ABSTRACT

Title of Document: A DESCRIPTIVE STUDY OF PROGRAM IMPLEMENTATION AMONG A GROUP OF HIGH ACHIEVING COALITIONS IN THE DRUG-FREE COMMUNITIES SUPPORT PROGRAM

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Substance abuse is a pervasive public health problem that affects all people and communities. Substance abuse can particularly devastate youth, as it correlates with many negative health outcomes including damage to the developing brain, dependence, delinquency, decreased academic potential, DUIs, and death. A potential solution to address these problems is the use of community coalitions. At the federal level, The Office of National Drug Control Policy's Drug-Free Communities Support Program does this through distributing competitive grants to eligible community coalitions that organize to prevent youth substance abuse.

This study examines the degree of agreement between activities of 12 high achieving coalitions. The analysis determined that 6 activities were universally present among high achieving coalitions, 10 activities had high agreement, and 33 activities had

low agreement among the coalitions. This paper aims to inform coalitions about best practices and inform policies for communities to reduce youth substance use.

# A DESCRIPTIVE STUDY OF PROGRAM IMPLEMENTATION AMONG A GROUP OF HIGH ACHIEVING COALITIONS IN THE DRUG-FREE COMMUNITIES SUPPORT PROGRAM

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# Chapter 1: Introduction

## 1.1 Statement of the Research Problem

Partnering among communities, public health organizations, universities, and private sector groups has become a common way to develop and implement public health initiatives. One type of a strategic relationship, a coalition, is developed when different sectors of the community, state, or nation join together for a common goal (Butterfoss F. D., 2002). The Drug-Free Communities Act of 1997 facilitates citizen participation in the nation's efforts to reduce substance use among youth (105th Congress, 1997). The Act authorized the Drug-Free Communities Support Program (DFC) and required grants to be awarded to community anti-drug coalitions that organize to prevent youth substance use. Since the passage of the Act in 1997, the DFC Program has funded more than 2,000 coalitions and mobilized nearly 9,000 community volunteers across the country to date (Office of National Drug Control Policy, 2014).

The DFC Program brings together 12 sectors in each community including youth, parents, schools, law enforcement, business professionals, media, youth-serving organizations, religious/fraternal organizations, volunteer groups, healthcare professionals, local, state, and tribal government, and other organizations involved in reducing substance abuse to meet the needs of substance abuse prevention for youth, families, and the communities in which they live (ICF International, 2014). According to the Office of National Drug Control Policy, the purpose of the DFC Program is to 1. "Establish and strengthen collaboration among communities, public and private non-profit agencies, as well as federal, state, local, and tribal governments to support the efforts of community coalitions working to prevent and reduce substance use among

youth" and 2. "Reduce substance use among youth and over time, and reduce substance use among adults by addressing the factors in a community that increase the risk of substance abuse and promoting factors the minimize the risk of substance abuse" (Office of National Drug Control Policy, 2014).

Coalitions are widely used among public health organizations, but coalitions lack a research base (Glanz, 2008). In order to address this gap, Butterfoss and Kegler developed the Community Coalition Action Theory (CCAT) (see **Figure 1, page 47**), which is derived from the Interorganizational Relationship Theory (IOR) (Butterfoss F. D., 2002). CCAT builds on several earlier models of partnership building, including community building and community development. CCAT is a complex theory that is difficult to test empirically due to the multiple dimensions of each construct. Selected components from CCAT have been measured, but the theory has not yet been examined in a comprehensive manner (Glanz, 2008).

## 1.2 Research Question

This descriptive study examined similarities and differences of program implementation among a group of high achieving Drug-Free Communities (DFCs). Grantees with successful outcomes of reduced past-30 day use of alcohol, tobacco, and marijuana, and an increased perception of risk across all three drugs were defined as "high achieving." See **Section 3.1.2.** for more information. This study aims to increase knowledge about the high achieving DFCs to help inform better policies and practices for communities to work to reduce substance use. The research question that this study will address is:

- What are the similarities and differences in program implementation among the selected high achieving Drug-Free Communities?

## 1.3 Definition of Terms

The following terms apply to the entirety of this proposal.

- *Drug-Free Communities:* defined as the community coalitions that have organized to prevent substance use and have been awarded the Drug-Free Communities Grant from ONDCP (Office of National Drug Control Policy, 2014).
- *Community Coalitions*: defined as a group of individuals representing diverse organizations, factions, or constituencies within the community who agree to work together to achieve a common goal (Feighery, 1990).
- *Collective Impact:* According to the Stanford Social Innovation Review, collective impact is defined as the commitment of a group of important actors from different sectors to form a common agenda for solving a specific social problem (Kania, 2011).
- *Community Development*: defined as the process of creating conditions of economic and social progress for the whole community with its active participation and the fullest possible reliance on the community's initiative (Brager, 1987).
- *Community Participation*: defined as the process of involving people in the institutions or decisions that affect their lives (Checkoway, 1989).

- *Community Empowerment*: defined as the process of individuals and organizations applying their skills and resources in collective efforts to meet their own needs (Israel, 1994) (Perkins, 1995).
- *Prevalence of Past 30-Day Use:* The percentage of survey respondents (middle or high school youth) who reported using alcohol, tobacco, or marijuana, at least once in the past 30 days (ICF International, 2014).
- *Perception of Risk:* The percentage of survey respondents (middle or high school youth) who reported that regular use of alcohol, tobacco, or marijuana has moderate risk or great risk. Alcohol use was defined as 5 or more drinks nearly every day. Tobacco use was defined as one or more packs of cigarettes a day. Marijuana use was defined as using once or twice a week (ICF International, 2014).

## 1.4 Public Health Significance

It is clear that substance abuse is a major problem in communities all across the nation as 66.2% of high school students have had at least one drink of alcohol during their lifetime and 34.9% have had at least one drink of alcohol during the past month (Centers for Disease Control and Prevention, 2013). Furthermore, 41% of high school students have ever tried cigarette smoking and 9% smoked at least one cigarette every day for the past month (Centers for Disease Control and Prevention, 2013). There are many negative outcomes that youth may experience when they use and abuse alcohol and tobacco including damage to the developing brain and dependency. A major problem with alcohol use in youth is the increased risk for alcohol use disorders (Arria, 2008; Hingston R. W., 2011). Furthermore, delinquency, decreased potential for academic and

career success, an increased risk of hospitalization and an increased practice of risky sexual behaviors are all correlated with youth use and abuse of alcohol, tobacco, and marijuana (Committee on Developing a Strategy to Reduce and Prevent Underage Drinking, 2004; Hingston R. W., 2014; Kim, 2012; Compton, 2014). Underage drinking is also correlated with DUI crashes and deaths (U.S. Department of Health and Human Services, 2007). There are many challenges in reducing substance use among high school students and there is a critical need for studies that help advance knowledge regarding best practices to accomplish this goal.

Community coalitions have been widely used as a health promotion initiative but they lack empirical evidence (Butterfoss F. D., 2002). It is imperative to examine the implementation strategies of high achieving coalitions to inform better policy decision and make a lasting impact on substance abuse prevention.

# Chapter 2: Background

## 2.1 Literature Review

### 2.1.1 Youth Substance Use as a Public Health Problem

As stated in **Section 1.4**, alcohol and drug use among youth is a serious problem that continues to challenge public health professionals. The consequences of underage drinking are numerous and well documented, but there is still a large number of high school students who experiment with drugs and alcohol. There are many challenges in reducing substance use in a high school population and there is a critical need for studies that help advance knowledge regarding effective strategies to accomplish this goal.

### 2.1.2 Conceptual Framework: Theories of Health Behavior

Bronfenbrenner's ecological perspective provides a useful framework for considering the multiple simultaneous influences on youth's substance use behaviors (Bronfenbrenner, 1979). According to this perspective, youth develop in a multilayered context with influences at the community, organizational, interpersonal, and individual levels (Schull, 2014). Community coalitions are commonly used to address health issues at all of these levels and provide a broad spectrum of prevention approaches ranging from individually-focused programs to efforts that explicitly seek to affect community-level influences.

#### 2.1.2.1 Social Ecological Model

Individuals are influenced by the opinions, behavior, advice, and support of friends, coworkers, and supervisors within organizational settings. Individual behavior can be improved when organizations operate in the larger social environment (Glanz et

al., 2008). According to Glanz et al. four principles of the ecological perspective are as follows:

1. *Multiple levels of factors influence behaviors.* Inclusion of all levels including intrapersonal, interpersonal, organizational, community, and public policy distinguishes ecological models from theories that primarily focus on one level.
2. *Influences interact across levels.* This interaction means that variables work together and there are likely to be multiple variables at each level
3. *Multi-level intervention should be most effective in changing behavior.* Single level interventions are less likely to have powerful or sustained population wide effects. Individual level changes are not likely to be sustained and environmental changes by themselves are insufficient to change behavior.
4. *Ecological Models are most powerful when they are behavior specific.* Ecological models have been the most successful when targeting specific health behaviors.

The social ecological model provides guidance to these complex changes that occur in organizations. This model proposes that individual, interpersonal, community, organizational, and societal factors need to be taken into account when planning and implementing health promotion interventions because they have direct and indirect influences on lifestyle, behavior choices, and health (Israel, 1994).

The Drug-Free Communities Support Programs utilizes an ecological approach to addressing youth substance use in communities across the country. The community coalitions develop implementation strategies that influence the individual, interpersonal, community and societal level factors. The Drug-Free Communities (DFC) National Evaluation: 2013 National Evaluation Report indicates that in 2011 prevalence estimates of alcohol and tobacco past 30-day use among high school students were significantly

lower than in communities with a DFC grantee than in areas sampled by the Youth Risk Behavioral Survey (ICF International, 2014). However, the prevalence of marijuana use did not differ significantly from the national data in 2011. The interaction between the levels in society and the collective impact of the sectors involved in the coalition may be one of the reasons DFC coalitions have had success in reducing drug use in youth.

