EFFECTS OF A TRAINING AND TECHNICAL ASSISTANCE INTERVENTION ON RATES OF COMMUNITY CHANGE TO PREVENT ADOLESCENT ALCOHOL USE IN TWO MIDWESTERN COMMUNITIES.

BY

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Submitted to the graduate degree program in Applied Behavioral Science and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master’s of Arts.

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Abstract

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This study analyzes the effects of a training and technical assistance intervention on the amount and kind of community changes facilitated by members of community coalitions to prevent adolescent alcohol use. As part of a NIDA funded project, the Youth Community Coalition (Columbia, MO) and the Dottes Community Coalition (Kansas City, KS) participated in a community change intervention. The intervention focused on building the skills of both coalitions to increase the rate of community changes facilitated in their communities to prevent adolescent alcohol use. The study provided a systematic investigation of the effects of training and technical assistance on environmental changes related to prevention efforts, followed by a case-study analysis of the Youth Community Coalition’s efforts related to longer-term outcomes.

Participating coalitions documented their efforts that resulted in changes in community conditions (i.e., new or modified programs, practices, or policies). The community changes were analyzed by rate and type of change (e.g., behavior change strategy used). Implementation of coalition-based processes was also measured to assess the effects of training and technical assistance on priority approaches selected by the coalitions. Assessments were administered via online surveys before, during and after the intervention. Community-level indicator data were also gathered to examine whether the effects on changes in community conditions generalize to
longer-term population-level outcomes. Two community-level indicators were collected and used for the analysis; self-reported 30-day alcohol use data was collected through school-based surveys, and adolescent alcohol-related arrest rates were gathered from archival records.

Results showed that both coalitions, when compared with baseline data, facilitated an average of at least three times as many community changes per month after the intervention. A multiple baseline, or interrupted time series design with staggered implementation across communities, showed that community changes increased following implementation of the intervention. Reported implementation of three prioritized coalition-based processes also increased after the intervention for each coalition. Although the effects did not generalize to longer-term outcomes, results suggest that the intervention was successful in preparing coalitions to facilitate community changes related to reducing risk for adolescent alcohol use.
Table of Contents

Abstract 3
Table of Contents 5
List of Tables and Figures 6
Introduction 8
Methods 13
Results 29
Discussion 51
References 64
List of Appendices 70
Appendix A 71
Appendix B 73
List of Tables and Figures

Figure 1 Framework of the Community Change Model 18

Table 1 Twelve Coalition-Based Processes (and related tasks) for Promoting Community Change and Improvement 23

Table 2 Thirteen Curriculum Modules/Competencies and Related Skill Areas Addressed in Training Component 26

Table 3 Illustrative Community Changes Facilitated by the Youth Community Coalition (YC^2) (Columbia, MO) 29

Table 4 Illustrative Community Changes Facilitated by the Dottes Community Coalition (Wyandotte County/Kansas City, KS) 30

Figure 2 Cumulative Number of Community Changes for YC^2 and Dottes Community Coalitions 32

Figure 3 Number of Cumulative Community Changes with Annotated Critical Events for YC^2 and Dottes Coalitions 34

Figure 4 YC^2 Reported Implementation of Prioritized Coalition-Based Processes 35

Figure 5 Dottes Reported Implementation of Prioritized Coalition-Based Processes 36

Figure 6 YC^2 Community Changes Distributed by Goal Area 38

Figure 7 YC^2 Community Changes Distributed by Prioritized Group 39

Figure 8 YC^2 Community Changes Distributed by Behavior Change Strategy 40

Figure 9 YC^2 Community Changes Distributed by Risk/Protective Factor 41

Figure 10 YC^2 Community Changes Distributed by Community Sector 42

Figure 11 YC^2 Community Changes Distributed by Expected Duration 43

Figure 12 Dottes Community Changes Distributed by Goal Area 44
Figure 13  Dottes Community Changes Distributed by Prioritized Group 45
Figure 14  Dottes Community Changes Distributed by Behavior Change Strategy 46
Figure 15  Dottes Community Changes Distributed by Risk/Protective Factor 47
Figure 16  Dottes Community Changes Distributed by Community Sector 48
Figure 17  Dottes Community Changes Distributed by Expected Duration 49
Figure 18  Columbia, MO Adolescent Alcohol- Arrests 50
Figure 19  YC^2 Reported Adolescent 30-Day Alcohol Rate 51
Adolescent alcohol use has serious consequences for adolescent development and public health (Hawkins, Arthur, Catalano, 1995). Each year, an estimated 7,000 people under the age of 21 die from alcohol-related injuries (National Highway Safety Traffic Administration, 2003). Motor vehicle crashes was the leading cause of death among 15-19 years old, accounting for 77% of overall deaths. Alcohol was a significant factor in these deaths as nearly one-third of adolescent drivers killed in crashes had been drinking (Hill, Sheppard, Miller, 2005). In addition, adolescents reporting past-year alcohol or illicit drug use were also more likely to engage in violence, have poor academic performance, and be at risk for suicide than those who did not use these substances (CDC, 2008). According to the Office of National Drug Control Policy (ONDCP), the U. S. Government spent $12 billion dollars on its national drug control program in 2005, with 13% (over $1.5 billion) used specifically for the prevention of drug abuse with an emphasis on youth (Wu, Khan, 2005).

Individuals who are exposed to multiple environmental risk factors have a greater chance of having health and behavior problems, including alcohol use (Pollard, Hawkins, Arthur, 1999). As a result, the science and practice of substance abuse prevention focus on identifiable and measurable factors in a person’s life: those that increase (risk factors) or decrease (protective factors) the likelihood of behaviors and related health outcomes, including use of alcohol and drugs. The working hypothesis in prevention science is that behaviors can be prevented or modified by changing personal and environmental factors. Some personal factors related to alcohol use among adolescents include whether friends are alcohol users, favorable
attitudes toward substance use, academic failure in late elementary school, and lack of commitment to school (Hawkins, Catalano, Arthur, 2002). Examples of environmental factors include a family history of substance abuse, family management problems, family conflict, favorable parental attitudes and involvement in substance use, the availability of drugs in the community, community laws and norms favorable toward drug use, and availability of firearms and prevalence of crime. The risk of an adolescent becoming an alcohol user is associated with the number and type of risk factors (and protective factors) they experience, and an individual’s age, gender, ethnicity, culture, and environment (Moon, Hecht, Jackson, and Spellers, 1999).

Nationally, the level of alcohol use among adolescents (i.e., percentage of adolescents reporting alcohol use in past 30-days) is estimated above 45%. Thirty-day alcohol use was reduced slightly (by 5%) between 1999 and 2005; however, no change was observed between 2005 and 2007 (CDC YRBSS, 2.12.2009). The U.S. Centers for Disease Control and Prevention issued a Call to Action to address underage drinking. According to the Surgeon General: “The 2005 National Survey on Drug Use and Health estimates there are 11 million underage drinkers in the United States. Nearly 7.2 million underage drinkers are considered binge drinkers, typically meaning they drank more than five drinks on occasion, and more than two million are classified as heavy drinkers” (Centers for Disease Control and Prevention [CDC], 2008).
Early alcohol use is particularly serious because of the long-term adverse consequences that can result. Adolescents are vulnerable to brain damage; those who start consuming alcohol before the age of fifteen are 40% more likely to become alcoholics in adulthood (NIAAA, 2003). The National Institutes of Health’s Institute on Alcohol Abuse and Alcoholism (NIAAA) issued a similar call for prevention: “Early intervention [with underage drinking] is essential to prevent the development of serious alcohol problems among youth between the ages of 12 and 20” (NIAAA, 2003).

Coalitions have formed in communities to change conditions related to risk for underage drinking and adolescent substance abuse. These alliances among multiple organizations aim to promote and protect health by changing conditions related to personal and environmental factors; and they have become increasingly popular over the past 30 years (Roussos and Fawcett, 2000). Although in widespread use, research on the effects of community coalitions has often lacked measurement of intermediate and longer-term outcomes and has limited documentation of positive outcomes resulting from coalition activities (Berkowitz, 2001).

For instance, the Fighting Back Initiative was a large-scale project funded by the Robert Wood Johnson Foundation to increase the capacity of community members to address adolescent alcohol use. Yet, it did not assure consistent measurements of either environmental changes or the rate of adolescent alcohol use (Zakocs and Guckenburg, 2006). The authors also suggest that capacity development or skill acquisition can take a long time to show results. Environmental changes and
related population-level improvements may not be seen during the relatively short-
time frame of a typically-funded project.

Some researchers have been critical of the Fighting Back Initiative and other
coalition approaches, concluding that strategies aimed at youth or community
prevention outcomes showed no effects (Hallfors et al., 2002). Critics have
recommended that future efforts focus on the named goals, measure relevant
outcomes, and assess the social validity of effects. The authors also recommended
school-based surveys as an appropriate alternative measure of outcomes in situations
where direct observation of behavior may be impractical or unethical, such as the case
with underage drinking (Hallfors et al., 2002).

Community coalitions utilizing technical assistance have become increasing
popular over the past decade. Yet, empirical evidence of the effects of technical
assistance in community coalition members’ ability to conduct this work is limited
(Feinberg et al., 2004). One multiple-community study in California and South
Carolina showed significant effects of coaching and technical assistance in efforts to
mobilize communities to reduce alcohol-related injuries. Unfortunately, this study
provided no systematic investigation of how technical assistance was implemented or
related to the outcomes (Holder et al., 2000). Feinberg and colleagues (2004) suggest
that training and technical support are critical to the effectiveness of community
work, but they do not recommend specific components and elements of such training
and technical assistance. Previous studies on coalition effectiveness have provided
few recommendations for skills or competencies needed by coalition members to
change community conditions and population-level outcomes such as adolescent alcohol use (Mitchell et al., 2002, Kegler and Redmon, 2006). Reports focused on technical assistance in implementing coalition approaches provide little mention of skills needed to do so (Hunter et al., 2009).

Based on systematic research and associated reviews of the literature, some researchers have recommended coalition-based processes or key mechanisms to improve community coalitions’ capacity to effect change and improvements (Work Group for Community Health and Development, Community Tool Box, 2006; Thompson-Watson et al., 2008). Watson-Thompson and the University of Kansas Work Group for Community Health and Development colleagues recommend 12 coalition-based processes, such as developing and using action plans, to operationalize the implementation of technical assistance to improve coalitions performance (see Table 1). The list of processes is based on a empirical research from multiple case studies (Fawcett et al., 2000; Mitchell et al., 2002; Shortell et al., 2002), experiential knowledge and lessons learned (Fawcett et al., 2000; Mitchell et al., 2002), and systematic reviews of the literature (Israel et al., 1998; Kreuter et al., 2000; Roussos and Fawcett, 2000). The recommended coalition-based processes reflect dimensions of capacity building, such as community skill building, identified by experts convened by the U.S. Centers for Disease Control and Prevention (Goodman et al. 1998).

Other researchers recommend using community-based participatory research (CBPR) to engage community and scientific partners in sharing responsibilities for
understanding and improving the work of community coalitions. This approach includes the equitable involvement of many diverse community representatives, researchers, and other stakeholders in all aspects of the research process; from setting goals to evaluating outcomes (Israel et al., 1998). This methodology may help discover how coalition-based processes can be used by community members to address local needs (Rand, 2008). CBPR involves coalition members and research partners shared sensemaking about what results from community efforts and what it means (Zubaida et al., 2007). CBPR methodology has been used to help understand coalition work and to improve coalition efforts (Israel et al., 1998).

The purpose of this study is to examine the effects of a training and technical assistance intervention on the amount and kind of community changes in the environment brought about by community coalitions to reduce risk for underage drinking. This study also uses CBPR approaches to examine implementation of key processes before and after the intervention. Finally, the study examines whether the effects on implementation of coalition-based processes and related community changes are associated with improvements in population-level outcomes (i.e., adolescent 30-day alcohol use rates).

