.

The seven level-1 variables were then added to the intercept-only (unconditional) model (Table 8) to test alternate hypotheses *Ia*, *Ib* and *Ic*.

Hypothesis Ia: Member's interest in TA will be significantly and positively related to *member's perceived skills* controlling for covariates (i.e., member's age, gender and education) and the member-level variables of: commitment, benefits from participation, and perceived overall strength of the coalition. Based on HLM analysis of this model (Table 8), this hypothesis was supported ($T = 3.48$, $df = 160$, $p = 0.001$). As such, there was a significant positive relationship between member's perceived skills and members' interest in TA. The 95% confidence interval for the coefficient was 2.40 and 3.30.

Table 8

Random Coefficient Regression Model of Members' Interest in TA and the Member-level Predictors

Fixed Effects	Coefficient	SE	T-Ratio	df	P-value
Intercept2, G ₀₀	2.86	0.06	47.08	21	0.000
Age, G ₁₀	0.00	0.00	0.88	160	0.379
Gender, G ₂₀	0.06	0.13	0.49	160	0.625
Education, G ₃₀	- 0.12	0.09	- 1.36	160	0.178
Commitment, G ₄₀	0.19	0.08	2.38	160	0.019*
Skills, G ₅₀	0.26	0.07	3.48	160	0.001*
Benefits, G ₆₀	0.08	0.10	0.86	160	0.389
Coalition strength, G ₇₀	- 0.16	0.06	- 2.63	160	0.010*
Variance					
Random Effects	SD	Component	df	χ^2	P-value
Intercept1, U ₀	0.22	0.05	21	43.43	0.003
Level-1, R	0.55	0.30			

* Significant at 0.05

Hypothesis 1b: Member's interest in TA will be significantly and positively related to member's benefits from participation, after controlling for covariates (i.e., member's age, gender and education) and other member-level variables (i.e., commitment, perceived skills, and perceived overall strength of the coalition). The hypothesis that member's perception of benefits would be significantly related to members' interest in TA was not supported (T= 0.86, df=160, p=0.389).

Hypothesis 1c: Member's interest in TA will be significantly and positively related to member's perception of coalition's overall strength, after controlling for covariates (i.e., member's age, gender and education) and other member-level variables (i.e., commitment, perceived skills, and member's benefits from participation). The hypothesis was not supported ($T = -2.63$, $df = 160$, $p = 0.010$). There was a significant negative relationship between the members' perception of the coalition's strength and members' interest in TA. The 95% confidence interval for the coefficient was $-.59$ and $.27$. The weaker the coalition was perceived to be, the more the interest in TA.

Commitment was a control variable in the model. As such, no relationship was hypothesized between commitment and members' interest in TA. However, the models revealed a significant, positive relationship ($T = 2.38$, $df = 160$, $p = 0.019$) with the dependent variable. The 95% confidence interval for the coefficient was $-.24$ and $.62$.

To summarize, members with higher commitment and higher skills would have higher interest in TA. However, members' interest in TA was inversely related to the members' perception of coalition strength. That is, a member's perception of a weak coalition would be related to high interest in TA and members in a strong coalition would have less interest in TA. Member-level commitment, skills and perception of coalition strength accounted for 20% of the variance in members' interest in TA.

The next sets of analyses were related to the coalition-level predictors. Because of power issues (i.e., too few coalitions to enter all coalition-level variables simultaneously), a separate set of HLM analysis was completed for each coalition-level variable.

Hypothesis 2a: Member's interest in TA will be significantly and positively related to the *leader's interest in TA*, after controlling for covariates (i.e., member's age, gender and education); the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition). Leader's interest in TA was positively related to members' interest in TA but it was not significant ($T=0.78$, $df=20$, $p=.443$). The hypothesis was not supported by the HLM analysis (Table 9).

Table 9

Effect of Leader's Interest in Technical Assistance on Members' Interest in TA, Controlling for Member-level Predictors

Fixed Effects	Coefficient	SE	T-Ratio	df	P-value
Intercept2, G_{00}	2.85	0.06	47.88	20	0.000
Leader's Interest in TA, G_{01}	0.10	0.12	0.78	20	0.443
Age, G_{10}	0.00	0.00	0.90	159	0.367
Gender, G_{20}	0.07	0.13	0.55	159	0.583
Education, G_{30}	-0.11	0.09	-1.26	159	0.209
Commitment, G_{40}	0.19	0.08	2.42	159	0.017
Skills, G_{50}	0.25	0.08	3.37	159	0.001
Benefits, G_{60}	0.08	0.10	0.82	159	0.416
Coalition strength (member), G_{70}	-0.16	0.06	-2.56	159	0.012
		Variance			
Random Effects	SD	Component	F	X^2	P-value
Intercept1, U_0	0.22	0.05	20	41.64	0.003
Level-1, R	0.55	0.31			

Hypothesis 3a: Members' interest in TA will be significantly and negatively related to *coalition structure*, after controlling for covariates (i.e., member's age, gender and

education) and the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition). Although it was a negative relationship, structure was not significantly related to the members' interest in TA ($T = -1.57$, $df = 20$, $p = 0.131$). The hypothesis was not supported (Table 10).