2.1.2.2 Social Ecological Model in Application

The social ecological model has been applied successfully to tobacco cessation campaigns in the United States. The social ecological model was developed to understand personal and environmental factors that impact individual behaviors (Bronfenbrenner, 1979). An illustration of the Social Ecological Model can be found in **Figure 2 (page 48).** The individual-level interventions that were addressed are brief advice to quit in individual medical encounters (U.S. Department of Health and Human Services, 2000), supports of nicotine replacement and other quitting aids (U.S. Department of Health and Human Services, 2000), and telephone counseling (Task Force on Community Preventative Services, 2005). While individuals were receiving targeted approaches to smoking cessation, other environmental levels were also addressed. For example, at the organizational level, programs began restricting smoking in the workplace (Brownson, 2002). Other programs emphasized community participation in program development to reduce smoking in neighborhoods (Fisher, 2004). And finally, at the policy level, there were many changes including promoting smoke-free environments, and increasing tobacco prices (Stillman, 2003). Community coalitions play a key role in the social ecological model's approach to health promotion. The American Stop Smoking Intervention Study (ASSIST) was derived from the social ecological model and was intended to reduce smoking by funding the development of

state tobacco control programs to promote smoke-free environments, increase taxes, and limit youths' access to tobacco products. The evaluation found that states with ASSIST funding had a greater decrease in the prevalence of smokers compared to states without ASSIST funding (Stillman, 2003). Furthermore, the strength of local coalitions and a focus on policy change predicted statewide improvements (Stillman, 2003).

However, some studies suggest activation of community coalitions would not necessarily result in desirable outcomes at the community level (Hallfors, 2002). For example, in the Robert Wood Johnson Program called, "Fighting Back," an evaluation looked at 12 coalitions that were designed to reduce substance abuse in their communities. It was hypothesized that in these communities strategy outcomes would be positively correlated with their specific targets. Specifically, sites with more comprehensive programs would have better outcomes and sites with higher dose strategies would have better outcomes. It was a surprising result that none of these hypotheses were supported with the data from this study (Hallfors, 2002). However, with adequate resources, training, support from the community, and the adoption of evidence-based strategies, there remains ample support to believe that community-based coalitions can be an effective vehicle for coordinating prevention activities within communities and producing meaningful reductions in substance use prevalence among youth (Flewelling, 2005; Watson-Thomspon, 2013; ICF International, 2014).

#### 2.1.2.3 Community Coalition Action Theory (CCAT)

Community coalitions have expanded rapidly over the past few decades and public health professionals have embraced the practice of coalition building even without a comprehensive theory. Due to the widespread use of community coalitions without a

research base, Butterfoss and Kegler developed the Community Coalition Action Theory (CCAT), a form of the Interorganziatonal Relations Theory (Butterfoss F. D., 2002). The CCAT aims to provide a complete contextual understanding of interorganizational collaboration in a community health promotion context (Glanz, 2008). CCAT describes the stages of coalition development, coalition functioning, development of coalition synergy, and creation of organizational and community changes that may lead to increased community capacity and improved health and social outcomes (Butterfoss F. D., 2002). The CCAT model is illustrated in **Figure 1 (page 47)** and consists of fourteen constructs that work in a cycle as new issues arise or planning cycles are repeated. The theory looks at organizational structure, community changes, and improved health and social outcomes (Glanz, 2008). Each construct is defined in methods **Section 3.2.**

The CCAT describes that a community coalition will go through three stages before having successful outcomes: formation, maintenance, and institutionalization. It is hypothesized that following this theory from start to finish will determine the successful outcomes of a community coalition, but this theory is difficult to test empirically. In the formation stages, a lead agency, with access to the community, brings together core organizations that recruit an initial group of community partners to initiate a coalition effort focusing on a health or social issue of concern. The coalition identifies key leaders and staff, who then develop structures and operating procedures that promote coalition effectiveness. Structural elements in the coalition ensure that the coalition will adequately assess the community, develop an action plan, and then select strategies based on best practices. This formation stage requires balancing benefits associated with membership to ensure they outweigh any costs of participation (Butterfoss F. D., 2002).

The maintenance stage involves sustaining member involvement and taking

concrete action steps to achieve the goals of the coalition. Success in this stage depends on the mobilization and pooling of member and external resources. The coalition relies on resources from members and external sources to design and then implement the planned strategies. Acquisition of resources, competent assessment and planning, and strong member engagement are precursors to successful transition to the institutionalization stage. Successful implementation of strategies results in shorter-term outcomes such as changes in individual knowledge, beliefs, self-efficacy, and behavior, as well as changes in community systems, policies, practices, and environment. If these changes are sustained they can lead to long-term outcomes, such as reductions in morbidity and mortality, or substantive progress toward other social goals (Butterfoss F. D., 2002).

In the institutionalization stage, successful strategy implementation results in the community change outcomes, increases in community capacity and the change in the desired health outcomes. If resources have been adequately mobilized and strategies effectively address an ongoing need, coalition strategies may become institutionalized in a community as part of a long-term coalition, or they may be adopted by some organizations within the community. It is important that the strategies that address the desired outcome are sustained after the initial implementation by becoming institutionalized in the community.

This descriptive study aims to extend our understanding of this process by analyzing the degree of agreement in high achieving coalitions in the institutionalization stage. The formation and maintenance stages will be addressed to understand the similarities between coalitions to understand the methods in place prior to program implementation. Coalition membership, operations, leadership, structures, resources, and

assessment of community are important components of implementing successful strategies.

#### 2.1.2.4 CCAT in Application

CCAT has been tested using longitudinal data from the evaluation of *California Health Cities and Communities* program. This study tested the relationships between coalition factors and outcomes as predicted by CCAT and found conflicting results. For example, shared decision-making and leadership were correlated with participation and coalition size was associated with participation and dollars leveraged, which is consistent with CCAT predictions and prior research (Butterfoss F. D., 2004). The study found support for some, but not all of the constructs in CCAT and highlights the need for further evaluations of successful coalitions to add to the research base (Kegler, 2011).

### 2.1.3 History of Community Coalitions

Since the 1980's the response to chronic health conditions has been the utilization of multiple interventions aimed at at-risk individuals and risk-producing environments (Milio, 1980; McLeroy K. B., 1988). The emphasis on multiple interventions is in response to the severity and complexity of chronic health conditions that are rooted in a larger social, cultural, political and economic framework (Butterfoss F. D., 1993). There was a large push in the late 1980s and early 1990s to establish community coalitions that focus on improving health status for a plethora of issues. It has been shown that stronger impacts on health outcomes will occur when intervening on social levels that help to shape behavior rather than just targeting the behaviors of individuals (McLeroy K. B., 1988; Hawkins, 1992; Stokos, 1992; Milio, 1980).

Community coalitions are aimed at "strengthening the social fabric" and therefore consist of community agencies, institutions, and concerned citizens (Butterfoss F. D., 1993). In the early 1990's the Federal Government invested hundreds of millions of dollars on coalition development as a health promotion intervention. For example, the National Institutes of Health funded *COMMIT*, a community tobacco control program. These coalitions required citizens to develop local strategies to decrease tobacco use (National Cancer Institute, 1988). Furthermore, *The Planned Approach to Community Health (PATCH)* and other community chronic disease initiatives sponsored by the Centers for Disease Control and Prevention encouraged the formation of local coalitions for community health planning and implementation (Centers for Disease Control and Prevention, 1992). Then in 1988, substance abuse prevention coalitions began in the federal government and major foundation initiatives such as the Robert Woods Johnson *"Fight Back"* initiative (Robert Wood Johnson Foundation, 2009). This initiative was expanded by the Center for Substance Abuse Prevention (CSAP) who funded over 250 coalitions in the Community Partnership Demonstration Program. This initiative brought together organizations and individuals from both private and public sectors that are relevant to substance abuse prevention (Center for Prevention Research, 2006). Then, CSAP joined forces with the Office of National Drug Control Policy to develop the Drug-Free Communities Support Program in 1997 (105th Congress, 1997).

2.1.4 The Drug-Free Communities Support Program

The Drug-Free Communities (DFC) Support Program is a "central, bi-partisan component of our nation's demand reduction strategy" and has shown significant progress in popularity (Community Anti-Drug Coalitions of America, 2009). There has been consistent and steady growth in both appropriations (from $10 million in FY 1998

to $87.4 million in FY 2013) and in grantees from (92 original grantees to more than 2000 grantees over this history of the program). According to the Office of National Drug Control Policy (ONDCP), the philosophy behind the DFC Support Program is that local drug problems require local solutions (Office of National Drug Control Policy, 2014).

ONDCP received funding for the DFC Support Program from Congress through the Drug Free Communities Act of 1997 to provide support to community-based coalitions that have been formed to address local youth substance use from multiple perspectives (105th Congress, 1997). The DFC Support Program operates on a yearly grant cycle that starts with a Request for Applications posted by the Substance Abuse and Mental Health Services Administration (SAMHSA) in January of each year. Community coalitions must meet all eligibility requirements before being considered for funding including:

- at least one coalition representative must be from 12 different sectors of society
    - including: youth (18 or younger), parent, business, media, school, youth-serving organization, law enforcement, religious/fraternal organization, civic/volunteer groups, healthcare professional, state/local or tribal government agency with experience State, local, or tribal government with experience in the field of substance abuse, other organization involved in reducing substance abuse;
- the coalition must have been in existence for at least six months;
- must have a mission statement to reduce substance use;
- must have developed an Action Plan to reduce substance use among youth which targets multiple drugs of abuse;

- must develop a system to measure report outcomes;
- the DFC must be legally representable as a non-profit or other organization;
- the coalition must have a strategy to solicit substantial financial support from non-Federal sources to ensure the coalition is self-sustaining;
- The applicant must not request more than $125,000 in Federal funds per year;
- Two coalitions may not serve the same zip code(s) unless both coalitions have clearly described their plan for collaboration in their applications;
- Grantees/coalitions may be awarded only one grant at a time through the DFC Support Program; and
- Coalitions may not receive more than 10 years of DFC funding.