METHOD

Context of this Study

The Youth Community Coalition (YC²) of Columbia, Missouri and the Dottes Coalition of Kansas City, KS were selected from a group of eight coalitions participating in the NIDA Coalition Research Project (NCRP) funded by the National
Institute on Drug Abuse (NIDA) of the National Institutes of Health. The coalition participants were selected from the Community Anti-Drug Coalitions of America (CADCA) database of thousands of coalitions; with a focus on those from five central Midwestern states (Kansas, Iowa, Nebraska, Missouri and Oklahoma). The list of potential participating coalitions was filtered by defined selection criteria including: being from a Midwestern state, having at least one paid staff member, and an annual budget of over $100,000. Coalitions were excluded if they had attended prior CADCA training sessions on related topics. Those coalitions that met the defined criteria were invited to participate. Ten coalitions were randomly selected to participate from those coalitions that responded to the invitation and two additional coalitions were waitlisted; and eight are still participating in the NCRP. Three of the eight coalitions (from Cohort one) received the intervention six months prior to five other coalitions from Cohort two. YC2 is from Cohort one; Dottes is from Cohort Two.

YC2 and Dottes were selected from the original eight coalitions based on the following selection criteria: routine participation in this NIDA project, consistent staff members throughout the project and urban community setting. YC2 was selected for longer-term population-level outcome analysis because of the length of time the coalition was in the intervention phase (11 months). Dottes (from the second Cohort) was not included in this final analysis because of the shorter duration of the intervention phase (only 5 months).
Youth Community Coalition (YC²)

The YC² was formed in 2003 by the Columbia Housing Authority to address community needs in Columbia, MO. In 2004, the coalition received funding from the Drug-Free Community program grant. The coalition focused on adolescent substance abuse prevention after they received their Drug-Free Community (DFC) funding (2004-2009). In 2005, a director was hired and she focused the group’s efforts on coalition building and developing community capacity. She remained the executive director of the coalition during the NCRP. In 2008, the coalition also received a Strategic Prevention Framework – State Incentive Grant (SPF-SIG) (2006-2009). DFC funding is from the national level and the SPF-SIG funding is from the state of Missouri to address underage drinking.

The Youth Community Coalition is located in Columbia, Missouri. Columbia has approximately 94,428 residents, primarily Caucasian (81.54%) with smaller ethnic populations (e.g., African American, 10.85%) making up the rest of the population (U.S. Census Bureau, 2006). Approximately 20% of residents are under the age of 18, 27% are between the ages of 18 and 24. Columbia is also home to a large state university, the University of Missouri, and two smaller colleges, Central Methodist University and Stephens College.

Dottes Community Coalition

The Dottes Community Coalition was the participating group from the second cohort of the NCRP. It was excluded from the analyses of the final research question because of limited time in the intervention phase and because the adolescent reported
30-day alcohol use rate was only available by years. Dottes formed in 1998 when they received $10,000 in funding from Kansas City, KS to develop a coalition in the Rosedale Community due to a crisis associated with widespread flooding. They later adapted their work to expand and coordinate services to address alcohol and drug abuse prevention and reduction. The coalition later expanded efforts beyond the neighborhood to all of Wyandotte County and it now focuses on decreasing adolescent drug abuse. The coalition does not work directly with youth, but with people and organizations who serve youth. Dottes is funded primarily through the Drug-Free Community grant.

Dottes is located in Kansas City, KS, which is located in Wyandotte County. The Kansas City metropolitan area includes 15 counties, including Wyandotte County. In 2000, the population of Kansas City, KS was 143,801 with residents being primarily Caucasian (55%), African American (30%), or Hispanic/Latino (17%). Approximately 29% of residents were under the age of 18, and 11% between the ages of 18 and 24 years. (U.S. Census Bureau, 2007).

Participants

The participants of this study are staff members of YC² and the Dottes Coalition from Columbia, MO and Kansas City, KS. Both coalitions were engaged with 12 community sectors including: the private sector (businesses), community and civic groups, faith-based organizations, government-based agencies, health organizations, human/social service organizations, law enforcement, media, parents/community members, schools and educational institutions, youth/youth-led
organizations, and youth-serving organizations. Participating coalitions were paid $300 quarterly stipends based on the full participation of the coalition in all aspects of the project. The stipend was awarded based on completion of the following: (a) documentation of community changes for the prior quarter and (b) participation in the assessment of coalition-based processes and (c) related technical assistance calls.

**Collaborative Partnership with University of Kansas Work Group**

The University of Kansas Work Group for Community Health and Development (KU Work Group) is focused on community-based participatory research and building capacity for efforts to change community conditions and population-level outcomes. The KU Work Group collaborates with grantmakers and other partners to support and evaluate efforts to build healthier communities. The work is an integrated program of research, teaching, and public service. The KU Work Group is affiliated with the Department of Applied Behavioral Science and the Schiefelbusch Institute for Life Span Studies at the University of Kansas.

The KU Work Group received a National Institute on Drug Abuse grant in 2007 that funded a two-year exploratory research project. The project was designed to examine the effects of a Community Change Model (CCM)—training in core competencies and technical assistance in implementing coalition-based processes—on community changes related to reducing risk for substance abuse. The CCM intervention involved group training using a field-tested curriculum and monthly technical assistance via telephone. The primary dependent variables measured were
environmental (community) changes and the implementation of prioritized coalition-based processes.

The Youth Community Coalition and Dottes Coalition documented environmental changes and other activities using the Online Documentation and Support System (ODSS) created and maintained by the KU Work Group (Fawcett and Schultz, 2008). This system supports participatory research among community and scientific partners engaged in shared sensemaking regarding the collected data.

Figure 1. Framework of the Community Change Model

<table>
<thead>
<tr>
<th>Community Change Intervention (Independent Variable)</th>
<th>Anticipated Outcomes (Dependent Variable)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Training in Related Skills</strong></td>
<td><strong>Increased rates of Community Changes</strong></td>
</tr>
<tr>
<td>• Creating and maintaining coalitions</td>
<td>New or modified:</td>
</tr>
<tr>
<td>• Assessing needs and resources</td>
<td>• Programs</td>
</tr>
<tr>
<td>• Analyzing problems and goals</td>
<td>• Policies</td>
</tr>
<tr>
<td>• Developing a model of change</td>
<td>• Practices</td>
</tr>
<tr>
<td>• Developing strategic and action plans</td>
<td></td>
</tr>
<tr>
<td>• Developing an intervention</td>
<td><strong>Enhanced Implementation of Coalition-Based Processes</strong></td>
</tr>
<tr>
<td>• Improving organizational management</td>
<td></td>
</tr>
<tr>
<td>• Building leadership</td>
<td></td>
</tr>
<tr>
<td>• Advocating for change</td>
<td></td>
</tr>
<tr>
<td>• Enhancing cultural competence</td>
<td></td>
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<tr>
<td>• Evaluating the initiative</td>
<td></td>
</tr>
<tr>
<td>• Implementing a social marketing effort</td>
<td></td>
</tr>
<tr>
<td>• Sustaining the work</td>
<td></td>
</tr>
<tr>
<td><strong>Technical Assistance in Implementing Coalition Processes</strong></td>
<td></td>
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<tr>
<td>• Analyzing Information About the Problem &amp; Goals</td>
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<tr>
<td>• Establishing a Vision &amp; Mission</td>
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<tr>
<td>• Defining Organizational Structure</td>
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<tr>
<td>• Developing a Model of Change</td>
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<tr>
<td>• Developing and Using Strategic Action Plans</td>
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<tr>
<td>• Arranging for Mobilizers</td>
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<tr>
<td>• Developing Leadership</td>
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<tr>
<td>• Implementing Effective Interventions</td>
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<tr>
<td>• Assuring Technical Assistance</td>
<td></td>
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<tr>
<td>• Documenting Progress &amp; Using Feedback</td>
<td></td>
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<tr>
<td>• Making Outcomes Matter</td>
<td></td>
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<tr>
<td>• Sustaining the Work</td>
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</tbody>
</table>
Measurement

The research questions examined in this study are: 1) Did the intervention (training and technical assistance) result in increases in community changes facilitated by participating coalitions? 2) What factors or processes are associated with accelerated and slowed rates of community changes brought about by each coalition to prevent underage drinking? 3) Were the coalitions able to further the implementation of coalition-based processes to support change efforts? 4) How were community changes contributing to the coalitions’ efforts to prevent underage drinking? And 5) Did the effects of community change brought about by YC\(^2\) generalize to improvements in longer-term outcomes?

To address these research questions, the study used three types of measurements: a) documentation of community changes (i.e., new or modified programs, practices, and policies), b) implementation of coalition-based processes (e.g., action planning), and c) population-level outcomes (i.e., 30-day adolescent alcohol use rates and adolescent alcohol related arrests).

Documentation of Community Change

Community change, changes in the environment to reduce risk for underage drinking, is the primary dependent variable. Community changes are defined as new or modified programs (e.g., classes in peer refusal skills that target new groups), policies (e.g., social hosting laws), and practices (e.g., expanded efforts to prevent drug use in homes) facilitated by the coalition and related to preventing adolescent substance use. For an activity to be documented as a community change, it had to
meet all of the following criteria: a) have occurred (e.g., when a policy is already adopted; when a new program is first implemented - not just been planned), b) was related to the initiative's chosen goals and objectives, c) were new or modified programs, policies, or practices in different parts of the community or system (e.g., government, business, schools, health organizations), and d) were facilitated by individuals who are members of the initiative or are acting on behalf of the initiative.

Documented community changes were analyzed further through additional questions in the documentation system. These questions were developed to capture the additional contribution of community changes to the effort. The changes were examined by goal area (e.g., alcohol prevention), prioritized group (e.g., elementary school-aged children), behavior change strategy (e.g., providing information to students about alcohol risks), risk and protective factor targeted (e.g., favorable attitudes toward alcohol use), and sector where change occurred (e.g., schools). This further analysis helps explore whether community changes are of sufficient amount, intensity of strategy, duration and penetration (Watson-Thompson, 2007; Fawcett et al., 1999; Roussos & Fawcett, 2000).

One staff member from each coalition was designated with the task of documenting (recording and scoring) coalition activities and accomplishments. This person was trained by KU Work Group staff using a codebook and protocol that included scoring instructions, examples and non-examples, and opportunities to practice and get feedback on scoring. This was done through distance training via telephone and a web-based computer data-sharing system. The primary training
session lasted three hours. The first part of the training was a Power-Point presentation regarding the codes and how to use them. The last part of the training involved practice in which a staff member from each coalition completed practice examples by coding hypothetical activities and accomplishments. Coalition documenters also were given a tour of the Online Documentation and Support System (ODSS) and practiced entering data using the ODSS.

A staff member from each coalition was responsible for documenting activities after they occurred. A KU Work Group graduate research assistant (the author) assured the quality of the data on a monthly basis by providing secondary (independent) coding of the data. Cohen’s Kappa was used to assess inter-observer agreement between code 1 (coalition staff member) and code 2 (independent secondary observer). Kappa scores were computed to yield a percentage of occurrences of agreement adjusted for chance. Kappa was 96% between code 1 and code 2.

Semi-structured interviews were used to gather qualitative information about factors associated with the rate of reported community changes. The interviews took place quarterly during regularly scheduled technical assistance calls. The interview protocol consisted of a list of questions a researcher would ask the coalition staff member as they reviewed graphs of community change data. For instance, when reviewing graphs of the cumulative community change data, scientific partners prompted coalition partners to reflect: “What does the pattern [of community change
data] suggest about what was increasing and slowing the rate of change? What does this mean for the coalition’s efforts? How might we adjust what we are doing?”

Reported community changes were validated on a monthly basis during technical assistance phone calls and through review of coalition meeting minutes. The second participant from each coalition confirmed the occurrence of reported community changes by reviewing documented changes every month with the researcher. Coalition meeting minutes were reviewed at the end of this study and 25% of reported community changes were validated through keyword searches.