Table 10

Effect of Perception of Coalition's Structural Capacity on Members' Interest in TA, Controlling for Member-level Factors

Fixed Effects	Coefficient	SE	T-Ratio	Df	P-value
Intercept2, G_{00}	2.87	0.06	50.37	20	0.000
Structure, G_{01}	-0.45	0.29	-1.57	20	0.131
Age, G_{10}	0.00	0.00	1.21	159	0.228
Gender, G_{20}	0.04	0.14	0.30	159	0.764
Education, G_{30}	-0.10	0.09	-1.31	159	0.304
Commitment, G_{40}	0.19	0.08	2.43	159	0.016
Skills, G_{50}	0.26	0.07	3.52	159	0.001
Benefits, G_{60}	0.09	0.09	1.02	159	0.309
Coalition strength (member), G_{70}	-0.15	0.06	-2.32	159	0.021
Variance					
Random Effects	SD	Component	df	X^2	P-value
Intercept1, U_0	0.21	0.04	20	39.74	0.006
Level-1, R	0.55	0.31			

Hypothesis 3b: Members' interest in TA will be significantly and negatively related to perceived *coalition's capacity in collaboration*, after controlling for covariates (i.e.,

member's age, gender and education) and the member-level variables (i.e., commitment, perceived skills, benefits from participation, and perceived overall strength of the coalition).

Collaboration was a negative relationship to members' interest in TA but it was not significant ($T = -0.19$, $df = 20$, $p = 0.851$). The hypothesis was not supported (Table 11).

Table 11

Effect of Perception of Coalition's Capacity in Collaboration on Members' Interest in TA, Controlling for Member-level Factors

Fixed Effects	Coefficient	SE	T-Ratio	Df	P-value
Intercept2, G_{00}	2.86	0.06	48.92	20	0.000
Collaboration, G_{01}	-0.03	0.17	-0.19	20	0.851
Age, G_{10}	0.00	0.00	0.90	159	0.372
Gender, G_{20}	0.06	0.14	0.44	159	0.657
Education, G_{30}	-0.12	0.09	-1.37	159	0.174
Commitment, G_{40}	0.19	0.08	2.34	159	0.021
Skills, G_{50}	0.26	0.07	3.47	159	0.001
Benefits, G_{60}	0.08	0.10	0.87	159	0.384
Coalition strength (member), G_{70}	-0.16	0.06	-2.45	159	0.016
Variance					
Random Effects	SD	Component	df	χ^2	P-value
Intercept1, U_0	0.23	0.05	20	43.61	0.002
Level-1, R	0.55	0.30			

Hypothesis 3c: Members' interest in TA will be significantly and positively related to perceived *coalition's capacity in programming*, after controlling for covariates (i.e., member's age, gender and education); the member-level variables of commitment,

perceived skills, benefits from participation, and perceived overall strength of the coalition. This hypothesis was not supported by the HLM analysis. Programming was not significantly related to members' interest ($T=0.06$, $df=17$, $p=0.950$). The hypothesis was not supported (Table 12).

Table 12

Effect of Programming on Members' Interest in TA, Controlling for Member-level Factors

Fixed Effects	Coefficient	SE	T-Ratio	df	P-value
Intercept2, G_{00}	2.86	0.07	41.81	17	0.000
Programming, G_{01}	0.01	0.14	0.06	17	0.950
Age, G_{10}	0.00	0.00	0.91	141	0.364
Gender, G_{20}	0.09	0.13	0.70	141	0.485
Education, G_{30}	-0.13	0.09	-1.57	141	0.118
Commitment, G_{40}	0.15	0.09	1.71	141	0.089
Skills, G_{50}	0.30	0.07	4.15	141	0.000
Benefits, G_{60}	0.04	0.10	0.38	141	0.707
Coalition strength (member), G_{70}	-0.15	0.07	-2.17	141	0.032
Variance					
Random Effects	SD	Component	df	χ^2	P-value
Intercept1, U_0	0.26	0.07	17	44.93	0.000
Level-1, R	0.54	0.29			

None of the hypothesized coalition-level predictors of members' interest in TA were significant. The leaders' ratings of structure and collaboration as well as the key informants' rating of programming did not influence the members' interest in TA. However, the pattern

of significance for member-level covariates (i.e., commitment, skills and strength of coalition) was generally consistent across these HLM models except programming. Skills and coalition strength remained significant predictors.

DISCUSSION

In the absence of strong evidence of the effectiveness of community coalitions as a prevention strategy (Roussos & Fawcett, 2000), funders have sought to build the organizational capacity of community coalitions through the use of technical assistance as a means of bolstering coalition capacity. However, funders' commitment to providing technical assistance support systems has not been met with a commensurate commitment from coalition members to utilize the available resources. A growing body of research has focused on the design of effective TA support systems and TA utilization (Chinman, Hunter, Ebener, Paddock et al, 2008; Chinman, Hannah, Wandersman, et al, 2005; Florin et al, 1993). The models have evolved from developmental to ecological approaches and from research-driven to a community-centered focus.

The need remains, however, to understand the essential components of effective capacity building (i.e., coalition functioning). Studies have focused on the effect of TA training attendance on internal and external coalition functioning (Feinberg, Greenberg, Osgood, Anderson & Babinski, 2002); the effect of TA dosage on coalition functioning (Mitchell et al, 2004, Feinberg, Ridenour & Greenberg, 2008) and the factors that moderate that relationship (Feinberg, Ridenour & Greenberg, 2008); and the effect of project functioning in predicting need for TA (Feinberg, Greenberg & Osgood, 2004). Technical assistance providers, coalition leaders, coalition members and community leaders were participants in these various investigations. The primary objective of this study was to

understand the predictors of interest in (and potentially utilization of) technical assistance support systems by coalition members specifically.