(Office of National Drug Control Policy, 2014)

Before funding can be appropriated to a community, the coalition must substantiate their local commitment and resolve to address its drug problem (Community Anti-Drug Coalitions of America, 2014). DFC grants are awarded for five years with the option to reapply for a maximum of 10 years (Office of National Drug Control Policy, 2014). DFC grantees receive awards of up to $125,000 per year for up to five years per award, with a maximum of two awards. Coalitions are only eligible to receive federal funding if they can provide a strategy to solicit financial support totaling at least a one-to-one match each year of the Federal support for up to $125,000, with increases in Years 8-10 (Office of National Drug Control Policy, 2014).

### 2.1.5 Community Coalition Effectiveness

There are three main reasons why the coalition approach has become popular in resolving health problems in the United States. The first reason is that in a democratic society people have the rights to participate in decisions that affect their health and

wellbeing (Clark, 2010). The second reason is that when there is greater participation in a decision or action, there is wider acceptance of a solution and it is more likely that the solution will be utilized and valued (McMillan, 1995). The third reason is that the collective wisdom and unique experiences of the participants in the coalition produce richer information and more relevant decisions (Cashman, 2008). The primary reason for utilizing community coalitions is that the most desirable solutions to health problems can only be found when the full range of community stakeholders are represented in the process of resolution (Blackwell, 2000). Furthermore, the underlying assumption is that a formal collaboration of diverse stakeholders, including community members, will achieve goals beyond the reach of individuals or organizations and that collaboration will reach these goals in a more efficient, effective, and sustainable way (Lasker, 2003).

A study on the *Communities that Care (CTC)* coalitions tested to see how sustainable community coalitions are after the end of study funding. The study found that 11 of the 12 coalitions were sustained 20 months beyond the end of study funding. The only coalition that disbanded was in a small town and was unable to sustain funding without study assistance (Gloppen, 2012). Therefore, in order for a coalition to be sustainable, they must have a way to secure funding after the grant is over. Similarly, capacity building has been cited as a vital approach for enhancing coalition functioning and effectiveness and one way to improve coalition capacity is through training and technical assistance (Watson-Thomspon, 2013). A study by Watson-Thompson used a randomized pre/posttest design to assess the impact of training and technical assistance on coalition capacity and found that technical assistance can increase coalition capacity for implementing collaborative processes (Watson-Thomspon, 2013).

### 2.1.7 Community Coalition Success

Community coalitions typically address complex problems and therefore evaluating coalition performance must involve multiple layers of assessment. There are three levels of coalition evaluation: the first level measures the coalition infrastructure, function, and procedures, the second level measures the extent to which interventions and activities are carried out and reach the target population and the third level measures the outcomes involving health and community change (Butterfoss F. D., 2004). However, determining what constitutes effective coalitions are not simple because of the differences in geographic areas and populations targeted (Zakocs, 2006). Therefore, Butterfoss' suggestion of three levels has been simplified into two measures: internal coalition functioning and external community level changes. Internal coalition functioning measures how well coalition-building actions have been executed, such as size of membership, amount of resources generated, or quality of strategic plans. External community level changes are measured by results from strategic actions implemented by coalitions, such as reductions in mortality, morbidity, injury, or risky health behaviors. Although community-level changes are the ultimate indicators of coalition effectiveness, measures of coalition functioning is a proxy, as it may be that coalitions with high internal functioning have a greater chance of achieving external outcomes (Zakocs, 2006).

The research question for this proposal is consistent with Zakocs' recommendation to use internal coalition function as a proxy for coalition success. Internal coalition functioning is used to gain a deeper understanding of how the implementation strategies were enacted in each of the high achieving DFCs. This chapter provided important background information for this research. With this understanding in

place, the next chapter with focus on the methodology used in this study. The methods section will include the definition of coalition success, inclusion criteria, and what survey questions will be analyzed from progress reports recorded through SAMHSA's Coalition Online Management Evaluation Tool (COMET) (**Appendix 1**), Coalition Classification Tool (CCT) (**Appendix 2**), and youth core measures survey items (**Appendix 3**).

# Chapter 3: Methods

## 3.1. Study Design

This analysis is a descriptive study of secondary data from the United States Office of National Drug Control Policy (ONDCP) and the Substance Abuse Mental Health Services Administration's (SAMHSA) Drug-Free Communities (DFC) Support Program. This study specifically focuses on the high achieving community coalitions to find the similarities and differences in implementation strategies utilized to reduce drug use in youth and increase the perception of risk for alcohol, tobacco, and marijuana. As part of the program, each DFC must submit data on youth's past 30-day use and perception of risk for each of these three drugs every two years. The data is collected in a system developed by HHS/SAMHSA and analyzed by ICF International, the entity contracted by the Federal government to evaluate DFC nationally.

The analysis was conducted in two stages. Stage 1 covers the initial data collection and filtering of the high achieving coalitions from 157 to 12, and Stage 2 describes the 12 high achieving coalitions' implementation strategies and activities that were most effective in reducing past 30-day use and increasing perception of risk for all three drugs.

### 3.1.1 Stage 1: Initial Data Collection

In Stage 1, ICF International was requested to provide data on all of the coalitions who were high performing in the fifth year of their grant cycle in either 2011 or 2012. High performing was defined as having an improvement in either past 30-day use or perception of risk in at least one drug category among students at least one grade level

(middle or high school). Both years were selected to ensure there were a significant number of DFCs that collected core measures data in that year.

ICF International submitted data on 66 coalitions. The 66 coalitions were drawn from a group of 157 coalitions who reported at least 2 outcome time points for 30 day-use and perception of risk for the 3 substances of interest in year 5 of the grant cycle in 2011 or 2012. The data submitted by ICF included the percentage of survey respondents who reported using alcohol, tobacco, or marijuana and reported perceived risk of these drugs. The data utilized in this study are the first outcome (percentage of students who report at the first data collection), last outcome (percentage of students who report and the last outcome), and total change (percent point change from first outcome to last outcome). Total change was calculated by subtracting the first outcome from the last outcome.

Next, out of the 66 coalitions submitted by ICF, the data were then narrowed down to 12 coalitions to derive a sample of the high achieving coalitions. This was accomplished by placing the data into a SAS file to see which coalitions had decreasing past 30-day use scores (indicated by a negative total change score) and increasing perception of risk scores (indicated by a positive change score). The DFCs that had a negative change score for past-30 day use and a positive change score for perception of risk in all three drug categories totaled to 12 coalitions out of the 66. These 12 coalitions were included in the Stage 2 descriptive analysis and are referred to in this study as the high achieving coalitions.

3.1.2 Stage 2: Descriptive Data Collection

The data utilized in this analysis is secondary data that is collected and stored by ICF International. Each DFC is responsible for collecting, aggregating, and submitting their own data for each core measure every two years to ICF through an online system

(**Appendix 3**). The DFCs also submit progress report data through COMET (**Appendix 1**) and CCT (**Appendix 2**) surveys every 2 years. Therefore the progress report data and CCT data received is from 2011 to ensure temporality of the program implementation and outcomes. In Stage 2, data were collected on implementation strategies, activity type, description of activity, scope and reach of activity, goals, and objectives for only the high achieving DFCs. This descriptive study focused on each coalition's implementation of strategies because the strategy implementation is one possible contributor to the change the occurred in youth's drug use and perception of risk scores.

3.1.3. Stage 2 Survey Questions

Below are the survey questions that match the constructs from CCAT. These survey questions were gathered by ICF International for the 12 coalitions. The survey questions can be found in (**Appendix 1)** and (**Appendix 2).** The survey items are from the 2011 COMET and CCT.

1. *Community Context*: The political, administrative, and social factors that are embedded in communities and can have a significant impact on communities (Butterfoss F. D., 2002).

    - The survey items that will measure this construct are:

      *Appendix 1:*
        - Geographic setting served (page 3)
        - Community setting served (page 3)
        - Substance of Issue in Community (page 4)
        - Description of Assessment (page 14-17)

2. *Coalition Membership*: Can be defined as either a paid or volunteer staff members from diverse expertise and backgrounds that are engaged in the coalition's efforts (Butterfoss F. D., 2002).

The survey items that will measure this construct are:

*Appendix 1:*

- 12 Required Sector Representatives (page 8)
- Total number of current representatives (page 9)
- Number of current representatives active in coalition meetings, activities, and tasks (page 9)

3. *Coalition Operations and Processes:* Coalitions must fulfill certain basic functions such as making decisions, communicating, and managing conflict (Butterfoss F. D., 2002).

   The survey items that will measure this construct are:

   *Appendix 2:*

   - Frequency of Conflicts (page 9)
   - Cause of conflicts (page 9)
   - Performance Evaluation (page 10)
   - Perceived Effectiveness (page 18)
   - Coalition self –assessment (page 19)

4. *Leadership and staffing:* Coalition leaders and staff organize the structure through which coalitions accomplish their work and are responsible for coalition processes such as communication and decision making that keep members satisfied and committed to coalition efforts (Butterfoss F. D., 2002).

   The survey items that will measure this construct are:

   *Appendix 2:*

   - Coalition governing body (page 5)
   - Identification of community leaders (page 6)
   - Community leadership in coalition efforts (page 6)

5. *Coalition Structures:* the degree to which rules, roles, and procedures are precisely defined (Butterfoss F. D., 2002)

   The survey items that will measure this construct are:

   *Appendix 1:*

- Rank up to 3 capacity building activities that were the main focus of your coalitions efforts during the last recording period (page 11)

*Appendix 2:*

- Implementation of coalition structure and operating procedures (page 3)
- Coalition type (page 3)
- Organizational structure (page 4)
- Confidence in task completion (page 4)
- Written procedures (page 5)
- Collaborative decision-making (8)

6. *Pooled Member and External Resources:* working together creates a synergy that enables individuals and organizations to accomplish more than they could achieve independently and resource from outside the membership and community are also helpful (McLeroy, 1994).