*Implementation of coalition-based processes*

The implementation of coalition-based processes was assessed using online questionnaires completed by three representatives from each coalition. Questions were asked about implementation of each task in the task analysis for each of 12 community processes. For example, a prioritized process for both coalitions, coalition-based Process 10 (Documenting Progress and Using Feedback), included 18 yes/no implementation questions; for example “Were the data used to make improvements in the intervention?” (see Appendix B). The overall implementation score for each process was calculated by dividing the total number of “yes” responses by the total number of discrete tasks in the process.

A KU Work Group research associate and a graduate research assistant (the author) provided monthly Technical Assistance (TA) via monthly phone conversations. TA was based on coalition-identified areas of importance and/or need based on the curriculum training received. Technical assistance focused on the 12
coalition-based process areas (e.g., developing organizational structure, documenting progress, sustainability) (Watson-Thompson, 2008; CTB). Table 1 lists the 12 coalition-based processes for change and implementation:

Table 1. Twelve Coalition-Based Processes (and related tasks) for Promoting Community Change and Improvement

<table>
<thead>
<tr>
<th>Process (number of tasks)</th>
<th>Illustrative Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analyzing Information About the Problem, Goals (N=17)</td>
<td>Define community, engage stakeholders in planning, collect and analyze information about the extent of problem</td>
</tr>
<tr>
<td>2. Establishing a Vision &amp; Mission (N=13)</td>
<td>Establish vision and mission statements, convene group to guide development of statements, apply and use vision and mission statements</td>
</tr>
<tr>
<td>3. Defining Organizational Structure (N=45)</td>
<td>Assess organizational needs and resources and develop goals to enhance the functioning of the organization, develop organizational structure, establish operating mechanisms for doing things within the organization (e.g., bylaws)</td>
</tr>
<tr>
<td>4. Developing a Model of Change (N=16)</td>
<td>Convene key stakeholders to develop a logic model for the effort, identify intended uses of model, identify core components and elements</td>
</tr>
<tr>
<td>5. Developing and Using Strategic Action Plans (N=26)</td>
<td>Develop objectives that serve as a marker of accomplishments and provide benchmarks for accountability, identify strategies to carry out objectives</td>
</tr>
<tr>
<td>6. Arranging for Mobilizers (N=17)</td>
<td>Identify need for mobilizer, define the roles and responsibilities of the community mobilizer or organizer, assure the effective functioning of the community mobilizer (group provides training, support, and feedback for the community mobilizer)</td>
</tr>
<tr>
<td>7. Developing Leadership (N=26)</td>
<td>Identify the composition of the ideal leadership team, recruit new leaders to the team, develop leadership plan, identify methods to support leadership</td>
</tr>
</tbody>
</table>
| Development Goals                                                                 | \begin{tabular}{l|l} 
8. Implementing Effective Interventions (N=24) & Engage community members and other key stakeholders in designing the intervention, identify objectives, research past interventions, identify core components and elements, evaluate efforts \\
9. Assuring Technical Assistance (N=13) & Assess the stage of development and readiness of the effort to use technical assistance, identify appropriate technical assistance and support providers for the initiative \\
10. Documenting Progress & Using Feedback (N=18) & Identify the measures to be used in the documentation and feedback system, document or collect the data using systematic methods, analyze, communicate, and use the data to make improvements in the initiative \\
11. Making Outcomes Matter (N=17) & Identify indicators of success for the initiative, specify reporting requirements about the activities and outcomes of the initiative, use incentives and disincentives to encourage outstanding implementation of activities and improvement in outcomes \\
12. Sustaining the Work (N=23) & Determine whether the initiative or activities should be sustained, group has determined the intended duration or the length of time that is appropriate for the initiative or effort to be sustained. 
\end{tabular} |

The implementation of the 12 coalition-based processes was measured at three different time intervals using an online survey. The first assessment was pre-intervention for both coalitions. Assessment two was taken during the intervention for YC2 (Cohort 1) and during baseline for Dottes (Cohort 2). The third assessment took place in March 2009 and was framed as a post assessment for this analysis. Three to four staff and volunteer members took the assessment each time it was administered.
Participants were selected based on the length of time they had been involved with the coalition and knowledge of coalition activities. The survey included implementation and use questions (N=255) related to the capacity areas and related permanent products. For example a process prioritized by the Dottes Coalition, Coalition-Based Process 4: Developing a Logic Model, the survey included 16 questions. Example questions include: Does your coalition have a logic model (permanent product)? Was the coalition involved in the creation of the logic model? Does the coalition use the logic model on a monthly basis? The implementation level was calculated by dividing the number of actions reported as implemented (sum of all assessments received from those reports for each coalition) in each coalition-based process area by the total number of activities in that process area (e.g., 14/16 activities were reported as implemented). There was a range of tasks for the processes; for instance Coalition-Based Process 3 had 45 questions and Coalition-Based Process 10 had 18 questions.

Population-level outcomes

Population-level outcomes were measured through adolescent 30-day use measurements and adolescent alcohol-related arrests. These indicators were selected based on consistency across Missouri for comparisons and on recommendations from national funding agencies (e.g., Substance Abuse and Mental Health Services Administration). The 30-day measurement was collected from the Missouri Department of Mental Health’s School Survey. The archival arrest data were collected from the Columbia, Missouri Police Department. Dottes was excluded from
the population-level outcome analysis because of the relatively short duration in the intervention phase of the study (five months) and because the population-level outcome data was only available in year intervals.

Components and Elements of the Community Change Intervention

The community change intervention consisted of two components: a) in-person/group training in core competencies using field-tested curriculum and b) telephone-based technical assistance in implementing priority coalition-based processes. The in-person curriculum training occurred in February and March of 2008 at the University of Kansas (KU) for YC² (Cohort 1, N=3); and in August and September 2008, for the Dottes coalition (Cohort 2, N=5). Two coalition members traveled to KU for two separate three-day in-person, group-training sessions. The training used 13 of the 16 modules from the Community Tool Box Curriculum (http://ctb.ku.edu). Table 2 outlines the 13 curriculum modules covered and illustrative skill areas (see table below).

Table 2. Thirteen Curriculum Modules/Competencies and Related Skill Areas Addressed in Training Component

<table>
<thead>
<tr>
<th>Curriculum Modules/Competencies</th>
<th>Illustrative Skill Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Creating and maintaining coalitions</td>
<td>Bring skilled people together to work on common goal</td>
</tr>
<tr>
<td>2. Assessing needs and resources</td>
<td>Conduct community needs assessments and develop asset maps</td>
</tr>
<tr>
<td>3. Analyzing problems and goals</td>
<td>Data analysis, prioritization of community needs, goal setting</td>
</tr>
<tr>
<td>4. Developing a model of change</td>
<td>Identify core components and elements of model, build model of practice, incorporate model into practice</td>
</tr>
<tr>
<td>5. Developing strategic and action plans</td>
<td>Develop objectives and strategies to</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>6. Developing an intervention</td>
<td>Review past intervention research, collaborate with stakeholders, develop components and elements of intervention</td>
</tr>
<tr>
<td>7. Improving organizational management</td>
<td>Analyze internal work environment, build skill areas</td>
</tr>
<tr>
<td>8. Building leadership</td>
<td>Recruit new members to leadership team, develop leadership plan</td>
</tr>
<tr>
<td>9. Advocating for change</td>
<td>Create advocacy plans based on community assessment and readiness</td>
</tr>
<tr>
<td>10. Enhancing cultural competence</td>
<td>Build skills related to cultural diversity and implement work in culturally sensitive areas</td>
</tr>
<tr>
<td>11. Evaluating the initiative</td>
<td>Document the intervention, develop evaluation plan, conduct periodic analyses of data</td>
</tr>
<tr>
<td>12. Implementing a social marketing effort</td>
<td>Create social marketing plan, involve key stakeholders, evaluate plan</td>
</tr>
<tr>
<td>13. Sustaining the work</td>
<td>Determine what activities need to be sustained and for how long, create plan to continue necessary work</td>
</tr>
</tbody>
</table>

The in-person training was conducted over the course of two, three-day sessions at the University of Kansas. The training was facilitated by KU Work Group staff. Each day two curriculum areas were taught to participants via slide show presentations and hands-on learning activities (e.g., creating action plans for a specific intervention to be used by the coalition). During the training, collaboration among participants from different coalitions was encouraged to facilitate sharing lessons learned from experiences in other situations.

The Technical Assistance (TA) component of the intervention consisted of three elements that were implemented sequentially. First, KU Work Group staff provided information to coalition staff about their self-assessments on the level of
implementation and importance of the 12 Coalition-Based Processes. This led to prioritized areas of importance and/or need (i.e., processes rated as high importance and low implementation). Second, during TA calls, KU Work Group staff facilitated action planning for community changes. During this phase, coalition members reviewed previously documented community changes with the KU Work Group TA provider, and then planned for upcoming community changes to be sought in the next months. Action plans included information about community changes to be sought and who would do what tasks to bring about the change by a specified time interval. The action plans were created collaboratively between partners and stored on a shared online workstation to increase availability to participating coalitions. The last element of TA was shared sensemaking about the documented community changes. This consisted of data review from the previous three months using the Online Documentation and Support System’s graphs and reflection questions. During this dialogue, coalition members reflected on what they saw (e.g., moderate and steady rates of change in past quarter), what it meant (e.g., this increase was associated with hiring a new staff member), and implications for adjustment (e.g., would like to increase rates of change in schools over next year).

Study Design

A multiple-baseline study design was used to examine the primary research questions: An empirical case study design (focused on YC²) was used to address the last research question. Dottes was excluded from this analysis because of the relatively short time period in the intervention phase (five months).
RESULTS

The findings are presenting for each of the five research questions.

Research Question #1: Did the intervention (training and technical assistance) result in increases in community changes facilitated by participating coalitions?

Table 3 lists some illustrative community changes that the Youth Community Coalition facilitated categorized by behavior change strategy.

Table 3. Illustrative Community Changes Facilitated by the Youth Community Coalition (YC²) (Columbia, MO)

<table>
<thead>
<tr>
<th>Behavior Change Strategy</th>
<th>Illustrative Community Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Information</td>
<td>For the first time, YC² and Shelter Insurance collaborated to increase awareness of alcohol use in connection to Prom time. Shelter allowed YC² to display posters at their community park where HS students typically go to have their Prom Pictures taken.</td>
</tr>
<tr>
<td>Enhancing Skills</td>
<td>YC² built peer leadership by paying for 8 high school students and 2 sponsors to attend Missouri Prevention Leadership/TREND Conference in St. Louis. Conference training designed to increase leadership skills and knowledge of prevention programming so teens can lead prevention groups and influence peers in their high schools in an effort to reduce alcohol and tobacco use among Columbia students.</td>
</tr>
<tr>
<td>Modifying Access, Barriers, Exposures, and Opportunities</td>
<td>For the first time, YC² was allowed to bring speakers into the Columbia Public Schools to talk about alcohol, tobacco and other drugs.</td>
</tr>
<tr>
<td>Enhancing Services and Support</td>
<td>Healthcare USA and YC² partnered on annual Back to School Health Fair. The event served over 1000 kids and parents by providing school supplies for those who get annual screenings at health fair.</td>
</tr>
</tbody>
</table>
### Changing the Consequences

For the first time, YC² Coalition Chair, Coalition Coordinator, and 3 Teen Members personally recognized community leaders who had gone beyond their duties to promote positive development of youth and children in Columbia. The Heroes For Youth Recognition certificate was presented to a City Council Representative, A Media Representative, and a Local Pastor. The activity was covered by the Columbia Daily Tribune.

### Modifying Policies and Broader Systems

For the first time, YC² Promise Team - Opportunities to Help Others met with youth leaders from area churches to discuss youth needs, in particular related to opportunities to volunteer in the community. Eight youth leaders attended, consensus was achieved to meet again and to invite youth to the meetings. To our knowledge, this is the first time a group of youth leaders from different churches agreed to meet and openly share ideas and resources with each other.

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Table 4 lists some illustrative community changes that the Dottes coalition facilitated categorized by behavior change strategy.