Main Study Results

This study focused on whether member-level (age, gender, education, commitment, perceived skills, benefits from participation and coalition's overall strength) as well as coalition-level (leader's interest in TA, structure, collaborative and programming capacity) variables would predict members' interest in TA. The unconditional model showed that there was significant coalition-level variance in members' interest in TA to warrant the use of multi-level analysis. The intraclass correlation indicated that 12 percent of the variance in member's interest in TA was accounted for by coalition-level variables. Thus, members' expressions of interest in technical assistance were influenced by their membership in a coalition. Therefore, the data were suited to multi-level analysis.

For the member-level predictors, the results were mixed. One of the three hypothesized member-level factors was significantly associated with members' interest in TA as predicted. Member's perceived skill was a significant predictor of interest in TA as hypothesized. Members who perceive themselves as having something to contribute to the coalition (i.e., knowledge about health promotion, expertise in implementing programs, etc.) had more interest in TA. Perhaps members who perceived themselves as having skills were less self-conscious about working with TA provider "experts" who might ask difficult question about coalition functioning. However, the relationship between the remaining

member-level variables (i.e., benefits and coalition strength) and members' interest in TA did not support the proposed hypotheses.

One assumption was that members who reported more benefits from their involvement in the coalition were likely more engaged with the coalition and cared about its outcomes. As such, they would be more interested in technical assistance. Perceived benefit was hypothesized to be positive and significantly related to members' interest in TA. However, it was not significantly associated with interest in TA in HLM analysis controlling for other variables. At the bivariate level, benefits was significantly correlated to member's interest in TA ($r=.21$, $p<.01$).

It was hypothesized that coalition members who perceived their coalition as strong would be more likely to profess interest in TA. This hypothesis was not supported. Members who perceived their coalition as weak were more interested in TA. This significant finding suggests that coalition members may be open to acknowledging the weakness of the coalition and committing time to improve its functioning.

Commitment was a control variable. The study found a positive, significant relationship of commitment to members' interest in TA. Interest in TA involves some level of commitment particularly when considering volunteers. In these coalitions, only 9.5% of the members were paid staff. Volunteer members of community coalition may have limited time to take advantage of technical assistance and training opportunities (Mitchell, Florin, & Stevenson 2002). There are opportunity costs (i.e., up-front time, energy, and diversion from a task focus) associated with utilizing technical assistance even when it is free and available

to the coalition members (Florin, Celebucki, Stevenson, et al, 2007). However, if members already made some level of commitment to the coalition (i.e., attending internal and external meetings, advocating for resources, etc.), perhaps they would be more willing to commit the time for TA (or at least be interested in TA).

Given the general influence of the leader on members, it was assumed that leaders would carry great weight in generating members' interest in utilizing TA. A modest positive relationship also emerged in the bivariate correlation analysis. A significant positive relationship was predicted. Leader's interest in TA was not a significant predictor of members' interest; however, the relationship was in the expected direction. If leaders are interested in TA, then the members are also interested. Even so, there are concerns with relying on the leader to discern the interest of the members particularly if the TA is needed for leadership development.

The study also examined the influence of the three coalition-level factors as proxy of coalition functioning: structure, collaboration and programming. It was assumed that if members perceived the coalition as objectively weaker and poorly functioning, then that would prompt them to seek additional help. However, the data did not support the hypothesis that coalition functioning (structure, collaboration and programming) would be related to member's interest in TA. None of these factors were statistically significant, although all of the relationships were in the predicted direction. Alternate explanations are offered for the lack of significant findings.

Structure came closer to approaching significance than the other two predictors ($p=.13$). In the coalition literature, structure is the most frequently cited indicator of coalition functioning (Zackocs & Edwards, 2006). If members were actively participating in the coalition, then lesser structural capacity would be immediately obvious (e.g., disorganized and inefficient meetings). As such, it would likely be the area of coalition functioning most immediately apparent to members and perhaps closely associated with member's interest in TA. The low statistical power of the study at the group level may have contributed to the failure to find a significant effect for structure.

Collaborative capacity was the leaders' rating of the amount of contact with other organizations in the community. The assumption was that if members perceived a weakness in collaboration, then that would prompt interest in getting help. However, it is unclear how apparent or important this lack of linkages may be to all coalition members. Collaboration was not significantly related to either leader's interest ($r=-.00$, $n=22$) or member's interest in TA ($r=.17$, $n=22$) at the bivariate level analyses. A possible explanation is the item may be an inadequate measure of collaboration. In addition, leaders and members may have alternate explanations of why collaboration is low (e.g., lack of community readiness).

Previous research suggests that implementation of health promotion programs involves more than developing internal coalition organizational capacity. While a functioning coalition was necessary, implementing programming also required some interaction with a variety of community sectors (Stith, Pruitt, Dees, Fronce, Green, Som & Linkh, 2006). In this study, it was assumed that key informants from several sectors of the

community presumably would be knowledgeable of the coalition's efforts and progress. The fact that a number of key informants were not aware of the coalition's efforts in implementing programming for promoting health and preventing health problems may indicate a lack of coalition activity. Conversely, the measure was a single item that may not have fully captured the impact of what the coalitions were doing. Some coalitions may have focused on areas other than program implementation (i.e., policy, advocacy, resource allocation, etc.).

Contributions of the Study

Despite these findings, the study contributes to the body of research regarding more effective utilization of TA by coalitions. First, we understand that skilled, committed members are more interested in TA. Perhaps members that are more skilled are more confident and self-assured. Therefore, they would be less inhibited in discussing the weaknesses or strengths of the coalition particularly if they are committed to and care about the coalition's work. On the other hand, members with lesser levels of commitment or skills would not be expected to indicate an interest in TA. They would possibly need some type of intervention to create interest (readiness) for TA (i.e., raise their awareness, change attitudes, etc.).