   The survey items that will measure this construct are:

   *Appendix 2:*

   - Cultural diversity (page 10)
   - Synergy (page 18)

7. *Member Engagement:* Training, defined roles, and ongoing contact with participating institutions were essential for member retention (Butterfoss F. D., 2002).

   The survey items that will measure this construct are:

   *Appendix 1:*

   - Did your coalition provide any training or technical assistance to other community groups or organizations? (Page 42)
   - For any training or TA that has been received, please fill out this information (page 44)

8. *Assessment and Planning:* defined as utilizing needs assessment, data collection, analysis, feedback, and plan development (Butterfoss F. D., 2002).

   The survey items that will measure this construct are:

*Appendix 1:*

- Goal (page 29)
- Objective (page 29)

9. *Implementation of Strategies:* defined as initiating new strategies, and maintaining and monitoring current strategies (Butterfoss F. D., 2002).

   The survey items that will measure this construct are:

   *Appendix 1:*

   - Strategy (page 28)
   - Activity Type (page 28)
   - Brief Description of activity (page 28)
     - This qualitative data has been coded by the evaluation team and has coded 41 activities that were listed into 7 categories (less that 5% of the data was not able to be coded)
   - Scope/reach of activity (page 28)

   *Appendix 2:*

   - Coalition focus 1 (page 13)
   - Coordination of Prevention Programs/Services (page 14)
   - Action plan activities (page 14)
   - Coalition focus 2 (page 16)
   - Intermediary or Community support org (page 17)

10. *Community Capacity*: Through training and practice in leadership, meeting facilitation, needs assessment, and planning, coalition members developed skills that improve their participation and could be generalized to other civic areas (Butterfoss F. D., 2002).

    The survey items that will measure this construct are:

    *Appendix 1:*

    - Accomplishments (page 40)
    - Challenge/Barriers (page 40)

    *Appendix 2:*

    - Coalition Sustainability (page 11)
    - Capacity Building Capacity (page 17)

11. *Community Change Outcomes:* members direct community events or influence larger institutional or state legislature (Butterfoss F. D., 2002).

    The survey items that will measure this construct are:

    *Appendix 2:*
    - Environmental strategies (page 15)

12. *Health and Social Outcomes:*

This is the eligibility criterion for Stage 2 of this study.

## 3.3 Analysis Plan

A descriptive analysis was employed to understand the similarities and differences among the high achieving DFCs. Some of the implementation strategy responses have been previously coded to account for 49 different activities to be categorized into the seven implementation categories (providing knowledge, enhancing skills, providing support, enhancing access/reducing barriers, changing consequences, physical design, modifying/changing policies). These 49 activities were the main focus of the analysis. Given the lack of data on the similarities and differences between high achieving coalitions, the operational definition of coalition agreement is as below.

Definitions of agreement among high achieving coalitions:

- Universal agreement: 92-100% utilizes the construct.
- High agreement: 67-93% utilizes the construct.
- Low agreement: 66% or less utilizes the construct.

Universal agreement and high agreement items are used to show similarities between the high achieving coalitions and low agreement items are used to show differences between the high achieving coalitions.

3.4 Project Timeline

The timeline presented in this section are approximate and subject to change

| **Date** | **Event** |
|---|---|
| November 2014 | Thesis proposal defense and approval |
| December 2014 | Receive Stage 1 data from ICF International |
| December 2014 | IRB review and approval |
| January 2015 | Receive Stage 2 data from ICF International |
| February 2015 | Data Analysis |
| March 2015 | Send Thesis to ONDCP for their approval and comments |
| March 2015 | Incorporate comments and suggestions from ONDCP into Thesis |
| April 2015 | Thesis Defense |
| May 2015 | Graduation! |

3.6 Ethical Issues

The complete protocol for the study was submitted for review by the Institutional Review Board (IRB) for the University of Maryland, Collage Park. As this is a secondary data analysis utilizing de-identified aggregate data, the review board determined this study to be Not Human Subject Research (NHSR) and therefore exempt from IRB approval. See **Appendix 4** for the formal letter.

3.5.1 Informed Consent

When the data was collected initially each school district had to follow survey collection protocols in their state and school district. ICF International sends DFCs a packet to explain how to collect survey information and provide technical assistance to each DFC in regard to their evaluation. ICF International says:

> **"The Protection of Pupil Rights Amendment of 2002 requires written parental/guardian permission for students to take part in U.S. Department of Education-funded school-based surveys that ask questions of a sensitive nature. Some states and school districts have**

> **implemented policies and laws that also require written consent for all school based surveys"** (DFC National Evaluation Team, 2012)**.**

The schools involved in this study received either passive or active consent for student participation.

3.5.2 Participant Confidentiality

One condition for the receipt of the DFC data was that it be deidentified. This task was completed by the ICF team prior to sharing the data for the purposes of this thesis. The data received in this study is aggregate and de-identified data. It is impossible to track the data back to the individuals completing the surveys and to the coalitions in which the data was collected.

# Chapter 4: Results

## 4.1. Stage 1: Sample Selection

The first data set from ICF International included 66 Drug Free Communities. These communities are seen as the high achieving communities because they either increased perception of risk or decreased past-30 day use in at least one of the drug categories (alcohol, marijuana, or tobacco). The inclusion criterion used in this study as described in **Section 3.1.2**, indicates that the following 12 coalitions were selected due to the fact that they decreased past 30-day use across all drugs and increased perception of risk across all drugs. The 12 coalitions that will be described below are the top 18% of the high achieving DFCs provided in the Stage 1 data set (n=66) from ICF International. This indicates that these 12 coalitions are the "high achieving" DFCs.

**Table 1 (page 30)** shows that across all drugs categories, the average percent point change of student's past 30-day use decreased from the first outcome to the last outcome when looking at all the provided coalitions. Scores from middle and high schools are averaged together to show the mean scores of the coalitions. However, as you can see from **Table 1,** there is great variability between these scores and very large standard deviations. In **Table 2 (page 30)** the average percent change was greater among the high achieving 12 coalitions showing that on average these 12 coalitions decreased average past 30- day use scores by a larger variable. Furthermore, the average perception of risk score increased across all drugs in the original 66 coalitions, as seen in **Table 3 (page 30).** However, in **Table 4 (page 30)** the percent point change was larger in the high achieving DFCs. The fact that **Table 2** showed a larger decrease in average percent of past 30-day use and **Table 4** showed a larger increase in average percent of perception

of risk substantiates that the inclusion criteria used in this study. The high achieving 12 coalitions showed greater improvements in past-30 day use and perception of risk than the 66 from Stage 1, and this validates the inclusion criteria used in this study.

However, this does not mean that each coalition selected in the high achieving category is high achieving in all the categories. Overall, each coalition has showed improvement across all drugs, and therefore they are included in this analysis. There is a large range of values and this is indicated in the standard deviation scores.

**Table 1: Past 30-Day Use in All Coalitions (N=66)**

| | *% Report Use First Outcome* | | *% Report Use Last Outcome* | | *% Point Change* | |
|---|---|---|---|---|---|---|
| **Past 30-Day Use** | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* |
| ***Alcohol*** | 29 | 15 | 19 | 13 | -10 | 11 |
| ***Marijuana*** | 13 | 9 | 11 | 9 | -2 | 6 |
| ***Tobacco*** | 15 | 9 | 9 | 7 | -6 | 8 |

**Table 2: Past 30-Day Use in Included Coalitions (n=12)**

| | *% Report Use First Outcome* | | *% Report Use Last Outcome* | | *% Point Change* | |
|---|---|---|---|---|---|---|
| **Past 30-Day Use** | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* |
| ***Alcohol*** | 34 | 13 | 21 | 12 | -14 | 7 |
| ***Marijuana*** | 16 | 9 | 13 | 8 | -3 | 3 |
| ***Tobacco*** | 16 | 9 | 8 | 5 | -8 | 7 |

**Table 3: Perception of Risk in All Coalitions (n=66)**

| | *% Report Perceive Risk First Outcome* | | *% Report Perceive Risk Last Outcome* | | *% Point Change* | |
|---|---|---|---|---|---|---|
| **Perception of Risk** | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* |
| ***Alcohol*** | 58 | 21 | 67 | 19 | 9 | 20 |
| ***Marijuana*** | 67 | 19 | 70 | 16 | 3 | 16 |
| ***Tobacco*** | 75 | 17 | 83 | 10 | 8 | 18 |

**Table 4: Perception of Risk in Included Coalitions (n=12)**

| | *% Report Perceive Risk First Outcome* | | *% Report Perceive Risk Last Outcome* | | *% Point Change* | |
|---|---|---|---|---|---|---|
| **Perception of Risk** | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* | *Mean* | *Standard Deviation* |
| ***Alcohol*** | 62 | 18 | 73 | 14 | 11 | 18 |
| ***Marijuana*** | 62 | 18 | 69 | 15 | 7 | 16 |
| ***Tobacco*** | 72 | 17 | 86 | 6 | 14 | 17 |

4.2. Description of High Achieving Coalitions

The 12 coalitions that were included in the Stage 2 descriptive analyses represent a broad range of coalition characteristics. **Table 5 (page 32)** provides descriptive information for the 12 coalitions, including each coalition members in various sectors of society and target population (urban, rural, or suburban). All coalitions in order to be granted funding in the DFC program must include at least one member in the community from the 12 different sectors. This rule is designated to allow for the collective impact from many different organizations to offer their expertise and knowledge about substance abuse prevention strategies. **Table 5** shows that all 12 coalitions include parents, youth, businesses, volunteer groups, health care professionals, law enforcement, media, religious/fraternal organizations, schools, state local and tribal governments, youth serving organizations, and other organizations with expertise in substance abuse with varying degrees of involvement. Although at least one member is required in order for the DFC to receive funding, many of these coalitions include additional members.

Furthermore, it is important to understand that these coalitions are targeting different populations. Two of the coalitions target urban, rural, and suburban populations, three coalitions targeted two of the three populations, and the remaining coalitions targeted only one population. The high achieving coalitions are evenly split in target population. There is an even distribution among 74% of the populations as either suburban or rural while 26% target an urban population.

**Table 5: Sample Characteristics**

| ***Coalition Members*** | ***Characteristics*** | ***N*** | ***%*** |
|---|---|---|---|
| *Number of Parents* | 1-4 | 6 | 50% |
| | 5-9 | 3 | 25% |
| | 10+ | 3 | 25% |
| *Number of Youth* | 1-4 | 5 | 42% |
| | 5-9 | 2 | 17% |
| | 10+ | 5 | 42% |
| *Number of Businesses* | 1-4 | 7 | 58% |
| | 5-9 | 4 | 33% |
| | 10+ | 1 | 8% |
| *Number of Volunteer Groups* | 1-4 | 9 | 75% |
| | 5-9 | 2 | 17% |
| | 10+ | 1 | 8% |
| *Number of Health Care Professionals* | 1-4 | 6 | 50% |
| | 5-9 | 4 | 33% |
| | 10+ | 2 | 16% |
| *Number of Law Enforcement Agencies* | 1-4 | 4 | 33% |
| | 5-9 | 7 | 58% |
| | 10-14 | 1 | 8% |
| *Number of Media* | 1-4 | 11 | 92% |
| | 5-9 | 1 | 8% |
| | 10+ | 0 | N/A |
| *Number of Religious/Fraternal Organizations* | 1-4 | 9 | 75% |
| | 5-9 | 2 | 17% |
| | 10+ | 1 | 8% |
| *Number of Schools* | 1-4 | 7 | 58% |
| | 5-9 | 1 | 8% |
| | 10+ | 4 | 33% |
| *Number of State/Local/Tribal Government Agencies* | 1-4 | 7 | 58% |
| | 5-9 | 2 | 17% |
| | 10+ | 3 | 25% |
| *Number of Youth Serving Organizations* | 1-4 | 8 | 67% |
| | 5-9 | 1 | 8% |
| | 10+ | 3 | 25% |
| *Number of Other Orgs with Experience in Substance Abuse* | 1-4 | 8 | 67% |
| | 5-9 | 3 | 25% |
| | 10+ | 1 | 8% |
| *Target Population** | Urban** | 5 | 26% |
| | Suburban** | 7 | 37% |
| | Rural** | 7 | 37% |

*Coalitions may select more than one target population
**Denominator is 19

**Table 6 (page 33)** provides a frequency table of the number of coalition activities employed in the year prior to last outcome data collection (2011). The coalition ID is used as an indicator. The average number of coalition activities is 22. In later tables, the categories of activities will be broken down into specific activities.

**Table 6: Frequency of Coalition Activities**

| Coalition ID | Number Activities |
|---|---|
| 1956 | 30 |
| 1970 | 21 |
| 1985 | 32 |
| 2006 | 19 |
| 2007 | 20 |
| 2018 | 25 |
| 2030 | 20 |
| 2049 | 13 |
| 2056 | 19 |
| 2085 | 21 |
| 2096 | 24 |
| 2140 | 22 |
| **AVERAGE** | **22.2** |

4.3. Description of Coalitions

**Tables 7-14 (pages 34-37)** provide a description of results for the high achieving coalitions with regard to the main findings in similarities of implementation strategies (providing information, enhancing skills, providing support, enhancing access/reducing barriers, modifying/changing policies, changing consequences, physical design, and strengthening coalitions). **Table 7 (page 34)** provides a breakdown of the implementation strategy categories. There is universal agreement among the high achieving coalitions that they implement activities in the following categories: providing information, strengthening coalition, enhancing skills, modifying and changing policies,

and changing consequences. There is high agreement in the category of enhancing access/reducing barriers and there is low agreement in the category of physical design.

**Table 7: Category Degree of Agreement**

| Implementation Activity Category | Degree of Agreement |
|---|---|
| Providing Information | 100% |
| Providing Support | 100% |
| Strengthening Coalitions | 100% |
| Modifying/Changing Policies | 92% |
| Changing Consequences | 92% |
| Enhancing Skills | 92% |
| Enhancing Access/Reducing Barriers | 67% |
| Physical Design | 42% |

Each of the implementation activity categories can be broken down into a total of 49 activities. **Table 8 (page 35)** shows activities that were universally completed among the "high achieving" coalitions. Six activities have universal agreement: direct, face-to-face information (not curricula) sessions, information dissemination (e.g., brochures, fact sheets, health fairs, etc.), media Campaigns (e.g., billboards, PSAs)/counter-marketing or counter-advertising campaigns, special events to heighten awareness (e.g., poster contests, forums, town-hall meetings, etc.), developing or improving coalition structure and operating procedures, and sponsoring drug-free events (e.g., drug-free dances). **Table 9 (page 35)** shows that there is high agreement among 10 activities: capacity building of coalition members, developing coalition leadership, recruiting new members and partners, strategic and sustainability planning, youth support programs, communication/decision-making program component, parenting skills program, training

program for teachers or trainers, improve safety and justice in the community, and increase enforcement of underage drinking laws.

**Table 8: Activity Universal Agreement**

| Activity | Activity Category | Percentage |
|---|---|---|
| Direct, face-to-face information (not curricula) sessions | Providing Information | 100% |
| Special Events to heighten awareness (e.g., poster contests, forums, town-hall meetings, etc.) | Providing Information | 100% |
| Information dissemination (e.g., brochures, fact sheets, health fairs, etc.) | Providing Information | 92% |
| Media Campaigns (e.g., billboards, PSAs)/counter-marketing or counter-advertising campaigns | Providing Information | 92% |
| Developing or Improving Coalition Structure and Operating Procedures | Strengthening Coalitions | 92% |
| Sponsoring drug-free events (e.g., drug-free dances) | Providing Support | 92% |

**Table 9: Activity High Agreement**

| Activity | Activity Category | Percentage |
|---|---|---|
| Recruiting New Members and Partners | Strengthening Coalitions | 75% |
| Communication/decision-making program component | Enhancing Skills | 75% |
| Training program for teachers or trainers | Enhancing Skills | 75% |
| Strategic and Sustainability Planning | Strengthening Coalitions | 67% |
| Youth support programs | Providing Support | 67% |
| Parenting skills program | Enhancing Skills | 67% |
| Improve safety and justice in the community | Enhancing Access | 67% |
| Increase enforcement of underage drinking laws | Changing Consequences | 67% |
| Capacity Building of Coalition Members | Strengthening Coalitions | 67% |
| Developing Coalition Leadership | Strengthening Coalitions | 67% |

**Table 10 (page 36)** shows that there are an abundance of activities in which there is low agreement among the high achieving coalitions. There does not seem to be high agreement in the category of modifying/changing policies, which is contradictory to existing literature.

**Table 10: Activity Low Agreement**

| Activity | Activity Category | Percentage |
|---|---|---|
| Sponsoring healthy "risky" activities (ex: rock climbing) | Providing Support | 58% |
| Alcohol and cigarette advertising restrictions in public areas | Modifying/Changing Policies | 58% |
| Drug refusal skills program component | Enhancing Skills | 58% |
| Evaluating, Conducting Research on, or monitoring of coalition | Strengthening Coalitions | 50% |
| Limitation and restrictions of location and density of alcohol outlets | Modifying/Changing Policies | 50% |
| Restrictions on alcohol and cigarette use at community events | Modifying/Changing Policies | 50% |
| Compliance checks for alcohol or tobacco sales to minors | Changing Consequences | 50% |
| Teen drop-in Centers or clubs | Providing Support | 42% |
| Role-modeling program component (e.g., mentoring) | Enhancing Skills | 42% |
| Improve quality and availability of education | Enhancing Access | 42% |
| Fundraising | Strengthening Coalitions | 33% |
| Improving Cross Cultural Competence | Strengthening Coalitions | 25% |
| Improve access to healthcare services | Enhancing Access | 33% |
| Increase surveillance of areas known for illegal drug sales | Changing Consequences | 33% |
| Recognition program for merchants who pass compliance checks | Changing Consequences | 33% |
| Improve signage | Physical Design | 25% |
| Increase enforcement of illicit drug laws | Changing Consequences | 25% |
| Efforts to require treatment for nonviolent drug offenders | Modifying/Changing Policies | 25% |
| Improve parks anther physical landscapes | Physical Design | 17% |
| Responsible beverage service training (voluntary or mandatory) | Modifying/Changing Policies | 17% |
| Conflict management skills training | Enhancing Skills | 17% |
| Improving access for people with special needs | Enhancing Access | 17% |
| Improve access to employee assistance programs | Enhancing Access | 17% |
| Improve access to transportation | Enhancing Access | 17% |
| Improve cultural language sensitivity | Enhancing Access | 17% |
| Support youth athletic leagues | Providing Support | 17% |
| Increased enforcement of impaired-driving laws | Changing Consequences | 17% |
| Prescription drug abuse tracking | Changing Consequences | 17% |
| Clearinghouse for ATOD information | Providing Information | 17% |
| Developing Mission or Vision | Strengthening Coalitions | 17% |
| Invoke nuisance laws to rehabilitate dangerous rental housing | Physical Design | 8% |
| Shoulder-tap enforcement program | Changing Consequences | 8% |
| Instituting drug testing | Modifying/Changing Policies | 8% |

*All strategy data reflect data submitted by DFC grantees prior to 2012. In 2012 some categories were combined reorganized to provide greater clarity so not all activities reported here continue to be collected in the manner provided.

4.4. Coalition Classification Tool

**Tables 11-14 (page 37-38)** depict universal agreement between "high achieving" coalitions in terms of their classification from the CCT (n=12) (**Appendix 2)**. These items provide insight into the priorities of the leadership and members of the coalition in terms of the coalition formation and maintenance. The tables have been broken up into four themes: operations, human capital, evaluation and program monitoring, and cultural competency. This thematic analysis found commonalities among the variety of survey items. A social science analyst was consulted in order to ensure the questions were appropriately classified into appropriate themes.