<table>
<thead>
<tr>
<th>Behavior Change Strategy</th>
<th>Illustrative Community Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Information</td>
<td>New program, Gangs in Wyandotte County, was implemented in cooperation with KCK Police Officer Jeff Brownlee. Information was provided on gang activity with information on how citizens can assist police.</td>
</tr>
<tr>
<td>Enhancing Skills</td>
<td>Rush Center offered new training to area churches in Kansas City to help churches address substance abuse.</td>
</tr>
<tr>
<td>Modifying Access, Barriers, Exposures, and Opportunities</td>
<td>St. Peter's Neighborhood Association meeting discussed and created plan to assist the DA in enforcement of drug paraphernalia law to ensure that the stores in their community do not revert to the practice of selling.</td>
</tr>
<tr>
<td>Enhancing Services and Support</td>
<td>The chair of Wyandotte County's Drug &amp; Alcohol Advisory Board, charged with funding drug &amp; alcohol prevention &amp; treatment programs through alcohol sales tax money, has begun to fund prevention efforts. Previously, the group only funded treatment programs.</td>
</tr>
<tr>
<td>Modifying Policies and Broader Systems</td>
<td>The Drug Endangered Children Protocol, which protects children of drug users through health care worker trainings, was implemented in Kansas City area.</td>
</tr>
</tbody>
</table>

Figure 2 shows the cumulative number of community changes (i.e., new or modified programs, practices or policies) facilitated by the Youth Community Coalition and the Dottes coalition prior to and during the intervention. The cumulative graph adds the number of changes that occurred each month to the total number of changes that occurred to date. For example, in December 2007 for YC\textsuperscript{2}, three community changes occurred which were added to the total thus far (one) for a cumulative value of four as of December 2007. From November 2007 until January 2009, the Youth Community Coalition facilitated 56 distinct community changes (see Table 3). During the same time period, and the Dottes coalition facilitated 80 distinct community changes (see Table 4).
Figure 2. Cumulative Number of Community Changes for YC2 and Dottes Community Coalitions

Figure 2 shows a pre-intervention mean of 1.25 per month, after the intervention the average rate of community changes per month shifted to 4.6 post-intervention for YC2. The effects were replicated in the second community; for Dottes, the rate of community changes per month doubled after the intervention. The
mean number of community changes per month increased from pre-intervention 3.9 to post-intervention 8.4.

**Research Question #2**: What factors or processes are associated with accelerated and slowed rates of community changes brought about by each coalition to prevent underage drinking?

The observed increases and decreases in the rates of community change may reflect implementation of the intervention and changes in the context. Semi-structured interviews were conducted with coalition staff to identify critical events and other documented activities associated with the implementation of the intervention. Of particular interest were key events associated with patterns of accelerating or slower rates of monthly community changes being facilitated by the coalition. For instance, for YC² (see Figure 3), there was a marked increase in the rate of community changes implemented following the action planning elements of TA. The summer months had lower rates of community changes. The Dottes coalition saw a slight increase in the rate of community changes facilitated during months after new staff members were hired. The implementation of a new program marked an increase during baseline. During the intervention phase, TA action planning for community changes and the implementation of technical assistance were associated with higher rates of community changes for Dottes. During the last months of the intervention fewer changes were facilitated. This was a period when the Dottes coalition was losing a staff member.
Research Question #3: Were the coalitions able to further the implementation of coalition-based processes to support change efforts?

The implementation scores decreased from time 1 (pre-intervention) to time 2 (during-intervention) for YC² for two of the three prioritized coalition-based process
areas. For (Coalition-Based Process 10) Documenting Progress and Using Feedback, reported implementation decreased by 8%; for (Coalition-Based Process 11) Making Outcomes Matter, it decreased by 32%, and for (Coalition-Based Process 12) Sustaining the Work, it increased by 4%. However, time 3 (post-test) scores, measured in March 2008, showed improvement in each priority Coalition-Based Process for combined Pre/During to Post analysis. The increases from combined Pre/During to Post scores was: for (Coalition-Based Process 10) Documenting Progress and Using Feedback, 15%; for (Coalition-Based Process 11) Making Outcomes Matter, by 48%; and for (Coalition-Based Process 12) Sustaining the Work, by 40%.

*Figure 4. YC² Reported Implementation of Prioritized Coalition-Based Processes*

The Dottes coalition implementation scores also decreased for two of the three prioritized Coalition-Based process areas from time one (pre-test) to time two (pre-
intervention) assessments. (Coalition-Based Process 4) Developing a Framework decreased by 12% and (Coalition-Based Process 10) Documenting Progress decreased slightly (by 2%). The third priority area, (Coalition-Based Process 3) Developing Organizational Structure, increased by 17% between time one to time two assessments. Overall implementation scores in all three areas increased from the pre/during assessments (combined) to the post-test assessment: (Coalition-Based Process 3) Developing Organizational Structure increased by 16%; (Coalition-Based Process 4) Developing a Framework increased by 23%; and (Coalition-Based Process 10) Documenting progress increased by 24%.

*Figure 5.* Dottes Reported Implementation of Prioritized Coalition-Based Processes
**Research Question #4:** How were community changes contributing to the coalitions’ efforts to prevent underage drinking?

Each community change that was documented using the Online Documentation and Support System (ODSS) was furthered analyzed using questions which permitted an analysis of contribution. This allowed the documented community changes to be categorized in various ways to better reflect the potential dose of environmental change; for instance by coalition goal, expected duration, behavior change strategy, sectors, and prioritized populations to benefit.

Figure 6 shows that the Youth Community Coalition focused the majority of its community changes (67%) on addressing all goal areas for reducing alcohol and tobacco use among adolescents. Focus on reducing alcohol use alone represented another 23% of their community changes. Very few changes (2%) were devoted toward reducing tobacco use alone.
Figure 6. YC² Community Changes Distributed by Goal Area (N=56)

Figure 7 shows that 25% of the community changes facilitated by the Youth Community Coalition were targeted towards children and youth of all ages. The coalition focused 20% of its community changes on high school-aged youth and an additional 16% on middle school youth. Twenty-four percent of their changes were targeted towards multiple age groups.
Figure 7. YC² Community Changes Distributed by Prioritized Group (N=56)

Figure 8 shows that modifying policies and broader systems (e.g., new school policy) and modifying access, barriers, exposure and opportunities (e.g., extended after school program hours) were the most utilized behavior change strategies (22% and 21% respectively). Providing information (e.g., informational classes) was 17% of the distribution. The least utilized behavior change strategy was changing the consequences (e.g., modifying consequences of alcohol arrests) at 2% of the community changes. Five of the six strategies made up an equal distribution of the effort.
Figure 8. YC² Community Changes Distributed by Behavior Change Strategy (N=56)

Figure 9 shows that the Youth Community Coalition focused implemented community changes on community laws and norms (e.g., new school policy) (25%), extreme economic deprivation (e.g., low-cost alternative activities) (16%), and as well as broader efforts that focused on all risk factors (14%). Early initiation of problem behavior (e.g., partnership with police department to increase identification of adolescent alcohol use) and friends who engage in problem behavior (e.g., peer refusal skill classes) were both addressed by 8% of the community changes.
Figure 9. **YC**² Community Changes Distributed by Risk/Protective Factor (N=56)

![Pie chart showing community changes distributed by risk/protective factors](image)

Figure 10 shows that community/neighborhood/civic organizations was the sector in which most of the documented community changes occurred (18% of the changes). Businesses/private sector were the target of 13% of the distributed changes. The sector of government-based agency, parents/community residents, and school/educational institution sectors each showed 12% of the community changes.
Figure 10. YC² Community Changes Distributed by Community Sector (N=56)

Figure 11 shows that the Youth Community Coalition had an equal distribution of community changes by the three categories of expected duration. One-third of the documented changes were reported as one-time events (e.g., skill workshop), and equal portions as on-going events (e.g., youth groups formed to work on school alcohol problem) and as occurring more-than once (e.g., health fair).
Figure 11 shows the Dottes Coalition focused the majority of its community changes on broad goal areas (59%). Thirty-two percent of changes were focused on all of the coalition’s goals. Five percent of changes were focused on reducing alcohol and 4% were focused on tobacco use among adolescents.
Figure 12. Dottes Community Changes Distributed by Goal Area (N=80)

Figure 13 shows the majority of community changes facilitated by Dottes were focused on elementary-school aged children (32%). All age groups were 20% of the distribution while preschool children and middle school-aged children were each 15% of the facilitated changes. Adults (25 years old) and children and youth of all ages were 8% and 7% of the community changes respectively. Three percent of the changes were focused on high-school aged youth.
Figure 13. Dottes Community Changes Distributed by Prioritized Group (N=80)

Figure 14 shows that enhancing skills (e.g., peer refusal skill class) and enhancing services and supports (e.g., new program at high school) were the most used behavior change strategies at 31% and 29%. Modifying policies and broader systems (e.g., new DEC protocol) were 21% of the community changes. Providing information (e.g., town hall meeting) was 13% of the changes, and 6% were focused on modifying access, barriers, exposures and opportunities (e.g., practice change neighborhood liquor store).
Figure 14. Dottes Community Changes Distributed by Behavior Change Strategy (N=80)

Figure 15 shows the distribution of community changes by risk and protective factors for Dottes. Family history of problem behavior (e.g., parenting classes), family management problems (e.g., availability of counselors), and favorable parental attitudes (e.g., town hall meeting) and involvement in problem (e.g., collaboration with parent school committee) were all 17% of the community changes. Community laws and norms (e.g., new community program) were 16% of the changes. Nine percent of the changes were related to other risk and protective factors, and 8% of the changes were related to multiple factors. Healthy beliefs and all risk factors were both 5% of the distribution.
Figure 15. Dottes Community Changes Distributed by Risk/Protective Factor (N=80)

Figure 16 shows that 19% of the documented community changes occurred in faith-based/religious organizations for the Dottes Coalition. Government-based agencies, law enforcement/court, and schools/educational institutions were 18%, 16% and 15%, respectively. Community/neighborhood/civic organizations were 11% of the community changes and both human/social services and parents/community residents were 7%.
Figure 16. Dottes Community Changes Distributed by Community Sector (N=80)

Figure 17 shows that the Dottes Coalition expected the majority (65%) of community changes to be on-going (e.g., new collaboration with fire department). Twenty-nine percent of community changes were expected to have a one-time duration (e.g., town hall meeting) and 6% were expected to have a duration of more than once (e.g., offered workshop).
Research Question #5: Do the effects on community change generalize to improvements in longer-term outcomes?

The purpose of the NIDA research project was to examine the effects of the community change intervention on rates and types of community change. Improvements in population-level outcomes were examined but not expected during the short time period (2 years) of this study.

The rate of adolescent alcohol-related arrests decreased only slightly from 48 to 41 arrests per 100,000 people during the intervention, as reported by the Columbia, Missouri Police Department. Figure 18 displays the pre/post rate of adolescent alcohol-related arrests. The trend line shows no difference between the pre-intervention and post-intervention rates of arrests.
Figure 18. Columbia, MO Adolescent Alcohol-Related Arrests

Figure 19 shows the average percentage of high-school students who reported using alcohol in the past 30-days for pre-intervention (2006) and post-intervention (2008) for both the city of Columbia and the state of Missouri. The reported rates decreased only slightly from 37% to 34% in Columbia. The reported rates remained nearly the same in the state average, from 26.5% to 26.6% in 2008.
DISCUSSION

This study examined the effects of a community change intervention—training and technical assistance—on the rates of community changes in two communities. The results show delayed, modest increases in rates of community change after staggered implementation of the intervention with two separate coalitions. Modest changes were noted particularly after the implementation of technical assistance in action planning for community change for both coalitions. The delayed effects may be related to the months required for fuller implementation of technical assistance with action planning and other coalition processes. However, other environmental events, correlated with the intervention, may have influenced the rate of community change observed during this period. The upward trend in
community change during baseline for the second coalition also makes it difficult to conclude a cause and effect relationship.