Second, members are more interested in TA if they perceive that the overall functioning of the coalition is weak. Some previous research suggested that weaker coalitions may not have the wherewithal to organize themselves or the internal support to seek help. However, this study suggests that coalition members may at least be willing to

pursue technical assistance if they see weakness in their coalition. This is important because it suggests that members of the weakest coalitions may be most willing to seek support.

Finally, leader's interest in TA may not be a fully adequate proxy for members' interest. In other words, the leader's interest may not be sufficient to galvanize members' interest in utilizing technical assistance. Previous researchers found a significant, positive relationship between the perspectives of the TA provider and the leader on board functioning as an indicator of need for TA (Feinberg, Fidenour & Greenberg, 2008). Although a positive relationship between leaders' and members' interest in TA was found, this was not a significant predictor in the HLM analyses.

Strengths of the Study

A strength of the study is its comprehensiveness in assessing coalition functioning from multiple perspectives. First, the study had multiple levels of data from each community: members of the coalition, the coalition leader (coordinator) and several community informants that represented sectors of the community that should have been knowledgeable about the coalition's activities. These data sources provided dual perspectives from the leader and members about the coalition's internal capacity as well as an external assessment of its progress in implementing programming. Inclusion of multiple perspectives strengthens the internal validity of the study.

Second, the study offered multiple measures of coalition capacity. Although the link between coalition functioning and interest in TA is unclear, the coalition literature mentions several factors that are frequently associated with coalition functioning (i.e. formalization,

sector represented, agency collaboration, member benefits, member experience/expertise, etc.) (Zackocs & Edwards, 2006). Consistent with that literature, this study defined and constructed coalition functioning using multiple factors. Although coalition-level measures of coalition functioning were negatively related to interest in TA, the results were not significant.

Another added value was the use of well-defined measures that were previously used in other coalition research (Mitchell et al, 2004; Florin et al, 2000). With the exception of collaboration, the member-level (i.e. commitment, skills, benefits) and coalition-level (i.e. collaboration) predictors exceeded the “minimally acceptable consistency reliability” coefficient of 0.70 (Nunnally & Bernstein cited by Granner & Sharpe, 2004). The Cronbach's alpha coefficients ranged from a low of .80 to a high of .89. Valid and reliable measures are required for rigorous research on coalition functioning and using them across research project will allow researchers to generalize their results (Granner & Sharpe, 2004).

Fourth, the study used hierarchical linear modeling (HLM) to account for the nested nature of the data. Similar to most behavioral and social data, coalition data have a multi-level structure. That is, members are nested within coalitions and are influenced by the leader and other members of the coalition. The analysis must disentangle this inter-dependence of the data. Within the hierarchical linear model, each of the levels in the data structure (e.g., members within coalitions) was formally represented by its own sub-model. The advantage was the ability to model accurately the true relationship between members' interest in TA and the predictors and the residual variability at that level. The comprehensive

approach of using reliable measures and controlling for cross-level interactions within the data strengthened the study.

Limitations

On the other hand, several limitations should be considered when interpreting the findings. First, there were methodological limitations associated with the small sample of 22 coalitions. For those models that included programming, only 19 coalitions were available. The small number of coalitions in this study may have yielded insufficient statistical power to detect coalition-level differences. This lack of power could possibly result in non-significant results when there was an effect. A common issue in most coalition research is that the relatively small number of coalitions limits the power in coalition-level analysis.

Another consideration is the non-representative sample of coalitions. Health-related coalitions in Maine that received funding from one of several state organizations were invited to participate in the Dirigo technical assistance support project. However, not all coalitions elected to participate. The lack of information on the characteristics of those that did not respond (i.e., perceived weakness, perceived strength, etc.) makes unclear if these findings would generalize to other coalitions.

A related issue is the response rate of the coalition members to the survey (183 of 382, 48%). Respondents self-selected and are likely to have been the more committed and active members. It is also conceivable that the active members had a better understanding of how the coalition functioned than the less active, non-participating members. On average, members had been in the coalitions for two years (mean of 25.8 months).

Another potential source of bias relates to the number of member responses needed to represent a coalition. There was tremendous variation in the number of members per coalition. The data on membership ranged from 5 to 250 (mean=57, SD=71). How many of the total would need to respond to get an accurate assessment of members' interest in TA? Does a critical number of members need to participate in TA to get sufficient penetration to achieve a difference in coalition functioning? Research suggests that a critical mass of coalition members were needed for different coalition functions. For example, data from CSAP's (Center for Substance Abuse Prevention) Community Partnership Grant project indicated that the number and representativeness of coalition members were positively related to policy change but it was significantly and negatively related to collaboration (Hays et al, 2000). For some areas of functioning, a larger number of coalition members is not always related to effectiveness. Hence, would the number of members be important when assessing interest in TA? Or would it be related less to the number of members and more to having the right members respond (i.e., the core, knowledgeable group of active members)?

The data were cross-sectional rather than longitudinal, another limitation. Interest in TA is likely a dynamic state that is influenced by organizational and contextual factors. For instance, coalition functioning could improve (or worsen) over time leading to a change in interest in TA. As the coalition develops and changes, new skills and competencies could be required. Consequently, members' readiness for and interest in TA could shift. As such,

cross-sectional data would be unable to capture/detect changes due to any sequence in which the predictor variables influence interest over time.