This thematic analysis found universal agreement among 24 items on the CCT **(Appendix 2).** In the **Table 11 (page 37)** theme of "Operations" it is clear that all of the high achieving coalitions have strong operational procedures. The coalitions are organized by holding meetings and keeping written agendas and minutes. They have inclusive decision-making processes and develop strategic and action plans. The coalitions have support from other organizations in the community and supports programs delivered by their partners.

**Table 11: CCT Universal Agreement: Operations**

| ***Questions*** | ***Answer*** | ***Degree of Agreement*** |
|---|---|---|
| We hold regularly scheduled meetings | Yes | 100% |
| We prepare a written agenda for each coalition meeting | Yes | 100% |
| We prepare and distribute written minutes from each coalition meeting | Yes | 100% |
| Decision-making processes are designed to be inclusive | Yes | 100% |
| To what extent does your coalition engage in developing strategic and action plans | A Great Extent | 92% |
| To what extent does your coalition have support from other organizations in the community | A Great Extent | 92% |
| To what extent does your coalition support programs or services delivered by our partners | A Great Extent | 92% |
| Our coalition records decisions in minutes or otherwise keeps track of | Yes | 92% |

| | | |
|---|---|---|
| decisions | | |

**Table 12 (page 38)** shows that there is universal agreement among the theme of "Human Capital." The high achieving coalitions have a coalition coordinator, someone on staff at the coalition who collects and analyzes data, and paid staff members. The leadership in the high achieving coalitions is strong because the leaders are committed to the coalition's mission and the coalition has established a reputation for being able to get things done.

**Table 12: CCT Universal Agreement: Human Capital**

| ***Questions*** | ***Answer*** | ***Degree of Agreement*** |
|---|---|---|
| We have funding from DFC that supports a part-time or full-time coalition coordinator | Yes | 92% |
| Our coalition has someone on the staff at the coalition or a member organization that assists the coalition with collecting and analyzing data on coalition activities and community indicators | Yes | 92% |
| We have paid staff members or in-kind staff members | Yes | 92% |
| To what extent has your coalition established a reputation for being able to get things done | A Great Extent | 92% |
| Coalition leadership is committed to the coalition's mission | Strongly Agree | 92% |

**Table 13 (page 39)** shows that there is universal agreement in the theme of "Evaluation and Program Monitoring." These coalitions collect school survey data at least once every two years, hold meetings to make adjustments as a result of monitoring or evaluation activities. These coalitions also engage in assessing needs and incorporating the need into their decision-making processes.

**Table 13: CCT Universal Agreement: Evaluation and Program Monitoring**

| ***Questions*** | ***Answer*** | ***Degree of Agreement*** |
|---|---|---|
| Our coalition collects school survey data that matches the coalition's geographic boundaries at least once every two years | Yes | 92% |
| Does your coalition typically hold meetings to reflect the result of monitoring or evaluation activities in order to make adjustments for implementation | Yes | 92% |
| To what extent does your coalition engage in assessing needs | A Great Extent | 92% |
| To what extent does your coalition incorporate assessment of need into decision making processes | A Great Extent | 92% |

**Table 14 (page 39)** provides insight into the high achieving coalition's degree of cultural competency. The coalitions not only have their materials examined by a diversity expert, but they employ cultural competency in their outreach, meetings, and activities.

**Table 14: CCT Universal Agreement: Cultural Competency**

| ***Questions*** | ***Answer*** | ***Degree of Agreement*** |
|---|---|---|
| Activities are designed to be inclusive | Yes | 100% |
| Materials are relevant/appropriate to the culture(s) and language(s) of the target population | Yes | 100% |
| Materials are examined by diversity experts or target population members | Yes | 92% |
| A culturally appropriate outreach action plan has been developed | Yes | 92% |
| Targeted youth are involved in coalition meetings and activities | Yes | 92% |
| Coalition members are representative of the demographic and cultural diversity in your community | Yes | 92% |
| To what extent is your coalition a prevention expertise resource to the community | A Great Extent | 92% |

4.5. Results

**Research Question:** The following tables and graphs describe the similarities and differences in program implementation among the high achieving Drug-free Communities. This study highlights the similarities in program implementation among

the high achieving DFCs. The findings support that the universal agreement activities are associated with high achieving results. There are 6 (12%) activities have universal agreement and there are 10 (20%) with high agreement. Furthermore, there is universal agreement among 24 survey items from the CCT (**Appendix 2).** These items were broken down into the themes of: meeting dynamics, coalition membership and coalition functioning.

Furthermore, the results of this study indicate that while there is universal and high agreement among activities implemented in these "high achieving" coalitions, there is also a great deal of low agreement. Out of the 49 activities, 33 (67%) of the activities were in the low agreement category.

# Chapter 5: Discussion

## 5.1 Discussion

The process of selecting the 12 high achieving Drug-Free Community coalitions was utilized to understand the similarities and differences in strategy implementation among these coalitions. This discussion aims to provide insight into the similarities in strategy implementation that shows what the most successful Drug-Free Communities have in common. Furthermore, it aims to show what activities the high achieving DFCs do not have in common. The purpose of this study is to understand the similarities and differences in program implementation across the high achieving DFCs to share information with current and future Drug-Free Communities about successful coalition program implementation.

### 5.1.1 Study Findings and Theoretical Frameworks

The findings from this study suggest that the activities that are categorized as having universal agreement among the high achieving DFCs may be a gateway to successful program implementation. **Tables 1-4 (page 30)** corroborate the inclusion criteria utilized in this study to select the high achieving Drug-Free Communities to be analyzed. Each coalition has a different target population and implemented different strategies as seen in **Tables 5 and 7 (pages 33 and 34)**. However, this supports the philosophy behind the DFC Program that "local drug problems require local solutions" (Office of National Drug Control Policy, 2014). However, the fact that there were strategies implemented across all high achieving coalitions despite target population leads me to believe that while there are local solutions to these drug problems there are also universally successful programs.

**Table 6 (page 33)** shows that there is a wide range in the high achieving coalitions in terms of the number of activities implemented. While the average number of activities implemented is 22, the range spans from 13-30. Therefore, it may not be the number of activities implemented that leads to the success of the coalitions, but it may be the dosage of the program or the percent of the target population reached.

**Tables 8-10 (pages 35 and 35)** provide the strongest insight into the similarities and differences in activity implementation. The activities that are implemented with universal agreement include direct, face-to-face information (not curricula) sessions, information dissemination (e.g., brochures, fact sheets, health fairs, etc.), media campaigns (e.g., billboards, PSAs)/counter-marketing or counter-advertising campaigns, special events to heighten awareness (e.g., poster contests, forums, town-hall meetings, etc.), developing or improving coalition structure and operating procedures, and sponsoring drug-free events (e.g., drug-free dances). What is interesting about these six activities is that they impact different three distinct sectors of society.

Direct, face-to-face information sessions, special events and sponsoring drug-free events all involve a level of interaction between the coalition and the community. Community involvement should be considered an important aspect of a successful DFC. To corroborate this, in **Table 10 (page 35)**, there are only 3 out of the 33 "low agreement activities" that can be described as having community involvement: sponsoring healthy "risky" activities, teen drop-in centers or clubs, and role-modeling program component (e.g., mentoring). However, of these low agreement activities, these are among the high agreement with scores of 42-58%.

Media campaigns and information dissemination involve changing social norms through providing information. While this activity is also aimed at the community, it

does not involve any direct community participation. Media campaign and information dissemination are the only two activities out of all the 49 activities, despite the degree of agreement, which is a direct result of the coalition, without need for any involvement from the target population. Therefore, media campaigns and information dissemination must be integral pieces of the success of these high achieving coalitions.

The last universally agreed upon activity is developing or improving coalition structure and operating procedures. Although there are activities that are aimed at strengthening coalitions in the high and low agreement categories, this activity is the most general and speaks to the fact that coalitions continue to evolve. These high achieving coalitions continue to improve their structure and operations to meet the needs of their community.

The CCT (**Appendix 2)** had universal agreement on a significant number of items that were broken down into three categories: meeting dynamics, coalition membership, and coalition functions. Items from **Tables 11-13 (page 38-39)** show that strong leadership, membership, and coalition structure are a gateway to success in activity implementation. The Community Coalition Action Theory states that the creation of organizational and community changes may lead to increased community capacity and improved health and social outcomes (Butterfoss F. D., 2002). These items with universal agreement provide insight into the formation and maintenance of the high achieving coalitions that, according to the CCAT, are a gateway for successful program implementation.

5.2 Study Strengths

This study provides a level of detail on the Drug-Free Communities Support Program that has not previously been examined. Since the Drug-Free Communities

Support Program is a large scale, nation wide program, the "Drug-Free Communities Support Program National Evaluation Reports" have provided broad information about the successful outcomes of the program, and the categories of program implementation. This type of report provides useful information for program administrators, but there is a lack of research on the specific activities implemented to share with current and future grantees.

This study is the first of its kind because it aims to provide specific information about program implementation as a resource to current and future grantees. The data analyzed were only among the high achieving coalitions because all grantees are striving the reduce substance use among youth. Since these coalitions target different populations, but still have universal agreement among implementation activities, these activities appear to be working across many populations. This study may provide the resources for more DFCs to become high achieving by implementing the activities that have universal agreement.

5.3 Study Limitations

This study did not look at low achieving DFCs to see if they are implementing different activities than the high achieving DFCs. Although the low achieving DFCs were not studied, the information provided on coalition formation and maintenance as well as institutionalization should be looked at as a whole. Implementing these activities without the foundation of a strong coalition, may not have successful results.

Additionally, because this study used secondary data the accuracy of the data cannot be validated due to the nature of the program. The outcome data is collected in the schools by the coalition and then sent to ICF International to compile. The CCT and program implementation data is also completed in survey format by the coalition through

an online format that is also compiled by ICF International. Although the validity and reliability of this data cannot be confirmed for this study, this is data that is currently used in to make funding decisions as well as to determine program success. Therefore, the principal investigator trusted the system in which the data was found in order to complete this research and provide results that can be put into practice.