This study also used qualitative methods (semi-structured interviews) to identify and examine factors associated with accelerated or slowed rates of community changes. For participating coalitions, both components of the intervention were associated with modest increases in rates of community change. A period of slowed change during the intervention phase was associated with the summer vacation of coalition staff members for YC\textsuperscript{2}. The summer period also showed slower rates of community changes for Dottes, which was reported by coalition staff as a typical cyclic pattern of substance abuse work because most of the work is done in school settings. For Dottes, availability of human resources appeared to influence the rate of community changes. Periods when new staff were hired were associated with slight increases in rates during baseline; however, loss of staff near the end of the study in December 2008 was associated with a stagnation in the rate of community change. The combined elements of the intervention (training and technical assistance, including community change action planning) seemed to have the greatest effect on rates of community changes for Dottes. However, without suitable comparisons and replications, this empirical study can only identify candidate factors that are associated with changes in rates.

Consistent with the principles of public health and community-based participatory research (CBPR), the coalitions used their own assessment data to determine the focus of technical assistance. Each coalition prioritized several
coalition-based processes to be the focus of monthly technical assistance calls. Based on its assessment of importance of the process and current level of implementation, \( YC^2 \) selected three different processes for focused technical support: a) Documenting progress and using feedback, b) Making outcomes matter, and c) Sustaining the coalition. Dottes selected: a) Documenting progress and using feedback, b) Developing organizational structure, and c) Developing a framework or model of change. Both coalitions increased reported implementation scores from pre-intervention to post-intervention for all of the priority processes. Those results represent reported levels of implementation, as direct observation of all aspects of implementation was not possible. Partial verification of implementation levels for coalition-based processes was supported through documented coalition activities and review of meeting minutes (e.g., strategic planning session held).

Improvements in reported implementation of coalition-based processes were associated with increased rates of documented community changes. It is plausible that the intervention enhanced coalition processes (process outcome) and that these effects generalized to increased rates of community changes (intermediate outcome). Further research over a longer period of time, and with similar or stronger experimental designs, is needed to demonstrate a cause-and-effect relationship between the community change intervention and implementation of coalition process and rates of community change. More research is also needed to examine whether (and under what conditions) the effects on community changes generalize to improved population-level outcomes and other more distal measures of coalition effectiveness.
Both the YC\textsuperscript{2} and Dottes coalitions focused on multiple goals for the majority of the facilitated community changes. YC\textsuperscript{2} had a higher focus on specifically reducing alcohol use (23\%) when compared to Dottes (5\%). Although both coalitions focused efforts on prevention, YC\textsuperscript{2} had a more targeted approach focusing more on alcohol than other substances. Future research should help establish whether and under what conditions targeted approaches yield greater environmental improvements in population-level outcomes.

Most of the changes facilitated by Dottes were identified as ongoing (65\%). By contrast, YC\textsuperscript{2} had an equal distribution of duration: one-third of documented changes were one-time events; one-third, more than once; and one-third, ongoing. Dottes’ longer expected duration of its documented changes may have a larger ultimate effect on longer-term outcomes since sustained efforts permit continuous exposure of aspects of the intervention in the community. YC\textsuperscript{2} duration scores may predict a more modest effect on longer-term outcomes, as only two-thirds of their efforts were planned to be sustained. Future research is needed to establish the necessary duration of implemented community changes that produce significant and sustainable improvements in population-level outcomes.

Modifying policies and broader systems, a stronger behavior change strategy, was used by each coalition for about 20\% of the community changes. Providing information, enhancing skills, and enhancing services and supports were also used similarly by each coalition (from 13-17\% of documented changes). However, YC\textsuperscript{2} used modifying access, barriers, exposures and opportunities 21\% of the time;
whereas Dottes used this strategy for only 6% of its documented community changes. Modifying policies and access/barriers and exposures/opportunities are among the stronger behavior change strategies, and providing information is among the weakest. Both coalitions had a mix of strategies related to their facilitated community changes. The use of behavior change strategies with stronger potential for achieving effects on behavior may be seen in greater improvements in longer-term outcomes. Future research is needed to better understand the long-term effects of different mixes of behavior change strategies on population-level outcomes.

Multiple sectors were involved in the work of both coalitions. YC² included 12 different sectors with a fairly equal distribution of changes occurring in each sector. Dottes also included 12 sectors, but with somewhat less equal distribution. The inclusion of 12 sectors is required by the coalitions’ shared funder, Drug-Free Community grant, and multi-sectoral intervention is a key component of prevention work. Government-based agencies, law enforcement/courts and schools/educational institutions were the more frequent sites for documented community changes; between 18-15% for both coalitions.

Both coalitions focused efforts on adolescents. YC² was focused on children and youth of all ages (20%), followed by high school-aged youth (20%), and then middle school-aged youth (16%). Dottes focused more on elementary school-aged children (32%), followed by all age groups (20%), and then preschool children and middle-school-aged youth (both 15%). Both coalitions heavily targeted youth. YC² focused its changes on high school and middle school-aged; whereas, Dottes targeted
younger youth in particular. YC² sponsored many prevention activities geared toward older youth, such as environmental changes to support alternative healthy behaviors like new skate parks for youth. Dottes prevention efforts were primarily directed toward younger school-aged children, such as elementary skill-building classes; and this was supplemented with broader community work, like organizing town hall meetings to discuss youth issues.

YC² focused on environmental conditions associated with older youth. Columbia is a smaller and less culturally-diverse community than Kansas City, Kansas (that of Dottes). This may have an effect on longer-term outcomes such as 30-day alcohol use and arrest rates because YC² is more directly changing environmental conditions associated with adolescents who are engaged in the problem behavior. Dottes has been more focused with younger populations, which should have delayed effects in outcomes. Future research may help clarify which prevention strategies are most effective in changing population-level behavior.

Consistent with the principles of community-based participatory research (CBPR), the focus of this study was the integration of knowledge and action for mutual benefit of community and scientific partners. This collaborative partnership aimed to promote co-learning and empowerment of the coalitions to continue their work long after the study has ended. The cyclical and iterative process that is common to community work—from collaborative planning to intervention to evaluation and making adjustments—is also common to CBPR. The incorporation of CBPR methodology helped study partners assure that positive outcomes were
experienced by community partners. CBPR focused research on shared goals to address community-identified issues.

The modest length of this study limits potential detection of associations between increases in community changes and improvements in population-level outcomes related to preventing adolescent alcohol use. However, the preliminary analysis of these limited data suggest a way to investigate this question. Adolescent alcohol-related arrests in Columbia, Missouri were on an increasing trend from 2004-2006 (36-49 per 100,000) and slightly decreased in 2007 (48 per 100,000). During implementation of the intervention, the rate was reduced to 41 arrests per 100,000 people. The adolescent school-based survey assessed the self-reported 30-day alcohol use rate both pre and during-intervention. The reported rate of 30-day adolescent alcohol use, consuming 1 or more alcoholic drinks in the past 30-days, decreased very slightly from 37% to 34%. The size of the effects were small and the length of documented efforts is too short to draw associations or conclusions about relationships between environmental changes and improvements in population-level behavior changes. Future research should examine longer term effects of community changes and associated population-level outcomes to further prevention work.

The study design had a number of limitations. First, the cause and effect relationship between the intervention and effects with community change (an intermediate outcome) is suggestive but not conclusive. The replication of effects in two different communities limits the threats to internal validity. However, without
more immediate and marked effects—and replication across more communities, the evidence of the effectiveness of the community change intervention remains tentative.

Second, the Online Documentation and Support System (ODSS) is based on self-report of coalition staff members. The accuracy of self-reports could be questionable as there may have been a bias to report events that had not occurred. There is also the potential for underreporting or leaving out important data for analysis of overall intervention effects. To mitigate this, coalition meeting minutes were examined for evidence of documented community changes. To support accurate and complete reporting, monthly accuracy and completeness checks were conducted by reviewing most recent documented changes with coalition staff. The reliability of the data is another limitation, as the participant-observers could have changed how data were reported over the 15-month period. To help assure the accuracy of the data, the data were reviewed on a monthly basis by both coalition members and scientific partners. To protect against changes in instrumentation, data were systematically scored by a second independent observer, and consistency in scoring was addressed through monthly feedback from secondary scorer. To support accurate and complete reporting, monthly accuracy and completeness checks were conducted by reviewing most recent documented changes with coalition staff.

Third, the generalizability of this study is a limitation as the selection of participating coalitions may interact with findings. The coalitions selected to participate in this research study had defined selection criteria (i.e., a moderate coalition budget and number of staff). Not all community coalitions will have the
same characteristics or environmental conditions, such as paid staff members, as the YC\textsuperscript{2} and Dottes coalitions. Fourth, testing and measurement was confounding in this study since documentation was required to establish levels of community change. The reactive effects of the measurement system and collaborative nature of the research process could limit the findings to only those coalitions in which documentation and shared sensemaking occurred. The ongoing technical assistance and action planning components of the intervention could have also contributed to reactivity. Finally, external environmental factors may have confounded study findings as each coalition only documented their own efforts and not all environmental changes brought about (by others) in their community. External environmental factors addressed by other groups outside the coalition, such as school curriculum modifications, may have influenced the results. However, the strong experimental design used in this study helps control for many of these variables.

This study also had a number of strengths. First, this study involved the systematic investigation of training and technical assistance on coalition processes used to create community changes related to preventing adolescent alcohol use. It is one of the first systematic investigations of such an intervention with community coalitions. Second, relative to other studies in the community coalition literature, this study had a strong experimental design. The multiple-baseline design is a stronger design than the traditional case-study approach that is the norm. This design controls for a number of key threats to internal validity including history (i.e., any environmental events occurring between pre-intervention and post-intervention
measurements that might affect the data) and maturation (i.e., development of the coalition as a function of time). Since marked effects on increased rates of community changes were noted when the intervention was implemented (and only when the intervention was implemented) this design helps rule out other plausible explanations. The effects of this comprehensive intervention were observed in two different communities at different times increasing the external validity of this study.

Third, the community-based participatory research approach is a key strength. The design of the measurement system and technical assistance intervention, as well as interpretation of the data, was done collaboratively by community and scientific partners. Periodic sensemaking was done with coalition staff members in which past data were reviewed and reported associations were examined with related contextual factors. The value of the research and associated findings was also increased since community partners were engaged in implementing the processes and directly affected by results. As a result, the findings of this study were beneficial, judging by community participants reports. The CBPR approach also helped ensure that community-determined processes were the focus of the study.

Finally, the systematic documentation of change efforts and assessment of implemented coalition processes was a strength. This documentation system helped coalition staff members record how the environment was changing and analyze their contributions to longer-term population-level outcomes (i.e., 30-day use of alcohol). The systematic assessments provided information on what coalition processes may be
associated with increased changes in the community related to this community-determined goal by reducing adolescent substance abuse.

Berkowitz (2001) made recommendations for improving knowledge about the functioning of community coalitions through systematic, empirical investigations. This study provides one of the first studies of the effects of systematic training and technical assistance on implementation of key community processes. It contributes to an understanding of community coalition functioning that can inform future prevention efforts. Despite several decades of investments in coalitions, the effectiveness of community coalition work is still in question today (Hawkins et al., 2008). This study extends the evidence base of how training and technical support can effect coalition efforts to change community conditions that may reduce risk for adolescent alcohol use at the community level.