Last, the measure of members' interest in TA may have limitations. Factor extraction data supported the scale as a global measure of technical assistance (Stone-Wiggins, 2008). Compared to the reliability coefficient for the predictors, members' interest in TA indicated very high reliability ($\alpha = .92$). Even so, acceptable reliability does not guarantee the validity of the measure. Despite high reliability, the factor structure used here has not been replicated in other studies. Therefore, further testing and refinement of the items may be required.

Despite these limitations, this research provided some insight into member-level factors that predict members' interest in TA. The consistency of the pattern of significance for these factors across the multi-level models strengthened that conclusion. Capacity building is thought to be essential to effective community coalitions. As long as interest in community coalitions is sustained, efforts to improve the capacity building process will (and should) continue. The findings provide suggestions for future research.

Future Research

Further improvement in technical assistance support systems is needed for TA to be effective in building the capacity of community coalitions. Future research should focus on understanding factors at the member-, coalition- and system-levels and how they interact across the levels. As the intended beneficiary of TA, coalition members must be interested in utilizing it. What characteristics of the members influence that choice? For example, what

influences their perception of having skills if it does not relate to educational level? Is it a perception of general self-efficacy from their practical experience in health promotion and prevention?

Coalition-level factors should be another focus. A developmental approach to providing TA has been proposed and seems intuitive and reasonable (Feinberg, Ridenour & Greenberg, 2008; Florin et al, 1993). Are domains of coalition functioning related to greatest interest in TA for members? Is it general or innovation-specific capacity that is most relevant? Are some domains for TA more important than others in improving the effectiveness of coalitions? Does interest change over time in response to developmental changes in the coalition or other factors? A preliminary model to identify domains of capacity at the various stages of development was not a good fit. Feinberg's approach of targeting TA (e.g. onsite) according to the age of the coalition showed modest results for the younger ones. Focusing on coalition functioning to understand and tailor capacity building to coalition functioning might increase interest in utilizing TA. Evidence on the relationship between coalition structure and coalition functioning make it a reasonable starting point for the development and global use of reliable measures to advance this area of research. Collaboration among funding organizations and TA providers will be necessary to address the inherent issue in coalition research of small sample size and low statistical power for coalition level analyses.

Finally, improvement in the design of the TA delivery system (i.e., distribution, training and experience of the TA provider; general or targeted services; onsite or offsite

delivery methods; dosage, etc.) is another research area. Under what circumstances is the more expensive individualized and targeted technical assistance needed? What is the optimal mode of delivery? Onsite TA is typically preferred but it is much more expensive. Is there an optimal combination of onsite and off-site TA? What is the most effective match for onsite and off-site in the TA delivery? There is need for cost-effective yet interactive TA models. Valid, reliable multi-method measures are essential for assessing the need for and evaluating the impact of technical assistance. Also, longitudinal studies are necessary to evaluate some of these issues.

Summary

Building the organizational capacity of community coalitions through technical assistance continues to be a preferred strategy for promoting their effectiveness (i.e., reaching long-term outcomes of community change). The technical assistance research produced over the last decade highlights the complexity of capacity-building and the challenges facing technical support systems (Mitchell, Florin & Stevenson, 2002). Poor utilization of these resources indicates the need for the TA support system to balance the needs and desires of the funder and the interest of the coalition members. Coalition leaders did not utilize TA (or were not interested in TA) when they did not understand what help was needed (Mitchell et al, 2004). As this study found, the lesser skilled coalition members had less interest in TA. These findings suggest the necessity to cultivate interest among members with lesser skills (i.e., create a sense of readiness by raising awareness and changing attitudes). To that end, the next generation of technical assistance research should

explore better TA assessment tools, tailor interventions to respond to adult learning styles, and minimize the opportunity costs for the volunteer coalition members.

REFERENCES

- Berkowitz, B. (2001). Studying the outcomes of community-based coalitions. *American Journal of Community Psychology, 29*(2), 213-227; discussion 229-239.
- Brinkerhoff, J. M. (2002). Assessing and improving partnership relationships and outcomes: a proposed framework. *Evaluation and Program Planning, 25*, 215-231.
- Butterfoss, F. D., & Kegler, M. C. (2002). Toward a comprehensive understanding of community coalitions: Moving from practice to theory. In R. J. DiClemente, R. A. Crosby & M. C. Kegler (Eds.), *Emerging Theories in Health Promotion Practice and Research* (pp. 157-193). San Francisco, CA: John Wiley & Sons, Inc.
- Chavis, D. M., Florin, P., Felix, M. R. J., Mizrahi, T., & Morrison, J. (1992) *Nurturing grassroots initiatives for community development: The role of enabling systems*. Binghamton, N. Y.: Haworth Press.
- Chinman, M., Hunter, S., Ebener, P., Paddock, S., Stillman, L., Imm, P., et al. (2008). The Getting To Outcomes demonstration and evaluation: An illustration of the prevention support system. *American Journal of Community Psychology, 41*(3), 206-224.
- Chinman, M. H., Gordan; Wandersman, Abraham; Ebener, Patricia; Hunter, Sarah B.; Imm, Pamela; Sheldon, Jeffrey. (2005). Developing a community science research agenda for building community capacity for effective preventive interventions. *American Journal of Community Psychology, 35*(3/4), 143-157.
- Chinman, M., Hannah, G., Wandersman, A. H., Ebener, P., Hunter, S. B., Imm, P., et al. (2005). Developing a community science research agenda for building community

capacity for effective preventive interventions. *American Journal of Community Psychology*, 35(3/4), 143-157.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327-350.