Furthermore, it is important to note that absolute value was not taken into consideration when including these coalitions. Some of the coalitions only showed minimal improvement and may have a change score of 0 or 1, while others had a change score of -29 for past 30-day use or 59 for perception of risk. However, the high achieving coalitions showed improvement across all three drugs and therefore still have valid improvement.

Social desirability bias is a concern for the outcome data because the data that is collected by the coalitions for ONDCP to review and the coalitions receive funding from ONDCP. However, this bias is most likely distributed equally over all coalitions. Furthermore, this study analyzed 12 DFC coalitions that are high achieving because they all reduced past-30 day use and increased perception of risk scores in all three drug categories in middle or high school. There is no reason to believe that the degree of bias is different in the most successful coalitions from the rest of the coalitions.

## 5.4 Future Research/Recommendations

*Number of Activities Implemented*

**Table 6 (page 33)** shows that the number of activities implemented does not define success. There is a large range of the number of activities implemented in each high achieving DFC therefore frequency of activity or dosage may have more of an impact in successful communities. This is an area where improvements can be made in

data collection and survey design. There is not currently a question that asks how often each program is implemented in the community or how many times each participant attends one of the activities. This may have an impact on the outcome results and may be a good place for a future study.

*Low Agreement in Evaluation Activity*

An interesting and worrisome finding in this study is that only 50% of the high achieving coalitions evaluate, conducting research on, or monitor the coalition. However, the results of this study are due to the monitoring and evaluation of the coalition. It is unclear why only 50% would report this activity when the survey they are filling out is the evaluation of the coalition. This begs the question as to the accuracy of the survey responses. The respondent could have answered this question incorrectly, or misread the question due to respondent burden.

*Link Formation and Maintenance with Outcome Results*

In order to further test the CCAT, it would be interesting to see if the formation and maintenance results have a correlation with the outcome results of this survey. This would show the coalition dynamics that correlate with high achieving DFCs. This analysis was beyond the scope of this paper, but would be an interesting study for future research.

*Experimental Research Design*

In order to provide a causal relationship between the 6 universal agreement activities, an experimental program evaluation should be employed. In this evaluation, the intervention will be one of the six universal agreement activities. A sample of the coalitions will be assigned the intervention and a comparison group will be assigned a different activity at the start of the funding cycle. After the five years of the grant cycle

outcomes between the two groups will be compared. This will determine if the change in student's use and perception can be attributed to the intervention. It is imperative that these activities be evaluated using an experimental design to determine causality before they are implemented across the country.

*Mixed Methods Approach*

A mixed methods approach would be a good way to evaluate the many changes the DFCs are making to their community. Although there are some open-ended questions in the survey, it would be a good idea to do key informant interviews to gain a stronger understanding of coalition development and implementation of activities. This mixed-methods approach will strengthen the evaluation by providing strong qualitative data to support to quantitative data already collected.

*Broadening the Scope of the Evaluation*

The Drug-Free Communities Support Program is unique because it targets multiple layers of youth development. There are twelve sectors of society that are required to participate in the coalition, but outcome data is only collected from schools. In order to broaden the scope of the evaluation and gain a better understanding of the changes being made to society, multiple sources should collect and analyze data. For example, law enforcement should be collecting and sharing data on DUI enforcement and crashes. Survey data should be collected on parents and their perceptions of teenage drinking and drug use in their community. Furthermore, health care professionals should screen youth for alcohol and drug use and report their findings. There are many ways to broaden the scope of the evaluation to better understand the community, school, family, and individual ad peer level changes that are being made in each community (Bronfenbrenner, 1979).

*Information Sharing*

It is imperative for the DFCs to share best practices with other grantees in the program and other coalitions that have formed to combat youth substance use. However, just sharing what activities were implemented is not enough. There are many nuances to program implementation that can only be described by first-hand experience. Coalition formation and maintenance has a profound effect on a coalition's ability to employ a strategy appropriately. Therefore, one idea is to have a few of these 12 "high achieving" coalitions speak at CADCA's National Leadership Forum to provide insight into how their coalition works together and how they implemented strategies. Decision-making, leadership, and other components for formation and maintenance should be discussed in detail so new coalitions or coalitions that are struggling can learn how to have successful results.

Another suggestion to promote information sharing between program administrators and each DFC is to provide a report card to each community so that each community knows where they stand compared to other communities in their year. This card can show them the national average of past-30 day use and perception of risk and show where they are on the spectrum. This is important so communities know if their programs are working or if they need to re-evaluate their program implementation.

Figure 1:

**Community Coalition Action Theory**

(Butterfoss F. D., 2002)

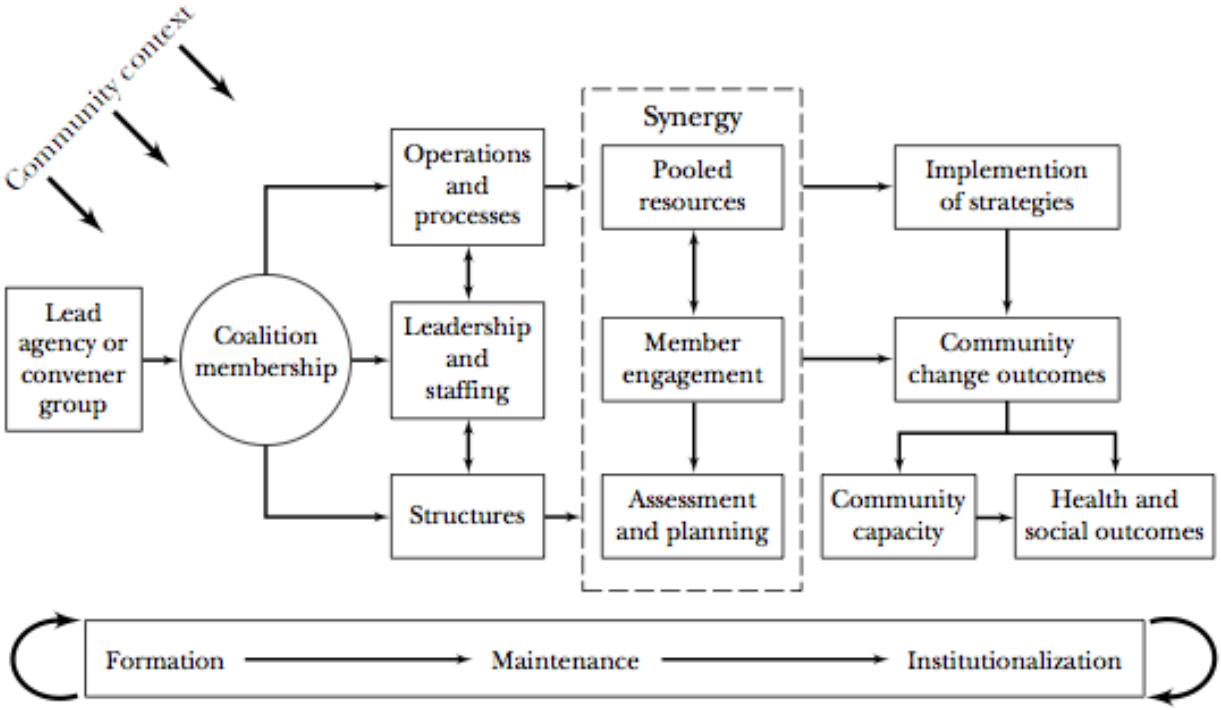
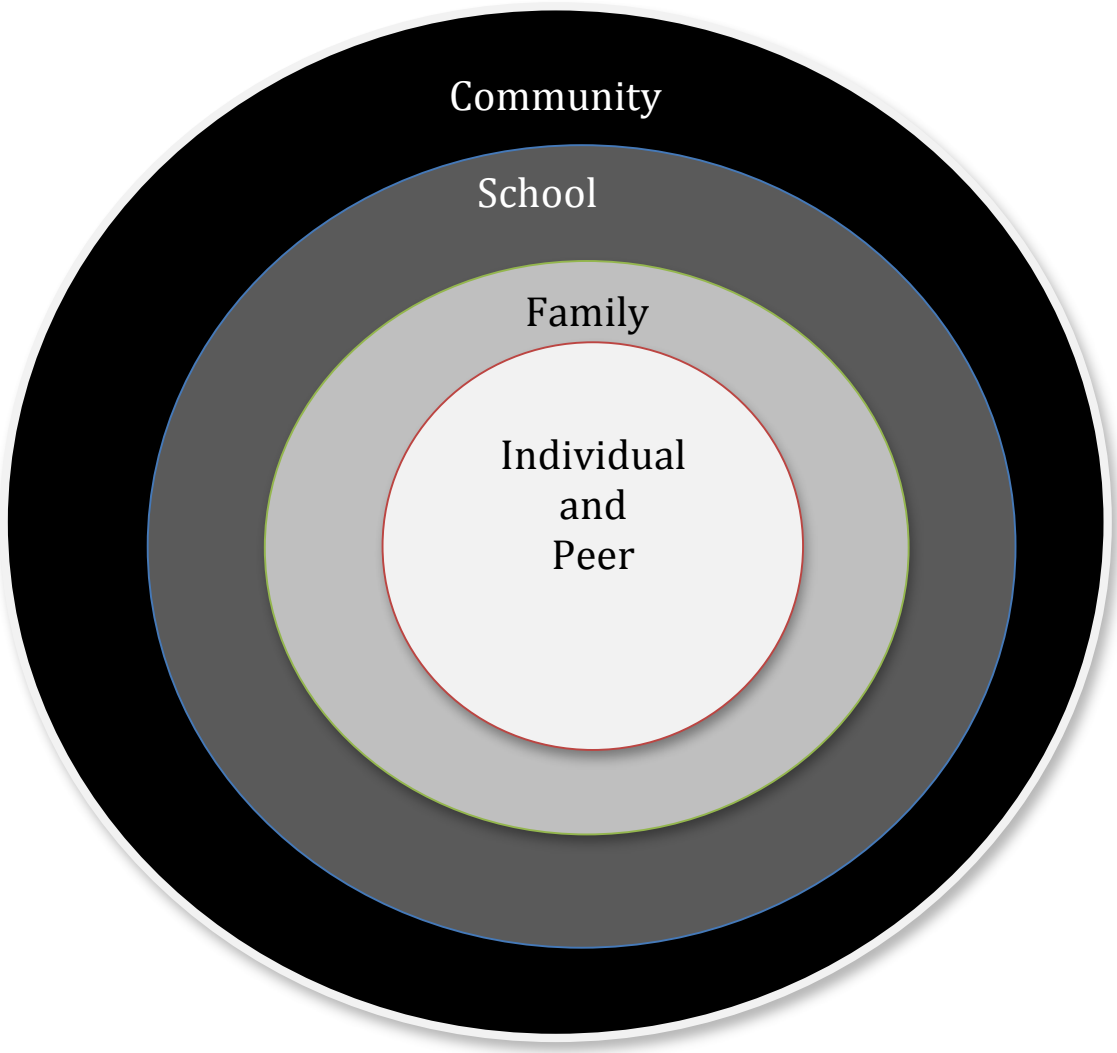


Figure 2:

**Social Ecological Model**

Adapted from Bronfenbrenner's Social Ecological Model (Bronfenbrenner, 1979).