Future research should continue to study the effects of interventions with community coalitions over an extended period of time. The brief nature of this developmental study limited the analyses of potential associations of resulting community changes and with longer-term outcomes. Longer studies with similar quasi-experimental designs and larger groups of participating coalitions could provide needed evidence for those important research questions. Future research should also include additional measures of behavior, such as permanent products of behavior (e.g., alcohol containers) and direct measurement of availability of alcohol for youth (e.g., observed sales to minors).
In addition, future research should examine the function of community-based participatory research (CBPR) methods. The incorporation of CBPR methods into this intervention was valued by community coalition members, as indicated in qualitative assessments of the intervention. Future research should further define and test protocols for CBPR methods and examine their effects on indicators of improved research (e.g., utilization of findings to make adjustments) and coalition functioning. (e.g., adjustments in coalition practice)

The findings from this study suggest several recommendations for improved practice in coalition work. First, using internet-based tools can help systematically analyze coalition efforts and their contributions to the community, including examining possible associations of community changes with population-level outcomes (Fawcett et al., 2002). Second, using web-based technical assistance can be an effective way to promote and facilitate community changes because it is widely available and facilitates collaborative work (Young et al., 2006). Third, future coalition efforts should use public meetings and other opportunities for collaboration to promote community engagement (a key aspect of CBPR). A healthy democracy is thought to depend on the ability of citizens to directly affect public policies through town hall meetings and other public gatherings (Lukensmeyer and Brigham, 2005). Behavioral scientists have noted the promise of large group interventions, citing town hall meetings as important for gathering community data on socially-important issues (Bunker and Alban, 2005).
The findings from this intervention highlight the value of CBPR, as the involved community coalitions’ input shaped the research and intervention methods, as well as interpretation of the findings. The findings from this study suggest that training and individualized technical assistance can influence the rate of community changes facilitative by community coalitions. This multi-component intervention incorporated behavioral and participatory research approaches. This exploratory study suggests a promising approach for enhancing the effectiveness of coalition approaches used to address a variety of community health and development concerns.

This intervention was designed to further understand the role of a widespread practice—training and technical assistance—in helping coalitions achieve the goal of changing conditions to prevent adolescent substance abuse. Over the 15-month study period, two coalitions were able to increase reported implementation of three prioritized coalition-based processes. This in turn, was associated with a marked increase in community changes in two different communities related to the goal of reducing adolescent alcohol use. Future research may help clarify how much of what types of community changes lead to decreased rates of adolescent alcohol use in communities. Continued participatory research efforts are needed to better understand how practical interventions, such as training and technical assistance, can enable communities to prevent public health problems and their related consequences for individuals, families and communities.
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List of Appendices

Appendix A  Coding Instructions for Documenting Community Changes
Appendix B  Assessment Forms Used to Assess Implementation of Priority Coalition-Based Process
Appendix A

Coding Instructions for Documenting Community Changes

Community/System Changes (CC):

General Definition: New or modified programs, policies or practices in the community or system facilitated by the initiative and related to its goals and objectives. Changes that have not yet occurred, which are unrelated to the group's goals, or those which the initiative had no role in facilitating are not considered community changes for the initiative. [Note: We use the term “Community/System” and “Community” Changes interchangeably since they represent the same type of event at different levels (e.g., neighborhood or city or broader system).

Coding Instructions: Specific instructions for using the definition to code events follow:

CC1 Community changes must meet all of the following criteria:
   CC1.1 have occurred (e.g., when a policy is first adopted; when a new program is first implemented - not just been planned), and
   CC1.2 are related to the initiative's chosen goals and objectives, and
   CC1.3 are new or modified programs, policies, or practices in different parts of the community or system (e.g., government, business, schools, health organizations), and
   CC1.4 are facilitated by individuals who are members of the initiative or are acting on behalf of the initiative.

CC2 When considering whether an event is new or modified: to be judged as “new,” a program, policy or practice must not have occurred before in the effort (e.g., with these groups of people, with these organizations or partners, in these settings, delivered in these ways). To be judged as “modified,” a program, policy or practice must be expanded or altered (e.g., a training program was expanded to include new modules, a policy was altered to affect new groups of people, a program was delivered in new organizations or places).

CC3 When considering whether to score multiple events as one instance or as multiple instances of a community change: To be judged as multiple instances, changes must be implemented in multiple settings (e.g., different schools or businesses) or levels (e.g., local, state levels) AND require separate approvals (e.g., a school principle approved a life skills program to be taught in her school; a second principle later agreed to do so in his school). If the event either occurred in only one setting or occurred as a result of one approval, it is coded as one instance of community change (e.g., the school board agreed to implement a district-wide life skills program that was implemented in multiple schools).

CC4 When multiple entries of the same event are being entered/documenting: The recorders involved should discuss how to record the event as a single entry (e.g., the same program implemented in the same place by multiple groups). If there is disagreement, a data coordinator should resolve differences to best represent how the environment is changing in a way that does not count the same event multiple times.
CC5 The *first* instance of implementation of a new program or practice in the community is coded as a community change, since it constitutes a change in a program or practice in the community.

CC6 A first time occurrence or enactment of a policy is recognized as a CC at the point of approval to implement the policy.

CC7 The *first* committed agreement of collaboration between two or more organizations or individuals facilitated by individual(s) who are acting on behalf of the initiative. For a collaboration to occur, independent groups must commit to sharing at least one of the following: 1) resources, 2) responsibilities, 3) risks, and/or 4) rewards.

CC8 Not all first-time events are community changes; *the event must meet all parts of the definition of a community change*. For example, if staff members attended a seminar for the first time it is generally not a community change.

CC9 Specifically excluded as community changes are Planning Products (e.g., new bylaws, completed action plan) and Resources Generated (e.g., a grant or donation to the initiative) that occur internal to the initiative.
Appendix B

Assessment Forms Used to Assess Implementation of Priority Coalition-Based Process

<table>
<thead>
<tr>
<th>COALITION-BASED PROCESS #3: DEVELOPING AN ORGANIZATIONAL STRUCTURE AND OPERATING MECHANISM</th>
</tr>
</thead>
</table>
| 1. **Core Task: Assess organizational needs and resources and develop goals to enhance the functioning of the organization.**  
  a. The group regularly assesses organizational strengths and weaknesses.  
  b. The group regularly assesses organizational resources and community assets.  
  c. The group regularly identifies organizational needs or barriers.  
  d. The group responsible for assessing organizational needs include diverse stakeholders with varied roles and responsibilities within the organization.  
  The organization has stated goals and objectives for improving the internal structure (e.g., board composition) and operations of the organization. |
| **Tips and strategies for assessing organizational needs and resources:**  
  ✓ Conduct a SWOT analysis of organizational Strengths, Weaknesses, Opportunities, and Threats.  
  ✓ Identify community partners and other organizational resources or assets.  
  ✓ Develop and regularly review goals and objectives related to the internal functioning of the organization. |
| Ratings = Percentage of Respondents indicating full implementation |
| **Overall Implementation: %** |
| 2. **Core Task: Develop an organizational structure.**  
  a. The organization has a clear governing structure (e.g., steering committee, advisory board, executive board) that is appropriate for the goals of the organization and its stage of development. |
| **Tips and strategies for developing an organizational structure:**  
  ✓ Ensure that the governing structure appropriately supports the goals of the organization.  
  ✓ Develop an operating mechanism (e.g., staffing, budget) that assures resources, supports, and accountability for |
b. The organization has a clearly defined structure or method for operating (e.g., committees, staffing) to support the functions and activities of the organization or group.

c. There are written descriptions of roles and responsibilities established for all levels of the organizational structure (e.g., board, committees, staff, and volunteers).

d. The group periodically reviews the structure of the organization to identify potential needs (e.g., different committees or more diverse composition of the board)?

3. Core Task: Establish operating mechanisms for doing things within the organization.
   a. The organization has bylaws (i.e., agreed upon rules for how important decisions are made).
   b. The organization has a document or manual that summarizes the responsibilities and procedures of the organization (e.g., rules for decision making, financial procedures).
   c. The group uses and regularly (e.g., annually) reviews the operational procedures (e.g., bylaws, procedural manual) and makes any necessary changes.
   d. The group holds regular and consistent (e.g., monthly) meetings at all appropriate levels (i.e., board, committees, staff).
   e. There are clear methods and protocols for communication (e.g., email, telephone, meetings) in the organization across

Tips and strategies for establishing ways of operating:

- Develop an operations manual that summarizes the responsibilities and procedures of the organization including the bylaws, rules for making decisions, and financial procedures.
- Review the roles and responsibilities of the organizational structure and the operational procedures with new members as an orientation to the organization.
- Encourage members of the organization to formally commit to responsibilities by signing a commitment letter.
- Develop a structure (e.g., committee) and process for regularly reviewing and updating the operational procedures.
- Assure the communications technology and working
multiple levels (e.g., board, staff, and volunteers).

f. The organization appropriately documents and records organizational activities (e.g., meeting minutes, accomplishments).

g. The group has adequate access to technology including communication technology (e.g., e-mail, telephone, and internet), computer equipment, and software.

h. The group has an appropriate working environment (e.g., office space) and sufficient resources (e.g., salary, operating expenses) necessary to support the operations of the group.

4. Core Task: Determine how volunteers will be recruited and used in the organization.

<table>
<thead>
<tr>
<th>a.</th>
<th>The organization has decided whether volunteers are appropriate to be used in the organization at the current stage of development.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>The organization has a process or plan for identifying and recruiting volunteers (including board members).</td>
</tr>
<tr>
<td>c.</td>
<td>The organization or group recruits volunteers (including board members) with diverse skills, professional expertise, background, and experience?</td>
</tr>
<tr>
<td>d.</td>
<td>The organization provides orientation, training, and supervision for all volunteers (including board members).</td>
</tr>
<tr>
<td>e.</td>
<td>All volunteer positions have written roles and responsibilities that are clearly stated.</td>
</tr>
</tbody>
</table>
| f. | Volunteers are screened (e.g., environment needed to support the effort.)

Tips and strategies for recruiting and using volunteers:

- Include volunteers in serving all appropriate aspects of the organization.
- Develop a volunteer handbook or manual outlining positions, roles and responsibilities, expectations, and policies for engaging volunteers.
- Assure selection, orientation, and support for board members who are also volunteers of the organization.
- Determine the liabilities of volunteers in the organization and ensure that they are protected (e.g., get insurance for the board, modify the governing structure) and are aware of any potential legalities.
- Assure the appropriate process and levels of screening and orientation for different types
<table>
<thead>
<tr>
<th>background check for volunteers working with children or dependents) as appropriate for their roles and responsibilities in the organization.</th>
<th>Tips and strategies for recruiting, hiring, and using paid positions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>g. There is a process for ensuring that volunteers are matched with appropriate service opportunities that fit with their interests, skills, and experience.</td>
<td>✓ Determine the tasks and positions that are appropriate to be fulfilled by staff, consultants, or volunteers.</td>
</tr>
<tr>
<td>h. The organization has identified and protected volunteers (including board members) from any liabilities.</td>
<td>✓ Develop a formal process for hiring that includes recruitment and selection (e.g., background checks, screening).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Core Task: Determine how the organization will recruit, hire, and use paid employees.</th>
<th>✓ Develop an employee handbook that outlines job responsibilities and tasks for paid staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The organization has identified which roles and responsibilities are better served by staff, consultants, and/or volunteers.</td>
<td>✓ Provide an orientation for new staff.</td>
</tr>
<tr>
<td>b. The organization has written job descriptions and clear responsibilities for all paid positions (e.g., staff, consultants).</td>
<td>✓ Assess the level of skill, knowledge, expertise, and experience of all staff and develop a plan for ongoing training and technical support.</td>
</tr>
<tr>
<td>c. The organization has a fair process and written protocol for recruiting and hiring staff and consultants</td>
<td>✓ Provide career development and advancement opportunities for staff.</td>
</tr>
<tr>
<td>d. The organization regularly (at least annually) identifies the training and technical support needs of staff and develops ongoing plans to assure necessary training and support for staff members.</td>
<td></td>
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<tr>
<td>e. The organization has an appropriate division of labor in which tasks are delegated to staff and other paid positions (i.e., consultants).</td>
<td></td>
</tr>
</tbody>
</table>
6. **Core Task: Evaluate and recognize the performance of staff and volunteers.**
   a. The organization provides regular feedback and formal recognition and rewards to staff for their performance and accomplishments (e.g., oral or written feedback, reward outstanding performance).
   b. The organization provides regular feedback and formal recognition and rewards to volunteers for their performance and accomplishments (e.g., oral feedback, honoring ceremonies).
   c. The organization formally recognizes and rewards (e.g., provide feedback, honoring ceremonies) the performance and contributions of volunteers.
   d. Volunteers and staff given formal opportunities (e.g., surveys, meetings) to regularly assess or provide feedback to management (e.g., board, supervisors) regarding the organization or group.
   e. There is a clear evaluation process (e.g., identified performance measures, evaluation schedule) used by the organization or group to assess performance of staff and volunteers (including board members).
   f. The organization has written

<table>
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<tr>
<th>Tips and strategies for evaluating staff and volunteers:</th>
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<tbody>
<tr>
<td>✓ Provide regular feedback to staff and volunteers on their performance.</td>
</tr>
<tr>
<td>✓ Develop clear performance measures for all staff and volunteer positions.</td>
</tr>
<tr>
<td>✓ Provide regular recognition of staff and volunteers for their accomplishments.</td>
</tr>
<tr>
<td>✓ Review work expectations and performance measures with all staff and volunteers as a part of orientation.</td>
</tr>
<tr>
<td>✓ Clearly communicate with staff and volunteers about their performance.</td>
</tr>
</tbody>
</table>
statements and clear benchmarks for all staff and volunteers (including board members) regarding how individual performance will be measured and assessed.