Fawcett, S. B., Lewis, R. K., Paine-Andrews, A., Francisco, V. T., Richter, K. P., Williams, E. L., et al. (1997). Evaluating community coalitions for prevention of substance abuse: The case of project freedom. *Health Education and Behavior*, 24(6), 812-828.

Feinberg, M. E., Gomez, B. J., Puddy, R. W., & Greenberg, M. T. (2008). Evaluation and community prevention coalitions: Validation of an integrated web-based/technical assistance consultant model. *Health Education and Behavior*, 35(1), 9-21.

Feinberg, M., Ridenour, T., & Greenberg, M. (2008). The longitudinal effect of technical assistance dosage on the functioning of Communities That Care prevention boards in Pennsylvania. *The Journal of Primary Prevention*, 29(2), 145-165.

Feinberg, M., E., Greenberg, M. T., & Osgood, D. W. (2004). Readiness, functioning, and perceived effectiveness in community prevention coalitions: A study of Communities that Care. *American Journal of Community Psychology*, 33(3-4), 163-176.

Feinberg, M. E., Greenberg, M. T., Osgood, D. W., Anderson, A., & Babinski, L. (2002). The effects of training community leaders in prevention science: Communities that Care in Pennsylvania. *Evaluation and Program Planning*, 25(3), 245-259.

- Flaspohler, P., Duffy, J., Wandersman, A., Stillman, L., & Maras, M. A. (2008). Unpacking prevention capacity: An intersection of research-to-practice models and community-centered models. *American Journal of Community Psychology, 41*, 182-196.
- Florin, P., Mitchell, R. E., & Stevenson, J. (1993). Identifying training and technical assistance needs in coalitions: A developmental approach. *Health Education Research: Theory and Practice,*
- Francisco, V. T., Fawcett, S. B., Schultz, J. A., Berkowitz, B., Wolff, T. J., & Nagy, G. (2001). Using internet-based resources to build community capacity: The community tool box [<http://ctb.ukans.edu/>]. *American Journal of Community Psychology, 29*(2), 293-300.
- Gilliam, A. B., Tracey; Davis, David; Lacson, Romel; Uhl, Gary; Phoenix, Ursula. (2003). Building evaluation capacity for HIV prevention programs. *Evaluation and Program Planning, 26*, 133-142.
- Green, L. W., & Kreuter, M. W. (2002). Fighting back or fighting themselves? : Community coalitions against substance abuse and their use of best practices. *American Journal of Preventive Medicine, 23*(4), 303-306.
- Grimm, L. G., & Yarnold, P. R. (Eds.). (1997). *Reading and Understanding Multivariate Statistics*. Washington, DC: American Psychological Association
- Hallfors, D., Cho, H., Livert, D., & Kadushin, C. (2002). Fighting back against substance abuse: Are community coalitions winning? *American Journal of Preventive Medicine, 23*(4), 237-245.

- Hays, C. E., Hays, S. P., DeVille, J. O., & Mulhall, P. F. (2000). Capacity for effectiveness: The relationship between coalition structure and community impact. *Evaluation and Program Planning, 23*(3), 373-379.
- Jolly, D., Gibbs, D., Napp, D., Westover, B., & Uhl, G. (2003). Technical assistance for the evaluation of community-based HIV prevention programs. *Health Education and Behavior, 30*(5), 550-563.
- Jourden, J., & Etkind, P. (2004). Enhancing HIV/AIDS and STD prevention through program integration. *Public Health Reports, 119*(1), 4-11.
- Kegler, M. C., Steckler, A., Malek, S. H., & McLeroy, K. R. (1998). A multiple case study of implementation in 10 local Project ASSIST coalitions in North Carolina. *Health Education Research, 13*(2), 225-238.
- Kreuter, M. W., Lezin, N. A., & Young, L. A. (2000). Evaluating community-based collaborative mechanisms: Implications for practitioners. *Health Promotion Practice, 1*, 49-63.
- Kumpfer, K. L., Turner, C., Hopkins, R., & Librett, J. (1993). Leadership and team effectiveness in community coalitions for the prevention of alcohol and other drug abuse. Special Issue: Community coalitions for health promotion. *Health Education Research, 8*(3), 359-374.
- Kurland, J., & Zeder, J. (2001). Coalition-building: The promise of government. *American Journal of Community Psychology, 29*(2), 285-291.

- Lasker, R. D., & Weiss, E. S. (2003). Broadening participation in community problem solving: A multidisciplinary model to support collaborative practice and research. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 80(1), 14-47
- Lasker, R. D., Weiss, E. S., & Miller, R. (2001). Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *The Milbank Quarterly*, 79(2).
- Maxwell, K., & Husain, T. (2005). Public private partnerships: Building capacity while effecting change. *Evaluation and Program Planning*, 28, 349-353.
- McMillan, B., Florin, P., Stevenson, J., Kerman, B., & Mitchell, R. E. (1995). Empowerment praxis in community coalitions. *American Journal of Community Psychology*, 23(5), 699-727.
- Merzel, C., & D'Afflitti, J. (2003). Reconsidering community-based health promotion: Promise, performance, and potential. *American Journal of Public Health*, 93(4), 557-574.
- Mitchell, R. E., Stone-Wiggins, B. P., Stevenson, J. F., & Florin, P. (2004). Cultivating capacity: Outcomes of a statewide support system for prevention coalitions. *Journal of Prevention & Intervention in the Community*, 27(2), 67-87.
- Mitchell, R. E., Florin, P., & Stevenson, J. F. (2002). Supporting community-based prevention and health promotion initiatives: Developing effective technical assistance systems. *Health Education & Behavior*, 29(5), 620-639.
- Mitchell, R. E. (1999). *Final Report of the Evaluation of the Dirigo Prevention Coalition*. Providence, RI: Center for Alcohol and Addiction Studies.