# Appendix 1:

COMET: Progress Report Data

# Appendix 2

CCT Data Collection Plan

# Appendix 3

Sample Core Measures Survey

# Appendix 4

IRB Letter Determination: Not HSR

# References:


105th Congress. (1997). *H.R.956 -- Drug-Free Communities Act of 1997.* Washington, D.C.: The Library of Conress.

109th Congress. (2006). *OFFICE OF NATIONAL DRUG CONTROL POLICY REAUTHORIZATION ACT OF 2006* . Public Law 109-469.

Arria, A. M. (2008). Underage drinking and alcohol dependence among college s tudents: an update from the College Life Study. *Compass* , 1-2.

Blackwell, A. G. (2000). Community-building: from local wisdom to public policy. *Public Health Rep. , 225* (2-3), 161-166.

Brager, G. A. (1987). Community organizing. New York: Columbia University Press.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Brownson, R. C. (2002). Effects of Smoking Restrictions in the Workplace. *An Annual Review of Public Health , 23*, 333-348.

Butterfoss, F. D. (1993). Community coalitions for prevention and health promotion . *Health Education Research , 8* (3), 315-330.

Butterfoss, F. D. (2004). Evaluating community partnerships and coalitions with practitioners in mind . *Health Promotion Practice , 5* (2), 108-114.

Butterfoss, F. D. (2002). Toward A Comprehensive Understanding of Community Coaltions . In R. J. DiClemente, *Emerging Theories in Health Promotion Practice and Research.* San Francisco, CA: Jossey-Bass.

Cashman, S. B. (2008). The power and the promise: working with communities to analyze data, interpret findings, and get to outcomes. *American Journal of Public Health , 98* (8), 1407-1417.

Center for Prevention Research. (2006). *Evidence-Based Practices for Effective Community Coalitions.* Champaign, IL: Prevention Research and Development, Institute of Government and Public Affairs, University of Illinois.

Centers for Disease Control and Prevention. (1992). Patch: Its Origin, Basic Concepts, and Links to Contemporary Public Health Policy. *Jounral of Health Education , 23* (3), 135-139.

Centers for Disease Control and Prevention. (2013). Youth Risk and Behavior Surveillance--United States, 2013. *63* (4).

Checkoway, B. (1989). Community participation for health promotion. In *Prescription for public policy* (Vol. 6).

Clark, N. M. (2010). Policy and System Change and Community Coalitions: Outcomes From Allies Against Asthma. *American Journal of Public Health , 100* (5), 904-912.

Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. (2004). Reducing Underage Drinking: A Collective Responsibility.

Community Anti-Drug Coalitions of America. (2009). *CADCA*. Retrieved 10 12, 2014, from Drug Free Communities (DFC) Program: http://www.cadca.org/policyadvocacy/priorities/drug-free-communities-dfc-program

Community Anti-Drug Coalitions of America. (2014). *Defining the Seven Strategies for Community Change*. Retrieved from CADCA: Building Drug-Free Communities: http://www.cadca.org/files/SevenStrategies4CommunityChange.pdf

Compton, W. (2014, June). Drug Abuse/Addiction Prevention: Good for Educational Outcomes? Washington, D.C.: Office of National Drug Control Policy.

DFC National Evaluation Team. (2012). *Drug-Free Communities Support Program National Evaluation: Understanding Core Measures and the Core Measures Survey Review Process.* ICF International. Fairfax, VA: ICF Intertaional.

Feighery, E. &. (1990). Building and maintaining effective coalitions. Palo Alto , CA: Health Promotion Resource Center, Stanford Center for Research in Disease Prevention.

Fisher, E. A. (2004). Cigarette Smoking. In J. B. Raczynski, *Health Behavior Handbook* (Vol. 2). Washington, D.C.: American Psychological Association.

Flewelling, R. L. (2005). Implementing Research-Based Substance Abust Prevention in Communities: Effects of a Coaltion-Based Prevention Initative in Vermont. *Journal of Community Psychology , 33* (3), 333-353.

Glanz, K. R. (2008). Mobilizing Organizations for Health Promotion: Theories of Organizational Change. In K. R. Glanz, *Health Behavior and Health Education: Theory Research and Practice* (Vol. 4, pp. 347-350). San Francisco, CA: John Wiley & Sons.

Gloppen, K. M. (2012). Sustainability of the Communities That Care Prevention System by Coalitions Participating in the Community Youth Development Study . *Journal of Adolescent Health , 51*, 259-264.

Hallfors, D. H. (2002). Fighting back against substance abuse: Are community coalitions winning? . *American Journal of Preventive Medicine , 23* (4), 237-245.

Hawkins, D. C. (1992). *Communities That Care: Action for Drug Abuse Preventio.* San Francisco, CA: Jossey-Bass.

Hingston, R. W. (2014). New research findings since the 2007 Surgeon General's Call to Action to Prevent and Reduce Underage Drinking: a review. *J Stud Alcohol Drugs , 75*, 158-169.

Hingston, R. W. (2011). Underage drinking and alcohol dependence among college students: an update from the College Life Study. *Arch Pediatr Adolesc Med , 160*, 739-746.

ICF International. (2013). *Drug-Free Communities Support Program: 2012 National Evaluation Report.*

Israel, B. A. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational and community control. *Health Education Quarterly , 21*, 149-170.

Kania, J. K. (2011, Winter). Collective Impact. *Stanford Social Innovation Review*.

Kegler, M. C. (2011). An Initial Attempt at Operationalizing and Testing the Community Coalition Action Theory. *Health Behavior Theory , 38*, 261-270.

Kim, e. a. (2012). New research findings since the 2007 Surgeon General's Call to Action to Prevent and Reduce Underage Drinking: a review. *Journal of Adolescent Health , 50*, 648-650.

Lasker, R. D. (2003). Creating partnership synergy: the critical role of community stakeholders. *Journal of Health and Human Services Administration , 26* (1), 119-139.

McLeroy, K. K. (1994). Editorial: Community coalitions for health promotion: Summary and further reflections. *Health Education Research , 9*, 1-11.

McLeroy.K., B. S. (1988). An ecological perspective on health promotion programs. . *Health Education Quarterly, 15*, 351-377.

McMillan, B. F. (1995). Empowerment praxis in community coalitions. *American Journal of Community Psychology, 23* (5), 699-727.

Milio.N. (1980). *Promoting Health Through Public Policy.* Philadelphia, PA: F.A.Davis, .

National Cancer Institute. (1988). *COMMIT Protocol Summary: Community Intervention Trialfor Smoking Cessa.* Bethesda, MD: National Cancer Institute.

Office of National Drug Control Policy. (2014). *Office of National Drug Control Policy*. Retrieved 10 7, 2014, from Drug Free Communities Support Program: http://www.whitehouse.gov/ondcp/drug-free-communities-support-program

Perkins, D. (1995). Speaking truth to power: Empowerment ideology as social intervention and policy. *American Journal of Community Psychology , 23*, 765-794.

Robert Wood Johnson Foundation. (2009). *Evaluation of Fighting Back.* Robert Wood Johnson Foundation.

Sanchez, V. S. (2014). Community health coalitions in context: associations between geographic context, member type and length of membership with coalition functions. *Health Education Research , 5*, 715-729.

Schull, T. M. (2014). The Impact of Media-Related Congnitions on Children's Substance Use Outceoms in teh Context of Parental and Peer Substance Use. *Jounal of Youth Adolescence, 43*, 717-728.

Stillman, F. E. (2003). Evaluation of the American Stop Smoking Intervetnion Study (ASSIST): A Report of Outcomes. *Journal of the National Cancer Institute , 95* (22), 1681-1691.

Stokos, D. (1992). Establishing and maintaining healthy environments: toward a social ecology of health promotion. *American Psychologist , 47* (1), 6-22.

Task Force on Community Preventative Services. (2005). *The Guide to Community Preventative Services: What Words to Promote Health.* New York: Oxford University Press.

U.S. Department of Health and Human Services. (2007). *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* Rockville, MD: U.S. Department of Health and Human Services.

U.S. Department of Health and Human Services. (2000). *Treating Tobacco Use and Dependence.* Washington, D.C.: U.S. Department of Health and Human Services.

Watson-Thomspon, J. W. (2013). Enhancing the Capacity of Substance Abuse Prevention Coalitions Through Training and Technical Assistance . *Journal of Prevention & Intervention in the Community , 41*, 176-187.

Zakocs, R. C. (2006). What Explains Community Coalition Effectiveness? *American Journal of Preventive Medecine , 30* (4), 351-361.