<table>
<thead>
<tr>
<th>7. Core Task: Monitor financial resources of the organization.</th>
<th>Tips and strategies for assuring financial resources and supports:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The organization has clearly identified and written roles and responsibilities for the governing structure (e.g., board) and staff (e.g., CEO, financial officer) used in monitoring financial resources of the organization.</td>
<td>✓ Identify a financial officer with knowledge, skill, and expertise in finance or accounting.</td>
</tr>
<tr>
<td>b. The organization has an operational budget (i.e., comprehensive master budget) that indicates all income and expenses from all revenue sources (e.g., grants, service contracts).</td>
<td>✓ Determine how the organization will monitor and administer its financial operations (with an external/internal financial agent).</td>
</tr>
<tr>
<td>c. Written policies and procedures are established and followed to assure appropriate financial procedures and fiscal controls.</td>
<td>✓ Ensure the organization has a cash operating reserve for at least 90 days.</td>
</tr>
<tr>
<td>d. The organization or group has identified an appropriate level for cash operating reserves (e.g., organization has at least 3 months of operating expense at all times).</td>
<td>✓ Provide financial reports for the governing body to support decision-making.</td>
</tr>
<tr>
<td>e. The governing structure of the organization understands the financial position of the organization and regularly review financial statements and reports.</td>
<td>✓ Conduct a regular financial review or audit of the organization.</td>
</tr>
<tr>
<td>f. The organization has a regular audit and review of financial records by a finance professional (i.e., certified public accountant) with no vested interest in the organization.</td>
<td>✓ Determine the form of accounting the organization will use (e.g., cash-basis accounting records revenue when money is received or expenses paid).</td>
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<tr>
<td></td>
<td>✓ File and retain documentation of all financial transactions.</td>
</tr>
<tr>
<td></td>
<td>• Develop a schedule of financial report requirements mandated by government and funding agencies.</td>
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<tr>
<td>g. The governing body monitors required financial reports and assure reporting requirements of appropriate federal and state agencies (e.g., IRS) and funding agencies (e.g., grant reports) are appropriately filed and submitted.</td>
<td></td>
</tr>
<tr>
<td>h. The organization has and uses a plan for securing financial resources for the organization.</td>
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</tbody>
</table>

[Optional] IDENTIFY FACTORS OR CONSIDERATIONS that might affect your group’s implementation of this process (e.g., the group’s stage of development, timing, other demands, available resources):

[Optional] COMMENTS/RECOMMENDATIONS to improve your group’s implementation of this process:
# COALITION-BASED PROCESS #4: DEVELOPING A FRAMEWORK OR MODEL OF CHANGE

<table>
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<tr>
<th>Overall Implementation: %</th>
<th>Ratings = Percentage of Respondents indicating full implementation</th>
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<tbody>
<tr>
<td><strong>Ratings</strong></td>
<td><strong>Complete</strong></td>
</tr>
</tbody>
</table>

1. **Core Task: Convene key stakeholders to develop a logic model for the effort.**
   a. Those brought together to develop the framework or logic model included key stakeholders (e.g., leaders of the group).
   a. The participants were given the opportunity to create or adapt the components (e.g., activities, intended outcomes) of the logic model.

**Tips and strategies for convening stakeholders to develop the logic model:**
- Engage stakeholders from the organization and community with diverse interests and experiences in developing the components of the logic model.
- Provide an opportunity for stakeholders to help develop and provide feedback regarding the logic model or framework for the group.

2. **Core Task: Identify the intended uses for the logic model.**
   a. The group identified uses for the logic model with both internal audiences (e.g., staff, board) and external audiences (e.g., funders).
   b. The group identified the appropriate scope or level(s) for the logic model (e.g., for the overall effort or particular project).
   c. The group has a logic model or framework that provides a visual depiction, picture, or diagram for how it will get from here (present conditions) to there (intended results/outcomes).

**Tips and strategies for identifying the intended uses of the logic model:**
- Use the logic model to communicate the purpose of the organization to new or potential group members, partners, and supporters.
- The logic model can be used to support other important processes including strategic planning, program design, evaluation, and sustainability.
3. **Core Task: Outline the key components of the logic model.**
   a. The logic model includes the vision and/or mission statement established by the group.
   b. The framework includes a brief description of the context (e.g., history of the problem) and conditions (e.g., political situation) of the community or effort related to the problem and goal.
   c. The framework includes a description of the key inputs (i.e., resources and supports available, barriers or constraints to be overcome) relevant to the group.
   d. The logic model includes a description of activities or components of the project or intervention.
   e. The logic model includes a description of intended outputs (i.e., direct products or results) of the activities or intervention components.
   f. The logic model includes outcomes (e.g., short, intermediate, long-term outcomes) or intended effects related to the objectives of the intervention or initiative.

4. **Core Task: Draw a picture of the logic model or framework that visually displays relationships between activities, outputs, and intended outcomes.**
   a. The logic model conveys the purpose and direction

**Tips and strategies for outlining components of the logic model:**

- Include the vision and/or mission statement within the logic model.
- Describe the context of the effort, including broader conditions that affect its success.
- Describe key inputs, including available resources and constraints for addressing the issue.
- Intervention components or activities (e.g., providing information, modifying access) should relate to the specific personal/environmental factors (risk/protective factors) that are targeted by the group.
- The intervention should use “best practices” or coalition-based approaches, where appropriate and available, as adapted for the context.

**Tips and strategies for drafting a logic model:**

- Use arrows (or other visual methods) to communicate directions of influence and relationships between the components of the logic model?
5. Core Task: Use the logic model to guide the work, making adaptations as appropriate.

a. The group uses the logic model to communicate the approach of the organization or effort for addressing the problem or goal (e.g., in grant applications, orienting new members, recruiting partners).

b. The group regularly (i.e., annually) reviews and updates the logic model(s) of the initiative or program.

<table>
<thead>
<tr>
<th>Tips and strategies for using the logic model:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Use the logic model to communicate the efforts of the initiative or program.</td>
</tr>
<tr>
<td>✓ Use the logic model to identify gaps in the program or initiative.</td>
</tr>
<tr>
<td>✓ Regularly review and update the logic model to reflect the current efforts of the program or initiative.</td>
</tr>
</tbody>
</table>

[Optional] IDENTIFY FACTORS OR CONSIDERATIONS that might affect your group’s implementation of this process (e.g., the group’s stage of development, timing, other demands, available resources):

[Optional] COMMENTS/RECOMMENDATIONS to improve your group’s implementation of this process:
### COALITION-BASED PROCESS #10: DOCUMENTING PROGRESS AND USING FEEDBACK

<table>
<thead>
<tr>
<th>Ratings % Complete</th>
<th>Overall Implementation: %</th>
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<tr>
<td>Ratings = Percentage of Respondents indicating full implementation</td>
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#### 1. Core Task: Identify key stakeholders, their questions of interest, and other reporting needs (if applicable) for the documentation and feedback system.

- **a.** Key stakeholders of the organization (e.g., board members, staff, funders) were involved in designing or adapting the documentation system for the initiative.
- **b.** The group has identified the types of data and information (e.g., activities being done, progress being made) that are important to key stakeholders (e.g., board members, clients) and other audiences (e.g., funders, elected officials).
- **c.** The group has identified the primary purposes, functions, and uses of data that are collected about the initiative (e.g., to document implementation, to analyze the contribution to outcomes, to make adjustments in the effort).
- **d.** The group has developed a set of evaluation questions that are important to stakeholders and other key audiences.

#### Tips and strategies for identifying the stakeholders, their questions of interest, and other reporting needs:

- **✓** Identify who has a stake in the success of the effort and determine their interests (e.g., to document what is happening, to assess the merit of the initiative, to improve the effort).
- **✓** Involve key stakeholders and organizational leaders in designing or adapting the documentation system.
- **✓** Identify evaluation questions that represent the interests of all stakeholders (e.g., what was done, what different did it make).
- **✓** Ensure that the documentation system can help with reporting to other important audiences (e.g., other funders)

#### 2. Core Task: Identify the measures to be used in the documentation and feedback system.

- **a.** The group collects process measures (e.g., satisfaction with the initiative’s efforts).
- **b.** The group documents the activities (implementation of the intervention; changes in communities and systems) used to address the

#### Tips and strategies for identifying the measures to be used:

- **✓** Gather and feed back measures of process (e.g., satisfaction ratings) to see and improve how the initiative is being carried out and experienced by key audiences.
- **✓** Gather and feed back measures of intermediate outcome (e.g., changes in communities and systems) to see and improve how the intervention is
c. The group collects longer-term or outcomes measures (e.g., changes in behavior or community-level indicators of improvement).
d. The group has identified the data sources and assured access to various types of measures (e.g., data from schools or police) to be collected by the initiative.
e. The types of data that are collected and documented are consistent with the measures of success outlined in the initiative’s logic model or strategic plan.

Tips and strategies for documenting and collecting data:
- Be clear about the methods to be used for collecting the data (e.g., who will do what by when with what result).
- Assure the quality of the data collected through training (e.g., with clear definitions and scoring instructions, examples, practice), reliability checks, and feedback (e.g., agreement on scoring between independent observers).
- Provide training and technical support to those collecting data related to the implementation and success of the initiative.
<table>
<thead>
<tr>
<th></th>
<th>d. The group (e.g., staff, board members) regularly (e.g., once a year) reviews information about the accuracy and completeness of the data.</th>
</tr>
</thead>
</table>
| 4. Core Task: Analyze, communicate, and use the data to make improvements in the initiative. | Tips and strategies for analyzing, communicating and using the data:  
- Present data about implementation and outcomes for review by staff, board members, and other stakeholders  
- Use graphs, pie charts, bulleted narrative comments, and personal stories to communicate what is happening and why it matters.  
- Engage community members and other key stakeholders in reviewing and making sense of the data at regular intervals (e.g., quarterly, annually).  
- Use documented data to assess progress, be accountable, and make improvements all along the way. |
<p>| a. The group (e.g., staff, board members) regularly (i.e., more than once a year) reviews the data about the implementation of the intervention or initiative. |                                                                                                                                  |
| b. The group regularly (i.e., more than once a year) reviews the evaluation questions and documented data to assess the progress of the initiative. |                                                                                                                                  |
| c. The group regularly (i.e., more than once a year) analyzes (makes sense of data) to help make adjustments and improvements to the initiative. |                                                                                                                                  |
| d. The group reviews and uses data and documented accomplishments to celebrate accomplishments and acknowledge individuals (e.g., staff, partners) for their contributions to the initiative. |                                                                                                                                  |
| e. The group regularly shares and communicates data to key stakeholders (e.g., partners, funders) and others (e.g., government officials) with a stake in the |                                                                                                                                  |</p>
<table>
<thead>
<tr>
<th>Initiative’s success/</th>
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</table>

(Optional) IDENTIFY FACTORS OR CONSIDERATIONS that might affect your group’s implementation of this process (e.g., the group’s stage of development, timing, other demands, available resources):

(Optional) COMMENTS/RECOMMENDATIONS to improve your group’s implementation of this process:
<table>
<thead>
<tr>
<th>Overall Implementation: %</th>
</tr>
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<tbody>
<tr>
<td>Ratings = Percentage of Respondents indicating full implementation</td>
</tr>
</tbody>
</table>

1. **Core Task: Identify indicators of success for the initiative.**
   a. The group has identified indicators of success for different stages of the initiative (e.g., early planning, during implementation, after implementation).
   b. The success indicators are made specific in agreed upon objectives that convey how much or what should be accomplished by when.
   c. The indicators reflect the interests of identified stakeholders (e.g., board, partners) including those who control important consequences (e.g., funding) for the initiative.