- Nicola, R. M. (2005). Turning Point's National Excellence Collaboratives: Assessing a new model for policy and system capacity development. *Journal of Public Health Management and Practice, 11*(2), 101-108.
- Paine-Andrews, A., Fawcett, S. B., Richter, K. P., Berkley, J. Y., Williams, E. L., & Lopez, C. M. (1996). Community coalitions to prevent adolescent substance abuse: The case of the "Project Freedom" Replication Initiative. *Journal of Prevention & Intervention in the Community, 14*(1-2), 81-99.
- Rogers, T., Howard Pitney, B., Feighery, E. C., Altman, D. G., Endress, & Roeseler (1993). Characteristics and participant perceptions of tobacco control coalitions in California. Special Issue: Community coalitions for health promotion. *Health Education Research, 8*(3), 345-357.
- Roussos, S. T., & Fawcett, S. B. (2000). A review of collaborative partnerships as a strategy for improving community health. *Annual Reviews of Public Health, 21*, 369-402.
- Saxe, L., Reber, E., Hallfors, D., Kadushin, C., Jones, D., & Rindskopf, D. (1997). Think globally, act locally: Assessing the impact of community-based substance abuse prevention. *Evaluation and Program Planning, 20*(3), 357-366.
- Spoth, R., Redmond, C., Shin, C., Greenberg, M., Clair, S., & Feinberg, M. (2007). Substance-use outcomes at 18 months past baseline: The PROSPER community-university partnership trial. *American Journal of Preventive Medicine, 32*(5), 395-402.

- Stith, S., Pruitt, I., Dees, J., Fronce, M., Green, N., Som, A., et al. (2006). Implementing community-based prevention programming: A review of the literature. *Journal of Primary Prevention, 27*(6).
- Stone-Wiggins, B. P. (2008). *Defining capacity building domains related to technical assistance for community coalitions*. Unpublished research competency requirement, North Carolina State University, Raleigh, NC.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (Fourth ed.). Needham Heights, MA: Allyn and Bacon.
- Wandersman, A., Duffy, J., Flaspohler, P., Noonan, R., Lubell, K., Stillman, L., et al. (2008). Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. *American Journal of Community Psychology, 41*(3), 171-181.
- Weiss, E. S., Anderson, R. M., & Lasker, R. D. (2002). Making the most of collaboration: Exploring the relationship between partnership synergy and partnership functioning. *Health Education and Behavior, 29*(6), 683-698.
- Wolff, T. (2001). Community coalition building--contemporary practice and research: introduction. *American Journal of Community Psychology, 29*(2), 165-172; discussion 205-111.
- Yin, R. K., Kaftarian, S. J., Yu, P., & Jansen, M. A. (1997). Outcomes from CSAP's Community partnership Program: Findings from the national cross-site evaluation. *Evaluation and Program Planning, 20*(3), 345-355.

Zakocs, R. C., & Guckenburg, S. (2007). What Coalition Factors Foster Community Capacity? Lessons Learned From the Fighting Back Initiative. *Health Education and Behavior, 34*(2), 354-375.

APPENDICES

Appendix 1 Subscales from the 1996 Dirigo Annual Member Survey (DAMS) Instrument

Members' Perceived skills

16. Below are several statements about your current participation (or former participation) in the community coalition. Circle the number to the right of each statement that shows how much you agree or disagree.

	5. Strongly agree	4. Agree	3. Neither agree nor disagree	2. Disagree	1. Strongly disagree
h. I can (could) contribute content knowledge about health promotion / prevention programs to the group	5	4	3	2	1
i. I can (could) contribute expertise in the implementation of health promotion / prevention programs to the group	5	4	3	2	1
j. I can (could) help the group to influence the adoption of local policies for health promotion / prevention	5	4	3	2	1

Benefits from participating in the coalition

18. Below is a list of benefits you may or may not get (have gotten) from your involvement in your coalition. Circle the number that describes how much of each benefit you are (or were) getting from work with your coalition.

	Very much a benefit	Somewhat of a benefit	Not very much of a benefit	Not at all a benefit
	4	3	2	1
a. Gain support by working with other members of the community	4	3	2	1
b. Gain personal recognition and respect from others.....	4	3	2	1
c. Learn new skills (public speaking, program planning)	4	3	2	1
d. Receive information about community services, events, etc.....	4	3	2	1
e. Provides a "sense of community"	4	3	2	1
f. Fulfills a sense of responsibility to contribute to the community.....	4	3	2	1

Members' Perception of the Coalition's Overall Strength

21. Overall, how strong is your coalition?

[1] very strong [2] somewhat strong [3] somewhat weak [4] very weak

Members' Commitment

26. Below is a list of activities that you might engage in as a member of your community coalition. Show how likely it is you will do each over the next 12 months by circling a number to the right of each statement.

	Very likely	Likely	Neither Likely nor unlikely	Unlikely	Very unlikely
	5	4	3	2	1
a. I will attend coalition meetings regularly	5	4	3	2	1
b. I will devote time outside of meetings to the coalition.	5	4	3	2	1
c. I will attempt to influence my group or organization to devote resources to increase community health promotion / prevention activities	5	4	3	2	1
d. I will attempt to increase linkages between my organization and other organizations for community health promotion / prevention activities	5	4	3	2	1

Members’ Interest in Technical Assistance

28. How much interest would you have in obtaining assistance for your coalition in developing its capabilities in the following areas:

	No interest	Minor interest	Moderate interest	Great interest
	1	2	3	4
a. Mobilizing (e.g., recruiting new members, representation from new community sectors).....	1	2	3	4
b. Structuring the coalition (e.g. establishing subcommittees, rules and procedures).....	1	2	3	4
c. Leadership development (e.g. meeting management, decision-making conflict resolution).....	1	2	3	4
d. Developing members' skills (e.g. in health promotion/prevention; policy advocacy).....	1	2	3	4
e. Identifying community resources / Linking with other community groups working on the same problem.....	1	2	3	4
f. Collaborating with other community groups working on different but related problems (e.g. they work on violence prevention, you on substance abuse prevention)	1	2	3	4
g. Assessing community needs for program planning	1	2	3	4

h.	Developing new health promotion / prevention program strategies.....	1	2	3	4
i.	Expanding the mission of the coalition into new problem areas (e.g. expanding from substance abuse prevention into violence prevention).	1	2	3	4
j.	Getting activities and programs implemented	1	2	3	4
k.	Evaluating specific programs / activities.....	1	2	3	4
l.	Reviewing and refining the array of general health promotion / prevention strategies used by the coalition.....	1	2	3	4
m.	Planning for the future of the coalition/institutionalization of its work.....	1	2	3	4

Demographic Variables

Finally, would you please finish by answering a few background questions which will help us describe community coalition participants and analyze our results. Please check your response or fill in the appropriate number.

29. Age: _____

30. Male ____ Female ____

31. Highest grade or year of school completed: _____

Appendix 2 Subscales from the Dirigo Annual Leader Interview (DALI) Questionnaire

COALITION LEADER TELEPHONE INTERVIEW

Community Sectors

15. I am going to read a list of community sectors. After I read the name of each sector. I want you to tell me whether the sector is regularly represented on the coalition:

	Regularly represented
[a] Business community	_____
[b] Faith community (clergy, rabbi)	_____
[c] Local government (e.g. town or city government)	_____
[d] Human services agencies (e.g. YMCA, Child and Family Services, etc.)	_____
[e] Volunteer service organization (e.g. Lion's Club, Rotary, etc.)	_____
[f] Grassroots community organizations (e.g. neighborhood associations)	_____
[g] Health care sector (e.g. physicians, hospital representatives)	_____
[h] Law enforcement	_____
[i] Schools	_____
[j] General concerned citizen (e.g. non affiliated parent)	_____
[k] Other _____	_____

Formalization

21. Does your coalition: [INTERVIEWER: check for YES]

- _____ a. have written bylaws?
- _____ b. provide written agendas at Coalition meetings?
- _____ c. have an organizational chart showing Coalition structure?
- _____ d. keep written minutes of meetings?
- _____ e. distribute written minutes to all Coalition members?

- ___ f. hold meetings on a regular date and time?
- ___ g. provide a standard orientation for new members?
- ___ h. have a written policy on how membership is defined?
- ___ i. have a written policy for member rotation (e.g., members serve two year terms)
- ___ j. have written expectations for member participation? (e.g., so many missed meetings and off Coalition)
- ___ k. have a written description of procedures for leader selection?
- ___ l. written description of the responsibilities of officers
- ___ m. written description of the procedures for decision making (e.g. majority rule, etc.)

Leadership

25. Which of the following leader/officers does your coalition have? These do not include paid coalition staff.

- ___ Chair/President
- ___ Vice-Chair/Co-Chair
- ___ Secretary
- ___ Treasurer/Town Financial clerk
- ___ Other _____

Leader's Rating of Collaboration (External linkages)

30. Now, I'd like to know how much contact your coalition has with various organizations in your community. How much contact did your coalition have with each of the following in your community during the past 12 months?

INTERVIEWER: Read through each organization, putting code number to the left of each.

None	Little (few times a year)	Moderate (monthly/more)	Extensive (weekly/more)
0	1	2	3

___ business

___ community

___ faith community

___ local government (e.g. town or city government)

___ human service agencies (e.g. YMCA, Child and Family Services, etc.)

___ volunteer service organizations (e.g. Lions Club, etc.)

___ grassroots community organizations (e.g. neighborhood organization)

___ health care sector (physicians, hospital representatives)

___ law enforcement

___ local media (newspaper, radio, TV)

___ Other: _____

Leader's Perception of the Overall Strength of the Coalition

37. Overall, how strong is your coalition?

[1] very weak [2] somewhat weak

[3] somewhat strong [4] very strong [9] don't know

Leader's Interest in Technical Assistance

44. Over the next 12 months, how much technical assistance would you like your coalition to receive in:

1=none 2= a little 3=some 4=a lot 9=don't know

HOW MUCH?

- | | |
|---|-------|
| a. Recruiting new member organizations/adding diversity to the coalition | _____ |
| b. Organizing and structuring the coalition (e.g., how to run a meeting, set up subcommittees, resolve conflicts) | _____ |
| c. Building knowledge and skills of individual members (e.g., in the content area of prevention) | _____ |
| d. Building the coalition's organizational capacity (e.g., how to collaborate with other organizations to plan a policy initiative) | _____ |
| e. Conducting a needs assessment | _____ |
| f. Developing an action plan that clarifies goals and objectives and specifies activities | _____ |
| g. Implementing activities in a coordinated and sequenced manner | _____ |
| h. Monitoring and evaluating activities to make changes in current actions or decide on changes in future activities | _____ |
| i. Planning for maintenance of the coalition over the long term | _____ |