   **Tips and strategies for identifying indicators of success for the initiative:**
   - Identify key indicators of success; including those for the short-term (e.g., completed plans, satisfaction with the process), intermediate term (e.g., changes in communities and systems; implementation of the intervention), and longer-term (e.g., changes in behavior and community-level indicators).
   - For key indicators, set objectives that specify how much of what will be accomplished by when.
   - Make sure the success indicators match the interests of key stakeholders (e.g., improving community-level outcomes).

2. **Core Task: Specify reporting requirements about the activities and outcomes of the initiative.**
   a. The group regularly (i.e., at least quarterly) communicates or reports the progress or status of the initiative to key internal audiences (e.g., leaders, members) of the initiative.
   b. The group regularly (e.g., quarterly, annually) communicates or provides reports regarding the progress of the initiative to important external audiences (e.g., funders, board, committees, partners).

   **Tips and strategies for specifying reporting requirements:**
   - Establish clear expectations and requirements for regular reporting (e.g., about what, to whom, from whom, by when) about the activities and outcomes of the initiative.
   - Report more frequently to internal audiences (i.e., at least quarterly) to be accountable to the group.
   - Report regularly to external audiences (e.g., quarterly, annually) to be accountable to the broader community.
c. There are clear expectations and requirements (e.g., what will be reported when) for reporting on the activities and outcomes of the initiative to key stakeholders.

<table>
<thead>
<tr>
<th>3. Core Task: Use incentives and disincentives to encourage outstanding implementation of activities and improvement in outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The group has clearly established positive and/or negative consequences for performance of key activities (e.g., praise or bonuses for outstanding performance; critical feedback and enhanced monitoring for poor performance).</td>
</tr>
<tr>
<td>b. The group has clearly established positive and/or negative consequences for attainment of outcomes (e.g., bonus grants and public recognition for improving community-level indicators; contingent loss of grants or other resources for consistently poor record of change or improvement).</td>
</tr>
<tr>
<td>c. The group has identified the conditions under which use of incentives/disincentives is appropriate (e.g., not too early in the initiative; when resources are adequate to expect improvement).</td>
</tr>
<tr>
<td>d. The consequences are administered consistently and fairly by key stakeholders (e.g., staff)</td>
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<table>
<thead>
<tr>
<th>Tips and strategies for using incentives and disincentives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Use success indicators, stated objectives, and reporting requirements to develop or adapt a system of incentives/ disincentives for maintaining activities and achieving results.</td>
</tr>
<tr>
<td>✓ Use the incentive system to assure tangible benefits for implementing activities and improving intended outcomes.</td>
</tr>
<tr>
<td>✓ Consider the use of positive reinforcement that is in the form of monetary rewards (e.g., bonus grants, stipends) and/or social consequences (e.g., recognition ceremony; social approval from the community).</td>
</tr>
<tr>
<td>✓ (if necessary) Consider the use of punishment that is in the form of potential loss of monetary resources (e.g., grant or stipend is not renewed) for consistent lack of progress in implementation and outcomes.</td>
</tr>
</tbody>
</table>
supervisor, board, funders) in positions of authority.

e. The incentives and disincentives are administered often enough to be effective (e.g., at least annually) and at the appropriate level(s) of the initiative (e.g., overall initiative, staff, partners).

<table>
<thead>
<tr>
<th>4. Core Task: Develop a system for documenting and providing feedback to monitor the activities and outcomes of the initiative. (Refer to the assessment for “Documenting Progress and Using Feedback”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The group documents the activities (e.g., implementation of the intervention; changes in communities and systems) used to address the problem/goal.</td>
</tr>
<tr>
<td>b. The group collects longer-term outcome measures (e.g., changes in behavior or community-level indicators of improvement).</td>
</tr>
<tr>
<td>c. The group (e.g., staff, board members) regularly (i.e., more than once a year) reviews the evaluation questions and documented data to assess the progress of the initiative.</td>
</tr>
<tr>
<td>d. The group regularly shares and communicates data to key stakeholders (e.g., community members, partners, funders) who care about the initiative’s success.</td>
</tr>
</tbody>
</table>

Tips and strategies for documenting and providing feedback:

- Identify the measures to be used in the documentation and feedback system related to the activities and outcomes of the initiative.
- Assure quality control of documentation of the effort (i.e., observer training, verification, and feedback).
- Document or track the effort’s activities and outcomes related to its framework or logic model (e.g., changes in programs or policies; rates of the problem/goal).
- Regularly communicate documented data to stakeholders and partners and assess its clarity, completeness, and utility in evaluating the initiative.
- Use the data to help guide distribution of incentives/disincentives and to improve the activities and outcomes.

<table>
<thead>
<tr>
<th>5. Core Task: Arrange celebrations and public recognition for those who bring about change and improvement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The group regularly celebrates the progress of the initiative in</td>
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</table>

Tips and strategies for celebrating accomplishments and recognizing people who make change happen:

- Use the documented information to celebrate changes in communities and systems (e.g., new programs or policies).
- Honor individuals for their
implementing activities and attaining anticipated outcomes.

b. The group regularly (i.e., at least annually) provides formal recognition (e.g., newsletter, recognition ceremony) for individuals who contribute to change and improvement (e.g., champions for change).

c. contributions to change and improvement (e.g., as champions for change).

[Optional] IDENTIFY FACTORS OR CONSIDERATIONS that might affect your group’s implementation of this process (e.g., the group’s stage of development, timing, other demands, available resources):

[Optional] COMMENTS/RECOMMENDATIONS to improve your group’s implementation of this process:
**COALITION-BASED PROCESS #12: SUSTAINING THE WORK OF THE INITIATIVE**

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Overall Implementation: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Complete</td>
<td>Ratings = Percentage of Respondents indicating full implementation</td>
</tr>
</tbody>
</table>

1. **Core Task: Determine whether the initiative or activities should be sustained.**
   a. The group has identified who makes decisions regarding whether to sustain the initiative and its activities (e.g., a committee, board, partners, funders).
   b. The group has determined whether the overall initiative or project should be sustained.
   c. The group has determined whether specific activities (e.g., educational programs, advocacy efforts) should be sustained.
   d. The group has determined the intended duration or length of time (e.g., ongoing, 5 years) that the initiative or activities should be sustained.
   e. The group has used evaluation data in making determinations about what should be sustained and for how long.

   **Tips and strategies for determining whether the effort should be sustained:**
   ✓ Identify what aspects of the overall initiative or organization should be sustained and for how long.
   ✓ Identify what particular activities (e.g., specific programs or policies, advocacy efforts) should be sustained and for how long.
   ✓ Consider whether the evaluation data (benefits and costs) suggest that the initiative/activities are worth sustaining.

2. **Core Task: Assess the current situation for sustaining the initiative.**
   a. The group has identified the target community or population to participate and assessed whether they would benefit from the sustained (adapted) efforts of the initiative.

   **Tips and strategies for assessing the current situation for sustainability:**
   ✓ Assess whether the current relationships, support and commitment to the organization/activity are sufficient to sustain the effort.
   ✓ Be clear about the amount and types of human resources and assets that are needed to be successful.
   ✓ Be clear about the amount and types of
b. The initiative has sufficient internal and external support (e.g., from staff, board, volunteers, partners) to try to sustain the effort, if desired.

c. The group currently has (or anticipates having) sufficient human resources (e.g., volunteers, staff) necessary to sustain the effort.

d. The group currently has (or anticipates having) sufficient financial resources (e.g., funding, grants) necessary to sustain the effort.

e. The group has assessed the costs and benefits of its activities and products (i.e., what it has to offer) and that of its competition (i.e., others in the community offering similar activities).

### 3. Core Task: Clarify the goals and context for sustaining the efforts of the initiative.

a. The group has decided what aspects of the initiative and its activities should be maintained (as is, or with adaptations).

b. The group has identified the amount and type of human resources (e.g., staff, volunteers) and financial resources (e.g., money) needed to sustain the initiative and its essential activities.

c. The group has established a written mission statement, goals and objectives related to sustaining the initiative or its activities.

d. The group has assessed its progress in attaining its anticipated goals and

<table>
<thead>
<tr>
<th>Tips and strategies for clarifying the goals to sustain the effort:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Establish goals for maintaining the organization and its activities.</td>
</tr>
<tr>
<td>✓ Set specific focused goals (short-term and long-term) for resources needed to sustain the organization and/or its activities.</td>
</tr>
</tbody>
</table>
objectives related to sustainability.

**e.** The group has determined whether the initiative’s current mission and objectives need to be expanded or changed to support the sustainability of the initiative.

<table>
<thead>
<tr>
<th>4. Core Task: Develop a sustainability plan that includes what resources will be necessary and how they will be attained.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The group has determined the costs of specific activities (e.g., education programs, services) to be maintained by the initiative.</td>
</tr>
<tr>
<td>b. The group has established specific short-term and long-term financial goals and a budget including all projected income and expenses.</td>
</tr>
<tr>
<td>c. The group has selected specific and appropriate strategies to be used to sustain the initiative and its activities (e.g., becoming a line item in an existing budget, applying for grants).</td>
</tr>
</tbody>
</table>

**Tips and strategies for developing a plan to assure necessary resources:**

- **✓** Identify what it costs (e.g., staff salaries) needed to sustain the organization and its essential activities.
- **✓** Develop a business plan to generate needed and probable resources in the short-term (e.g., next six months) and longer-term (e.g., next 5 years).
- **✓** Review and select multiple strategies for sustaining the effort (e.g., share positions and resources, become a line item in an existing budget, apply for grants, solicit in-kind support from other organizations).
- **✓** Generate a budget based on probable resources.
- **✓** Develop a marketing plan to reach out to potential funders and the community including statements of what your group has to offer, its vision and mission, and the value of your programs and activities to the community.
- **✓** Develop a social marketing plan for the initiative and its essential activities, including potential audiences and the 4 Ps (product, price, place, promotion) of marketing.
### 5. Core Task: Implement an action plan for sustaining the initiative or its activities.

- **a.** The group has developed and implemented an action plan for each of the strategies and tactics chosen to sustain the effort (e.g., becoming a line item in an existing budget, fundraising, applying for grants).
- **b.** Action plans were developed (i.e., identifying what will be done, by whom, by when, resources needed) for implementing the components of the sustainability plan.
- **c.** The group systematically documents the activities and results of efforts to secure and maintain resources (e.g., financial resources allocated, in-kind contributions, grants submitted).
- **d.** The group regularly reviews the results of implementation of the plan in reaching its short and long-term goals for sustainability.
- **e.** The group has developed relationships and networks with potential partners and funders that may be interested in supporting the efforts of the initiative over time.

### Tips and strategies for implementing an action plan to sustain the initiative or its efforts:

- Regularly review and make necessary adjustments to the sustainability plan.
- Assess the effects of the sustainability tactics in generating necessary resources for sustaining your efforts.
- Develop and maintain the relationships needed to sustain the initiative and its essential activities over the long haul.

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**[Optional] IDENTIFY FACTORS OR CONSIDERATIONS** that might affect your group’s implementation of this process (e.g., the group’s stage of development, timing, other demands, available resources):

**[Optional] COMMENTS/RECOMMENDATIONS** to improve your group’s implementation of this process: