

ABSTRACT

Title of Dissertation: AN EXAMINATION OF THE RE-INVENTION
PROCESS OF A HEALTH PROMOTION
PROGRAM: THE CHANGES AND EVOLUTION
OF “FOCUS ON KIDS” HIV PREVENTION
PROGRAM.

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Behavioral prevention programs remain one of our most powerful tools in slowing the human immunodeficiency virus (HIV) epidemic. However, questions persist on balancing fidelity of these programs and adapting them to a different target population or setting. The current study explored the extent to which “Focus on Kids,” an HIV prevention program with efficacious results from a carefully conducted study, was re-invented when adopted by other agencies and implemented in new settings. This study investigated the quality of re-invention by using a proxy variable of adherence to the core components of the curriculum thought to be responsible for the positive behavior change.

The use of a snowball sampling technique identified 34 service providers who had utilized the curriculum. After conducting a telephone survey with the participants, an ex post facto design was used to determine the relationship between reasons for

re-invention and other variables thought to be associated with re-invention quality. Results indicated that considerable re-invention occurred. Organizations frequently changed and deleted activities and over half of respondents added new activities. The research allowed the construction of a model of re-invention with factors that were both positively and negatively associated with quality re-invention. Decreasing re-invention quality was associated with citing certain reasons for re-invention: time constraints or the host agency required change. Factors associated with quality implementation included an adopter organization being a national non-governmental organization, having a researcher on the team, or citing expanding to new topics as a reason for re-invention.

The results of this study demonstrate the need for curriculum developers to understand the real world environment in which HIV prevention curricula are used. Developers must facilitate practitioners' understanding of the theory and core components of the curriculum thought to be responsible for behavior change.

AN EXAMINATION OF THE RE-INVENTION PROCESS OF A HEALTH
PROMOTION PROGRAM: THE CHANGES AND EVOLUTION OF “FOCUS ON
KIDS” HIV PREVENTION PROGRAM.

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DEDICATION

To my parents, Joe and Gaye Galbraith, and all the wonderful youth I have had the pleasure to work with during my years at “Focus on Kids.”

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An Examination of the Re-invention Process of a Health Promotion Program: The Changes and Evolution of “Focus on Kids” HIV Prevention Program.

CHAPTER ONE: INTRODUCTION

“Implementing a program is like constructing a building. An architect draws upon general engineering principles (theory) to design a building that will serve the purposes for which it is designed. However, the specific building that results is strongly influenced by parameters of the building site, such as the lot size, the nature of the site’s geological features, the composition of the soil, the incline of the surface, the stability and the extremes of climate, zoning regulations, and the cost of labor and materials. The architect must combine architectural principles with site parameters to design a specific building for a specific purpose on a specific site. The blend of theory, purpose, and site generates a structure that accomplishes the goals while maximizing resources efficiently... This dynamic is mirrored in the rough-and-tumble world of the human services. Despite excellent plans and experience, ongoing redesign and adjustment may be necessary. This is when the causal model, articulating the program theory, is especially important. (Bauman, Stein & Ireys, 1991, p.634)

Although new treatments continue to offer hope for individuals infected with the Human Immunodeficiency Virus (HIV), researchers remain pessimistic about finding a cure or discovering a vaccine in the near future (Stine, 2000). Behavioral prevention programs remain our most powerful tool in curbing the HIV epidemic. Strong evidence exists that behavioral prevention interventions to reduce HIV risk behaviors work (Stanton, Li, et al., 1996; Collins, et al., 2002; Johnson, Carey, Marsh, Levin, Scott-Sheldon, 2003; Jemmott, Jemmott, & Fong, 1992; Main, et al., 1994; Kirby, Barth, Leland, & Fetro, 1991; St. Lawrence, et al., 1995). Programs that target individuals and are based on social cognitive theories have repeatedly proven to be efficacious. With the aid of behavioral prevention programs, HIV infection rates are declining in some

communities. However, the rate of HIV infections among young people continues to be alarming. Globally, half of all new infections (over 6,000 daily) occur in young people (United Nations Population Fund, 2003). Although HIV prevalence at the national level is not known at present, trend data on HIV/acquired immunodeficiency syndrome (AIDS) diagnoses are available in 30 states with confidential, name-based HIV reporting since 1998. Data from the beginning of the epidemic through 2002 report 13% of persons diagnosed with HIV/AIDS were 13-24 years-old at diagnosis and 37% of persons diagnosed with HIV/AIDS were 25-34 years-old at diagnosis (Centers for Disease Control and Prevention [CDC], 2002). There are several reasons to suspect the prevalence might be higher than the numbers suggest. First, sexually active teens under age 18 are far less likely than their adult counterparts aged 18 to 44 to have been tested for HIV (25% to 59% respectively) (Kaiser Family Foundation, 1999). Further, about 40% of HIV infected persons first find out they have HIV less than 1 year before AIDS diagnosis (CDC, 2003). Considering the long period during which an HIV infected person may have no symptoms, many persons who are newly diagnosed in the 25-34 year-old age group were infected under 25 years of age.

Why are such high rates of HIV infection continuing even with the success of behavioral prevention programs? The potential impact of successful HIV prevention programs is greatly reduced, in part, because they are not being widely disseminated nor are they institutionalized. The National Institutes of Health (NIH) Consensus Development Conference on Interventions to Prevent HIV Risk Behaviors (1997) states that a major challenge is to disseminate and implement efficacious interventions in community settings. DiClemente reinforces these sentiments and further refines the current research needs by stating:

Ultimately, prevention of HIV infections not only depends on the development and evaluation of innovative behavior change approaches but on how effectively these interventions can be translated [italics added] and integrated into self-sustaining components of clinic practice, school curricula, or community programs, particularly in those countries and populations most adversely impacted by the HIV epidemic. Thus, future research efforts should be directed at identifying mechanisms for timely translation of effective HIV interventions into sustainable community-, clinic-, or school-based programs (DiClemente, 2000 p.317).

DiClemente's discussion of translating programs demonstrates the understanding of a need for directed re-invention of effective programs to be more suitable for different target audiences or settings. DiClemente's further emphasis on sustainable programs has been noted by federal and state funding agencies and non-profit philanthropic foundations, which increasingly require prospective recipients of grants to demonstrate plans for institutionalizing programs to ensure that they remain viable and long-term (Goodman, McLeroy, Steckler, Hoyle, 1993).

Although experts agree that dissemination of successful programs is important, concern is increasingly voiced that no mechanism exists to ensure that the application of effective programs' diverse reproductions will be successful. Experts advise that new program settings may require "careful training of personnel, close monitoring of the fidelity of procedures, and ongoing monitoring of effectiveness" (NIH Consensus Development Conference Panel, 1997, p.87). Questions also continue on how to balance the need to maintain fidelity of successful programs to ensure continued success against the need to adapt the program to ensure a fit with a different target population (Center for Substance Abuse Prevention [CSAP], 2001). Researchers warn that if effectiveness seems to be diminishing, then the program must be modified to ensure that it remains effective for the new target audience and setting. Presently, limited

guidelines are in place to facilitate dissemination and modification of effective programs to ensure that they remain effective (NIH, 1997).

The importance of evaluating behavior change interventions has long been understood and there exists some consensus of the superiority of certain methodologies for evaluation, such as the employment of a randomized, controlled, longitudinal trial. Researchers are also beginning to define elements that contribute to successful program development (Kirby, 2001). Kim and colleagues (1997) described four intervention design issues that impacted efficacy of intervention: (a) theoretic framework, (b) incorporation of community and/or cultural aspects of target populations, (c) training in coping skills, and (d) duration of the intervention. However, there currently exists no gold standard for the appropriate means for implementation of a program under conditions different from those present in the original research evaluation. There is also limited information of the process of re-invention and subsequent influence it has on the efficacy of the program. Rogers (1995) defines re-invention as "the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation" (p. 17). Re-invention has been viewed both positively and negatively. More research is required to determine the circumstances under which re-invention improves program quality and diminishes program quality. Moreover, research is needed to determine that an intervention showing efficacy in a clinical trial is as effective when implemented under less stringent conditions existing in the community setting (Jemmott & Jemmott, 2000). Finally, a greater understanding is needed on how the re-invention/fidelity balance effects institutionalization of a proven efficacious program.

The Centers for Disease Control and Prevention's Division of Adolescent and School Health (CDC/DASH) recognizes the importance of successfully evaluating

behavior change prevention programs and applying these research findings to prevent disease and injuries. DASH's former "Programs that Work" project identified curricula with credible evidence of reducing health risk behaviors among youth and provided support (including training and curricula) to ensure the diffusion of the program. "Focus on Kids" was one of eight such programs. It is an HIV prevention program that was developed with funding from the National Institute of Mental Health (NIMH) and the National Institute of Child Health Development (NICHD) beginning in the 1990s. "Focus on Kids" was developed, implemented, and evaluated in Baltimore, Maryland, targeting urban, low-income African-American adolescents in their early to mid-teens. Since 1998, when "Focus on Kids" was disseminated as one of the former "Programs that Work" by CDC/DASH, its dissemination spanned nationally and internationally. However, prior to this current study, no research determined the changes that had occurred when "Focus on Kids" was used for other target audiences and settings. This lack of research was a concern, since "Focus on Kids" was developed with a deliberate emphasis on cultural appropriateness achieved through a prolonged ethnographic phase, and further enhanced with a quantitative assessment of some of the key elements of qualitative findings.

The current study further advances the breadth of research at the department of Pediatrics, University of Maryland Baltimore, School of Medicine. In the early 1990s a team of its researchers developed and evaluated the "Focus on Kids" HIV prevention program. Since the team adapted and evaluated the program for numerous new settings and target audiences. The program was also disseminated nationally as a "Program that Works." The current research aids in a better understanding of the re-invention of the program as it was diffused.

Statement of the Problem

There were compelling reasons for an exploratory analysis of the re-invention process during dissemination of a proven effective HIV prevention program. There is a moderate body of literature on diffusion of health promotion innovation and a modest body of literature that specifically focuses on the diffusion of behavioral prevention programs. However, limited research exists which investigates the process of "re-invention" that occurs when programs are implemented in different settings or when programs are aimed at varying target populations. Researchers recognized the importance of studying the re-invention process in the early 1980s (Rogers, 1995). However, the most current literature on re-invention does not differ significantly from what was written in the 1980s. The complexities of studying the re-invention process have caused many investigators to neglect the field. It is certain, however, that re-invention takes place. Therefore it is essential to better understand the re-invention process and its effects on institutionalization for the reasons outlined below.

First, prevention of HIV infection depends on the effective translation of proven programs to populations at risk. Second, policy is being instituted that federal, state, local and foundation monies be used for programs that have been proven effective with scientific studies (Gottfredson, Gottfredson, Skroban, 1998). However, to date, there is limited research available to suggest that effective programs work under different environments. Finally, although the importance of institutionalization of effective

programs is recognized, minimal research explores the association between institutionalization and re-invention.

Purpose of the Study

The purpose of the current study was two-fold, the first was to examine the process of re-invention that occurred during the dissemination of “Focus on Kids,” one of the CDC’s former “Programs that Work.” A qualitative investigation was conducted to explore what occurs during the re-invention process. The researcher investigated the frequency of different types of adaptations (deletions, additions, and changes to the current activities); the demographic characteristics of the new target audiences; the type and number of facilitators; the structure of the sessions and duration of the program; the reasons cited for re-invention (cultural appropriateness, to narrow in on a problem or expand, time constraints, skill and efforts of individual implementers, modernization, simplification, or implementing the organization’s philosophy); sources of guidance on re-inventing the program; and the extent to which key design issues, specifically theoretical underpinnings and skills building, were affected during the re-invention process. The second purpose of this study was to advance the theory of re-invention by understanding how program quality, measured by a proxy variable of adherence to core elements, is predicted by various key variables of program re-invention (see Figure I-1 below). The study explores whether there is an association between program quality

and reasons for re-invention, sponsoring organization, type of re-invention, relation to developers of “Focus on Kids,” and level of institutionalization.

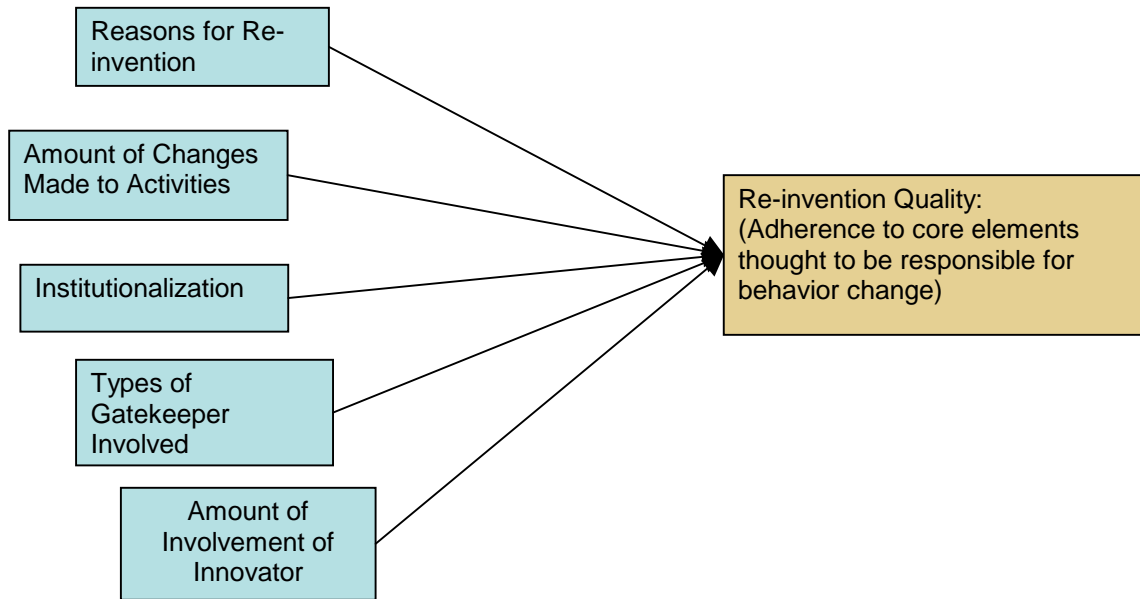


Figure I- 1: Re-invention Quality Model

Definitions of Terms

Re-invention: “the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation.” (Rogers, 1995, p.17) Re-invention is often called adaptation. For the purpose of this study re-invention will include deletions (activities that were not completed at all), changes (activities that were modified from the outlined procedures in the curriculum) and additions (new activities that were added) to the curriculum.

Program

Fidelity: “the degree of fit between the developer-defined components of a ...prevention program, and its actual implementation in a given organizational or community setting.” (CSAP, 2001, p.4)

Core

Components: “Those elements of a program that analysis shows are most likely to account for its positive outcomes.” (CSAP, 2001, p.5) For the purpose of this study core components are defined as those activities that

operationalize the theoretical underpinnings of the curriculum or the activities that operationalize the National Health Education Standards.

Discretionary

Components: Those components that can be deleted without major impact on the program's effectiveness.

Re-invention

Quality: Re-invented programs' adherence to core components.

Gate Keeper: The organization that sponsored implementation of "Focus on Kids."

Site

Coordinator: Individual who aided adaptation process at their site. Site coordinators further played a role ensuring these activities were taught at their site.

Site: Project area where all those conducting the curriculum are run by the same organization and have been instructed to conduct the same version of the curriculum.

Innovators: The group of researchers who developed and evaluated the original "Focus on Kids." The team consists of Bonita Stanton, MD, Linda Kaljee, PhD, Xiaoming Li, PhD, Maureen Black, PhD, Izabel Ricardo, PhD and Jennifer Galbraith, MA.

Involvement

of Innovator: The extent to which one of the innovators was involved in the re-invention process. Innovator may have had no contact, trained a master trainer who trained adopters, an innovator may have trained adopters, one or more of innovators could be consultants on project, one or more of innovators can be part of team, or one of innovators could be the primary investigator of project.

Institutionalization:

The degree to which a program is stabilized, accepted, sustained, or durable within an organization (Goodman et al., 1993).

Changes:

The activity was not conducted with the steps outlined in the curriculum, the activity was moved to another session, the content was changed. When the storyline of a vignette was changed, just changing names was not considered a change. Activities that were reported as partially completed were considered a change. Substitution of materials (e.g., a black board versus newsprint) was not considered a curriculum change.

Research Questions:

1. What re-invention occurred in the diffusion process of the “Focus on Kids” program? How often did change occur? What was the rationale for change?
2. How are the reasons attributed for re-invention (simplification, lack of understanding, agency requiring change, time constraints, narrowing in on a problem, expanding to another problem, making more suitable, modernizing/updating, and increasing ownership) related to quality of re-invention (strong adherence to Protection Motivation Theory [PMT] and the National Health Education Standards [NHES] [vide infra])?

Hypothesis: Quality of re-invention is negatively correlated with re-invention due to (a) simplification, (b) lack of understanding of activity, (c) agency requiring change, and (d) time constraints. Quality of re-invention is positively correlated with re-invention due to (a) narrowing in on a problem, (b) expanding to another problem, (c) making more suitable for target audience, (d) to modernizing/updating, (e) increasing ownership.

3. How is amount of change in activities related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Changes are negatively associated with re-invention quality.

4. How is level of institutionalization related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality is negatively associated with level of institutionalization.

Although the hypothesis might seem counter-intuitive at first (one would assume higher-quality programs would be more likely to be institutionalized), the literature shows institutionalization is more likely to occur when educational innovations are changed (Berman & Pauley, 1975). Re-invented programs have been found to have an increased chance to be institutionalized (Rogers, 1995; Arthur & Blitz, 2000; Glaser & Backer, 1977). This higher re-invention may be due to the more flexibility an adopter has to change the program to meet their organizations needs, the greater the likelihood the program will be institutionalized (Berman & McLaughlin, 1978). A CSAP (2001) report suggests that high fidelity may be obtained at the beginning of the implementation process proceeded with successive stages of re-invention over time due to changes in the environment, scientific knowledge or simply time. Since amount of change is hypothesized to be negatively associated with quality re-invention, it is further hypothesized that re-invention quality is negatively associated with level of institutionalization.

5. How is type of gate keeper related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality is negatively associated with state education agencies, local education agencies, and schools.

6. How is level of innovators' involvement (innovator may have had no contact, trained a master trainer who trained adopters, an innovator may have trained adopters, one or more of innovators could be consultants on project, one or more of innovators can be part of team or one of innovators could be the primary investigator of project) related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality is positively associated with level of involvement by innovators.

The results of the above research questions will lead to a test for an overall model of re-invention quality.

Significance of the Study

The current study explored the extent to which “Focus on Kids,” an HIV prevention program which showed efficacious results from a carefully conducted study, was re-invented, when adopted by others and implemented in new settings. It also analyzed the quality of re-invention by using proxy variables of adherence to the core components of the curriculum thought to be responsible for the positive behavior

change. Quality program re-invention was considered strong if there was high adherence to the social cognitive theory on which the program was based and strong adherence to the National Health Education Standards (vide infra). A better understanding of re-invention and predictors of quality of the intervention is crucial to the field of health education for several reasons. As noted earlier, almost no research on the re-invention of successful prevention programs exists. An exploratory qualitative investigation is needed to begin defining key issues of re-invention to serve as a basis for later research in understanding how re-invention is related to efficacy and institutionalization. Kelly et al. (2000) summarize the importance of studying re-invention by drawing an analogy to mechanical engineering:

In mechanical engineering, it is customary to test a prototype with a sample of consumers and to study carefully how they use the product, including uses that were not specifically intended. By determining variations in how consumers will use the product, it is possible to specify the limits within which the product will work and then to reengineer the prototype so that it will work well in the real world (as opposed to a product development laboratory). Similarly, it is important to study how behavioral HIV risk reduction interventions will be used by community providers of HIV prevention services so that interventions can be designed to remain effective under real world conditions. (p. 96)

What types of re-invention occur during dissemination? What are the reasons for re-invention? These questions have been identified repeatedly as an important need by researchers, public policy makers, and community members, yet to date, few researchers have tackled these difficult issues (Rogers, 2000; CSAP, 2001, NIH, 1997).

Further, the importance of a greater understanding of the diffusion process of effective programs is described by Gottfredson, Gottfredson and Skroban (1998):

This issue (of transferability of efficacious programs) is important because scientific studies demonstrating effectiveness are used to sway public opinion about the efficacy of prevention and to direct federal, state, local, and foundation money toward effective prevention programs and practices. The U.S. Department of Education for example, has recently revised its guidelines for allocating the \$500 million per year spent in the Safe and Drug-Free Schools and Communities Program so that local funds are spent to support programs for which scientific evidence of a reduction in drug use, violence or disruptive behavior among youth is available. To the extent that the research base for this and similar policies fails to generalize to more common prevention settings, the public will again be asked to admire the emperor's new clothes. (p. 316)

Finally, an analysis of "Focus on Kids," a program that has been disseminated both nationally and internationally, can make an important contribution to the theory of diffusion. Re-invention that occurs naturally during the diffusion process of effective programs is not understood. Re-invention has been cited both as a positive force in diffusion correlated with greater perceived effectiveness (Rogers, 1993; Brunk & Goepfinger, 1990) or as a negative or an "error" in a desirable, effective program (Rogers, 1993). These reasons all underscore a greater understanding of the re-invention process that occurs during the diffusion process and what predicts quality re-invention. By studying the re-invention that occurred in "Focus on Kids," an important first step in understanding the mechanism and implications of re-invention has been taken.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

The following literature review will examine the theory of diffusion of innovations, looking specifically at the re-invention that occurs during the diffusion process as it approaches institutionalization. The components of diffusion theory and its relevance for health education will be explored with specific attention given to re-invention in health education. Examples of re-invention and methods for measuring re-invention will be described. The original innovation “Focus on Kids” and some of the replications of the innovation will be described. Finally, there will be a discussion of the survey administration for the research.

Diffusion of Effective HIV Prevention Programs

Increasingly, scientists working in the HIV prevention field are calling for the “widespread use of effective, science-based interventions to motivate and sustain behavior change” (Kraft, et al., 2000, p.7). Strong evidence supports the efficacy of behavioral prevention interventions to reduce HIV risk behaviors (Stanton, Li, et al., 1996; Jemmott and Jemmott, 2000). Programs targeting individuals versus populations that are based on social cognitive theories have repeatedly been shown to be efficacious

(Stanton, Li, et al., 1996; Jemmott and Jemmott, 2000). The NIH Consensus Development Conference on Interventions to Prevent HIV Risk Behaviors states that a "major challenge now is to disseminate and implement efficacious interventions in public health settings" (2000, p. 87). However, limited guidelines are in place to facilitate effective modification of efficacious programs.

Theory to Guide Research

A theory is a set of interrelated propositions containing concepts that describe, explain, predict or control behavior (Kerlinger, 1986). Theory and theory-based research can systematically explore the population's understanding of the problem, comprehend the processes used to invoke behavior change, develop screening and prevention programs, determine the effectiveness of these programs, understand the process of dissemination, and, most importantly, give rise to opportunities for generalizations across problems or cultures. Theory enables researchers to build upon previous research efforts without having to formulate new ways of organizing and understanding the complexities of reality.

However, the author also notes that one must also be cautious using theory. It is important not to concentrate on one theory but instead be open and knowledgeable of many theories. The theory used depends upon the research being conducted, the population being addressed, and the targeted outcome. Also remaining open with theory, so the focus is not limited to narrow theoretical constructs, is important. This

narrow focus could result in an omission of an important construct of the culture which is not included in the theory. Therefore, researchers should remain flexible and change or expand theories, when needed. Diffusion theory was a natural choice to guide the exploration of adaptation that occurs during the dissemination of a scientific-based HIV prevention program. The theory looks at the diffusion of innovations and can be beneficial in organizing research questions to advance our understanding of the dissemination process.

Diffusion Theory

Diffusion has been defined as "the process by which an innovation is communicated through certain channels over time among members of a social system (Rogers, 1995, p.5). An innovation is an idea, program or practice that is perceived as new (Rogers, 1983). Diffusion Theory began in the early 1900s in the field of Anthropology but was soon found in many other disciplines (Rogers, 1995). Everett M. Rogers is one of the more prominent writers on diffusion, with several collections of diffusion research (1962, 1971, 1983, 1995 and 2000). He has detailed the growth of this research field and provided extensive literature reviews and case studies of diffusion research. This literature review will focus on diffusion research in the public health and health education fields and the re-invention process during diffusion.

Elements of Diffusion Theory

There are four major elements in diffusion theory: (a) innovation, (b) communication channels, (c) time, and (d) social system. Figure II-1 below portrays the constructs of diffusion theory as described by Rogers (1995).

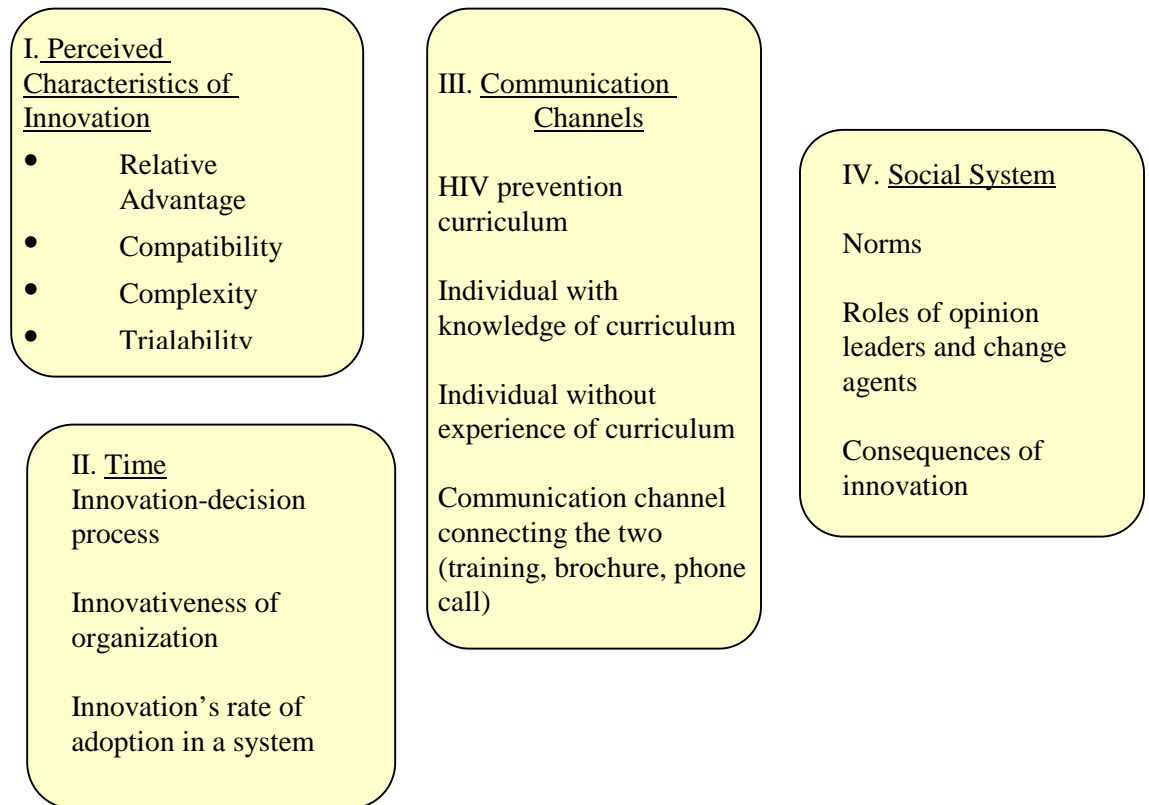


Figure II- 1: Diffusion Theory

The Innovation

The Innovation is “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (Rogers, 1995, p.11). Several key characteristics of innovations, as perceived by individuals (or potential adopters), help to explain their rate of adoption. The characteristics of innovations are (a) relative advantages, (b) compatibility, (c) complexity, (d) trialability, and (e) observability.

Relative advantage is the degree to which the innovation is thought to be superior to that which it is replacing. This particular characteristic of innovations is often measured in terms of economics, social prestige, convenience, efficacy, and satisfaction. It is not whether or not the innovation actually has objective advantages but rather whether the potential adopter perceives advantages.

Compatibility is the perception of the innovation being in agreement with existing values and norms of the social structure. Innovations that are contrary to current norms and values systems will take longer to be adopted since value systems, which change at a much slower pace, must change first. An example of this would be the adoption of HIV prevention programs that emphasized condoms in conservative communities. One would expect a slow rate of adoption of such innovations despite apparent efficacy due to its divergence from the existing value system.

The perceived difficulty of the innovation is termed ‘complexity.’ The more complex an innovation is perceived, the longer it will take to be adopted. New ideas that are easily understood tend to be adopted with greater speed.

Trialability is the degree to which an innovation can be tried on a limited basis. If it is possible to experiment with the innovation without having to give up what the innovation is replacing, it is more likely the innovation will be adopted.

The degree to which the innovation is visible to others is ‘observability.’ The easier it is for individuals to see the results of an innovation, the more likely they are to adopt the innovation. “Focus on Kids” would be labeled as a preventive innovation, an innovation that communities adopt to lower the probability that some future unwanted event will occur (adolescents becoming infected with HIV). Since the unwanted future event might not have happened anyway, the benefits of adoption are not obvious. Further, since prevention (by definition) precludes the undesirable outcome, the prevention cannot be observed or counted. Prevention innovations such as HIV prevention generally have a low degree of observability and a slower rate of adoption (Rogers, 1995).

The innovations most quickly adopted are those that are perceived by individuals as having greater relative advantage, compatibility, trialability, observability, and less complexity. Other characteristics including flexibility, reversibility, cost-efficiency, effectiveness, reliability, applicability, and radicalness have been utilized by researchers (Kolbe and Iverson, 1981; Dearing and Meyer, 1994). However, Rogers (1995) has

argued for limiting attributes to the core five characteristics (relative advantage, compatibility, complexity, trialability, and observability) because they are distinct, supported by the literature, and allow generality across studies of perceived attributes.

Communication Channels

Rogers (1995) describes the communication process of diffusion of an innovation consisting of the following elements “1) an innovation, 2) an individual or other unit of adoption that has knowledge of the innovation or experience with using it, 3) another individual or other unit that does not yet have experience with the innovation, and 4) a communication channel connecting the two units” (p.18). Communication channels include mass media, which is the most rapid and efficient means to inform potential adopters about new innovations, and interpersonal channels which involve a face-to-face exchange between two or more individuals. Researchers have found that most individuals do not evaluate innovations on the basis of scientific studies of effectiveness, but rather on subjective evaluations of innovations from other individuals like themselves who have adopted the innovation and have experience (Rogers, 1995). This importance of peers suggests that characteristics of modeling and imitation are the core elements of the diffusion process.

Time

Rogers (1995) breaks the time element of the diffusion process into three pieces: “1)...the innovation-decision process by which an individual passes from first knowledge of an innovation through its adoption or rejection, 2) the innovativeness of an individual or other unit of adoption...and, 3) an innovation’s rate of adoption in a system” (pg. 20). All pieces of the time element contribute to whether or not the innovation is adopted.

The Innovation Decision Process has five fundamental stages: (a) knowledge, (b) persuasion, (c) decision, (d) implementation, and (e) confirmation. Knowledge is when a decision-making unit (e.g., an individual, community, or agency) learns of the innovation’s existence and gains some understanding of how it works. Persuasion occurs when the decision-making unit forms either a positive or negative opinion. Decision is the process an individual or organization undergoes in determining come up to a final decision to adopt or reject the innovation. Implementation is when the decision-making unit puts the innovation to use--this is generally where re-invention occurs. Confirmation is when the decision-making unit seeks support of the decision for adoption that is already completed. Confirmation can be the beginning of institutionalization. However, if there is no positive support, the decision can be reversed at this time (Rogers, 1995).

Rate of adoption in the system is also dependent on the characteristics of individuals who make up the system. Adopters have been classified by the rate of adoption in the following categories: innovators, early adopters, early majority, late

majority, and laggards. Innovators have almost an obsession with new ideas that leads them away from their peers. Innovators have substantial resources allowing them to take potential risks from unprofitable innovations. They tend to understand technical knowledge and often have the ability to cope with a high degree of uncertainty.

Rogers (1995) describes characteristics of various types of adopters. Early adopters are more integrated into their social system. These individuals usually garner a large degree of respect from their peers and are often leaders in their community. They are often sought out by change agents as catalysts for the diffusion process. They often serve as local role models.

Early majority adopters are average members of the social system. They interact with their peers but are not usually leaders in the community. Individuals in the early majority often deliberate for some time before accepting an innovation (Rogers, 1995).

The late majority adopt new ideas just after the average individual in the social system. Adoption by this group often results from economic necessity and increasing pressure from their peers. Thus, this group is often described as being skeptical and cautious. The majority of the social system must endorse the innovation before this group adopts the innovation (Rogers, 1995).

The final group, laggards, is composed of traditionalists. They usually possess no leadership ability. Often isolated in their social system, decisions from this group are mostly made by what has been done in the past. Their resistance to innovation is

rational to themselves. It is often the system rather than the individual that causes the individual to be a laggard or late adopter (Rogers, 1995).

Social System

Diffusion occurs within a social system. Roger's (1995) defines the social system as "a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal" (p.23). Individuals, informal groups, organizations, or subsystems comprise the units of a social system. The social system sets the boundaries within which the diffusion takes place. Norms, roles of opinion leaders, change agents, and the consequences of the innovation all involve a relationship with the social system (Rogers, 1995).

Diffusion Research in Public Health

The field of public health began using diffusion theory in the 1950s. Most early diffusion research in public health and medical sociology focused on studies of the dissemination of new drugs or medical ideas through physicians' networks or on knowledge, attitudes, and practices surveys for contraceptive methods in the developing world where the adopters are clients or patients (Rogers, 1995). During the 1980s health educators became aware of the potential of diffusion theory for behavioral prevention programs.

The early articles focused on the perceived attributes of the innovation and characteristics of individual adopters (Goldman, 1994; Green & McAlister, 1984; Howze & Redman, 1992). Developers were encouraged to use diffusion theory to respond to the perceived attributes of innovations to market or “position” their innovations more effectively (Clift & Freimuth, 1985).

Diffusion theory has also been used to aid health educators in the use of communication channels to encourage adoption of innovation. Green & McAlister (1984) found that early adopters were more likely to respond to mass media, whereas later adopters required more local or community based intermediaries. Diffusion theory also allowed a means to explain how community leaders served as change agents and communication channels (Clift & Freimuth, 1995).

The construct of the social system in diffusion theory allows health educators to explore innovations from an ecological or environmental perspective. This approach emphasizes a complex, multi-stage process that takes place at the community, organizational, and legislative level (Portnoy, Anderson, & Eriksen, 1989).

Many constructs of diffusion theory have been used to aid in the implementation of innovative behavior change programs in the school system. Advocates have used communication channels, such as teacher training via conferences, workshops, or video training to facilitate implementation of the programs (Smith, Steckler, McLeroy, Bennett, & Frye, 1991; McCormick, 1992; Basen-Engquist, et al., 1994). Others have used technical assistance from the innovation developers to aid in implementation

(Paulussen, Kok, Schallma, & Parcel, 1991). In the school system, gaining support from the social system in the form of leadership has also been found to be crucial in program implementation (McCormick, Steckler, & McLeroy, 1994; Smith, Steckler, McKeroy, Bennett, & Frye, 1991). Agencies such as the National Diffusion Network recognized the importance of diffusion. They provided dissemination funds, raised awareness of successful curriculums, provided training, technical assistance, and materials to schools to facilitate diffusion (Anderson & Portnoy, 1989).

Critics argue that early diffusion research focused primarily on adoption and did not explore what happens after adoption, during implementation and maintenance (Basch, 1981; Basch, Eveland, & Portnoy, 1986; Gold, 1980). During the late 1980s and early 1990s, researchers in school health education began exploring long-term implementation and institutionalization of programs—a necessary step to gain sustainable behavior change in communities. This research began the debate of fidelity of programs as intended by curriculum designers versus adaptation due to what was seen as barriers to implementation among teachers and educational administrators (Atkinson, 1997).

Re-Invention

Although the history of diffusion dates back to the early 1900s, the field did not begin to explore the concept of re-invention until the 1970s (Rogers, 1995). Re-invention, defined as “the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation,” (Rogers, 1995 p.174) had been

ignored or considered a very infrequent occurrence. Re-invention, also called adaptation, has been defined as “deliberate or accidental modification of a program” (CSAP, 2001, p.4). It can include deletions or additions, modifications of existing components, changes in the manner or intensity of components, or cultural modifications required by local circumstances (CSAP, 2001). The process of adoption had been considered a passive act rather than adopters being active modifiers and making adaptations to the innovation. Once the concept of re-invention was identified, however, researchers discovered that significant re-invention occurred during adoption of innovations.

Re-invention usually occurs during the implementation stage of the innovation-decision process (See Figure II-2). Perhaps one of the reasons that the frequency of re-invention was not discovered previously is that researchers were measuring adoption at the decision-making stage instead of implementation (Rogers, 1995).

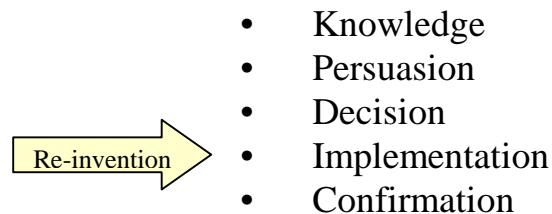


Figure II- 2: Innovation-Decision Process

Re-invention has been viewed positively and negatively throughout the course of its study (Rice & Rogers, 1980; Berman & Pauley, 1975; Wulf, 1987). Typically, researchers and developers have negatively viewed re-invention. Often considered a distortion of the original technology, many developers and researchers have tried to ensure that no re-invention takes place (Rogers, 1995). It is difficult for researchers to measure adoption when re-invention occurs. Adopters, however, generally perceive re-invention as a positive quality. Re-invention is even sometimes overemphasized with adopters pointing out with pride the minor changes they made to the innovation and seeing the innovation as much improved (Rice and Rogers, 1980).

Re-invention can be tremendously beneficial to adopters. Re-invention allows customization of the program to more appropriately fit the adopting communities' needs. A national survey of innovation in public schools found that when educational innovations were re-invented, institutionalization was more likely to occur (Berman and Pauley, 1975). Schools were more likely to continue the re-invented programs since they addressed the schools' needs and circumstances.

The Argument for Fidelity

The impetus for research on fidelity began with efforts to explain why so many evaluation results of previously effective program were not showing consistent results (CSAP, 2001). Service organizations that use proven effective programs, in hopes of achieving similar success, can do so with utmost confidence when they conduct the

intervention with a high degree of fidelity. This level of fidelity involves the same intensity, the same activities, content and procedure in an environment, and target audience that is similar to the original research trial (Kelly et al., 2000). Many federal agencies and private organizations, that promote prevention curricula as effective, advise that teachers should administer the curricula precisely as specified in curriculum guides to ensure positive results (Drug Strategies, 1999; CDC, 1994; National Institute of Drug Abuse [NIDA], 1997). Overall, the empirical literature has underscored the importance of maintaining a high degree of fidelity of curricula implementation. Most school-based prevention studies assessing fidelity have linked it to the achievement of program objectives (Botvin, Baker, Dusenburg, Tortu, & Botvin, 1990; Hansen, Graham, Wolkenstein, & Rohrbach, 1991; Hansen, 2001; Rohrbach, Graham, Hansen, 1993; Pentz, Trebox, Hansen, 1990).

The Argument for Re-invention

Re-invention can be used to expand to new prevention challenges or to hone in on a specific problem. Some argue that re-invention is inevitable and even desirable to meet the needs of different audiences or contexts. For example, re-invention can be used to make the innovation more relevant to a specific target audience and can aid in gaining community ownership of the program (Rogers, 1995; Berman & McLaughlin, 1976; & CSAP, 2001). Re-invented programs have been found to have an increased

chance to be institutionalized (Rogers, 1995; Arthur & Blitz, 2000; Glaser & Backer, 1977). Re-invention can assure the innovation complements the values and norms of the social system. “The ultimate goal is to maintain the basic integrity of a program model while matching the innovation to the unique features of the setting and the preferences/reactions of the relevant population” (Jason, Durkal, & Holton-Walker, 1984 p.313).

The Frequency of Re-Invention

Fifty-six percent of schools adopting educational innovations promoted by the National Diffusion Network implemented only selected aspects of the innovation (Emrick et al, 1977). Although much of the re-invention was relatively minor, about 20% of the schools made important changes to the innovations. Larsen and Agarwala-Rogers (1977) found that 53% of mental health agencies in California re-invented innovations that they adopted. A study of the adoption of a computer-based planning tool, promoted by a Federal agency to local governments, found that about half of the adopters had re-invented the system to some degree (Eveland et al., 1977). The RAND Corporation conducted a study of educational innovations and discovered that few adopted curricula were completed with fidelity (Berman & McLaughlin, 1976). Another study of “Here’s Looking at You II” prevention curriculum found that one in three school districts completed only half of the lessons in the curriculum. Tappe and colleagues (1995) found that 84% of teachers did not complete at least one module in

the Teenage Health Teaching Modules curriculum. Activities such as role-playing and discussions of communicating with family were most often dropped. Finally, Botvin et al. (2001) found that the mean number of program “points” conducted during curriculum delivery was as low as 48%, and this might have been even lower had the teachers not been aware they were under observation.

Factors Influencing Re-invention

Rogers outlines six reasons re-invention occurs (1995). In an effort to simplify a complex innovation, re-invention can occur. Re-invention can also occur due to a lack of knowledge about the innovation. This situation might result when agencies do not receive appropriate training and therefore do not implement the intervention as intended. Similarly, the abstract form or numerous applications possible of some innovations can lead to re-invention. This situation is possible when a behavior change innovation is composed of general skills building techniques and does not have specific knowledge about the risk behavior the intervention is targeting. In this case the intervention may be abstract enough that the skills building techniques can be modified and used to target another risk behavior. For example, an HIV prevention program could be adapted to target violence prevention by modifying the skills building techniques. Re-invention might also occur in an effort to focus in on a problem or expand to address other problems. An example of this situation might be when an HIV

prevention program is used to focus on sexually transmitted diseases (STD) in general or more specifically on teen pregnancy. Re-invention can also occur to increase ownership of the innovation. Increasing ownership might range from changing the name of the intervention program to changing many of the activities so that they reflect the target audience. Finally, re-invention might be caused by a change agent encouraging modification of an innovation.

Kelly et al. (2000) offer some more practical reasons for re-invention. Lack of available resources is a frequent cause for re-invention when innovations progress from research institutions to service providers. Service providers do not commonly have the same resources available for staff and incentives for participation. Moreover, service organizations often have a high turnover rate of staff.

Another reason for re-invention, cited by Kelly and colleagues, is to address a more heterogeneous target population. Researchers generally desire and are able to have participants meet requirements concerning age, demographics, and other characteristics. Service providers, however, tend to be more inclusive and must offer their services to a much wider audience. Service organizations usually have a long history with their target audience and have a good sense of their needs and thus, adapt the innovation to these needs with available resources.

In some cases, re-invention can occur because an adopter is ignorant about the innovation (Eveland et al., 1977; Larsen and Agarwala-Rogers, 1977). This generally happens when minimal contact exists between the adopter and the innovators or

previous adopters. An example is the re-invention of a geographically-based computer software system that occurred more often when there was only awareness created of the innovation versus when consultation was provided to the adopters at the implementation stage (Rogers, 1995). Therefore re-invention can occur when there has been inadequate learning or training in the innovation before adoption.

Von Hippel and Finkelstein (1978) found that the frequency of re-invention can be controlled by the innovation developer, who can affect the ease or difficulty of changing the innovation. For instance having interdependent components makes it difficult to adopt one piece without adopting the other elements. An innovation that is not highly interrelated is more likely to be broken apart and only some of the elements used (Koontz, 1976).

Guidelines for Balancing Fidelity and Adaptation

Although the above literature review cites many articles that discuss the re-invention/fidelity debate, sparse empirical research exist suggesting guidance for balancing fidelity and adaptation of programs. Precise methods for ensuring the right balance are uncertain. Even so, there are some guidelines in place that can be followed and can also facilitate the research on re-invention to further the knowledge base. Several researchers have offered guidelines for how to strike a balance during the re-invention process (Kelly et al., 2000; Solomon, 2002; CSAP, 2001).

Components of innovations can be divided into two categories: core elements or components (key characteristics are another term sometimes used) and discretionary or optional components. Core components most likely account for the desired behavior change. Discretionary components can be deleted or changed without having an impact on the desired outcome (CSAP, 2001). Identifying the core components of effective programs is repeatedly cited as a fundamental step in balancing fidelity and re-invention (CSAP, 2001; Solomon, 2002; Kelly et al., 2000). Kelly et al. suggest a three step process for identifying core elements of an intervention. The first is to look at the behavioral science theory. Kelly et al. state “These theories emphasize the critical role played by constructs such as information, attitudes, beliefs, intention to change, expectation about outcomes, and perceived self efficacy as determinants of behavior change that reduce risk” (p.90). The constructs of the theory are translated into activities that target each of the constructs. These constructs are thought to be directly responsible for risk-reduction and therefore the activities that operationalize these constructs should be considered core elements (Kelly et al, 2000).

Another method of assessing core elements is to gain extensive experience with the intervention and feedback from participants and experienced program staff about what activities were most effective (Kelly et al, 2000). Consultation with the program developers is a necessary step to this process (CSAP, 2001). A final method for assessing core elements of interventions, that have been under-utilized to date, is

through controlled experiments. Presently there is limited research in this area. Kelly et al. state

Definitions of what constitute the core elements of a given intervention must usually be viewed from a conceptual rather than empirical or literal perspective. Questions concerning adaptation and tailoring of research-based HIV prevention interventions can be better answered if research distinguishes essential from nonessential components of effective risk-reduction interventions, determines the exposure needed to produce positive outcomes, and examines the generalizability to populations different from those for whom an intervention was initially found to be effective. (2000 p.95)

Despite the dearth of controlled experiments, a few studies have assigned subjects to different versions of an intervention with respect to procedures, specific activities (Kalichman, Rompa, & Coley, 1996; O'Donnell, L., San Doval, Duran, O'Donnell, C.R., 1991), and duration (Peterson, et al., 1996; L. Jemmott, May 15, 2001, personal communication) in order to define core elements.

Assessing fidelity/adaptation concerns for the particular implementation site is another guideline suggested by CSAP (2001). This step involves determining what changes may be necessary given factors such as target audience, politics, funding, and the community environment. This step can include the completion of a local needs assessment. The procedure will identify the needs, resources, attitudes, and cultural and linguistic context of the community (Solomon, 2002). The needs assessment can be completed on a large scale and include individual interviews, focus groups, written surveys, community advisory boards, and a review of published journal articles. However, a large scale needs assessment is not always necessary or possible (Solomon,

2002). For instance, previous reports might have already collected this information. Researchers should consider existing resources available for a needs assessment and what additional information is imperative. Solomon (2002) gives a variety of categories that an agency should consider for a needs assessment when replicating an HIV prevention program. These categories include a youth profile (demographic, socioeconomic, cultural characteristics, adolescent risk behaviors norms, and other youth issues); community norms (attitudes and perceptions on sexuality, HIV/AIDS and youth); available organizational resources (paid and volunteer staff, funding, physical space, materials, and partnerships with other organizations with resources); and potential costs and funding options (costs for preparation, implementation and ideally adaptation).

Another guideline for balancing fidelity and adaptation is selecting a program and a replication strategy (Solomon, 2002, CSAP, 2001). Selecting a program that has already been demonstrated as effective can be beneficial and time saving for service organizations that do not generally carry out research. Selecting the best evaluated intervention for a specific target audience and having an overall implementation plan, based on a needs assessment, are going to increase the likelihood that the program continues to be successful in behavior change. Solomon (2002) highlights two types of replication strategies. The first strategy involves selecting an appropriate intervention and implementing it with high fidelity to the original program. Further, Solomon (2002) articulates three criteria that must be met to successfully employ this strategy: (a) the

program has been shown to be effective in achieving the long-term goals that are similar to the long-term goals of the community in which the provider is working; (b) the target audience with which the provider is working is similar in terms of gender, age, ethnicity and culture to the target audience of the program which was evaluated and shown to be effective; (c) the program is appropriate for the program setting, funding, staff and available resources of the implementing organization.

When the three criteria cannot be met Solomon recommends a second strategy: selecting an appropriate program and replicating it with adaptations. Solomon (2002) offers specific guidance depending on which of the above criteria cannot be met. First, a community may desire a specific intervention program for which there has yet to be a demonstrated effective model. Solomon (2002) gives the example of communities desiring to implement abstinence-only prevention programs. To date there have been few rigorous evaluations of abstinence-only prevention programs and those that have been studied have not found strong evidence that such programs delay sexual initiation (Kirby, 2001). Modifying a long-term goal of the program is not likely to result in an effective program since a core element of the intervention would be altered. In this case Solomon (2002) recommends, based on the current evaluation research, either developing a new program or choosing a program that meets the long-term goals of the community. However, this recommendation has thus far has only shown weak promise of effectiveness. This approach should be taken and developers should attempt to

ensure that all characteristics found common to effective sex education curricula have been addressed (*vide infra*).

The second criterion that might not be met is a different proposed target audience from that used during the evaluation of the proposed curriculum. If the long-term goals of the intervention are the same, adaptations can be made while maintaining fidelity to the overall program model and its theory of behavior change (Solomon, 2002). The first step is to review the theory behind the intervention and identify which short-term objectives would have to be modified for the new target audience. The replication is possible if the changes are relatively small and do not affect the constructs of the theory which the program is modeled on. If changes are required to the constructs of the underlying theory, it is better to develop a new program (Solomon, 2002). The focus should be on incorporating characteristics that are found in most effective programs.

Researchers have written about the development of a framework of issues to be addressed in designing behavioral interventions. Stanton, Kim, Galbraith & Parrott (1996) identified twelve design components believed to be important in intervention design for HIV risk-reduction intervention efforts for adolescents. There is growing consensus that the intervention designs for adolescent behavioral prevention programs should be based on a theory of behavioral change. Further, the authors (1996) note the need for the intervention to be culturally appropriate for the target population, and urge involvement of the targeted community in the development of the intervention. The

investigators also found a widespread understanding of the need to ensure that the intervention is developmentally-appropriate.

The authors also observed an increasing awareness that intervention dose (the number and duration of sessions and the inclusion of booster sessions) may affect intervention impact. Further, specific characteristics of the interventionists (i.e. age, ethnicity, experience and commitment) have been hypothesized to influence the impact of the program and should, thus, be considered in the intervention design. Pilot testing the intervention was also a crucial element that should be included in the design of the intervention. Finally, the content and use of interpersonal skills in an intervention are important elements that many researchers acknowledge when developing a behavioral change intervention (Stanton, Kim, Galbraith, Parrot, 1996).

Kirby (1997, 2001) cites additional desired characteristics in designing an intervention including a focus on changing a small number of behaviors. Kirby notes that interventions should deliver clear messages by reinforcing key messages on sexual behavior--basic, accurate information should be provided about risk and prevention methods. The intervention should address social pressures such as peer pressure and media influence. The intervention should also provide participants opportunities to model communication, negotiate and build refusal skills. A variety of teaching methods should be used to involve participants and personalize messages. Finally, Kirby (2001) highlights the importance of selecting appropriate facilitators. Facilitators should believe in the program and be appropriately trained in the materials and methods (2001).

Adapting programs for new cultures and target audiences can be expensive and time consuming, but important in maintaining their effectiveness.

The last scenario Solomon (2002) highlights is that the first two criteria are met (long-term goals and the proposed target audience is similar to the original program) but the setting (clinic, school or community), staffing, or funding resources are different or not available. Partnerships with appropriate agencies offer a solution in these scenarios. Collaborations with community-based organizations, schools, churches, private foundations, and universities, that would have resources to promote the intervention, can assure success when resources at implementing agencies are absent (Solomon, 2002).

Continuing Calls for Research on Re-invention

Although researchers are beginning to explore the question of re-invention, (Solomon, 2002; Kelly, 2000; CSAP, 2001) significant questions remain for future research. Fairweather and Davidson (1986) highlight the need to focus research on the process of dissemination: “It appears necessary for scientists not only to create valid innovations and understand their salient processes, but also to advance from the art to the science of dissemination.” (1986, p.213). The CSAP report (2001) further outlines key areas in which additional research is needed. Primarily, research is required for more information on the implementation process. This research would explore the

appropriate balance between fidelity and adaptation for different programs, target populations, or implementation settings. Experimental research is needed to determine how to promote fidelity with inevitable re-invention. The report further emphasizes the need for a rigorous definition of “fidelity” and calls for an exploration of the frequency of different types of adaptation or re-invention including deletions, additions, modifications in content, and changes in intensity.

The CSAP report emphasizes the need to explore the specific role of program developers and their support organizations in the process of program implementation. The report notes that many developers do not have the means or the motivation for providing technical assistance to implementers. The sources available for developing and evaluating prevention programs rarely fund technical assistance for program implementers.

The CSAP report underscores the need to determine the sources of variance in fidelity. Although variance is often deemed necessary to address local needs, a broad literature review found that other factors, such as the skill and effort of the people involved in the implementation and difficulty of some implementation tasks, also led to re-invention (Parcel et al., 1991). The CSAP report urges more research to determine the relative importance of these variance factors.

According to the CSAP report, another area of research that has been largely ignored is the characteristics of implementers that is associated with differing degrees of adaptation. For example, Emshoff et al. (submitted for publication) found that attention

to fidelity came about when grantees were under pressure from the funding agency to maintain fidelity (in CSAP, 2001).

Another research question addressed by CSAP is discovery of the point in the institutionalization process during which re-invention occurs most frequently. The CSAP report suggests that with innovative programs high fidelity there may be obtained at the beginning of the implementation process proceeded with successive stages of re-invention. The re-invention may occur due to changes in the environmental conditions, scientific knowledge of the issues, or time.

Further, issues of how to bridge the gap between program developers and program implementers need to be addressed. This improved relationship could lead to a better understanding by program implementers of the value of increased process and outcomes evaluation. More user-friendly instrumentation and technical assistance by developers need to be available to achieve this process. Program implementers, if involved earlier in the development process, could also provide advice on format and distribution processes that could improve assuring a superior adaptation/fidelity balance.

Greenberg (2004) suggests that the central question is how effective evidence-based programs are in the real world. He suggests research is needed on what factors influence the quality of implementation and encourages the development of conceptual models and a pragmatic model based on empirical evidence on the science of implementation. Greenberg suggests studies focus on both the factors of the programs themselves and non-program factors e.g. characteristics of teachers, students, and

policies and regulations of school and governmental bodies. He advocates both studying the natural variation that occurs during diffusion but also conducting experimental trials in which aspects of implementation are varied e.g., training characteristics and technical assistance.

Greenberg (2004) further articulates the need for more research on the process of “going to scale,” the broad dissemination of evidence based prevention programs. Rotheram-Borus and Duan, (2003) note that to date there are a small minority of proven effective programs that have actually succeeded in wide-spread dissemination. She suggests exploration of models of marketing and other dissemination models is needed to begin creating models. Greenberg calls for experimental or case study research to guide efforts of bringing evidence-based prevention programs to scale.

Measuring Re-invention

The paucity of research on the amount and effect of re-invention is due, in part, to the challenges of measuring implementation and re-invention. Researchers have typically avoided this field due to the difficulties of operationalizing measurement techniques. However, several authors have attempted to measure implementation and re-invention and offered some guidelines to the process.

Eveland et al. (1977) recommended identifying the number of elements in each implementation of an innovation that were similar to, or different from, the “mainline”

version of the innovation. They suggest that most innovations can be broken into elements which allow a means of measuring re-invention.

Scheirer and Rezmovic (1983) identified five measurement criteria for accurately measuring the extent of implementation taking place. These criteria facilitate the development of a measurement strategy for re-invention. The five criteria are (a) the use of multiple measurement techniques, (b) the presence of an operational definition, (c) the examination of reliability, (d) the assessment of validity, and (e) the use of sampling.

The use of multiple techniques, as used by Blakely, et al. (1987) (*vide infra*), is preferable as it aids in avoiding method-specific biases associated with each of the individual techniques. The greater the number and variety of methods used to measure implementation, the more accurate the measurement will be. Each method used will detect specific biases and measure distinct components of the implementation of the innovation. Multi-method measurement increases validity that the implementation process is being accurately assessed. Scheirer and Rezmovic (1983) provide several examples of researchers who used multiple techniques for measuring different components or for validating findings. Methods used included classroom observation and structured interviews of the classroom teacher as well as supervisors' rating forms. However, the researchers noted a lapse in comparing the different techniques and that multi-attribute indexes were not constructed.

Scheirer and Rezmovic (1983) also propose the use of an operational definition. Kerlinger (1973, p.31) characterizes an operational definition as one that "assigns meaning

to a construct or variable by specifying the activities or ‘operations’ necessary to measure it.” The operational definition allows one to measure constructs and provides a bridge between the levels of theory and observation.

The third criterion is the examination of reliability. Test-retest, a type of reliability check, can be defined as the extent to which measurements, when repeated over time, ascertain comparable findings with only slight measurement error. Scheirer, in a review of the level of institutionalization (LOIN) scale (vide infra), suggests inter-rater reliability assessments are of particular importance. The LOIN scale requires judgments to be made about complex situations involved in program implementation. Clear and unambiguous items are necessary to ensure clarity and appropriate comprehension from informant to informant (Scheirer, 1993).

Validity is the fourth criterion Scheirer and Rezmovic (1983) site as important for measuring program implementation. Validity asks the question “Are we measuring what we think we are measuring?” (as cited in Scheirer and Rezmovic, 1983, p. 614). Scheirer and Rezmovic (1983) recommend several techniques for assessing the difficult construct of validity in program implementation measurement. The simplest method for assessing validity is face validity—“the extent to which users or respondents believe a measure ‘looks like’ the intended concept” (Scheirer and Rezmovic, 1983, p.616). They recommend that researchers check face validity by asking innovation users, developers or clients if the intended measure captures the components they believe are essential to the specific innovation. Measuring content validity further requires comparison with a

content plan or list of components developed for the specific innovation preferably with assistance from experts on that innovation such as one of the designers. The final form of validity the authors cite is construct validity. This type uses statistical procedures (i.e., factor analysis or multi-trait-multi-method matrix) to establish an empirical test for a hypothesized underlying theory or construct.

The final criterion that Scheirer and Rezmovic (1983) suggest is an appropriate sampling strategy. Here sampling is included as a criterion for measurement as it strongly influences the adequacy of data collected by any measuring technique. They recommend sampling strategies should consider “both the accurate assessment of the level of implementation within a site and the generalizability of the findings across sites” (p. 619). However, the authors repeatedly note the challenges involved in sampling given the complexity of the topic, costs of multi-site research, difficulty operationalizing the implementation of many innovations, and the non-random adoption of many innovations. Even with these challenges, they caution that researchers need to carefully consider the sampling of respondents within each research location in relation to the most appropriate unit(s) of analysis for the target innovation.

Case Studies of Re-invention Research in Health Education

Drug Abuse Resistance Education (DARE) Study

DARE is a collaborative effort initiated in 1983 by DARE certified law enforcement officers, educators, students, parents and communities to offer a drug and violence prevention program primarily targeted to 5th and 6th graders. Its program content is organized into seventeen 45-60 minute sessions taught by a law enforcement officer. Suggested extended activities to be integrated into other instruction by the classroom teacher are also included. DARE experienced a phenomenal rate of diffusion, reaching an estimated 4.5 million school children in the United States and other countries (DARE, n.d.).

Wulf (1987) studied the re-invention of the DARE program through a questionnaire mailed to the 84 law enforcement agencies nationwide that had sent police officers to the 2 weeks DARE training program between 1984 and 1987. Ninety-five percent of the local programs initiated from the trainings maintained the name DARE. However, Wulf found significant re-invention occurring--34% of the adopting communities elected not to include all 17 DARE lessons as prescribed in the original curriculum. Three of the lessons most likely not to be incorporated included (a) a session focusing on gang pressure, (b) forming a support system, and (c) role modeling. The other 14 DARE lessons were adopted by about 70% of communities. Sixty-four percent of the 84 adopting communities did not have a junior high school DARE program and half of the 36% who extended DARE training into junior high school did not teach all 11 DARE lessons. Follow-up training of children after their 5th and 6th grade training in the DARE program was often neglected. Seventeen percent of the

adopting communities did not teach one of the 17 DARE lessons, while 42% had made some modifications in the program. In two-thirds of programs only the police officers, not the individuals from the schools conducting the DARE program, were trained in the DARE curriculum. In these cases, the police department generally initiated the DARE program, while the school was never completely invested.

DARE leaders believe that the program should be adopted with no re-invention. Accordingly, they made it difficult to conduct the DARE program without training from DARE leaders. Even so, adopters changed to the curriculum to make it more appropriate for their community (Wulf, 1987). The re-invention controversy surrounding the DARE program might, in part, explain the controversial findings about its continued effectiveness after diffusion (Ennett, Tobler, Rigwalt, Flewelling, 1984).

The Arthritis Self-Care Project

Brunk and Goepfinger (1990) studied re-invention that occurred during a community-based arthritis self-care project. They explored the process of re-invention in the field as their trained interventionists carried out an intervention designed to educate arthritis patients on better self-care. The authors identified five areas of re-invention: (a) alterations in method of identifying direct caregivers, (b) alteration in use of direct caregivers, (c) alteration in curriculum content and format, (d) alteration in

channels of information diffusion, and (e) variable occurrence of the “attention placebo” (Brunk & Goepfinger, 1990).

The authors note the importance of acknowledging that re-invention will occur to some extent. They further emphasize the importance of uncovering what is occurring during the re-invention process by actively soliciting process information. This can be accomplished through their third recommendation that accurate and detailed records be kept during program implementation and evaluation. Fourth, they suggest that direct interventionists be monitored to better identify various re-invention that had taken place. Fifth, the authors recommend that research be used to determine the extent of the re-invention. Lastly, and perhaps most importantly, the authors stress that re-invention be viewed as a positive force that often improves programs--re-invention can be used as a mechanism to uncover problems that were overlooked during program development. Further, re-invention allows creativity by caregivers that can result in improved programs more suited to the intended audience. However, they note that the positive nature of re-invention will not be recognized unless there is accurate mapping of the changes as they occur.

The National Diffusion Network

Perhaps the most sophisticated research on re-invention to date was conducted by Blakely et al. (1987). The research team studied seven nationally disseminated education and criminal justice projects measuring program fidelity, re-invention, and

effectiveness were measured. The results showed that implementations conducted with high-fidelity were more effective than low-fidelity implementations. Modifications made to target local circumstances did not seem to influence effectiveness, however, additions to the program seemed to increase effectiveness (Blakely et al, 1987).

The sample was composed of seven innovations from The National Diffusion Network and the Exemplary Projects Program that met certain criteria: (a) they had a least 2) adopters nationally that could be studied, (b) the innovations were incorporated organization-wide, (c) sites were currently operating the innovation, (d) sites had been conducting the innovation for at least two years, and (e) there was a “reasonably high probability” that there was some outcome data. Ultimately, the sample consisted of 70 sites, 10 for each innovation.

Although the concepts of fidelity and re-invention had been discussed conceptually, few researchers had tackled the difficult task of operationalizing and measuring these constructs. The researchers built upon Hall and Loucks’ (1978) concept that social programs were composed of a finite number of components. Blakely and colleagues (1987) followed many of the guidelines suggested by Scheirer and Rezmovic (1983): the use of an operational definition, multiple methods of measurement, a good sampling technique, and assessment of reliability and validity. Blakely and colleagues measured program fidelity as the proportion of finite program components that were implemented. They also developed detailed process measures that allowed observation of specific program components to measure adoption or implementation by

each site to determine fidelity. The fidelity of the model was defined solely in terms of the developers' innovation model.

Blakely and colleagues (1987) gave a simple two-part operational definition of re-invention: as an addition to the original model or a modification of the existing program components. They did not include deletions as part of the re-invention score because deletions were seen as unacceptable variations in fidelity.

Blakely and colleagues (1987) used multiple methods, including extensive interviews, in person observations, and a review of all published materials to assess the fidelity of each program. The operational definition of each component was characterized in a four step manner. Each component must be (a) observable or verifiable through interview with staff or clients of the implementation organization, (b) discrete from other components, (c) "innovation specific," and (d) finally, the list of components should "exhaustively describe" the innovation (Blakely et. al., 1987).

Validity was analyzed by comparing data across the various measures obtained. Multiple sources of data were available for 75% of items at each site. They found an exact-agreement convergence rating of .96 for the between-source comparison strategy summed across all 70 sites.

Blakely and colleagues (1987) found that high-fidelity adopters tended to be more effective than implementers with low-fidelity. However, local additions to the model tended to enhance effectiveness. Their analyses suggested that additions were

positive and contributed to the overall effectiveness of the innovation, while modifications not distracting from fidelity were unrelated to effectiveness.

Fidelity at the Nation's Middle Schools

Ringwalt et al. (2003) revealed wide-spread adaptation by teachers of school-based substance use prevention curricula. Ringwalt and colleagues selected a random sample of public and private middle schools in the 50 states and the District of Columbia. Data were collected by mailing questionnaires to the lead substance-use-prevention teacher or another school staff member who was most knowledgeable about the school's respective program. The analysis was restricted to respondents who reported using certain types of programs: a) 1 of 48 specified commercial or research-based substance-use-prevention curricula; b) an unspecified recognizable substance-use-prevention curriculum; or c) a written substance-use-prevention curriculum developed locally by the school's state, county or school district or by the school itself. The final sample included 1,674 teachers.

Curriculum fidelity, the study's dependent variable, was assessed with one question: "How closely did you follow the curriculum guide(s) in teaching your substance use lessons?" Response options included "I did not use a curriculum guide," "not very closely—I frequently adapted the material as appropriate," "somewhat closely—I sometimes adapted the material as appropriate," and "very closely—I taught the material as specified." Seventy-eight percent reported using a recognizable

substance-use-prevention program and the remaining (approximately 22%) did not use a formal guide. Only 15% of respondents reported following a curriculum “very closely.”

Several factors contributed to the variance in maintaining curriculum fidelity. The first was the degree to which the teachers thought that they had discretion in what topics they covered in substance use lessons--the more discretion teachers perceived they had the less likely they were to follow curricula guides. In-service training the teachers received also contributed to curriculum fidelity. Those teachers who reported greater perceived effectiveness of their last substance-use-prevention training to be high were more likely to maintain curriculum fidelity. Principal support for the substance - use-prevention curriculum was also associated with increased fidelity. Finally, public schools were more likely to report greater curriculum fidelity than private schools. The authors failed to find an association between competing demands of teachers’ time for other subject areas, which is often anecdotally thought responsible for lack of fidelity.

The authors present recommendations for program developers to promote implementation fidelity: (a) sufficient initial training to convey the curriculum’s purpose and content; (b) sufficient practice in teaching activities; and (c) determining the latitude that teachers perceive they are allowed to adapt programs. The greater perceived latitude, the more program developers might want to stress fidelity. When possible trainers should give specific instructions on which components can and which should not be eliminated.

Institutionalization: The Final Step in Diffusion

After a program is adopted and implemented, with re-invention more than likely occurring, the program will go through the confirmation stage, in which a decision is made whether or not to maintain the program. If the decision is affirmative, the program can proceed to, arguably, the final stage of diffusion, institutionalization. However, passage through adoption, implementation and confirmation, even when confirmation is positive, does not guarantee institutionalization (Goodman, McLeroy, Steckler, Hoyle, 1993). Many different terms identify institutionalization of programs within organization: frozen, stabilized, accepted, sustained, durable, persistent, maintained, routinized, incorporated, continued and durability (Ledford, 1984; Miles, 1983; Glaser, 1981).

However, the construct of institutionalization is more complex than can be summarized in a one-word definition. Institutionalization can include modification of organizational values in order to incorporate the program (Beyer & Trice, 1978). Institutionalization implies that the program has become an integral part of an organization in which it is housed, that it is part of the standard operations and is no longer novel (Goodman, et al., 1993).

Goodman et al. (1993) describe four factors that suggest that institutionalization of effective health promotion programs is a key component in program success. First, in order to deliver programs to large target populations, the programs must exist for

enough time that most of the population will have sufficient exposure to them. Secondly, since successful health promotion programs aim for sustained behavior change, multiple exposures to the program is necessary. Further, often health promotion requires cultural and social change in the meaning of health and this change needs to be supported. Finally, organizations that adopt health promotion innovations require considerable time and energy to integrate them into their mission and operations (Goodman, et al., 1993).

Goodman et al. (1993) conceptualized institutionalization along two planes represented by rows and columns. The rows are based on a typology of organizational sub-systems proposed by Katz and Kahns (1978), which suggests that systems are constructed of production, maintenance, support, and managerial sub-systems. The production sub-system's major functions include implementation of product plans, procedures, schedules and quality control. The maintenance sub-system is personnel-directed and includes recruitment, retention, socialization, rewarding, and sanctioning. Maintenance is vital and assures continuity throughout the systems operations. The supportive sub-system is more external and establishes legitimacy as well as favorable relationships within the wider social environment. Seeking funding sources and physical space for programs are functions of the supportive sub-system. The final sub-system is managerial, which described by Katz and Kahn (1978) controls, coordinates, and directs all of the other sub-systems. Programs that have managers formally

assigned, have written job descriptions for staff, and routinized progress reports are considered well integrated into the managerial sub-system.

In order for a program to be considered institutionalized in a host organization it must be built into each of the organizations sub-systems. Goodman et al. (1993) delineate the degree of saturation with certain terms (making up the columns of their conceptualization): passages, routines, and niche saturations. Passages are the first degree of program institutionalization and are one-time events--for the production sub-system this could be formalizing and implementing program plans. Shifting the program's funding from soft to hard money is an example of passage for the support sub-system. The inclusion of the program on an organizational chart would represent a passage for the managerial sub-system. The second degree of program institutionalization is routines, which involves making the passages routinized. For example, this might include the program's hard funding is renewed annually and remains stable or if the program remains on the organizational chart after reorganization of other aspects of the organization.

The final degree of program institutionalization is niche saturation. This occurs when the program expands to its optimum limits within the host's organizational sub-systems. Program passages, routines, and niche saturations exist for each organizational sub-system. Here, the greater the number of cells occupied in Table II-1, the greater degree of program institutionalization.

Table II- 1 : Sub-systems and Degrees of Institutionalization			
Dimensions	Passages	Degrees	Niche Saturation
Sub-systems			

Production			
Maintenance			
Supportive			
Managerial			

Application of Diffusion Theory in Public Health:

CDC's former "Program that Works" Project

CDC’s National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health (DASH) recognizes the importance of successfully evaluated behavior change prevention programs and maintains a policy of applying research findings to prevent disease and injuries and promote health among adolescents and young adults. A former project of DASH identified curricula having credible evidence of reducing health risk behaviors among youth. Once identified CDC used diffusion theory (Rogers, 1995) and actively "employ[ed] various strategies to enhance the diffusion process, including identifying programs shown to be successful in a typical school or community setting, formatting programs for ease of use, and working with sites that express an interest in adopting the innovation" (Collins et al., 2002). DASH provided support including training and curricula, to ensure diffusion of the curricula took place. CDC did not endorse the curricula; they simply promoted them as programs that had been proven to work (these were referred to as “Programs that Work”). It was the choice of the adopting organizations to determine what curricula best meet their respective populations’ needs. DASH discontinued “Programs that

Work” in July of 2002 in effort to improve the process used to provide scientific guidance intended to aid program selection of state and local health and education agencies. As a result of concerns and suggestions from the field, DASH is currently working on a process that may better address the needs of schools and communities throughout the country. The new processes that are being developed will identify a larger number of packaged interventions that have scientific evidence of effectiveness to better meet the needs of schools and communities, and since schools have requested a broader range of choices, DASH will identify scientifically-derived characteristics of effective programs to guide the efforts of the large numbers of schools and communities that develop their own programs instead of using packaged programs. However, since “Focus on Kids” was disseminated under the former “Programs that Work” it will be described here in detail.

Evaluation Panel

The first step toward becoming identified as a "Program that Works" was review by an expert evaluation panel. The panel consisted of four to five evaluation research experts tasked with determining if the program/curriculum was responsible for risk-behavior reduction among youth. Seven criteria were used: (a) sufficient quality and duration; (b) sampling strategies are adequate with regard to representativeness, comparability of comparison groups and sample size; (c) follow-up periods among both control and experimental are adequate and comparable with minimal attrition; (d) data

collection instruments (surveys, interviews, focus-group questions, physical measurement) are of acceptable quality and human subject concerns are appropriate; (e) data analysis is appropriate; (f) the curriculum has a strong reduction of risk behaviors; and (g) there is evidence that the findings are valid.

Program Panel

If the program was found to have valid impact in reducing risk behaviors by the evaluation panel, it was assessed for feasibility by program panel experts who determined the feasibility of replicating the program. Again, 4 to 5 experts in curriculum and program development were assembled by DASH to assess whether a program could be implemented by the average teacher or youth group leader. The panel considered a set of five qualities of the program: (a) accuracy of information, (b) ease of implementation by a teacher or youth group leader, (c) requirement for additional materials is at a minimum, (d) applicability of the curriculum to groups other than the original target group, and (e) potential barriers to implementation.

Based on these criteria, if both panels recommended adoption of the curriculum, DASH designated the curriculum as a “Program that Works.” For those programs recommended, the panel also provided specific recommendations that might improve the curriculum: (a) format that included program objectives, philosophical concepts, and research findings; (b) examples that reflect culture and gender equity; (c) accurate and

current information that is consistent with the curriculum as evaluated; and (d) incorporated changes suggested during the evaluation study. These changes might be the first phase in re-invention. However, while the format may have changed and facts may have been updated, the program panel did not make any changes in the core elements and educational strategies of the curriculum which were an integral part of the developer's research strategy and evaluated by the evaluation panel.

Diffusion of “Programs that Work”

After designating a curriculum as a “Program that Works” CDC/DASH helped in the diffusion process of the curriculum. Communication channels used included e-mail communication, professional conferences and workshops, and newsletters (Collins et al., 2002). DASH provided curriculum and evaluation fact sheets for each “Program that Works” (Appendix A) and an overview of the “Program that Works” process and distributed information widely at a national, state, and local level. Other elements of these dissemination efforts varied year-to-year and program-to-program.

All “Programs that Work” had a national publisher to enable availability of the curriculum. Education, Training and Research Associates (ETR) or the Education Development Center (EDC) worked with the program developers to prepare the curriculum for national dissemination, working with the developer and guided by the recommendations of the program panel. The national publishers also worked with the

developers to prepare two types of training materials for each of the “Programs That Work”: a guide for training teachers to implement the curriculum and workshop plans and materials for training those who will train the trainers.

The workshop plans and materials were used in two national training workshops sponsored by CDC/DASH for each newly identified “Program that Works.” These CDC-funded training workshops were usually conducted twice at the national level. Subsequently, the publisher or other interested national or regional groups could arrange for additional training sessions for trainers.

DASH, in partnership with EDC and ETR, attempted to develop training sessions consistent with diffusion theory. Training sessions were led by professional health education trainers and not the original researchers unless they had a background in health education training—this way the trainees could easily identify with the trainers. The training sessions attempted to bring together many community trainers, and sessions were designed so that the trainees could participate in the intervention. The prevention intervention was kept simple. The training sessions typically included a set of elements: (a) discussion and activities that demonstrate effective educator training; (b) modeling key lessons from the program and discussing their classroom application; (c) providing some criteria for maintaining fidelity when implementing the program; (d) identifying and training in the skills necessary for the effective implementation of the program; (e) providing presentations from educators, administrators and/or students who have used the curriculum; (f) discussing the theoretical underpinnings and

providing examples of how they are practiced in the program; (g) providing an overview of the research results; (h) familiarizing educators with resource materials that provide additional information and/or support for the program; (i) building the educators confidence in communicating about HIV; (j) providing time to discuss the strengths and weaknesses of the program; (k) providing practice for the trainer to build competence in modeling the skills teachers will need to implement the program effectively; and (l) providing time for participants to draft plans for how they will use the curriculum when they return to their home setting (i.e., train other educators, teach students directly first, then train others, etc.).

Trainees attending these national master training sessions were given written materials: (a) copies of the curriculum guide and samples of any other support materials, (b) a user friendly summary of the research findings, (c) key published research articles on the program; (d) a list of common questions and answers regarding the program and (e) the research study, (f) a sample educator training design which includes a list of educator prerequisites for attending the training, and (g) other related resources.

Finally, CDC/DASH, ETR, and EDC recognized that implementation and maintenance will be facilitated by ongoing support of community efforts. Again, these efforts varied, but typically included periodic follow-up workshops, technical assistance on training-related matters through a telephone consultation, feedback to the program developers from Community-based Organizations (CBOs) and schools who have attended the training sessions, and on-site consultation (Collins et al., 2002). CDC's

“Programs that Work” process focused exclusively on the knowledge and persuasion stages of diffusion.

Evaluation of “Programs that Work” Dissemination Process

CDC-DASH was interested in strengthening its dissemination and training strategies, thereby improving the extent to which effective programs could be implemented with fidelity nationwide. CDC conducted qualitative and quantitative research examining the characteristics of states that have and have not adopted either “Focus on Kids” or another “Program that Works.” CDC/DASH conducted focus groups and 6-month and 12-month follow-up assessments of master trainers who participated in either of the two national trainings on “Focus on Kids” (Collins, et al., 2002; Cheng, Francisco, Hare, Butler, 2002). The evaluation also followed local health educators who received training from the master trainers to assess the extent to which the local educator engaged in dissemination activities. Data from the focus groups and quantitative assessments will be used to understand the results of the re-invention research detailed chapter five.

Guidelines on Fidelity given in the “Programs that Work” Training

Several of the authors of “Programs that Work” curricula offer general guidelines regarding re-invention. Several examples are described below.

Re-invention guidelines for “Reducing the Risk”

The developers of “Reducing the Risk” were concerned about implementers maintaining fidelity of the program and offered the following questions and answers at the beginning of the curriculum.

2. Do I have to teach all the lessons? If I don't have time for them all, what can be dropped?

To the best of all knowledge, the effectiveness of the curriculum is not dependent upon any single activity. Thus, if any single activity is dropped, most of the effectiveness will probably be maintained. On the other hand, if the curriculum is shortened by 25% or 50%, then the effectiveness probably will be diminished. From our research, we simply cannot determine which activities are the most critical.

3. How much flexibility do I have to change any lesson?

For the evaluation, teachers implemented the curriculum with a high degree of fidelity. Thus, to increase the chances of effectiveness, the curriculum should not be significantly changed.

However, given that caveat, it is probably true that the effectiveness of the curriculum will not be diminished if minor changes are made, and perhaps some of the minor changes might increase its effectiveness for a particular group of students. For example, if the scripts in the role plays sound stilted to a particular group of students, then rewriting them so that they still illustrate the same communication skills but use words more appropriate for a particular audience may improve the effectiveness for that audience. Similarly, if students have lots of questions about an important topic, then spending a little more time of that topic and a little less time on another may be appropriate.

On the other hand, we don't recommend dropping activities, especially the role plays, or significantly changing the activities.

(Barth, 1996 p. 218)

Re-invention guidelines in “Focus on Kids”

The developers of “Focus on Kids” realized the positive value of some forms of re-invention and addressed this in the introduction to the curriculum. In the implementation section of the curriculum is the following question and answer.

How do I make this program relevant for youth in my community?

As mentioned previously, the Focus on Kids curriculum is based on social cognitive theory, and ethnographic and survey research was conducted to ensure that the intervention was developmentally and culturally grounded. The target audience for Focus on Kids was urban youth, ages 9-15, from predominantly low-income areas, all of whom were African American. Although this was the audience that Focus on Kids was designed for, the curriculum is still relevant for many other adolescent groups; however it may be necessary to make minor adaptations to best suit the needs of your targeted community.

One strategy that might help when adapting the curriculum is to have an advisory board made up of community leaders (e.g., teachers, recreation club directors, church leaders), parent and youth from your community. Share the curriculum with the advisory board and listen to their recommendations on what might need to be altered. Another strategy is to conduct a few focus group meetings with groups of 8-10 parents or youth where you ask what their concerns are and what they feel youth need to learn to protect themselves. A final strategy is to get survey information, if it is available, to determine what risk behaviors are most common among youth with whom you will be working.

There is limited information about alcohol use in the curriculum because the data showed that this risk behavior was not prevalent among the original target population. Drug selling, however, was a concern heard frequently from parents and youth, so the curriculum places greater emphasis on preventing drug selling. Minor changes to the curriculum can help ensure you are best addressing the needs of your youth. (University of Maryland, Department of Pediatrics, 1998 p.7)

Others developers of the “Programs that Work” curricula make no mention of the re-invention/fidelity question. Further, there has been no research, to date, of what

type of re-invention actually occurs during the diffusion process of “Programs that Work.”

Other Federal and Private Lists and Registries of Effective, Science-Based Programs

Although DASH’s “Programs that Work” was discontinued, there are several other federal and private lists in which “Focus on Kids” has been identified as an effective, science-based prevention program. CDC’s Division of HIV Prevention (DHAP) (2001) developed the Compendium of HIV Prevention Interventions with Evidence of Effectiveness to respond to prevention service providers, planners, and others who request science-based interventions that work to prevent HIV transmission. All interventions in the Compendium come from U.S.-based behavior studies with a control group and significant positive results for behavior or health outcomes. “Focus on Kids” is listed as one of the interventions that communities may be considering adopting. Although some guidance is given on adoption, no training or technical assistance is available for “Focus on Kids” through DHAP.

The Substance Abuse and Mental Health Services Administration’s (SAMHSA) mission is to bring effective substance abuse and mental health programs to every community. SAMHSA carries out its mission by compiling prevention, treatment, and

rehabilitation knowledge, identifying and promoting science-based programs, and building capacity at the state and regional levels to infuse prevention, treatment, and rehabilitation knowledge and programs into every community in the United States. To assist its practice and policy-making constituents in learning more about science-based programs, CSAP created a National Registry of Effective Programs (NREP). NREP is a resource to review and identify effective programs. In identifying programs, NREP seeks candidate prevention programs from the practice community and from the archival scientific literature. Programs are reviewed by a panel of three evaluation and content specific experts to ensure that the research is conceptually sound and internally consistent, has sound methodology, and can provide evidence that the results are clearly linked to the program itself (credible) rather than outside forces. Eighteen criteria are used to review the program: theory and conceptual model, intervention fidelity, process evaluation, design, method of assignment, sample size, attrition, analyses of attrition effects, methods to correct biases, substantive relevance, psychometric properties, missing data, treatment of missing data, outcome data collection, analysis, other plausible threats to validity, integrity, and utility. Programs must be generalizable to other populations, be well-implemented, and well-evaluated (NREP, n.d.). “Focus on Kids” has been designated an “effective program” in the NREP system (T. Schwinn, personal communication, December 12, 2003).

There are several other lists and registries on which “Focus on Kids” has been identified including ETR’s “Programs that Work,” (ETR, n.d.) the Urban Institute’s

“Teen Risk Taking: Promising Prevention Programs and Approaches,” (Eisen, Pallitto, Bradner, & Boshon, 2000) and the U.S. Office of Population Affairs’ “Program Archives on Sexuality, Health & Adolescence” (PASHA, n.d.).

“Focus on Kids”

In this proposal the researcher is advocating an analysis of the re-invention and institutionalization of the “Focus on Kids” HIV prevention program. It is, therefore, important to understand the history of the development and original evaluation of “Focus on Kids.”

Description of the Audience

The original target population was African-American youth residing in public housing or other similar low-income communities in Baltimore City. In the original “Focus on Kids” study, 351 youth ages 9 to 15, attending one of nine recreation centers serving low-income communities, participated. The median age was 11 years, and the median level in school was 6th grade. Advancing age, grade level, and male gender were highly correlated with sexual status overall. At baseline one-fifth of those reporting to be virgins expected to become sexually active in the next six months. Among sexually active youth, nearly two-thirds had used a condom at the last episode of intercourse; approximately the same percentage anticipated doing so at the next episode.

Eighteen percent of the youth resided with both biologic parents and 64% with one (Stanton, Li, et al., 1996).

Description of Methods

Protection Motivation Theory

Both the survey instrument and intervention are theoretically based on a social cognitive model, Protection Motivation Theory (PMT). The PMT posits that environmental and personal factors combine to pose a potential threat. The PMT (see Figure III-3) is organized around two possible pathways (threat appraisal and coping appraisal) which are postulated to be responses to possible "threats." The "threat" is the challenge to engage in a high-risk behavior. Threat appraisal, consideration of a maladaptive response, is mediated by a balance between rewards that accompany the behavior [both personal pleasure (intrinsic reward) and social approval (extrinsic reward)] and the perceived severity and the personal vulnerability to the adverse consequences of the threat. Coping appraisal, consideration of an adaptive response, is negotiated by balancing the response efficacy (perceived likelihood that the action will reduce the threat) and self-efficacy (belief that the individual can complete the adaptive response) with the response cost (barriers) of completing the adaptive response. These two pathways combine to form protection motivation--the intention to respond to a potential threat in either a adaptive or maladaptive manner (Rogers, 1983). PMT was selected as the guiding theoretical model because it expands upon several other models

of behavioral change such as the Health Belief Model, by specifying constructs representing important developmental tasks for adolescents including “self-efficacy” and “extrinsic rewards” (Prentice-Dunn & Rogers,1986).

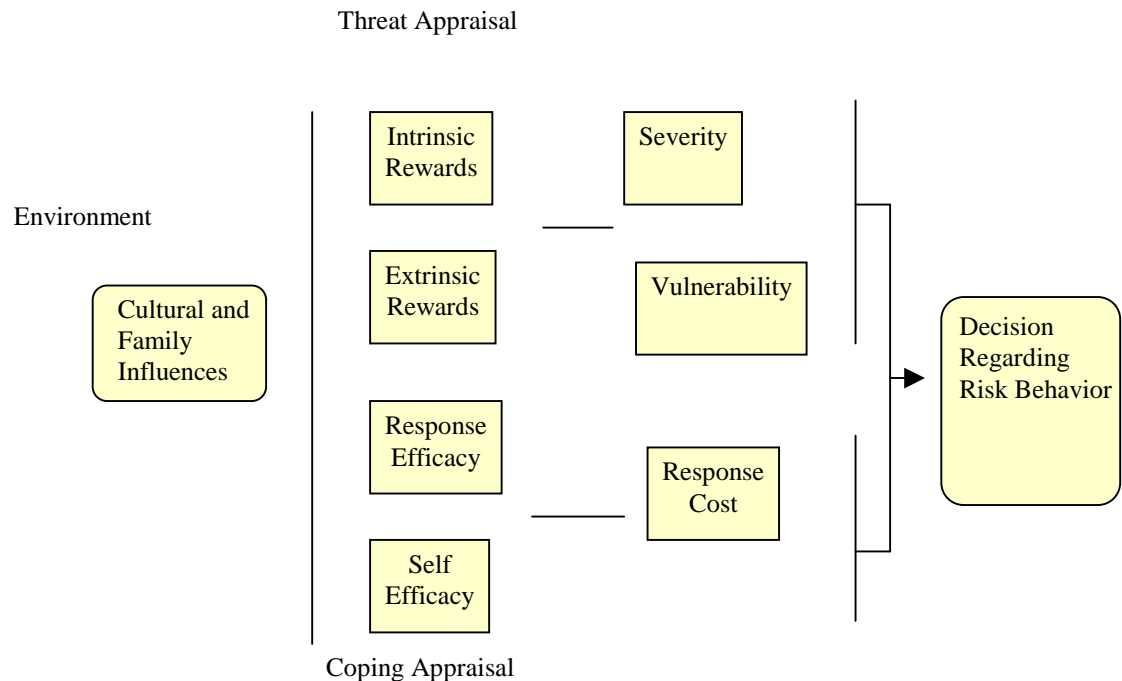


Figure II- 3: The Protection Motivation Theory

Translating PMT into a Curriculum for Urban African-American Adolescents

Each of the constructs described above were addressed in one or more sessions (vide infra) to assure that the theoretic constructs for each potential relevant risk factor were all addressed in the curriculum. "Focus on Kids" operationalized these constructs through activities. For example, the program included activities that dispel the myth that all peers approve of the risky behavior operationalizing the construct of “extrinsic rewards” (i.e., the good feelings that one gets from the outside created by doing the risk

behavior). An activity called the “M-n-M game” was employed to give participants a more realistic understanding of activities in which other youth were participating. The youth were asked to display, using candies, how many kids their age, out of a hundred, they think are having sex. Then the facilitator would show them the real statistics from a survey and asks them to consider why youth overestimate the percentage.

Another example is the operationalization of the construct of “perceived vulnerability” (i.e., how likely the adolescent thinks the negative outcome is if they engage in the risky behavior or in this case, how likely they think it is they will become infected with HIV if they have unprotected sex). The intervention utilizes activities to show the participants that they are vulnerable to becoming infected with HIV if they participate in risk behaviors. An activity called the “Transmission Game” is played in which each youth is given an index card and told to introduce themselves to three people. They shake hands with their new acquaintances and have those individuals sign their name on the index card. After all youth have three signatures on their cards the youth return to their seats. Prior to the game the facilitator has placed an “X” on 10% of the cards and a “C” on one or two cards. The facilitator asks the youth to examine their cards to ascertain whether they have an “X” on their card. Those youth are asked to stand and are told, hypothetically, that they have been exposed to an STD and must go to the clinic for treatment. The rest of the class is asked to stand if any of the individuals standing signature is on their card. They are told, hypothetically, they too have been exposed and should go get treatment. This process is repeated several

times. After several rounds, nearly all the youth are standing. Those youth with a “C” on their card are told they have used a condom and therefore have not been exposed and can sit down. This activity is used as a visualization of how STD are spread, thereby attempting to increase youth’s “perceived vulnerability.” All constructs of the PMT are operationalized with several activities as described above. A breakdown of all the activities and the PMT constructs operationalized is presented in chapter 3.

Research Design of “Focus on Kids”

After baseline data were collected, youth were stratified through random allocation to receive or not to receive the intervention, resulting in 201 intervention youth and 182 control youth. Both the "control" and the "intervention" youth were exposed to facts regarding HIV and STD through weekly sessions. However, only the "intervention" youth received these facts in the context of decision-making based on the PMT.

The primary intervention series, focusing on decision-making, consisted of eight weekly meetings (seven 1.5 hour-long sessions conducted in the nine participating recreation centers and one-day-long session conducted in a rural campsite). Sessions focused on one or more PMT construct from different perspectives and reviewed concepts from previous session. Facts regarding AIDS, STD, contraception, and human development were also provided. Multiple delivery formats such as small group

discussions, lectures, videos, games and role-playing were employed to present each PMT construct. The eight week intervention was followed by six monthly follow-up sessions and three annual booster sessions.

The control groups were invited to participate in an eight week series of 90-minute health education sessions that consisted of watching movies on various health related topics (i.e., drugs, birth control, and puberty) and discussions with a facilitator. There was no discussion of decision-making or cultural integration. The control group met as one large group consisting of youths from two neighboring recreation centers, alternating weekly between the two sites.

Results

An "intention to treat" model was used to compare the intervention impact on self-reported condom-use rates at the six month and 12 month follow-up over-all and by age and gender subgroups. Analyses for condom-use were only conducted among those youth who engaged in intercourse during the present six-month study interval. These analyses controlled for baseline differences. Condom-use was significantly greater overall among intervention youth compared to control youth at six months (Stanton, Li, et al., 1996), but by 12 months differences in rate of condom-use were no longer significant (Li, Stanton, Feigelman, & Galbraith, 2002). This pattern of improved behavior among intervention youth at six months with a subsequent regression at 12 months was also apparent among demographic subgroups. Among males there was a

significant difference at six months which was no longer significant by 12 months. Among older youth self-reported condom-use rates were already somewhat higher among intervention youth at baseline. This difference increased at six months, but regressed to the baseline difference by 12 months. This trend was apparent among younger youth, although the differences between groups were not significant at any interval. Similar differences were found for condom-use intention and condom-related perceptions. This regression in safer behavior prompted us to conduct a booster session at approximately 15 months post-intervention, where lessons learned about condoms were reinforced. After the summer booster session series, there was a significant difference in condom use at 18 month post-intervention (Li, Stanton, Feigelman, & Galbraith, 2002).

Master and Subsequent Trainings of “Focus on Kids”

“Focus on Kids” trainings were generally 1.5 days to 2.5 days in length, depending on the size and experience of group leaders being trained. The overall objective of all trainings was to prepare the participants to effectively implement the “Focus on Kids” program. The training included an overview of the “Focus on Kids” program, including an understanding of the theory and research behind it. It also included an overview of CDC’s “Program that Works” project. It emphasized that practice and facilitation skills are crucial to the successful implementation of “Focus on

Kids.” Finally, the training attempted to ensure that participants understood how to implement “Focus on Kids” with fidelity. The majority of the activities from all eight sessions were modeled for participants. Activities that were deemed straight forward were discussed instead of being modeled. After a review of each session, participants were given pointers for effective implementation and encouraged to discuss challenges and strengths of the individual session and activities. All participants received an opportunity to practice presenting components of the project and obtain feedback from their fellow participants. Additional topics covered during most of the trainings included the following: effective facilitation skills, incentives, group management tips, and implementation issues including parent permission, recruiting teens, booster sessions, scheduling and program costs. When appropriate, participants were allowed time to draft plans for using the curriculum in their home setting.

“Focus on Kids” trainings, to date, have included two national CDC sponsored trainings in Baltimore and San Diego. Trainings sponsored by Departments of Education include the following states: Oregon, California, Nevada, West Virginia, and Washington State. Virginia’s health department sponsored a “Focus on Kids” master training. International trainings sponsored by the World AIDS Foundation and Fogerty Agency have been conducted in Viet Nam, Namibia, China, Trinidad and Tobago and the Bahamas. Research institutions including John Hopkins University, the Virology Institute at University of Maryland, Washington State University and West Virginia University have also sponsored trainings. Private non-profit organizations such as the

Latin American Youth Center and Willis Substance Abuse Prevention Center in Worcester, Massachusetts have trained staff in the “Focus on Kids” program. Finally, many of the individuals who have become master trainers during these trainings have gone on to sponsor additional trainings of their own (Campbell, personal communication, 2002; Bryant, K., personal communication, 2002).

Existing Replications of “Focus on Kids”

Several attempts to replicate the “Focus on Kids” curriculum for different target audiences have been made. The descriptions of these replications are included here in an effort to describe some possible programs that will be explored in greater detail in the research.

Viet Nam

Through intramural funding at the University of Maryland Baltimore, a pilot program was initiated to modify, implement, and evaluate “Focus on Kids” in Khanh Hoa Province, South Central Coastal Viet Nam. After the “Focus on Kids” curriculum and evaluation tool were modified, a total of 26 facilitators from the four pilot project communes were trained including youth leaders, health care providers, and teachers. The facilitators recruited youth in their respective communes to participate in the modified “Focus on Kids” program. Forty youth (20 boys and 20 girls) were recruited from each of the four communes for a total of 160 participants

between the ages of 14 and 20 years. In all 8 items in attitudes regarding condom access and use, there was significant difference ($p=.00$) between pre- and post-tests for the total sample. In 15 of 26 knowledge questions, there was a significant increase ($p=.00$ to $.03$) in correct responses between pre- and post-test (Kaljee, 2001). The further expansion and longitudinal evaluation efforts is currently funded by a NIH Fogarty grant.

My Future is my Choice: Namibia, Africa

From 1994 to 2000, “Focus on Kids” provided technical assistance to the National AIDS Steering Committee and local committees in Namibia to develop and implement HIV-risk reduction interventions targeting adolescents. With support from the World AIDS Foundation and the Fogarty Foundation, we conducted ethnographic research to adapt the “Focus on Kids” curriculum for use in rural, African school settings. The resulting Namibian curriculum, "My Future is My Choice" (MFMC), was assessed in a randomized trial conducted among 515 Namibian youth ages 15 to 18. Overall, onset of sexual activity was delayed among intervention youth and condom-skills and intentions were increased (Stanton et al., 1998). The intervention has now been delivered to over 75,000 Namibian youth. MFMC was designated by The Joint United Nations Program on HIV/AIDS as one of the "Best Practices" in Africa (United Nations Children’s Fund, n.d.).

Replication of “Focus on Kids” in West Virginia

Researchers are currently involved in a NIMH-funded research effort to replicate “Focus on Kids” in rural West Virginia after modifying the program to make it culturally-appropriate. Ethnographic work was initiated over the summer 1999 and has included individual and group interviews of adolescents, parents, and professionals regarding adolescent risk and protective behaviors. In addition, the “Focus on Kids” team provided technical assistance for training and evaluation for the West Virginia Department of Education to transfer the “Focus on Kids” program into West Virginia public schools.

“Focus on Teens” in Baltimore City High Schools

"Focus on Kids" was implemented in five Baltimore City High Schools which have school-based health clinics. The program was adapted to be conducted during the lunch hour. The program was also evaluated to determine whether the program remains effective when it is delivered to youth in a less intensive, but longer course. The program was conducted twice weekly for 25 minutes for 12 weeks compared to once a week for 90 minutes for eight weeks.

Focus on Youth in the Caribbean: Trinidad and Tobago and the Bahamas

Since 1994 the governments of the Bahamas and Trinidad and Tobago have recognized the threat posed by the AIDS epidemic to their youth, especially adolescents and young adults. Despite actively developing behavioral strategies, these governments

had neither the funds nor the technical expertise to do HIV/AIDS prevention research. They collaborated with clinicians from the “Focus on Kids” team at the Department of Pediatrics, University of Maryland School of Medicine to develop a culturally-, theoretically-, and developmentally-based curriculum adapted from the “Focus on Kids” program previously described. The program was first adapted for use among Bahamian girls ages 9 to 16. A randomized control trial was conducted with 500 Bahamian girls. At two months post-intervention, a significant difference amongst condom use for sexually active youth (91% of intervention youth had used a condom last sexual episode versus 45% of control youth). A significant improvement in knowledge and intention to use condoms was also noted. The enthusiastic endorsement of the program by Bahamian leaders motivated Trinidad and Tobago HIV/AIDS leaders to request that the program be implemented in their country. A pilot program was conducted in Trinidad and Tobago and is presently being evaluated through a randomized control trial. The continued interest in the program has led to the creation of an autonomous, independent, and self-sustaining Caribbean task force called “Focus on Youth Response Force.” The task force developed a curriculum appropriate to the English-speaking countries of the Caribbean determined to have shared cultural norms. Trainers were certified to teach the curriculum and to conduct future teacher training courses. A conference was held in April, 2001 in the Bahamas to promote the continued development of the task force and to accelerate the process of curriculum development

and a training cadre. University of Maryland staff has provided technical assistance on an as-needed basis.

Informed Parents and Children Together (ImPACT) and "Focus on Teens"

With funding from NIMH, a combined parent-adolescent intervention has been developed and implemented among 853 youth and parent dyads in Baltimore, Maryland to determine how a combined youth-parent program would increase and/or sustain the positive changes in youth behaviors. The program was implemented in 38 communities in Baltimore. One-third of the youth (318 youth) received only the basic 8-week "Focus on Kids" curriculum and a control video on goal-setting. Another third of the youth (287 dyads) were randomly assigned to receive the "Focus on Kids" curriculum in addition to the ImPACT program with their parents. The final third of the youth (248 dyads) were randomly assigned to receive the basic "Focus on Kids" program and booster sessions at 7, 10, 13 and 16 months post-intervention. Results revealed that those youth whose parents were randomized to receive ImPACT, demonstrated reduced rates of sexual risk behaviors and substance use at 6 months and reduced rates of substance use and overall risk intent at 12 months (Wu et al., 2003).

Survey Administration Methodology for Research

A survey has been defined as a “purposeful conversation in which one person asks prepared questions (the interviewer) and another answers them (the respondent)” (Frey & Oishi, 1995, p. 1). The conversation is directed with the purpose of gathering information by administering the same set of questions in a consistent way to all selected respondents. The goal of the survey is to produce quantifiable measures of variables that can be analyzed statistically to generate reliable observations about associations between key variables.

Survey interviewers are used instead of self-administered questionnaires for several reasons despite the increased resources needed. Interviewers can enhance respondent participation, answer the respondent’s questions, and clarify the meaning of responses. Interviewers also ensure that the survey is administered in the desired order and by the desired respondent (Frey & Oishi, 1995).

Open-ended and Closed-ended Surveys

This research used a combination of open-ended and closed-ended questions to determine the key variables. Closed-ended questions can be defined as those questions for which a list of acceptable responses is provided to the respondent. Open-ended questions are those for which no acceptable responses are provided to the respondent (Fowler, 2002). Advantages and disadvantages exist for both types of questions. Open-ended questions allow the researcher to obtain unanticipated answers. The answers might also more accurately describe the respondent’s situation. Open-ended questions

are also used when the list of responses is too extensive to give the respondent. Finally, respondents enjoy the chance to answer some questions in their own words. When respondents are not given the chance to articulate their experience in their own words, it can be a frustrating experience (Fowler, 2002).

Even with the many advantages of open-ended questions, there are also many disadvantages causing many survey researchers to prefer closed-ended questions. Disadvantages of open-ended questions include that they are more susceptible to problems with memory and are more influenced by mood and cues. Open-ended questions are also more difficult to code and responses can be difficult to document, especially over the phone (Fowler, 2002). When conducting phone interviews versus face-to-face interviews closed-ended questions are often preferred due to telephone respondents' tendency to truncate open-ended questions (Groves & Kahn, 1979). Reliability is increased with closed-ended questions--interpretation of the meaning of answers is also easier and more reliable with closed-ended questions. Finally, data analysis can be more powerful with closed-ended questions (Fowler, 2002).

Open-ended and closed-ended survey designs are used by researchers to quantify information; however, limitations exist to such surveys. One-time surveys are limited in that they do not permit determination of causality (only association) and are of minimal use for incidents with low frequencies (Fris & Sellers, 1996). Finally, a survey is only as good as the survey, methodology to collect data, and analysis.

Telephone Surveys

Telephone surveys are one of the most popular forms of survey research and are the surveys that dominant the field today (Conklin, 1999). Additionally, telephone interviewing is cost-effective and has a high speed of data collection (Frey & Oishi, 1995). Telephone surveys generally have high response rates. Although, telephone interviews often lead to less complete answers to open-ended questions. Highly trained interviewers, skilled in the ability to probe, can further enhance response rates and lead to increased quality of data.

Probes are a technique used to get more information when a response is unclear or incomplete (Frey & Oishi, 1995). A simple “uh-huh” or “tell me more about that” are examples of a probe. Although probes are essential to help respondents recall to get more complete answers, interviews must be standardized to maintain reliability and validity. If an interviewer changes the meaning of a question when clarifying or probing a respondent, reliability and validity can be compromised. Therefore, it is essential that probes are written out in the questionnaire and standardized to enhance data quality (Frey & Oishi, 1995).

Summary

Conceptual areas from the literature were reviewed in this chapter. Major themes consisted of diffusion theory, examples of re-invention, re-invention in public health, case studies of re-invention research on behavior change innovations, and

guidelines for replication of effective programs while balancing the fidelity/re-invention issue.

In summary, an increasing body of knowledge related to diffusion theory in public health (specifically to issues of re-invention) exists. However, to date, much of the literature focuses on literal and theoretical issues and rather than empirical research. Health educators, particularly those involved in HIV prevention, have emphasized the importance of replication of effective programs tailored to meet the specific needs of the target audience. They have called for an increase in research on re-invention to maintain effective and sustainable programs.

The next chapter details methodology for exploring of the re-invention that occurred during the diffusion process of “Focus on Kids.”

CHAPTER THREE: METHODOLOGY

Introduction

This study is a qualitative and quantitative exploration of the re-invention of an efficacious HIV prevention program. Descriptive and process evaluation data from site coordinators conducting the innovation were assessed to advance the theory of re-

invention. These data were explored by investigating what re-invention occurred during program diffusion and how re-invention quality (measured by a proxy variable of adherence to core elements) is associated with various key variables of program re-invention. This chapter describes the research design of the re-invention analyses of “Focus on Kids” including: a description of the innovation, the process of questionnaire development, the sampling procedure to identify study participants, data collection methods, and a description of the construction of both dependent and independent variables as well as data analyses methods for the research questions.

The Innovation: “Focus on Kids”

A full description of the history of the development and original evaluation of the “Focus on Kids” program can be found in chapter 2. Below are brief descriptions of all the curriculum activities of “Focus on Kids” that were measured to assess the re-invention process. (See Appendix A for a full description of each).

Description of “Focus on Kids” Curriculum Components

Session 1: Trust Building and Group Cohesion: Introduction Game: Flying Objects or Double Letter (Build Group Cohesion) “Focus on Kids” Program Overview (build Group Cohesion); Group Cohesion Activity: Crossing Canyons or Human Knot (build

Group Cohesion); Establishing Ground Rules (establish rules); Family Tree (decision making occurs in a social context); SODA (Stop, Options, Decision, Action) Decision-Making Model: Step 1 (introduce decision making model); Wrap-Up and Closing Ritual (What did you learn today?).

Session 2: Risks and Values: Opening Ritual and Review; How Risky Is It? (basic facts); What Are You Concerned About? (identify areas of personal concern); Why Do People Feel Invulnerable (understand teen invulnerability); Defining a Value (identify values); Values Voting (identify values); What Youth Can Do (understand role as community peer advocate); Wrap-Up and Closing Ritual.

Session 3: Educate Yourself: Obtaining Information: Opening Ritual and Review; SODA Decision-Making Model: Step 2 (acquire skills for decision-making-second step of the SODA model--use family tree); Finding Information for Good Decisions (identify potential resources); Telephone Exercise: Gathering Information (identify potential resources); Video: "What Kids Want to Know about Sex and Growing Up" (basic information on puberty); Field Assignments (learn how to gather information); Wrap-Up and Closing Ritual.

Session 4: Educate Yourself: Examining Consequences: Opening Ritual and Review; Parent Role Play (identify parents as potential resources); M-n-M's Game: How Many Kids Are Really? (realistic perception of what peers are doing); Condom Demonstration and Condom Race (learn correct condom usage & practice skills); SODA Decision-

Making Model: Step 3 (acquire skills for decision-making: decision—use vignettes from the Family Tree); Additional Field Assignments; Wrap-Up and Closing Ritual.

Session 5: Skills Building: Communication: Opening Ritual and Review; SODA

Decision-Making Model: Step 4 (acquire skills for decision-making: action—use vignettes from the Family Tree); Communication Game: Changing Messages (understand complexities of communication); Communication Styles: Aggressive, Assertive and Nonassertive (become a more effective communicator); Communicating Without Words (understand complexities of communication); Sex: A Decision For Two (learn about date rape & prevention); Wrap up and Closing Ritual.

Session 6: Information About Sexual Health: Opening Ritual and Review; Ways to

Show You Care (identify alternatives to intercourse); HIV Transmission Game (understand rapid spread of HIV and STD); Contraceptive Lesson (understand various forms of contraceptives advantages & disadvantages); Wrap-Up and Closing Ritual.

Session 7: Attitudes and Skills for Sexual Health: Opening Ritual and Review; Goal

Setting: My Future (understand planning to reduce risks and achieve goals); Images of Sex (understand conflicting images of sex) Role-play: Saying NO or Asking to Use a Condom (practice new skills); Wrap-Up and Closing Ritual.

Session 8: Review and Community Project: Opening Ritual and Review; The

Knowledge Feud (reinforce facts and build self/team esteem); Pat on the Back (reinforce self-esteem, practice communication skills); Community Projects Discussion (determine

method to share information and skills learned with others); Wrap Up and Closing Ritual.

Questionnaire Development

Development of Instrument Items

The Re-invention Measurement Instrument (RMI) (Appendix B) developed by the author for the present study, is composed of four sections: program logistics, curriculum re-inventions (deletions, changes and additions), a pre-existing institutionalization scale (Goodman, McLeroy, Steckler, Hoyle, 1993), and a perceived effectiveness section. The RMI has 113 items and was developed through a review of similar existing instruments, consultation by colleagues of the developer, a review by a panel of experts, and a pilot test (vide infra). Based on a review of instruments that assess re-invention and a review of the characteristics of diffusion and re-invention in public health (see chapter 2), a preliminary draft of the RMI was developed by the author to assess the nature and extent to which re-invention occurred during diffusion of the “Focus on Kids” program. Question format includes multiple-choice, five-point Likert-type scales, and open-ended questions.

Based on Eveland’s (1977) recommendation, the researcher deconstructed the elements of re-invented versions “Focus on Kids” to determine the number of

adaptations from the original “Focus on Kids” program. Although Wulf (1987) in her analysis of the re-invention of the DARE program used sessions as the unit of analysis, the researcher used individual activities that make up each session as the unit of analysis for more accurate analyses. Scheirer and Rezmovic (1983) suggest that for accurate results, questionnaire items should ask about specific actions defined by the researcher as components of the innovations rather than more general questions when using self-report to measure program re-invention. The perception of the site coordinator was used to determine for each activity, whether the activity was (a) conducted as it is written in the curriculum, (b) conducted as it is written in curriculum but in a different order, (c) not conducted at all or (d) completed with changes. The interviewer used frequent prompts to achieve the greatest accuracy. As an example of the prompts used for the activity “How Risky Is It?” the interviewer asked: “Were any additional behaviors added to the list?” “Were any behaviors left off the list e.g. anal sex?” Prompts are written into the survey to ensure consistency among interviews (Appendix B). A short description of all the activities was available (Appendix A) if the respondent did not recall a specific activity, the interviewer read the standardized description to the respondent. To further standardize survey administration, the author independently conducted the interviews.

If an activity was reported to have been re-invented, the interviewer asked the site coordinator to describe the changes. The site coordinators were also asked, from a list of prepared reasons, to attribute why the changes were made. The list of reasons

was developed by a literature review and input from an expert panel about common reasons for re-invention (to simplify, little understanding of the activity, desire to narrow in on a problem, to expand to another problem, to increase ownership/make more suitable for new target audience, due to the agency requiring the change, to update or modernize, time constraints or other). If “other” was chosen, the site coordinator was asked to further explain the reason for change.

The draft RMI was reviewed by several of researcher’s colleagues and committee members and revised based on the reviewers’ comments and prepared for the expert panel.

Expert Panel

The second draft of the RMI was reviewed by a panel of experts (n = 4) including representatives from CDC/DASH (Leah Robin, PhD), ETR (Julie Taylor), a pediatrician and the primary developer of “Focus on Kids” (Bonnie Stanton, MD), and an anthropologist from the University of Maryland (Linda Kaljee, PhD). The draft questionnaire was sent to each of the expert panelists for their suggestions for improvement. Suggestions were incorporated into the draft, which was then sent out again to the expert panel for an additional review. Comments and information learned from the expert panel were used to revise the questionnaire for the pilot test.

Pilot Test

The pilot test was conducted with five site coordinators or assistant coordinators. An attempt was made to identify programs that had both a site coordinator and an assistant coordinator for the pilot. Assistant coordinators were selected, when possible, so as not to disqualify the program from inclusion in the final study. Assistant coordinators were asked to avoid any discussion of their piloting experience with the site coordinator to prevent any bias. Assistant coordinators participated in two of the five pilot programs. The researcher met face-to-face with assistant coordinators in the Baltimore-Washington area and conducted telephone surveys with those outside the area. The pilot instrument was reviewed for length, comprehension, and format. A final revision of the instrument, based on findings from the pilot, was completed (Appendix B).

Primary Data Collection

Choice of Subjects

Four methods were possible for data collection: (a) a text analysis of the written curriculum to assess changes made to the curriculum; (b) an interview the head of the project (a primary investigator, head of the CBO, or head of the school district); (c) an interview of the site coordinators or managers for changes made to the curriculum (the method used by Wulf in her study of the DARE program); or (d) an interview of group leaders to determine the actual content taught in the curriculum (the method used by Brunk and Goeppinger in their exploration into re-invention in the Arthritis Self-Care Project). The author struggled with the choice of informants for sometime before selecting site coordinators or managers. A site coordinator was defined as an individual who contributed with curriculum re-invention or who understands the rationale for change at their site. The site coordinator also ensured that these activities were taught at their site. Site coordinators, managing multiple sites, were only interviewed for one site. The site included was the last one conducted that fit inclusion criteria (*vide infra*). The rationale for choosing site coordinators as the sample was threefold. First as the purpose of this study was to explore re-invention that took place during the process of dissemination, the study targeted those individuals who played a role in the planned transformation of the curriculum. Second, since the published “Focus on Kids” cannot be changed due to copyright laws, many of the changes made were probably done orally and thus, would not be captured by a review of the written curricula. Further, a micro-approach was desired, assuming that decisions of what was appropriate might change

from one county to the next or even one school to the next. Therefore, having an overall supervisor would not work, as they might be in charge of several programs that teach different renditions of the curriculum. Finally, it would be impossible to know why individual changes were made (e.g., time constraints vs. focus group discussions that determine the activity would not be accepted) if a narrow level of study (i.e., group leaders) were chosen. Group leaders, for example, might not be knowledgeable of the rationale for change. Further, group leaders were often times unaware of institutionalization, which was best captured by a site or organizational coordinator. Although interviewing the group leaders would have demonstrated another level of re-invention that is very important, this process evaluation would be more appropriate at a local level. For the above reasons, it was felt for the purpose of this study the site coordinator or manager was the appropriate person to interview.

Selection of Subjects

Snowball sampling was employed in this study to obtain subjects. Snowball sampling is a technique used to identify potential subjects when appropriate candidates for the study are hard to locate (Babbie, 1982). Other health educators, who participated in the “Focus on Kids” trainings, assisted in identifying others who have used the “Focus on Kids” curriculum. The 206 individuals who participated in one of the “Focus on Kids” Master Trainer Trainings (two CDC national trainings [64 individuals

trained], four school systems [82 individuals trained] as well as the three international trainings [60 individuals trained]) described in chapter 2 were contacted for assistance . They identified both organizations that conducted “Focus on Kids” groups and other individuals who were trained or using the “Focus on Kids” curriculum. Other organizations that the author had trained or knew were using “Focus on Kids” were also contacted.

Recruitment Procedures

All individuals who participated in a “Focus on Kids” training were contacted by letter requesting their participation in the preliminary screening for the research study. A description of the study and a screening questionnaire along with a self-addressed postage paid postcard for declining participation was sent to all potential participants (Appendix C). If potential participants did not decline the screening interview, a phone call was initiated to determine if (a) the individual’s organization had conducted “Focus on Kids” groups, (b) they had conducted additional trainings, and (c) a site manager or coordinator was available and were willing to be interviewed. Trainers who conducted additional trainings were asked to identify others who had been trained in the program and the same procedure was used for the new potential participants.

Selection Criteria

Participants in the study included site coordinators responsible for conducting a “Focus on Kids” program who knew the rationale behind which activities were taught in a specific jurisdiction. Participants further were those who worked to ensure that these activities were taught at their respective sites. In order to be included in the study, “Focus on Kids” needed to have been implemented in the previous year. Finally, selection of participants was limited to those who spoke English (the groups did not have to be conducted in English as long as the manager was able to use English to answer the survey questions).

Exclusion Criteria

Site coordinators not having conducted “Focus on Kids” in the previous year were excluded from the study. The author struggled with the number of activities from the curriculum an organization needed to complete to be a part of the study. Since many of the activities are components of other curricula and are quite popular, the author did not set the criteria too low because only completing one or two activities could not be equated with adopting the curriculum. Setting the criteria too high would potentially lose a large group of adopters that only used a small number of the activities from the curriculum. Finally, the author settled on a minimum of 7 activities from the curriculum as a sufficient number to distinguish between those organizations not necessarily adopting the curriculum and still low enough to determine the full range of organizations adopting the curriculum. If during pre-eligibility screening, the site

coordinator reported less than 7 completed activities from the curriculum, the individual was excluded from the sample.

Data Collection

If the site coordinator agreed to participate in the study, further screening was conducted to ensure that all inclusion criteria were met and a convenient interview time was arranged. Prior to the interview the participants were sent a copy of the survey via e-mail, mail, or fax. The survey was specifically to help the respondent prepare for the interview while not overwhelming them or allowing them to self-administer the survey (Appendix D). An index card listing the 10 choices of reasons for re-invention in large bold font was also included in the pre-interview packet for use as a visual aide while respondents answered questions on re-invention. Further, respondents were requested to have all their curriculum and other materials gathered for the interview.

Site coordinators who had conducted multiple versions of the curriculum were asked to answer the survey for the last conducted version. Survey administration took place via the telephone; the researcher conducted all interviews herself to eliminate inter-rater reliability bias. The researcher read all of the questions and recorded the subjects' answers on an interviewer form (Appendix B). Prompts were included in the interviewer script throughout the questionnaire to clarify questions and to facilitate

respondents' recall. Descriptions of all curriculum activities had also been prepared in advance should, respondents need help in recalling the exact activities.

All interviews were taped using a micro -cassette telephone recorder. The cassette tapes were used for archival purposes when questions arose about the context of a comment. All subjects had the right to refuse being taped. All micro-cassettes are stored in a locked file cabinet in the researcher's office and will be destroyed after two years. The interviews lasted approximately 30 minutes and site coordinators were compensated for their time with a copy of the video "Protect Your Child from AIDS" (an HIV prevention video that targets parents of adolescents) and a \$10.00 blockbuster certificate. The video was evaluated and shown to be effective at broadening and sustaining the "Focus on Kids" program (Wu et. al., 2003).

Analyses to Answer Research Questions

Data Analysis Plan

This study was conducted to assess the type and amount of re-invention that occurred to the "Focus on Kids" program during the diffusion process. Further, the study attempted to develop a model of key constructs that predict quality of the re-invention. Quality of re-invention was operationalized with a proxy variable of adherence to core elements that relate to the PMT and the National Health Education

Standards (NHES). As this research was an exploratory study in nature, and the measurements were based on methods found to be reliable in previous research, the questionnaire described above was not assessed as to its reliability prior to data collection. Instead, reliability tests were calculated after data collection prior to data-analyses to answer the research questions.

Instrument Reliability

A test-retest reliability coefficient was used to assess the reliability of the survey. Approximately one-fourth of the sample (n=8) was asked to retake the survey 2 to 4 weeks after the initial survey. For reliability testing, every fourth participant was asked to repeat the survey 4 to 6 weeks after the first interview. If the participant refused to repeat the survey or interviewer could not make contact after 4 weeks, the next person on the list was contacted to be re-interviewed. Variables were both binary and continuous and based on very small sample. Therefore, Spearman rank-order correlation coefficients were used for continuous test-retest scores to assess reliability. Kappa scores were used to show strength of association for the dichotomous variables.

Qualitative Analyses

1. What re-invention occurred in the diffusion process of the “Focus on Kids” program? What deletions, changes, and new activities were instituted? How often did these re-inventions occur? What was the rationale for change?

Characteristics of organizations adopting “Focus on Kids” were examined, including the demographics of the target audience, type of gatekeeper involved, involvement of innovators, and whether evaluations (both process and outcomes) were conducted. Simple frequency distributions of types of re-invention (changes, deletions and additions) and attributable reasons for re-invention were computed. Activities most commonly deleted or changed across organizations were determined. Most common reasons for re-invention were computed. The researcher examined themes that emerged in the frequency distributions as well as explanations and descriptions of activities.

Quantitative Analyses

To answer the proposed research questions above, the key variables were operationalized and scored. In this section the construction of the dependent variable is described. Following the description of the dependent variable, each of the independent variables and their associated research questions and planned analyses are described.

Dependent Variable: Re-invention Quality

The dependent variable, re-invention quality, was measured using a proxy variable of adherence to the core components of the curriculum thought to be

responsible for the positive behavior change. There are two sub-scales that compose the dependent variable re-invention quality: adherence to the PMT subscale and adherence to the NHES subscale.

1. Adherence to the PMT Subscale

The first step in measuring adherence to the theoretical foundation was to determine a means to measure and operationalize the PMT (see description in chapter 2) in the curriculum. A team of four social scientists, representing members of the original “Focus on Kids” team, and four others in the process of implementing an adaptation of “Focus on Kids” convened to determine which activities in the curriculum corresponded to the constructs of the PMT. The team undertook a three step process. First, independent examinations of activities from “Focus on Kids” were conducted to determine which activities operationalized the various PMT constructs. The team members then conducted conference calls to share their scores and resolve any inconsistencies. The team members debated their points of view and only the constructs receiving consensus were included in the analyses. “Focus on Kids” operationalized all seven PMT constructs. Table III-1 presents the PMT constructs and the “Focus on Kids” activities used to operationalize the constructs.

Table III- 1: Protection Motivation Theory Constructs and “Focus on Kids” Activities	
Threat Appraisal	
PMT Construct	Activities in which construct is operationalized:

<p>Intrinsic Reward 8 Activities</p>	<p>Session One: Family Tree Session Two: Rank your Values; Values Voting Session Five: Sex: A Decision for Two Session Six: Ways to Show You Care Session Seven: Goal Setting: My Future; Images of Sex Session Eight: Pat on the Back</p>
<p>Extrinsic Reward 10 activities</p>	<p>Session One: Family Tree Session Two: Rank your Values; Values Voting Session Four: M-n-Ms: How Many Kids Are Really? Session Five: Sex: A Decision for Two Session Six: Ways to Show You Care Session Seven: Goal Setting: My Future; Images of Sex Session Eight: Pat on the Back; Community Projects</p>
<p>Severity 13 Activities</p>	<p>Session One: Family Tree Session Two: How Risky Is It?; What Are You Concerned About? Session Three: Finding Information for Good Decisions; Telephone Exercise: Gathering Information; Field Assignments: Interviewing Parents Session Four: SODA Decision Making Model: Step Three: Decide Session Five: Sex: A Decision for Two Session Six: Ways to Show You Care Session Seven: Goal Setting: My Future; Images of Sex Session Eight: Knowledge Feud</p>

<p>Vulnerability 12 Activities</p>	<p>Session One: Family Tree Session Two: How Risky Is It?; What Are You Concerned About? Session Three: Finding Information for Good Decisions; Telephone Exercise: Gathering Information: Field Assignment: Interviewing Parents Session Five: Sex: A Decision for Two Session Six: HIV Transmission Game; Contraceptive Lesson Session Seven: Goal Setting: My Future; Images of Sex Session Eight: Knowledge Feud</p>
<p>Coping Appraisal</p>	
<p>PMT Construct</p>	<p>Activities in which construct is operationalized:</p>
<p>Response Efficacy 16 Activities</p>	<p>Session Two: What Youth Can Do Session Three: SODA Decision Making Model: Step Two: Options; Finding Information for Good Decisions; Field Assignments: Interviewing Parents Session Four: Parent Role Play; Condom Demonstration; SODA Decision Making Step Three: Decide Session Five: SODA Decision Making Model: Step 4: Action; Communication Styles: Aggressive, Assertive, and Nonassertive; Sex: A Decision for Two Session Six: Ways to Show You Care; Contraceptive Lesson Session Seven: Goal Setting: My Future; Role Play: Saying NO or Asking to Use a Condom; Session Eight: Knowledge Feud; Community Projects</p>

<p>Self Efficacy 21 Activities</p>	<p>Session Two: Rank Your Values; Values Voting; What Youth Can Do Session Three: SODA Decision Making Model: Step Two: Options; Finding Information for Good Decisions; Field Assignments: Condom Hunt Session Four: Parent Role Play; Condom Demonstration; Condom Race; SODA Decision Making Model: Step Three: Decide; Additional Field Assignments Session Five: SODA Decision Making Model Step 4: Action; Communication Game: Changing Messages; Communication Styles: Aggressive, Assertive, and Nonassertive; Communicating Without Words; Sex: A Decision for Two Session Six: Ways to Show You Care; Contraceptive Lesson Session Seven: Goal Setting: My Future; Role-play: Saying NO or Asking to Use a Condom Session Eight: Knowledge Feud; Community Projects</p>
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<p>Response Costs 16 Activities</p>	<p>Session One: Family Tree Session Two: Rank Your Values; Values Voting Session Three: Finding Information for Good Decisions; Telephone Exercise: Gathering Information; Field Assignments: Condom Hunt Session Four: Parent Role Play; SODA Decision Making Model: Step Three: Decide; Additional Field Assignments Session Five: SODA Decision Making Model: Step 4: Action; Communication Game: Changing Messages; Communication Styles: Aggressive, Assertive, and Nonassertive; Communicating Without Words; Sex: A Decision for Two Session Six: Contraceptive Lesson Session Seven: Role Play: Saying NO or Asking to Use a Condom</p>
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Scoring of Adherence to PMT Subscale

A sub-score was given to each of the seven constructs of the PMT based on the number of activities conducted that fulfilled the construct. For example, 16 activities were identified as addressing Response Efficacy (perceived likelihood that an action will reduce the threat). If the project coordinator reported that all 16 activities remained unaltered in the curriculum, a score of 16 (the highest score possible) would be recorded, if none of the activities were completed a zero would be scored (the lowest possible score). If eight of the identified activities were completed an eight would be scored.

Activities that were changed were evaluated by the author to determine if they continued to operationalize the previously identified constructs. Several examples of changed parent role-play activities will illustrate how this process was completed. In the original curriculum the parent role-play activity was scored as operationalizing self-efficacy, response efficacy, and response costs. One organization, for instance, changed the parent role-play activity to a discussion on parent vs. youth communication styles. This program did not score for operationalizing the original constructs (self-efficacy, response efficacy, and response costs) that the parent role-play was assigned. The decision to score the revised activity this way was based on a belief that a conversation about different communication styles did not give youth the opportunity to practice the skill nor the confidence that such a conversation was possible (response efficacy), that they could do it (self-efficacy), and exemplify problems that might occur during the conversation (response costs). Another organization had participants practice the parent role-play activity at home. Again, credit for the three PMT constructs was not given since determining if the youth had completed the assignment and ensuring the youth opportunity for feedback was not possible. Finally, a third program in a juvenile justice facility changed the role-play activity to talking to their probation officers instead of parents, to tailor it for participants. This group was given credit for operationalizing the PMT constructs (response-efficacy, self-efficacy, and response costs) since the youth seemed to receive the same skills from this altered activity. To reduce bias, the author was blind to the identity of the organization changing activities and relied solely on the

description of the changed activity while scoring. Decision rule charts were kept on decisions made for each changed activities to ensure consistency on how changed activities were scored (Appendix E).

All new activities were scored for adherence PMT by the author. Descriptions of the new activities were reviewed according to the constructs of the PMT. A determination was made if the new activity met any of the constructs of the PMT. A decision rule chart was kept to ensure consistency (Appendix F). The following example illustrates the process. Two different organizations added an activity using “drunken goggles” by which the participants used goggles that simulating the experience of drinking and were then asked to accomplish tasks that require coordination. Five other organizations added a similar activity called “Let’s Spin” where participants are spun to simulate the experience of drinking and then asked to accomplish coordination tasks. All of these activities are scored the same and given one point for severity. To reduce bias, the author was blind to the identity of the organization completing the new activities and relied solely on the description of the activity to score. As with the activities in the original curriculum, an activity received one point for each PMT construct it operationalized. New activities had the potential to substantially raise the adherence to PMT constructs. Once analysis of all new activities was conducted, scoring was completed.

An overall score for meeting the adherence to the PMT was scored by summing the seven sub-scores. The author struggled with the decision of whether or not to

standardize the constructs of the PMT. As currently calculated, some constructs of the PMT are more heavily weighted than others (e.g., self-efficacy is composed of 21 activities whereas response cost is composed of 16, and intrinsic reward is composed of only 8 activities). However, the author recalled that the curriculum's development team included more exercises in certain constructs due to the belief that some constructs had more influence on behavior change and should therefore, have more activities that operationalized and reinforced the construct. Consequently, the author decided to let each construct be weighted by the number activities that operationalized the construct.

2. Adherence to the National Health Education Standards (NHES) subscale

Description of NHES

In 1992, the Joint Committee on the National Health Education Standards (NHES) began developing a framework to aid schools in creating or choosing health curricula to ensure that their chosen programs would enhance student health and promote academic success. The Standards delineate the knowledge and skills that students need to obtain, interpret, and understand and the competence to use health information and services to enhance health. They provide a foundation for curriculum development, instruction, and assessment of student performance. Developed with input from thousands of reviewers (including professionals in health and education, parents, and community members), the Standards draw from numerous documents and

experience of other development groups for education standards. The Standards represent the state of the art in school health education. The hope is that the NHES provide a framework for schools to create instructional programs that will enable their students to become healthier and experience academic success (Joint Committee on National Health Education Standards, 1995).

National Health Education Standards

Standard 1: Students will comprehend concepts related to health promotion and disease prevention. Performance indicators for this standard center around identifying what good health is, recognizing health problems, and ways in which lifestyle, the environment and public policies can promote health.

Standard 2: Students will demonstrate the ability to access valid health information and health-promoting products and services. Performance indicators focus on identification of valid health information products, and services including advertisements, health insurance and treatment options and food labels.

Standard 3: Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks. Performance indicators include identifying responsible and harmful behaviors, developing health-enhancing strategies, and managing stress.

Standard 4: Students will analyze the influence of culture, media, technology and other factors on health. Performance indicators are related to describing and analyzing how

one's cultural background, messages from the media, technology and one's friends influence health.

Standard 5: Students will demonstrate the ability to use interpersonal communication skills to enhance health. Performance indicators relate to interpersonal communication, refusal and negotiation skills and conflict resolution.

Standard 6: Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health. Performance indicators focus on setting reasonable and attainable goals and developing positive decision-making skills.

Standard 7: Students will demonstrate the ability to advocate for personal, family, and community health. Performance indicators relate to identifying community resources, accurately communicating health information and ideas and working cooperatively to promote health (Joint Committee on National Health Education Standards, 1995).

An Analysis of the NHES and "Focus on Kids"

As organizations began using CDC/DASH identified "Programs that Work" such as "Focus on Kids," they began to ask how these programs met the NHES, for their health education programming. To answer this question, ETR (1999; 2003) enlisted the assistance of three members of the Joint Committee on the NHES. They first conducted independent examinations of lessons from each of the "Programs that Work," including "Focus on Kids." The analysis identified which performance indicator was met for each of the seven standards. Each committee member used a standardized form

to collect the data. The committee members then conducted conference calls to share their analysis and resolve any differences. Staff from ETR facilitated these conference calls. The committee members critically argued and debated their points of view and only the performance indicators receiving consensus were included in the analyses. Charts and summary statements were developed for each “Program that Works.” “Focus on Kids” met all seven NHES (see Table III-2) (ETR, 2003).

Table III- 2: NHES and “Focus on Kids” Activities	
Health Education Standard #1: Students will comprehend concepts related to health promotion and disease prevention. 6 activities	
Performance Indicators: (Grades 5-8)	
1. Explain the relationship between positive health behaviors and the prevention of injury, illness, disease, and premature death.	Session 2: How Risky Is It? Session 6: HIV Transmission Game Ways to Show You Care
2. Describe the interrelationship of mental, emotional, social, and physical health during adolescence.	Session 3: Video: What Kids Want to Know About Sex and Growing Up
6. Describe ways to reduce risks related to adolescent health problems.	Session2: How Risky Is It? Session 6: Ways to Show You Care HIV Transmission Game Contraception Lesson Session 7: Review of Chapter 6
8. Describe how lifestyles, pathogens, family history and other risk factors are related to the cause or prevention of disease and other health problems.	Session 2: How Risky Is It? Session 6: HIV Transmission Game
Health Education Standard #2: Students will demonstrate the ability to access valid health information and health-promoting products and services. 7 activities	
Performance indicators: (Grades 5-8)	
Specific Activities where addressed:	
1. Analyze the validity of health information, products and other services.	Session 3: Finding Information for Good Decisions Session 4: Condom Demonstration M&Ms Game: Who Many Kids Are Really?

2. Demonstrate the ability to utilize resources from home, school, and community that provide valid health information.	Session 3: Finding Information for Good Decisions; Telephone Exercise: Gathering Information; Field Assignments Session 4: Additional Field Assignments Session 5: Presentation of Field Assignments
4. Demonstrate the ability to locate health products and services.	Session 3: Finding Information for Good Decisions; Telephone Exercise: Gathering Information; Field Assignments
Health Education Standard #3: Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks. 5 activities	
Performance Indicators: (Grades 5-8)	Specific Activities where addressed:
3. Distinguish between safe and risky or harmful behaviors in relationships.	Session 2: How Risky Is It? Session 4: SODA Decision-Making Model Step 3: Decide Session 5: Sex: A Decision for Two
4. Demonstrate strategies to improve or maintain personal and family health.	Session 4: Condom Race Session 7: Role-play: Saying NO or Asking to Use a Condom
Health Education Standard #4: Students will analyze the influence of culture, media, technology and other factors on health. 4 activities	
Performance Indicators: (Grades 5-8)	Specific Activities where addressed:
1. Describe the influence of cultural beliefs on health behaviors and the use of health services.	Session 2: What is a Value; Rank your Values; Values Voting
2. Analyze how messages from medial and other sources influence health behaviors.	Session 4: M&Ms Game: How Many Kids Are Really?
Health Education Standard #5: Students will demonstrate the ability to use interpersonal communication skills to enhance health. 11 activities	
Performance Indicators: (Grades 5-8)	Specific Activities where addressed:

1. Demonstrate effective verbal and non-verbal communication skills to enhance health.	Session 1: Group Cohesion Activity: Burning Buildings or Human Knot Session 4: Parent Role-play Session 5: Communication Styles: Aggressive, Assertive, and Nonassertive Communicating without Words Sex: A Decision for Two Session 7: Role-play: Saying NO or Asking to Use a Condom Session 8: The Knowledge Feud Pat on the Back
2. Describe how the behavior of family and peers affects interpersonal communication.	Session 5: Communicating without Words Sex: A Decision for Two
3. Demonstrate healthy ways to express needs, wants and feelings.	Session 4: SODA Decision-Making Model—Step 3: Decide Session 5: Communication Game: Changing Messages Communication Styles: Aggressive, Assertive, and Nonassertive Sex: A Decision for Two Session 7: Role-play: Saying NO or Asking to Use a Condom Images of Sex Session 8: The Knowledge Feud
4. Demonstrate ways to communicate care, consideration and respect of self and others.	Session 4: Parent Role-play Session 7: Role-play: Saying NO or Asking to Use a Condom Session 8: The Knowledge Feud, Pat on the Back
5. Demonstrate communication skills to build and maintain healthy relationships.	Session 4: Parent Role-play
6. Demonstrate refusal and negotiation skills to enhance health.	Session 7: Role-play: Saying NO or Asking to Use a Condom
Health Education Standard #6: Students will demonstrate the ability to use goal setting and decision-making skills to enhance health. 8 activities	
Performance Indicators: (Grades 5-8)	Specific Activities where addressed:

1. Demonstrate the ability to apply a decision-making process to health issues and problems individually and collaboratively.	Session 1: SODA Decision-Making Model-Step 1: Stop Session 3: SODA Decision Making Model-Step 2: Options Session 5: SODA Decision-Making Model—Step 4: Action Session 8: The Knowledge Feud Community Projects
2. Analyze how health related decisions are influenced by individuals, families and community values.	Session 4: SODA Decision-Making Model—Step 3: Decide
3. Predict how decisions regarding health behaviors have consequences for self and others.	Session 1: Family Tree Discussion Session 5: SODA Decision-Making Model—Step 4: Action
5. Describe how personal health goals are influenced by changing information, abilities, priorities and responsibilities.	Session 7: Goal Setting: My Future
Health Education Standard #7: Students will demonstrate the ability to advocate for personal, family, and community health. 1 activity	
Performance Indicators: (Grades 5-8)	Specific Activities where addressed:
2. Express information and opinions about health issues.	Session 8: Community Projects
4. Demonstrate the ability to influence and support others in making positive health choices.	Session 8: Community Projects
5. Demonstrate the ability to work cooperatively when advocating for healthy individuals, families, and schools.	Session 8: Community Projects

Scoring of Adherence to NHES Subscale

A similar process used to score the PMT was used for adherence to the NHES. A sub-score was given for each of the seven health education standards, based on the number of activities conducted that fulfilled that standard. For example, for National Health Education Standard #1: Students will comprehend concepts related to health promotion and disease prevention, six activities were identified as addressing the

NHES. If the project coordinator reported that all six activities were intended to be completed were unaltered using the process of documentation described above, the program would receive a score of 6 (the highest score possible) if none of the activities were completed the program would receive a score of zero (the lowest possible score). If three of the identified activities were completed, a three would be scored.

Altered activities were evaluated by the author to determine if they continued to adhere to the standards. Several examples of changes made to the activity “Sex: A Decision for Two,” which focused on date rape, illustrates how the process was completed. In the original curriculum the date-rape activity was scored as adhering to standards 3 (practicing healthy behaviors) and 5 (communication skills). One organization changed the date-rape activity to a discussion with a rape crisis counselor who talked about the services her center offered. This program did not adhere to the original standards that the date-rape activity was assigned. This scoring decision was based on a belief that a conversation about services offered by a rape crisis center did not give youth the opportunity to practice the healthy behaviors and communications skills needed to avoid situations in which date-rape could occur. Several organizations modified the storyline by having the characters drink alcohol. These organizations were given credit for adhering to the standards 3 and 5, as the youth gained the same skills they would have from the original activity. Finally, a third program discussed statutory rape laws as well as date-rape; the group was given credit for adhering to standards 3 and 5 since the youth received the same skills from this changed activity. To reduce

bias, the author was blind to the identity of the organization changing activities and relied solely on the description of the changed activity while. Decision rule charts were kept to ensure consistency on how changed activities were scored (Appendix E).

All new activities were scored for adherence to NHES by the author. Descriptions of the new activities were reviewed according to the NHES indicators. A determination was made if the new activity met any of the standards. A decision rule chart was kept to ensure consistency (Appendix F). The following examples illustrate this process. Several organizations added activities in which factual information was given. All new activities that only presented factual information received a point for Standard 1 (health information). Also, several organizations added activities surrounding sexual harassment and sexual abuse. Both activities gave youth opportunities to practice communication skills. However, the sexual abuse activity delivered factual information as well. Therefore the sexual abuse activity was scored for adherence to both Standard 1 (health information) and 5 (communication) while the sexual harassment was only scored for Standard 5 (communication). To reduce bias, the author was blind to the identity of the organization completing the new activities and relied solely on the description of the activity to score. As with the activities in the original curriculum, an activity received one point for each standard it operationalized. New activities had the potential to substantially increase the adherence to NHES constructs. Once analysis of all new activities was conducted, scoring was completed.

An overall score for fulfilling the NHES was scored by summing the seven sub-scores. Similarly to the issue of some PMT constructs have a greater weight, the author considered the decision of whether or not to standardize the Standards. As currently calculated, some standards were more heavily weighted than others (the score for Standard 5 (communication) is composed of 11 activities whereas the score for Standard 8 (advocacy) is composed of just one activity). However, the author determined the weight could be reflective of the belief that certain standards were more important in the process of behavior change.

Scoring of Quality of Re-invention Variable

An overall score for quality of re-invention variable was determined by summing the PMT and NHES sub-scores after standardizing them to give them equal weight. The final PMT sub-score with both original and new activities was divided by the total possible times the PMT constructs were operationalized in the original curriculum (96 opportunities) leading to a range of 0 to a little over 1. To standardize the NHES with both original and new activities was divided by the total possible number of 42 activities leading to a range of 0 to a little over 1. The overall score for quality of re-invention was constructed by summing the two subscales and dividing by two for an overall range of 0 to just over 1.

Independent Variables

Five groups of independent variables were analyzed to explore associations with re-invention quality which contributed to a model of re-invention quality (see Figure III-1). The five groups of independent variables are reasons for re-invention, amount of changes made to activities, institutionalization, type of gatekeeper included, and involvement of innovators. Each group of independent variables is described below in relation to the research question which they attempt to answer.

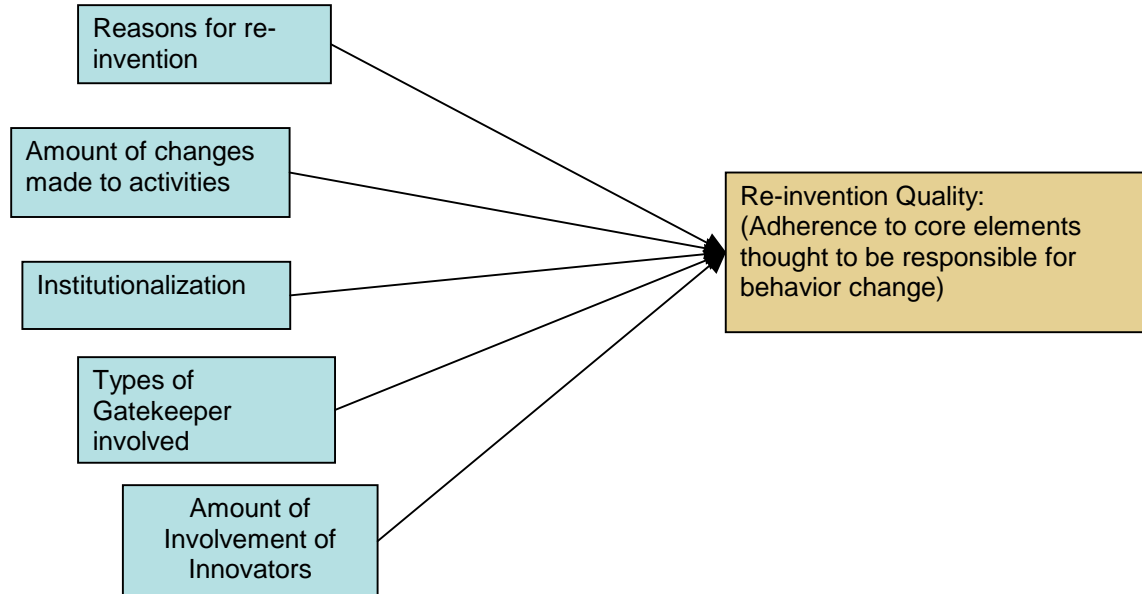


Figure III- 1: Re-invention Quality Model

Research Question Two: Reasons for Re-invention

The second research question explores the relationship between the reasons attributed for re-invention and quality of re-invention. This question is delineated in 9 different research questions.

Construction of Variables:

Nine separate independent variables contribute to reason for re-invention. When an activity was dropped or changed, the site coordinator was asked several follow-up questions from a list of nine common reasons for re-invention: to simplify, did not understand activity, desire to narrow in on a problem, to expand to another problem, make more suitable for target audience, agency required change, to modernize/update curriculum, time constraints, increase ownership or other reason (Rogers, 1995). If they answered “other” they were asked to explain the reason for change. The “other” variable was analyzed qualitatively and treated as a separate variable. The remaining nine variables were constructed by summing the number of times the respondent attributed the re-invention (deletion, change, or addition) to each reason. A re-invention could be scored in more than one category, therefore each rationale for change had a potential range of 0 (all of the activities were done exactly as in the original curriculum) to 75 (all of the activities were changed or deleted and new activities were also added. All nine variables were continuous.

Research Question: How are the reasons attributed for re-invention (simplification, lack of understanding, agency requiring change, time constraints, narrowing in on a problem, expanding to another problem, making more suitable, to modernize/update, and to increase ownership) related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Time constraints, agency requiring change, lack of understanding, and simplifying will all be negatively associated with re-invention quality. Making more suitable for target audience, modernizing, expanding to another problem, and increasing ownership will be positively associated with re-invention quality.

Data Analyses Plan: Distribution analyses were conducted for all variables to determine if re-coding was necessary and the correct statistical method was determined. The distribution analyses and any recoding decisions are reported in chapter 4. If no recoding was necessary, the researcher planned to conduct Spearman rank-order correlation coefficients to test the association between reason for re-invention and re-invention quality.

Research Question Three: Changes to Activity

Construction of Variable:

Changes were considered when the activity was not conducted with the steps outlined in the original curriculum, the activity was moved to another session, the content was altered, or when the storyline of a vignette was altered (changing names was not considered a change). Activities partially completed were considered a change.

Substitution of materials (i.e., a black board versus newsprint) was not considered a curriculum change. Prompts were written in the instrument that the interviewer used while conducting the interview (Appendix B).

“Changes” was defined as the amount of total alterations to activities and was constructed by counting the activities that had been changed. “Changes” ranged from 0 to 55 as every activity could potentially be changed and was continuous.

Research Question: How is amount of change related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Changes are negatively associated with re-invention quality.

Data Analyses Plan: Distribution analyses were conducted for the variable to determine if re-coding was necessary and the correct statistical method was determined. The distribution analysis and any re-coding decisions are reported in chapter 4. If no re-coding was necessary, the researcher conducted Spearman rank-order correlation coefficients to test the association between amount of change and re-invention quality.

Research Question Four: Institutionalization

Research question four is composed of one independent variable: institutionalization. The variable is constructed with a pre-existing scale, the Level of Institutionalization (LOIN) Scales for Health Promotion Programs.

Construction of Variable:

The 15-item LOIN (Goodman, et al., 1993), used to construct the independent institutionalization variable, is based on Goodman’s conceptualization of

institutionalization described in chapter 2. It includes four subscales that examine the extent of program integration into organizations: production (items 1-5; e.g., “Have any of the plans or procedures used for implementing this program been put in writing?”), managerial (items 6-8; e.g., “Has a supervisor been formally assigned to oversee this program?”), maintenance (items 9-11; e.g., “Have any permanent staff been assigned to implement this program?”), and supportive subsystem (items 12-15; e.g., “Is the staff most closely associated with this program’s implementation hired from a stable funding source?”) (Appendix B: Section H). Each item has three sub-questions; sub-question “a” asks the individual about existence of some recognizable form of institutionalization (“Have any of the plans or procedures used for implementing this program been put in writing?”). Sub-question “b” seeks duration in years of the institutionalization (e.g., If yes, for “how many years have such written plans or procedures actually been followed?”) and sub-question “c” probes the extent of institutionalization of the curriculum. This probe uses a Likert-type scale (“Of all the aspects of this program that could have written plans or procedures, what is your best estimate of the proportion which actually have written plans or procedures?”). The Likert scale ranges from 1 (no aspects...) to 4 (all aspects...). Goodman, et al., (1993) found Cronbach’s alpha was moderate to high for the subscales, despite the limited items forming the scales. The average corrected item-total correlations of .28 for the subscale was equivalent to an alpha of .80 for a 15-item scale (Goodman, et al., 1993).

The survey was scored using a grid. All “a” and “b” sub-questions were scored as follows:

If “No” or “Not sure/not applicable” for “a” then the score for the sub-item was 0.

If “Yes” for “a” and “0” or “1” for “b” then the score for the sub-item was 1.

If “Yes” for “a” and “2” or “3” for “b” then the score for the sub-item was 2.

If “Yes” for “a” and “4” or “5” for “b” then the score for the sub-item was 3.

If “Yes” for “a” and “6” or more for “b” then the score for the sub-item was 4.

The mean of all item scores for each sub-system was determined. If the mean score was “1” or less, then institutionalization was low for that sub-system; if the mean score was greater than “1,” but less than or equal to “2” then institutionalization was low to moderate; if the mean score was greater than “2,” but less than or equal to “3” then institutionalization was moderate to high; and if the mean score was greater than “3,” then institutionalization was high.

All “c” questions received a score of 1 to 4 (with 1 being the least extent and 4 being the greatest extent that the inquired aspect of institutionalization had occurred). Again, the mean of all item and sub-system scores were determined. If the mean score was less than or equal to “2,” then institutionalization was low; if the mean score was greater than “2,” but less than or equal to “3” then institutionalization was moderate; if the mean score was greater than “3,” then institutionalization was high. Finally, an overall institutionalization score was computed by taking the mean of all 8 sub-scores. The institutionalization score will be a continuous variable with a range from 0 to 4.

Research Question: How is level of institutionalization related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Institutionalization is negatively associated with re-invention quality.

Data Analyses Plan: The distribution analysis was conducted for institutionalization to determine if re-coding was necessary and the correct statistical method was determined. The distribution analysis and any re-coding decisions are reported in chapter 4. If no re-coding was necessary, the researcher planned to conduct Spearman rank-order correlation coefficients to test the association between institutionalization and re-invention quality.

Research Question Five: Type of Gatekeeper Involved

Research question five explored the types of agencies involved in implementing “Focus on Kids.” The gatekeeper was defined as representation of an organization that aided in implementing “Focus on Kids.”

Construction of variables:

The independent variable (type of researcher involved) is made up of five different variables. Respondents were asked whether the following types of organizations were involved in the implementation of “Focus on Kids”: CBOs, state and local education agencies or schools, research institutions, national non-government organizations (NGOs), government agencies, or other. For each category, respondents were scored 1 if they identified the agency as partners or implementers, and 0 if they did

not categorize the type of agency as being a part of the implementation. Because multiple organizations sponsored “Focus on Kids” in partnerships, the agency could be defined as more than one of the categories. Each classification made up a binary independent variable.

Research Question: How is the type of gatekeeper involved related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality will differ by type of gatekeeper involved. Education agencies will have lower re-invention quality.

Data Analyses Plan: Due to multiple comparisons non-parametric statistics were used to prevent spurious findings. In research question five the independent variables, types of gatekeeper involved, are binary therefore Wilcoxon-Mann-Whitney test was used.

Research Question Six: Amount of Involvement of the Innovators

Construction of Variable:

The amount of involvement of the innovators variable is the extent to which the innovators contributed to the re-invention process. Originally, the innovator involvement was scored on a continuum from no involvement to strong involvement: (no contact, trained a master trainer who trained gatekeeper, trained gatekeeper, one or more of innovators were consultants on project, one or more of innovators were part of team or one of innovators was primary investigator of project). Innovator involvement was then re-coded into two categories. A crucial element to re-invention quality was

whether or not the innovator participated in how the program was re-invented.

Therefore, all those that had no contact, were trained by master trainer, or were trained by the innovator were coded as 0 (as the innovator had no part in decisions made about re-invention). When the innovator participated in re-invention when the innovator was a consultant, part of the team, or the primary investigator and therefore, these responses were coded with a 1.

Research Question: How is innovators' involvement related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality is positively associated with level of involvement by innovators.

Data Analyses Plan: Due to multiple comparisons a non-parametric statistic was used to prevent spurious findings. In research question six the independent variable, innovators' involvement, is binary therefore Wilcoxon-Mann-Whitney test was used.

Test of Overall Model:

A potential weakness of the research is when testing multiple comparisons this may lead to spurious findings. It is for this reason that the more conservative, non-parametric statistics are used. Further, bivariate significant findings will be confirmed in a multivariate model, in which true independent relationship between independent variables and the dependent variable will be confirmed.

Sample Size Calculations

This study was exploratory in nature with a sample size of 34 and an alpha of .05, there is a power of 79% to detect a .6 effect size which is a medium effect size. Small difference might not be detected leading to Type II errors (Cohen, 1988).

Summary

This chapter described the detailed plans for an exploratory analysis of the re-invention of the “Focus on Kids” program. It also clarifies the innovation, the instrument development, sampling procedure, operationalization of all the variables and quantitative analyses of all research questions.

CHAPTER FOUR: RESULTS

Introduction

The current study involved conducting a qualitative and quantitative exploration of re-invention quality of an efficacious HIV prevention program. The results of the reliability analyses are presented first, followed by a description of the sample population. Next, descriptive data of the re-invented innovations are detailed. Then analyses of the remaining five research questions are presented. Finally, the author presents an overall a multivariate model that showstrue independent relationships between independent variables and the dependent variable.

Instrument Reliability

To determine the reliability of the survey in measuring the re-invention of “Focus on Kids,” eight respondents of the original sample took the survey a second time two to four weeks after the first survey. Variables were both binary and continuous and based on a very small sample, therefore, Spearman rank-order correlation coefficients were used for continuous test-retest scores to assess reliability. Kappa scores were used to show strength of association for the dichotomous variables. The majority of the key variables had associations of .7 or above. The variables that had

lower correlation coefficients include one reason for re-invention “My agency required me to change” (.655 p=.08) and one gatekeeper, CBOs (.5 p=.10). The correlation coefficients for all test-retest variables can be found in Table IV-1.

Table IV- 1: Test-retest Correlation Coefficients and Tests of Associations for Main Variables (n=8)			
Variable		Correlation Coefficient	P
	Spearman rank-order correlation coefficients		
	Quality of re-invention	.98	.000
	Expand to another problem	1.00	.000
	Make more suitable for target audience	.77	.026
	My agency required me to change	.66	.078
	Time constraints	.81	.014
	Changes	.71	.048
	Kappa scores		
	Community-based Organization	.50	.102
	State/Local Education Association	1.00	.005
	Research Institution	1.00	.005
	National Non-Governmental Organization	1.00	.005
	Government Agency	1.00	.005
	Institutionalization	1.00	.005
	Involvement of Innovator	1.00	.005

Respondents

A snowball sampling technique was used to obtain 244 individuals whom had participated in “Focus on Kids” trainings. Three additional individuals were included in the sample as they had conducted “Focus on Kids” with youth. Therefore, the total number of potential participants was 247 as shown in figure IV-1. For all 247

respondents, several attempts were made to contact them (including up to four phone calls with messages, two faxes if a fax number was available and two e-mails if address was available). If contact information was not accurate an attempt was made to locate the correct information through their agency of employment, operator's assistance, or the internet white pages.

As shown in Figure IV-1, contact was made with 153 (61.9%) of these individuals. The reasons that contact was not possible for the remaining 94 individuals was as follows: 32 (34%) no longer worked at agency, 24 (26%) did not return phone calls, e-mails or faxes, 18 (19%) inaccurate contact information was given, 14 (14.9%) refused participation with opt-out postcard and 6(6%) had other miscellaneous reasons that they could not be contacted. Of the 153 that were contacted, 43 (28%) were determined eligible for the study. Eighty-eight (58%) were not eligible because they had not conducted "Focus on Kids" with youth, the remaining 22 (14%) were not eligible (see chapter 3, page for inclusion and exclusion criteria) due to the following reasons 5 (23%) involved in the pilot, more than one year had passed since 5 (23%) conducted "Focus on Kids", 7 (32%) completed less than seven activities, 1 (5%) group leader did not speak English, 1 (5%) program had changes that were so substantial it was no longer possible to match activities to the original program, and 2 (9%) had multiple people on the same project and someone else was interviewed. Thirty-four of the 43 individuals determined eligible for the study were interviewed for a response rate of 79%. Of the remaining 9 eligible who were not interviewed, reasons for not being

interviewed 4 (44%) no longer worked at the agency and could not be located, 3 (33%) never returned calls or e-mails, and 2 (22%) refused participation.

Altogether, 34 of known 43 eligible subjects (79%) were successfully interviewed for this research project. Every fourth participant was asked to repeat the survey 4 to 6 weeks after completed the first interview for reliability testing. If that person refused or interviewer could not make contact after 4 weeks the next person on the list was contacted to be re-interviewed.

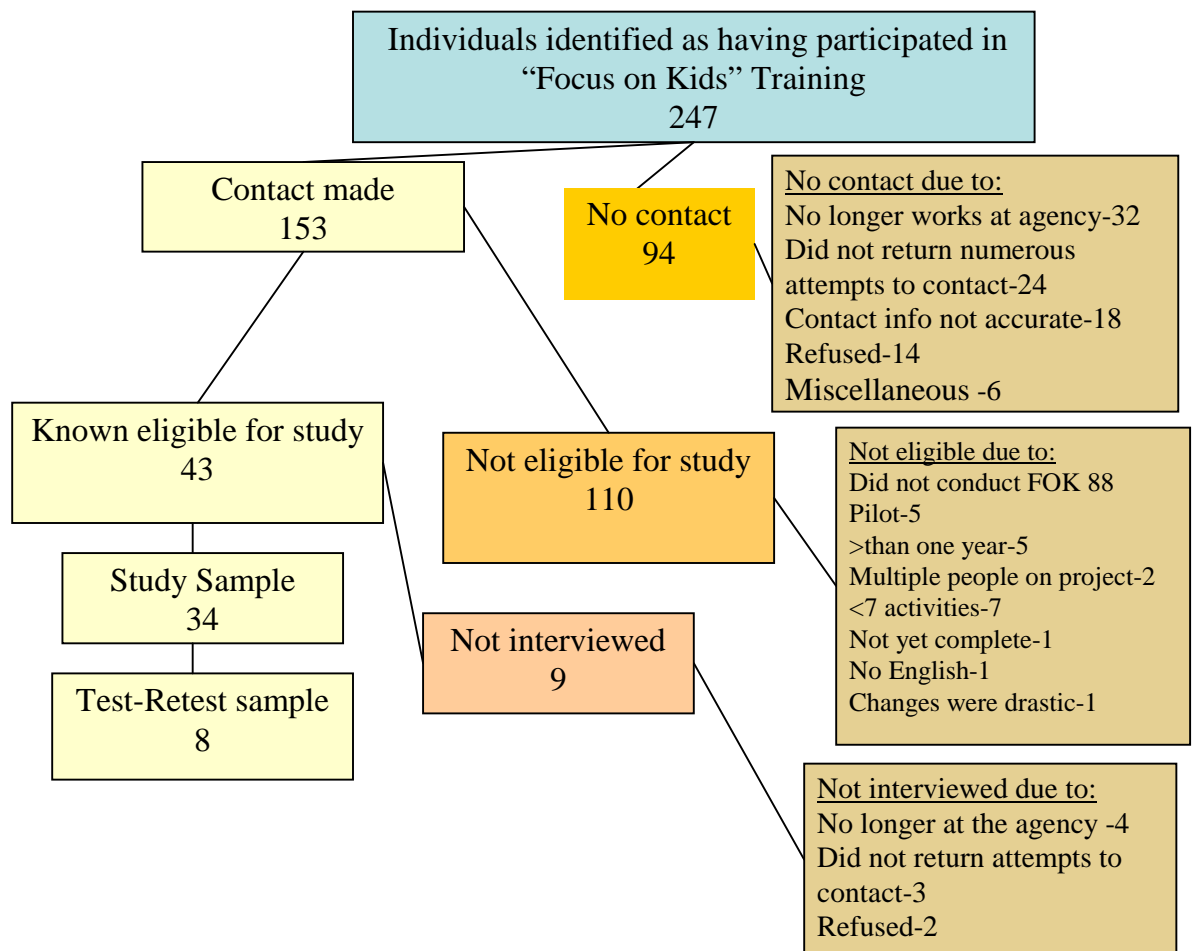


Figure IV- 1: Characteristics of the Sample Population

Participants in the study were from 5 different countries: Bahamas (3), Mexico (1), Trinidad and Tobago (3), Vietnam (1), and United States (28) (one program occurred along the boarder of US and Mexico and is therefore counted twice). Two additional countries, China and Namibia, used “Focus on Kids” as a template to create new curricula. However, in China no project coordinators familiar with the curriculum were fluent in English. Therefore, the organization could not be included. The re-inventions to the Namibian curriculum, “My Future, My Choice,” were so extensive that the coordinator was unable to discern which activities were drawn from “Focus on Kids.” The implementers, too, were no longer familiar with the original “Focus on Kids” and could not discern the activities that were re-invented--therefore this site was not included in the current study. Those individuals from the U.S. represented the District of Columbia and 11 different states (California, Iowa, Louisiana, Maryland, Michigan, Nevada, North Carolina, South Carolina, Virginia, Washington, and West Virginia).

The curriculum was translated into five new languages (Vietnamese, Spanish, Chinese, and two local African languages). Eleven (32%) groups had also changed the name from “Focus on Kids.”

The 34 projects represented CBOs (19), state or local education agencies (4), research institutions (10), NGOs (3), government agencies (local, state and federal) (8),

as well as one church, a residential facility for troubled youth, a private consultancy organization, and a school-based health clinic. Nine of the programs were partnerships across two or more of the agencies listed above.

Nineteen (56%) participants in the sample were trained by the author (the lead trainer on the development team). Twelve (35%) were trained by a master trainer who was trained by the author. All 31 trained individuals received instruction in the entire curriculum. The remaining 3 (9%) were never trained. Beyond training, involvement of innovators included 3 (9%) programs in which one of the original developers was part of a team, 3 (9%) programs in which one of the developers was a consultant on the project and five (15%) programs in which one of the original developers was the primary investigator of another research program in which “Focus on Kids” was utilized.

Characteristics of the Program

In the original “Focus on Kids” program the groups ranged in size from 3 to 10. The number of youth in each group in the replications ranged from 3 to 35 with a mean of 15 (SD=7.9) youth per group. The number of groups that were conducted in the various projects ranged from 1 to 150 with a mean of 16 (SD=28.8).

In the original evaluation of “Focus on Kids” two facilitators were used per group. The facilitators were paid, part-time employees and included both members and

non-members of the target audience. No peer educators were used in the original “Focus on Kids.” In the replications of “Focus on Kids” there was a range of facilitators from 1 to 4 per group with a mean of 1.9 (SD=.8). Twenty-six (77%) of the replications used paid facilitators and 12 (35%) used volunteers¹. Twenty-one (62%) of the replications used community members of the target audience and 22 (66%) used non-community members². Eighteen (53%) used full-time employees and 20 (59%) used part-time employees³. Ten (30%) of the replications used peer educators.

The original “Focus on Kids” evaluation was composed of seven 90-minute sessions and one all day session for a total of 16 hours. In replications of “Focus on Kids” the range of number of sessions was 1 to 24 with a mean of 7 sessions (SD=4.7). The range for total duration was 3 hours to 30 hours with a mean of 12.4 hours (SD=6.7).

The original “Focus on Kids” was conducted in recreation centers. Replications, however, took place in a wide array of locations--recreation centers, churches, schools, community centers, health departments, group homes, juvenile detention centers, and one program took place with the use of satellite television hook-up (the facilitators were in one location and the youth were in several different rural community locations).

¹ Some replications used both paid and volunteers, therefore the numbers are greater than 100%.

² Some replications used both community members and non-community members therefore the numbers are greater than 100%.

³ Some replications used both full-time and part-time employees therefore the numbers are greater than 100%.

Characteristics of the Target Audience

The demographics of the programs' target audience varied greatly. Fifteen (44%) replications were conducted with rural youth, 3 had suburban youth as a primary target audience, and 22 (65%) replications targeted urban youth⁴. The ethnicity of the target audiences was diverse, including 16 replications focusing primarily on African-American participants and 11 from many different ethnic groups. Also, the target audience was primarily Caribbean majority of African-descent in 5 replications, Vietnamese in one, and primarily European-American in one. The age of youth in the groups ranged from 8 to 24, with the majority having an age range of 10 to 18.

The original "Focus on Kids" evaluation was conducted with same-sex, naturally occurring friendship groups. The rationale of using naturally formed friendship groups was to influence peer norms. Fourteen (41%) of the replications were conducted with same-sex groups, while the remaining 20 (59%) were conducted with mixed gender groups. Only 2 of the programs (6%) used naturally occurring friendship groups. Although not defined as friendship groups, in 26 replications (77 %) the youth were familiar with each other including 8 replications (23 %) that were composed of classrooms.

Process of Re-invention

Many of the participants reported seeking guidance or conducting research to facilitate the re-invention process. Twenty (60%) replications reported some guidance on the re-invention process. Guidance was received through a variety of resources including advice from the “Focus on Kids” developers (13 or 38%), counsel of the publishers, ETR associates (3 or 9%), and NHES (6 or 18%). Other replications received guidance from community advisory boards and experts in the Departments of Health and Education. Fifteen (44%) of replications conducted research to assist in the preparation of re-inventing “Focus on Kids.” Ten (30%) of the 34 replications conducted qualitative research--the majority of these conducted focus groups in the target community. Eight (24%) replications completed surveys prior to re-invention.

Re-inventions were communicated to facilitators through a variety of mechanisms including oral communication through training 13 (38%) organizations, new curriculum manuals 7 (20%), and addendum pages to the original curriculum.

Research Question Analyses

⁴ Several replications targeted youth in more than one region and therefore the numbers sum to greater than 34.

Research question one was concerned with the type and amount of re-invention occurring during the diffusion process of “Focus on Kids”. Frequency distributions were completed on each activity to determine frequency of re-invention and rationale for re-invention (Appendix G).

On average, the activities were conducted without changes by over half of the organizations. Table IV-2 presents the activities that were most frequently conducted without changes, percentage of organizations that did not change the activity, and description of the activity.

Table IV- 2: Activities Most Frequently Not Re-invented (n=34)		
Activity	Description of Activity	N (%)
Defining a Value	Youth learn what a value is, where values come from, and that values help determine choices that people make.	28 (82.4)
Ground Rules	Group leader leads youth in this activity where they establish their own ground rules that must be followed by everyone.	27 (79.4)
Communication Game Changing Messages	This is the old telephone game. One person whispers a story to the next person, who whispers it to the next and so on. The last person has to repeat out loud what they heard. It helps youth understand miscommunication and how rumors get started.	25 (73.5)
Communicating Without Words	In this activity, youth stand in a line facing the same direction. The person at the end of the line is given an action or emotion to communicate to the person in front of her or him without using words, and the process is repeated with the next person. A discussion is lead about the (mis)communication that frequently occurs without words.	24 (70.6)

Ways to Show You Care	Youth are given reasons why people have sex and asked to come up with other possibilities. Then, youth are asked to decide whether these reasons can be accomplished “With or Without Intercourse” or through “Intercourse Only”. Almost all reasons are possible without intercourse, including pregnancy. Youth are then asked to brainstorm about other ways to show you care without having sex.	24 (70.6)
What are You Concerned About?	For this activity, youth discuss concerns about life. Youth are then told that their concerns are normal and that this program will help teach them how to protect themselves from some of these concerns.	24 (70.6)

Table IV-3 presents the most commonly deleted activities, percentage of replications that deleted the activity, description of the activity, most common reason cited for deleting the activity and number of programs citing the reason. “Deletions” were significantly negatively correlated with quality of re-invention. Re-invention quality decreased with the greater the number of deletions. The correlation coefficient was high for “deletions”. The magnitude between the relationship of “deletions” and quality of re-invention (Spearman Rank $r = -.863$) accounted for 74% of the variance.

Table IV- 3: Activities Most Frequently Deleted and Most Common Reasons Cited for Deleting Activity (n=34)				
Activity	Description of Activity	n (%)	Most common reason cited for deleting	n (%)

Additional Field Assignment	Youth are assigned field assignments that were not completed at the end of Session III. An additional field assignment is added where youth can talk to a parent about what they have learned in the program and what they can learn from that parent about decision-making or gathering information.	28 (82.4)	Time constraints	14(50)
Review of Field Assignments	Youth share with the class what they have learned completing the field assignments.	19 (56)	Time constraints	14(74)
Field Assignments	Youth are instructed to complete field assignments, including a “Condom Hunt”, “Parent Interview”, and calling a hotline.	17 (50)	Time constraints and To make more suitable for target audiences	10(59) 10(59)
Community Projects	Youth determine their skills, interests for project to improve community. Youth choose a community project that relates to HIV and implement the project.	16 (47.1)	Time constraints	11(69)
Video	Youth watch a video, <i>What Kids Want to Know About Sex and Growing Up</i> , about puberty. A discussion is led about the changes that happen in the body during puberty.	16 (47.1)	No resources	11(69)

Changes were considered when the activity was not conducted with the steps outlined in the curriculum, the activity was moved to another session, the content was

changed, or when the storyline of a vignette was changed (just changing names was not considered a change). Activities that were reported as partially completed were also considered changes to the curriculum. Substitution of materials (i.e., a black board versus newsprint) was not considered a curriculum change. Table IV-4 presents the most commonly changed activities, description of the activity and most common changes to the activity, number of replications that changed the activity, and most common reason cited for change.

Activity	Description	n (%)	Most common reason for making change to activity	n (%)
M-n-M Game	Original: Youth are asked how many kids they think are having sex using 100 M-n-M's. Youth are then given the actual percentage, which tends to be different than the youth's perception. Reasons for this difference are discussed. The same activity is repeated for other behaviors. Change: Local stats used	20 (58.8)	Make more suitable for target audience	16 (80)
The Family Tree	Original: Youth are given a skeleton of a family tree and asked to create the circumstances of and relationships between the family members. The family tree is used in Decision-Making Models throughout program. Change: Changed the names and story to fit culture of youth (included Vietnamese, Hispanic, rural youth, group home setting)	15 (44.1)	Make more suitable for target audience	10 (67)
Contraceptive Lesson	Original: The forms of birth control and their positive and negative aspects are discussed. Change: Added additional methods	16 (47.1)	Update	7 (44)

Sex, A Decision for Two	<p>Original: This activity illustrates the drastic results that can occur by miscommunications using a story about date rape. The myths and facts of acquaintance rape are discussed, along with how that miscommunication could have been avoided.</p> <p>Change: Included alcohol/drugs or date rape drug in story</p>	14 (41.2)	Make more suitable for target audience	4 (29)
How Risky Is It?	<p>Original: In this activity, youth are asked to decide whether behaviors are “Risky”, “Safe”, or if one should “Use Caution.” Youth then discuss the reason for their choice for each particular behavior, and they are given the appropriate information about the behavior.</p> <p>Change: Dropped or added behaviors</p>	11 (32.4)	Make more suitable for target audience	8 (73)

The most common reason cited across all activities among all organizations for re-invention was time constraints (cited 433 times as reason for re-invention) followed by making the activity more suitable for their target audience (cited 280 times), narrowing in on a topic (cited 65 times), and that the agency required the change (cited 51 times) (Appendix G).

New activities were added by 18 (53%) respondents. Of respondents who added new activities, the mean number of activities added was 3.85 (SD= 5.87). The topics of the new activities included alcohol and drug use prevention (7), sexual abuse and harassment (7), building new relationships (7), additional information about HIV/STD (4), cultural diversity (1), prevention of cigarette smoking (1) and in one program HIV testing was added. In another replication a parental monitoring

component was added. Here parents received a 2 hour home visit that involved watching a video on monitoring and working with a health educator to role-play effective communication skills for talking with their adolescents about HIV prevention. This replication had not been done within the year and was therefore excluded from this study. The most common reasons cited for including additional activities were to expand on another problem and to make the activity more suitable for the target audience.

“Additions” was significantly positively correlated with quality of re-invention. The greater number of new activities, the higher the re-invention quality. The correlation coefficient was moderate. The magnitude between the relationship of “additions” and quality of re-invention (Spearman $r=.408$) accounted for 17% of the variance.

Overall re-invention was defined as the amount of any of these three types of re-invention—deletions, changes, or additions. Overall re-invention was significantly negatively correlated with quality of re-invention. When the overall amount of re-invention increased, re-invention quality decreased. The correlation coefficient for overall re-invention and quality of re-invention (Spearman $r=-.416$) accounted for 17% of the variance.

Research Question 2: How are the reasons attributed for re-invention (simplification, lack of understanding, agency requiring change, time constraints, narrowing in on a

problem, expanding to another problem, making more suitable, to modernize/update, and to increase ownership) related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Time constraints, agency requiring change, lack of understanding, and simplifying will all be negatively associated with re-invention quality. Making more suitable for target audience, modernizing/updating, expanding to another problem, and increasing ownership will be positively associated with re-invention quality.

Data Analyses:

Distribution charts and scatter plots were constructed to determine if correlation coefficients were an appropriate statistical tool (Appendix H). The distribution charts and scatter plots revealed that several of the distributions for reasons for re-invention were not appropriately distributed for correlation coefficients. A decision rule was made to drop variables in which greater than 26 of the 34 respondents (76%) did not cite reason or only cited the reason once. To narrow in on a problem, did not understand activity, to simplify, and to modernize/update were cited by so few respondents that these variables were dropped from the analyses. For the remaining variables, both the dependent variable (re-invention quality) and the independent variables (reason for re-inventions) were continuous variables. Histograms were constructed to determine if the variables appeared as a normal distribution. Although the dependent variable was normally distributed, all of the independent variables were positively skewed. A decision was made to use the non-parametric statistical test of Spearman rank-order

correlation coefficient. Table IV- 5 presents the correlation coefficients and significance levels for the correlations.

Table IV- 5: Correlation Coefficients for Reason for Re-invention and Quality of Re-invention (n=34)		
Reason for re-invention	Correlation Coefficient	P
To Expand	.465	.006
Time Constraints	-.751	.000
Make more suitable for target audience	.297	.008
My agency required me to change	-.508	.002
To increase ownership	-.039	.827

The following reasons for re-invention including time constraints and agency requiring change were both significantly negatively correlated with the quality of re-invention. When the frequency of “time constraints” or “agency requiring change” was cited as reason for re-invention increased, re-invention quality decreased. The correlation coefficient was high for both constraints. The magnitude between the relationship of time constraints and quality of re-invention (Spearman $r=-.751$) accounted for 56% of the variance. The correlation coefficient for “my agency required change” and quality of re-invention ($r=-.508$) accounted for 26% of the variance.

“To expand to another problem” and “to make more suitable for target audience” were both significantly positively correlated with quality of re-invention. When the

amount of times “expanding to another problem” or “making more suitable for target audience” was cited as reasons for re-invention increased, quality also increased. The correlation coefficient was moderate for both constraints. The magnitude between the relationship of “to expand to another problem” and quality of re-invention ($r=.535$) accounted for 29% of the variance. The correlation coefficient for “to make more suitable for target audience” and quality of re-invention ($r=.297$) accounted for 9% of the variance.

The research confirmed the hypotheses for time constraints, agency requiring change, making more suitable, and expanding to another problem. The research failed to confirm the hypotheses for updating or modernizing. The research was not able to answer the research questions for lack of understanding, narrowing in on a problem, simplifying, and increasing ownership due to the lack of variance the scale measured in these variables.

Research Question 3: How is the total number of changes related to quality of re-invention (strong adherence to PMT and NHES)? (Change is characterized when the activity was not conducted with the original steps outlined in the curriculum, it was moved to another session, the content was altered, or when the storyline of a vignette was altered [modifying names was not considered a change]. Also activities reported as partially completed were considered a change).

Hypothesis: Changes are negatively associated with re-invention quality.

Data Analysis:

A distribution chart and scatter plot were constructed to determine if correlation coefficients were an appropriate statistical tool (Appendix H). The change variable demonstrated enough variation to conduct analysis. A histogram was constructed to determine if the variable appeared to have a normal distribution. The change variable appeared to be normally distributed. A decision was made to use the non-parametric statistical test of Spearman rank-order correlation coefficient for all the variables as a more conservative approach due to multiple comparisons being conducted. Table IV-6 presents the correlation coefficient and significance level for the correlation.

Table IV- 6: Correlation Coefficient for Total Number of Changes and Quality of Re-invention (n=34)		
	Correlation Coefficient	P-value
Changes	.132	.458

The variable, “Changes,” was not significantly correlated with quality of re-invention. The number of changes did not seem to impact re-invention quality. The research failed to confirm the hypotheses for changes.

4. How is level of institutionalization related to quality of re-invention (strong adherence to PMT and NHES)?

Hypothesis: Re-invention quality will differ by level of institutionalization. No or very low levels of institutionalization will have greater re-invention quality.

Data Analysis:

Distribution tables and scatter plots were constructed for institutionalization and re-invention quality. Since a large number of organizations scored very low on the institutionalization measure, a decision was made to re-code institutionalization into two categories. Agencies scoring ≤ 2.0 were coded as having no to low institutionalization. Those scoring > 2.0 were coded as moderate to high institutionalization. Therefore the variable of institutionalization was now binary and the non-parametric statistic Mann-Whitney was conducted. Table IV-7 presents the Z score and significance level for institutionalization and re-invention quality.

Table IV- 7: Wilcoxon-Mann-Whitney Test for Institutionalization and Quality of Re-invention (n=34)				
	N	Mean Rank	Z	P
No to low institutionalization	28	16.89	-.768	.442
Moderate to high institutionalization	6	20.33		

Re-invention quality did not differ by the level of institutionalization. The quality of re-invention did not differ significantly whether there was no to low institutionalization or moderate to high institutionalization. The research did not confirm the hypothesis.

5. Is there a relationship between quality of re-invention (strong adherence to PMT and NHES) and type of gate keeper?

Hypothesis: Re-invention quality will differ by type of gatekeeper involved. Education agencies will have lower re-invention quality.

Data Analyses:

Type of gatekeeper involved is composed of five binary variables. Therefore, to determine the relationship between type of gate keeper involved and the quality of re-invention the non-parametric statistic Mann-Whitney was conducted. Table IV-8 presents the Z scores and significance level for each type of gate keeper.

Table IV- 8: Wilcoxon-Mann-Whitney Test of Gatekeeper Type and Quality of Re-invention with New Activities (n=34)					
Type of Gatekeeper		N	Mean Rank	Z	P
CBOs	No	15	17.23	-.139	.890
	Yes	19	17.71		
State and Local Education Agencies	No	30	17.98	-.775	.438
	Yes	4	13.88		
Research Institution	No	24	15	-2.27	.023*
	Yes	10	23.5		
NGOs	No	31	16.32	-2.216	.027*
	Yes	3	29.67		
Government Agency	No	26	17.92	-.447	.655
	Yes	8	16.13		

Re-invention quality differed by the type of gatekeeper involved. Researcher and NGO involvement had higher re-invention quality. The research did not confirm the hypothesis, although an unanticipated significance was found with researcher and NGO involvement.

Due to the positive association with having a researcher on the team and re-invention quality, the author questioned whether if there would be a similar association with organizations that did not have a researcher on the team but did conduct some research prior to re-invention.

Hypothesis: Conducting research prior to re-invention, even without a formal researcher involved, is positively associated with re-invention quality.

Data Analysis:

Prior research conducted is a binary variable. Therefore, to determine the relationship between prior research conducted and the quality of re-invention, the non-parametric statistic Mann-Whitney was conducted. Table IV-9 presents the Z scores and significance level for whether or not prior research was conducted.

Table IV- 9: Wilcoxon-Mann-Whitney Test for Prior Research and Quality of Re-invention (n=24)					
		N	Mean Rank	Z	P
Prior Research Conducted	No	17	10.62	-2.033	.042
	Yes	7	17.07		

Re-invention quality differed by prior research conducted. Prior research conducted had higher re-invention quality. The research did confirm the hypothesis.

Research Question 6: Is there a relationship between quality of re-invention (strong adherence to PMT and NHES) and involvement of innovators?

Hypothesis: Re-invention quality is positively associated with level of involvement by innovators.

Data Analysis:

A decision was made to re-code relationship to innovator into two categories. It was determined that the crucial decision of involvement of innovators to re-invention quality was whether or not the innovator participated in how the program was re-invented. Therefore, all those that had no contact, were trained by a master trainer, or were by the innovator, were coded as 0 (as the innovator had no part in decisions made about re-invention). The innovator did play a part in re-invention when the innovator was a consultant, part of team, or the primary investigator--these situations were coded as 1. Therefore, the variable of relation to the innovator was now binary and the non-parametric statistic Mann-Whitney was conducted. Table IV-10 presents the Z score and significance level for innovators involvement and re-invention quality.

Table IV- 10: Wilcoxon-Mann-Whitney Test for Innovator Involvement and Quality of Re-invention (n=34)					
		N	Mean Rank	Z	P
Innovator Involvement	No	23	15.65	-1.565	.118
	Yes	11	21.36		

Re-invention quality did not differ by involvement of innovator. The research did not confirm the hypothesis.

Final Model for Re-invention Quality

To determine an overall model for re-invention quality, bivariate significant findings were used to conduct multivariate analyses. The following variables were included: time constraints, my agency required me to change, make more suitable, to expand to another problem, institutionalization, having researcher involved and having an NGO involved.

Multivariate analyses were performed using linear regression modeling with step-wise regression. Stepwise regression was chosen over a forced hierarchical regression to allow empirical data derive the final model as the research was exploratory and the theory was not ready to predict a model. For the step-wise regression, all variables were initially included in the model and the least significant was removed after each run. The process continued until all variables remaining were significant ($P \leq .05$). Results are displayed in Table IV-11. Step-wise elimination yielded three independent variables that were significant correlates of program fidelity after adjusting for all other variables in the model. A collinearity diagnostic using the condition index was conducted. The condition index is the square root of the ratio of largest to smallest eigenvalues in the correlation matrix of the independent variables. Statisticians suggest that condition

indices under 15 are not problematic. There were no condition indices greater than 15 that would indicate a possible problem with collinearity (Johnston, 1984).

Table IV- 11: Results of Stepwise Elimination Procedure Assessing the Contribution of Key Independent Variables to Quality Re-invention (p≤0.05) (n=34)	
Key Variable	Beta Coefficient
Time constraints	-.728
My agency required me to change	-.331
To expand to another problem	.277

The model explained 83% of the variance in fidelity. Those group leaders who reported no or few time constraints, no or few requirements of their host agency, and expanded the program to other problems reported greater quality of re-invention than their counterparts.

Summary

This chapter reported the results of the reliability analysis, the characteristics of the sample respondents, setting of sample replications, and target audience of sample replications as well as the results of the analyses to answer the research questions. The reliability analysis found the majority of the key variables to have test-retest correlation coefficients greater than 0.7. The data analyses concerning the research questions were also presented. The meaning of the analyses will be discussed in chapter 5.

CHAPTER FIVE: DISCUSSION, IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

This chapter reviews the research questions and design, summarizes the research findings, discusses conclusions, describes limitations of the study, and addresses the implications for health education practice. To conclude, recommendations for future studies will be proposed.

Study Summary

This study was conducted in an effort to the need to understand re-invention that occurs during the diffusion process of effective HIV prevention programs. To answer the six research questions posed, analyses were conducted on data gathered through telephone surveys from 34 projects implementing the HIV prevention program, “Focus on Kids.” The research was framed using diffusion theory to guide possible predictors to re-invention quality. The re-invention measurement instrument was developed for this study. A pre-existing institutionalization scale was also administered. An analysis of the instrument’s reliability was conducted with a test-retest reliability analysis which was acceptable with most variables scoring .7 or above.

The first research question was “What re-invention has occurred in the diffusion process of the “Focus on Kids” program?” Frequency distributions revealed that on

average, the activities were conducted without changes by over half of the organizations. Deleting activities occurred frequently. Most commonly dropped activities consisted of field assignments, review of field assignments, additional field assignments, community projects and the video, What Kids Want to Know about Sex and Growing Up. Activities were also changed frequently. The most commonly adapted activities were the “M-n-M game,” “The Family Tree,” the “Contraceptive Lesson,” “Sex a Decision for Two,” and “How Risky is It?”

Innovative and varied re-invention occurred including the use of a satellite television broadcasts to reach youth in rural settings, adding a parental component, and adding a HIV testing component to the curriculum. The curriculum was translated into several different languages. Also, differing target audiences created the need for development of new activities that focused on the prevention of alcohol and other drugs, sexual abuse and harassment, and the development of quality relationships.

The second research question was “How are the reasons attributed for re-invention related to quality of re-invention?” Both time constraints and my agency required me to change were significantly negatively associated with quality of re-invention. Citing time constraints as a reason for re-invention accounted for 56% of the variance in re-invention quality. Citing my agency requiring the change accounted for 26% of the variance.

The fourth research question was “How is the level of institutionalization related to quality of re-invention?” The Mann-Whitney test was conducted. No significant

relationship was found between the amount of institutionalization and quality of re-invention.

The relationship between the organization hosting the “Focus on Kids” program and re-invention quality was examined in question 5, “Is there a relationship between type of gatekeeper and quality of re-invention?” The Mann-Whitney test was conducted. Both the involvement of a research institution and NGOs were positively associated with quality re-invention.

Research question 6 was, “Is there a relationship between involvement of the innovators and quality of re-invention?” No significant relationship was found between the involvement of the original team of developers and quality of re-invention.

Discussion of Results

The discussion of results focuses upon significant findings in the data analyses conducted to answer the research questions. The reader should be cautious when interpreting these or any other research results. In order to influence theory and practice, more than statistical significance is necessary. It is the substantive meaning of the finding that is most important. The researcher should have adequate certainty that the results of the experiment did not arise by chance and the results reflect a difference that is meaningful (Reicken & Boruch, 1974; Pedhazur, 1997). Statistical significance does not necessarily translate into practical significance. To determine practical

significance, researchers must use their judgment in deciding whether practical significance is made with the following factors: 1) cumulative weight of evidence, 2) statistical significance of results, 3) substantive meaning of results, 4) clinical importance of results, and 5) policy-making (Green & Lewis, 1986).

The current study illustrates several cases in which statistical significance was determined in addition to substantive practical implications. These results are summarized below.

Common Changes to the “Focus on Kids” Curriculum

A qualitative examination of how various replications of “Focus on Kids” were implemented during the diffusion process is a significant step toward understanding the barriers and opportunities to high quality re-invention. Frequency distributions of most commonly deleted and adapted activities across organizations allow exploration of themes and characteristics that make activities vulnerable to being dropped or inappropriately adapted.

Extension Activities

The four most frequently deleted activities were additional field assignments, review of field assignments, field assignments, and community projects. All of these

activities could be defined as “extension” activities. Extension activities are activities designed for outside the classroom or program use. That extension activities are frequently dropped is an important finding for curriculum developers. Activities that are believed to add in the development of core knowledge and skill acquisition must be included in the core curriculum and further enhanced through extension activities. There should not be a belief that the utilization of extension activities will be sufficient.

Videos Resources

The fifth most commonly dropped activity was the video, What Kids Want to About Sex and Growing Up, which resulted from a lack of resources (the cost of the video is \$59.99). Adolescent service providers and schools are often under strict budgetary constraints and might not be able to obtain or utilize more advanced technologies such as audio cassettes, videotapes, CD-ROM, PowerPoint presentation, and web-based resources. Although advanced technology can contribute to the appeal of instruction, it is important that curriculum developers offer low-technology alternatives that are able to fulfill the objectives.

Another disadvantage of advanced technology is its difficulty in adapting to new audiences. A video developed for a specific community may not have the same impact in another community (especially when there are language differences). This problem limits the programs generalizability to other target audiences, perhaps resulting in the

video being dropped. Therefore the information contained in the video is lost to the participants.

A final problem with activities using advanced technology is that they become outdated with time, perhaps impacting its effectiveness. ETR associates, one of the leading publishers of HIV prevention curricula for youth, discourages the use of videos with curricula as they quickly date the curriculum. Furthermore, in this case service providers are hesitant to use the curriculum.

The Vietnamese and Namibian adaptations to “Focus on Kids” addressed these issues of challenges with technology. These countries replaced the video with a short skit with characters from “The Family Tree” activity in “Focus on Kids.” In the skit an older brother or sister describes the changes that occur during puberty. The script was written in the curriculum and group leaders performed the skit for the group. Although some groups might have the resources for the video, having the script available as an alternative activity might facilitate quality adaptation.

Commonly Adapted Activities

The three most commonly adapted activities were the “M-n-M game⁵,” “The Family Tree⁶”, and the “Contraception Lesson.” The first two of these activities were

⁵ This is an activity where youth are asked how many kids they think are having sex, using 100 M-n-M’s. Youth are then given the actual percentage, which tends to differ from the youth’s perception. Reasons for this difference are discussed. The same activity is repeated for how many kids use condoms, sell and use drugs.

culturally appropriate for an urban, African-American target audience. Therefore, group leaders were given specific instructions on adapting activity for their target audience. References for specific resources to assist in the adaptation of the activity to another target audience were provided. Specific instructions seemed to aid group leaders in successfully adapting the activities for their own target audience without losing the objectives of the activity. Likewise, resources and references were provided on updating the contraception lesson for their target audience. “Sex a Decision for Two⁷” and “How Risky Is It?⁸” were also frequently adapted to be more suitable for the target audience. In “Sex a Decision for Two” many group leaders included information about prevention of alcohol and drug use in the story. In “How Risky Is It” behaviors were added and deleted depending on the target audience. No guidance was given for these two activities. In future editions of “Focus on Kids” it might be beneficial to provide guidance on appropriate adaptations of these activities.

Barriers to Quality Implementation

⁶ In this activity youth are given a skeleton of a family tree and asked to create the circumstances of and relationships between the family members. The family tree is used in the SODA Decision-Making Models throughout “Focus on Kids”

⁷ This activity illustrates the drastic results that can occur due to miscommunications. The myths and facts of acquaintance rape are discussed, along with how that miscommunication could have been avoided.

⁸ In this activity, youth were asked to decide whether behaviors are “Risky,” “Safe,” or if one should “Use Caution.” Youth then discuss the reason for their choice, and are then given the appropriate information about the behavior.

Two factors were found to be associated with decreasing quality in implementation: time constraints and my agency requiring changes being made. These factors will be discussed in this chapter including the implications and future research needs around these findings.

Time Constraints

Time constraints was the most commonly cited reason for not conducting an activity. The activities most frequently dropped were the opening ritual, closing ritual and the review sessions. These deletions occurred because the curriculum was completed in one or two days rather than spanning over 8 weeks. Often times these activities were considered discretionary and, therefore, did not have an effect re-invention quality. However, lessons learned in other activities were frequently reinforced during the opening, review, and closing activities.

Although “Focus on Kids” was developed in a community-based setting, many schools and state and local education agencies have been targeted as a potential audience for the curriculum. There are strengths to implementing HIV prevention programs like “Focus on Kids” in schools. Every school day, 53 million young people attend nearly 119,000 schools across our nation (U.S. Department of Education, 2002). Because of the size and accessibility of this population, school health programs are one of the most efficient means of reaching young people to reduce the behaviors that place

them at serious risk for HIV infection. However, these education agencies and schools experience constraints not often found in the community environment. Curriculum developers need to understand constraints of practitioners in different fields. The CDC/DASH study described in chapter 2 found that the need to meet graduation standards in schools challenges the implementation of programs like “Focus on Kids” with fidelity. “Focus on Kids” requires up to 12 hours of class time, which makes it difficult to fully implement in classes that are meeting the graduation standard. Often times funding is limited to subjects that will be on these standardized tests. As one teacher commented, “We don’t have 10, 16, and 14 weeks in a classroom to implement these programs, and so that’s why you get people who don’t implement with fidelity. At best, we can maybe get five lessons in or six lessons in. That’s really a huge problem” (Cheng, Francisco, Hare, Butler, 2002, no page number).

Host Agency Constraints

Having an agency require a change in the curriculum was also negatively associated with quality re-invention. The condom demonstration and condom race activities were most commonly dropped or adapted due to constraints by the host agency. Six (18%) of the organizations dropped the activity due to their agency’s constraints and 5 (15%) adapted the activity. Three of those groups adapting the condom demonstration used an activity called “condom cards.” In this activity a

number of cards are provided listing one step involved in putting on a condom (e.g., penis should be erect, hold tip, roll down all the way, etc.). Youth organize the cards in the sequence the steps of putting on a condom should occur. The remaining projects separated the youth by gender when doing the condom activity. The condom card activity was not written into the curriculum, but should be considered for inclusion in future editions for those agencies not allowing condom demonstrations.

Curriculum developers should understand the political constraints of many practitioners. In a focus group of health educators trained in the “Focus on Kids” curriculum conducted by CDC/DASH, participants were asked whether they were required to obtain permission to implement the program from different agencies or groups. Most local health educators were required to obtain permission to implement the program from more than one agency or group. The top three agencies or groups indicating that permission needed to be granted prior to implementing the curriculum were from school principals (44%), students’ parents (37%), and local education agencies (36%) (Cheng, Francisco, Hare, Butler, 2002).

Issues surfacing from focus groups about “Focus on Kids” reflected policies encountered for other sexuality education and HIV prevention programs, in general. Some states cede authority to local districts, while in others must obtain special permission to utilize curricula that expand beyond abstinence messages. Most respondents shared the difficulty in disseminating “Focus on Kids” in the classroom because it was deemed too sexually explicit and too long in length for the public school

setting. However, respondents indicated that other settings existed for which this curriculum was appropriate. This observation reinforces the finding of this study that different gatekeepers can have varying success at quality re-invention. In focus group discussions with state and local education agencies, respondents shared that the curriculum was “generally a good one, but that it was difficult to implement with fidelity because it had been designed for a community setting” (Cheng, Francisco, Hare, Butler, 2002 no page number). A quote from a teacher participating in the CDC/DASH focus groups demonstrates some of the issues:

We can only, in Louisiana, we can teach basic facts about HIV, but we are not allowed to talk about condom use (except in New Orleans). In fact, in a lot of the school districts, you are not allowed to talk about condoms or other forms of contraception at all. And definitely you would not be able to do a demonstration. That is why [Focus on Kids] is not compatible with our needs and values. We very much have an “abstinence only” mentality. We have a very powerful and strong political organization that really doesn’t want these programs in our schools. They want us to go in there and say “Don’t have sex” and that’s it...If we were not so bound by state laws we would have much more done. A lot of our parents, legislature and strong groups have prevented us from implementing programs with fidelity. We have an old curriculum guide from the ‘80s, so you can see where we are at. It really is an uphill battle. The kids are really suffering if they are not getting knowledge because in Louisiana, we have some of the highest STD and teenage pregnancy rates nationally (Cheng, Francisco, Hare, Butler, 2002 no page number).

Facilitators to Quality Implementation

Expand to another Problem

Adding new activities was positively associated with quality implementation. These findings are consistent with prior research that adding components did not seem to diminish the effectiveness and could, in fact, increase its effectiveness (Blakely et al., 1987; Mayer, Blakely, Davidson, 1986). Added activities often centered around related risk behaviors such as alcohol use, STD, and sexual abuse. The additional subject areas resulted from an understanding of risk behaviors being prevalent within the target audience. Many of the activities further operationalized the constructs in the PMT. This finding that expanding to new areas improves re-invention quality could be highlighted for program implementers to add activities as they see appropriate. Guidance could be given on how to add appropriate activities that further operationalize the theory, and simultaneously increase ownership and address problems that are unique for different populations.

Researcher Involvement

Having a researcher on the team, whether or not they were one of the core developers of the program, was significantly associated with quality implementation. This finding is perhaps due to the researcher having a greater understanding of the importance of behavior change theory and the constructs of the theory and how they

were operationalized in the program. Further, researchers might also be more sensitive to the issues of maintaining fidelity. There was not a significant difference between the overall adaptations of those with a researcher on the team versus those that did not have a researcher (mean number of changes 20 vs. 26), however there was a trend. It also appears that the type of change made was different and the inclusion of a researcher on the team was more likely to ensure that the adaptation continued to capture the construct of the theory that the activity operationalized. Similarly, those organizations that conducted research prior to re-inventing the curriculum, even if there was not a formal researcher on the team, were more likely to have quality implementation. This finding might be to the result of those that conducted research were more likely to have given thought to how the curriculum was changed, which led to better adaptation

Notably, there was not a significant relationship found between re-invention quality and involvement of innovators (the original developers of the “Focus on Kids” curriculum). This finding was particularly surprising, since anecdotal evidence and guidance of many who recommended that one of the keys for high quality adaptation is technical assistance and quality training from the developers. It seems that having one of the original developers is not essential. However, it is helpful to have someone who understands the theory behind the research and the importance of maintaining fidelity to these main constructs.

National Non-Government Organizations

Gatekeepers that included NGOs were also associated with quality re-invention. Similar to researchers, it is possible that, NGOs do not face constraints of time or content that can be taught. The discussion earlier highlighted constraints that schools experience when presenting controversial materials. Similar constraints were not mentioned by NGOs. Further, NGOs averaged 6 activities dropped due to time constraints versus 13 experienced by CBOs and education agencies, and 12 in government organizations. Likewise, it is more likely that NGOs adopted the curriculum because it complemented their organization's philosophy, therefore, would not require approval from as many other institutions as schools would. Since "Focus on Kids" was originally developed for communities, it might have been better suited for NGOs than the school.

Notably, CBOs did not seem to have the same ease as NGOs. Perhaps this is because community pressures are greater on CBOs or that they are not staffed by the same level of professionals as NGOs and therefore more adaptation took place due to lack of knowledge around the importance of fidelity. More research is required to further understand this issue with CBOs.

A Model for Understanding Quality Implementation

There has recently been an eruption of literature in prevention science on issues of the diffusion of evidence based programs to which this research adds (Kaftarian,

Robinson, Compton, Watt-Davis, & Volkow, 2004). Researchers have focused on several areas: (a) the need for innovative research designs and methodologies needed to explore the value and applicability of research-based programs in practice (Greenberg, 2004; Biglan, 2004; Pentz, 2004; Dusenbury & Hansen, 2004), (b) building the capacity of practitioners in the field to successfully implement research-based programs (Spoth, Greenberg, Bierman & Redmond, 2004; Greenberg, 2004; Dusenbury & Hansen, 2004) and (c) the focus on this research, the tension between fidelity and adaptation during the implementation of the program (Castro, Barrera & Martinez, 2004; Elliott & Mihalic, 2004; Dusenbury & Hansen, 2004; Ringwalt, Vincus, Ennett, Johnson, & Rohrbach, 2004). This last issue will be discussed in greater detail.

Castro et al. (2004) develop of a model to better understand the relationships in re-invention and adaptation of proven effective curricula that emphasizes the importance of planned, organized and systematic methodology toward cultural adaptation to enhance program effectiveness. Elliott and Mihalic (2004) argue that fidelity and institutionalization are possible when there is a substantial effort in building local capacity before program implementation. They also argue for high quality training and technical assistance provided to practitioners in the field. Elliott and Mihalic further argue that adaptation should only be done in the context of the theoretical model and that the effects of adaptation must be evaluated with experimental trials. Dusenbury and Hansen argue that program adaptation is necessary to meet local needs. They encourage developers to simplify and redesign programs to make them appealing to

practitioners and applicable to the needs of communities. Ringwalt et al. explored why teachers adapt research-based programs. They hypothesize that teachers in schools with racially and ethnically diverse populations might be more likely to adapt prevention curricula to the cultural norms of their students in the hope of making them more appropriate and effective. They encourage developers to systematically explore how teachers are adapting curricula in high minority schools and incorporate the modifications that are found effective in the curricula. The results of the current study are a contributions to the above researchers and have many similar themes.

The model emerging from the current research suggests factors that influence the quality of implementation. The exploratory research contributes both with better understanding the relationship of those variables that had significant associations with re-invention quality and also by discovering through the qualitative research some of the non-program factors that need to focused on in further research e.g. political climate, prevalence/perceived need of community, community involvement during implementation, funding, popularity, technical assistance and training available. Figure V-1 shows an emerging model of re-invention including some of the relationships that emerged in this study.

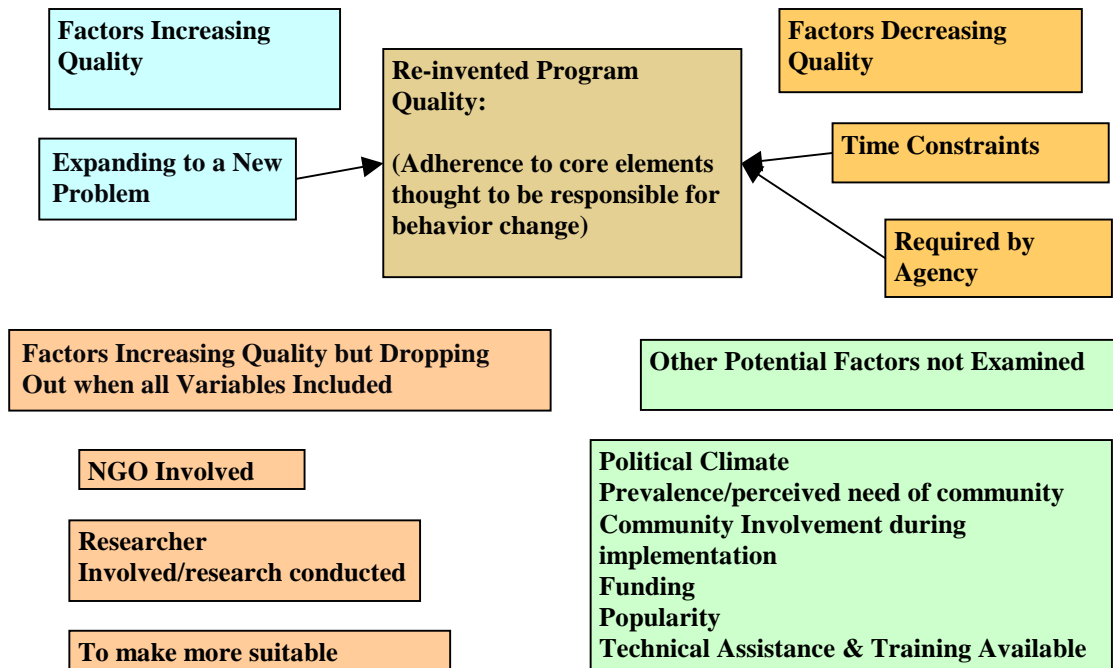


Figure V- 1: Re-invention Quality Model Revised

Recommendations for Health Education Practice

A recent study reported that as of 1999, 26.8% of all middle schools, including 34.6% of public schools and 12.6% of private schools, used at least one of a number of curricula now considered science-based (Ringwalt et al., 2003). As the proportion of schools and community organization utilizing school-based curricula increases, so will the opportunities for curriculum developers to ensure their programs are effectively implemented. This study provides critical insights for the health education field on how developers can aid in effective HIV prevention programming for adolescents.

Existing guidelines for balancing adaptation and fidelity, include identifying the core components of effective programs. This process can be done by having a researcher familiarize themselves with the theory and how it has been operationalized to ensure that adaptations still capture the essence of the theoretical construct that is thought to be responsible for behavior change. However, “real world” constraints do not make it easy. Programs do not often have access or resources (both time and money) to collaborate with a researcher to conduct a core analysis to ensure that quality adaptation occurs. An alternative approach that should be evaluated is the inclusion of curriculum notations under each activity regarding which constructs the activity operationalizes and how the activity can be adapted for different target audiences without sacrificing the quality of the program.

The results of this study demonstrate the need for curriculum developers to understand the real world environment in which HIV prevention curricula are used. A recent conference sponsored by the National Institute of Drug Abuse (NIDA) (2003) entitled “Blending Research and Reality,” initiated a dialog between researchers and practitioners to facilitate quality implementation and institutionalization. Practitioners identified three needs of researchers: (a) to ensure that curriculum is grounded in reality of practitioner’s context, (e.g., teacher priorities, administration pressures and the mission of the school); (b) ensure that practitioners understand the theories programs are based upon since educators have their own set of theories there must be integration and buy in of the practitioners; (c) appropriate technical assistance and training must be

available (NIDA, 2003). Health educators face several restrictions including political, community norms, and time constraints. These constraints must be better understood and addressed by developers. Further, developers should facilitate practitioners' understanding the theory behind the curriculum and what is believed to be the core components of the curriculum thought to be responsible for the behavior change. Involving a researcher on the implementation team may be beneficial in ensuring this task is completed.

Limitations

Due to the exploratory nature of the research there are a number of limitations that must be addressed. The limitations include issues of measurement, bias, and sampling. Measurement issues include the lack of validity testing and construction of the independent and dependent variables. Bias issues include subjectivity of interviewer, researcher, and issues of social desirability. Sampling issues include the small sample size, representativeness, and generalizability. All of these limitations will be addressed in greater detail in this section.

There is a paucity of instruments for measuring re-invention and fidelity, therefore the Re-invention Measurement Instrument (RMI) was developed for this study through a review of the literature, consultation with experts, and pilot testing. Due to the small sample size, validity testing was not possible. There were several independent

variables which did not show sufficient distribution for analysis and therefore had to be dropped. It is possible that this lack of distribution was due to the limited sample size or because the questions were not stated suitably.

Another measurement limitation with the independent variables is the study only looked at re-invention quality as it related to the curriculum components. There are other aspects of the original “Focus on Kids” study that may have contributed to its success in changing behavior, including the use of naturally occurring friendship groups, the incentives, the community-based environment, and it being an after school program. None of these factors were studied in relation to re-invention quality and thus, limits the study.

Similarly, other variables that might have impacted quality re-invention were identified in the process of the study and not captured by the RMI. The political climate, prevalence/perceived need of communities, community involvement, popularity, funding available, and availability of technical assistance and training were articulated during the process of conducting the research as important constructs for implementation. Therefore, the model presented in this chapter is not complete as these and other salient constructs would need to be operationalized and included to understand the complete diffusion process.

Another measurement limitation had to do with the dependent variable. Re-invention quality, the independent variable, had an interconnection to deletions, additions, and changes. Re-invention quality was a proxy variable constructed since

outcomes data were not available. However, there is some concern that the proxy variable is closely related to number of deletions, additions and changes. Although there were activities that could be deleted and not decrease the re-invention quality score (discretionary components, e.g. opening and closing exercises), most deletions automatically decreased re-invention quality. Likewise, although some additions did not change re-invention quality, most additions increased the quality and it was not possible for an addition to decrease re-invention quality. Changes to activities either caused the re-invention score to remain stable (when all PMT constructs and NHES were still operationalized) or decrease (when the PMT constructs or NHES were no longer operationalized due to change in activity). Only rarely did a change cause an increase in quality. A changed activity had to operationalize a different PMT construct or NHES that was not previously operationalized by the activity prior to the change for an increase to occur. Therefore, there is a close relationship of the re-invention quality variable to the sum of all the deleted and changed activities as well as new activities, however, due to variations in how activities were deleted, changed and added, it was felt that re-invention quality was a good measurement to determine the overall adherence to the core theoretical constructs.

There are also several limitations around subjectivity or biases. First, re-invention efforts were based on self-report questions. It is possible that other changes in the “Focus on Kids” curriculum occurred that were not addressed in the RMI and therefore did not surface during the interview. Also, some subjectivity could have

existed on interviewees' interpretation of whether the activity was done "exactly" as it was written in the curriculum. Prompts were written into the survey that the interviewer used (Appendix B) however it was impossible to eliminate allsubjectivity. There is also the possibility of bias due to issue of social desirability. Many of those interviewed were trained by the researcher and could have felt awkward reporting the extent to which they changed the program. For this reason there may have been a bias toward reporting activities were conducted with fidelity. Again, the researcher assured the interviewee that there were no right or wrong answers but that we were interested in the process, none-the-less there is still a possibility of bias due to social desirability.

There is also a possibility of bias by the interviewer. The interviewer had to make decisions about whether all changed and new activities operationalized the constructs and NHES. Although the interviewer tried to ensure they were blind to the identity of the organization when making such decisions it was not always possible. Even when the interviewer was blind to organization there was still room for subjectivity. The interview tried to limit the subjectivity by decision rule charts to ensure there was a systematic approach to how activities were scored (Appendix E & F).

The limited sample size was a further limitation of the study. The sample size was not sufficient to detect either a small or moderate effect size. Further, due to the small sample size, the numbers were not large enough to sufficiently conduct analyses of sub-groups. It would have been interesting to look at the sub-group of organizations that had not been trained and had no contact with the original developers to determine if

there were differences within this group. However in the current sample, this group was only composed of three participants and was therefore not large enough. A final limitation of the small sample size was there was not enough power to look at the interaction of the independent variables to determine if there was a synergistic effect.

Further, multiple comparisons are tested and may lead to spurious findings. It is for this reason that the more conservative, non-parametric statistics were used. Further, bivariate significant findings were confirmed in a multivariate model in which a true independent relationship between independent variables and the dependent variable were confirmed. However, the small sample size and multiple comparisons are important when interpreting the individual research question findings.

Finally, the representativeness of the sample posed another limitation. The researcher may have missed some relevant “Focus on Kids” adaptations, even though attempts were made to contact everyone trained by the original innovator's core research team. It was impossible to reach the majority of those who purchased the curriculum directly from ETR and had no contact with the core team. This group of implementers is perhaps very different from those who were trained in the curriculum. Another limitation is thatre -invention was examined only in relation to the “Focus on Kids” curriculum, therefore the results of this study are not generalizable to all curricula or even all HIV prevention curricula.

Another limitation is some salient constructs might have been missed and because the survey was a cross-sectional instead of a longitudinal study, it can only

determine significant associations between the independent variables and quality re-invention—it cannot state causation. It is possible that there are other variables that influence both the independent variable and quality intervention that was not measured in this research.

Although there are a number of critical limitations to the study, as an exploratory study it continues to offer important insights to health educators and the field about future studies in the dissemination and institutionalization of research-based prevention programs.

Recommendations for Future Studies

The current study is an important step in understanding the process of re-invention that occurs naturally during the diffusion process, however, more research is needed in re-invention quality. Experimental research is needed to determine how to promote quality re-invention—different approaches, such as increased technical assistance, training in program adaptation, guidance available in the text of the curriculum, making fidelity to the theoretical model a requirement for grantees, and linking developers to researchers in the field—could be evaluated to see which were effective in increasing quality re-invention.

Experimental research is also needed to determine if programs that would better meet the realities and constraints of service organizations providing HIV prevention for adolescents would be effective and less likely to be poorly re-invented. For example,

successful HIV prevention programs could be shortened and tested against the original to see if they remain effective. There have been “one-shot” HIV prevention programs shown to be effective (CDC, 2001). More research is needed to see if some of the longer programs for adolescents could be shortened and remain effective. Programs that are less controversial (e.g., abstinence-based programs) that are based on social cognitive theory and work on skills building also need to be evaluated against current programs to determine their effectiveness.

The current study used re-invention quality as a proxy measure for outcomes assuming that if the quality of the re-invention was good, there would be a better chance of achieving the same outcomes as the original “Focus on Kids.” However, more research is required on how re-invention quality impacts actual outcome. More randomized control outcome trials between adapted programs are needed. The research design would use the original version as the control and the question could be “Is it better than, or as effective as, what we have now?” Interventions trials need to be done to see if an all day, 5 hour session is as effective as eight, 90 minute sessions. Other trials could test an abstinence-based version of “Focus on Kids” that did not include information on condoms, unless the youth asked against the current version. Agencies are already using these re-inventions of the curriculum and future research could address whether this is an effective approach.

There is also a need to explore the specific role of program developers and their support organizations in the process of program implementation. Many developers do

not have the means or motivation for providing technical assistance to implementers. The resources available for developing and evaluating prevention programs rarely also fund technical assistance for program implementers (CSAP, 2001). The use of federal dollars to motivate developers to participate in these endeavors is needed (CSAP, 2001).

More research is needed to determine other sources of variance in fidelity. The current research began to address the variance in fidelity based on reason for re-invention and gatekeeper organization; however other sources of variance might exist. Research is needed to explore variance of re-invention that might be caused by the skill and effort of the people involved in the implementation and difficulty of some implementation tasks. The CSAP (2001) report encourages more research to determine the relative importance of these variance factors.

Another area for future research addressed by CSAP is at what point in the institutionalization process does re-invention occur most frequently? The CSAP report suggests that with innovative programs there may be high fidelity at the beginning of the implementation process followed by successive stages of re-invention. The re-invention may occur due to changes in the environmental conditions, scientific knowledge of the issues, or time. More research is needed to answer these questions that will assist in developing processes to increase re-invention quality.

There is also a great need to develop better instruments and methods to study re-invention, fidelity, and implementation quality. The RMI was specifically developed for this study and the “Focus on Kids” curriculum. More research is needed around the

development of valid and reliable assessment tools for fidelity and re-invention that are generalizable to different curricula.

Often times if change is desired, the economic benefits must be demonstrated. Currently millions of federal dollars are spent on the implementation of science-based programs. Research is needed on what the costs are to implement programs with high quality and if there are economic benefits in ensuring that quality implementation occurs.

Finally, bridging the gap between program developers and program implementers needs to be addressed. This improved relationship could lead to better understanding by program implementers of the value of increased process and outcomes evaluation. More user-friendly instrumentation and technical assistance by developers needs to be available to achieve this process. Program implementers, if involved earlier in the development process, could also provide advice on format and distribution processes that could improve superior re-invention quality.

Conclusions

This study explored the extent to which “Focus on Kids,” an HIV prevention program which has shown efficacious results from a carefully conducted study, was re-invented when adopted by others implemented in new settings. It analyzed the quality of re-invention by using a proxy variable (adherence to the core

components of the curriculum) thought to be responsible for the positive behavior change. Quality program re-invention was considered strong if there was high adherence to the social cognitive theory on which the program was based and strong adherence to the NHES. Several barriers including time constraints and restrictions imposed by the sponsoring agencies were identified. Facilitators to re-invention quality include having a research institution or NGO involved in the re-invention process and changing and adding activities to expand to another problem. These findings of re-invention and what determines quality re-invention are important contributions to the field of health education for several reasons. As noted earlier, almost no research on re-invention of successful prevention programs exists. This exploratory qualitative investigation began defining key issues of re-invention that can serve as a basis for future research. By determining the variations in how service providers adapt “Focus on Kids,” it is possible to specify the limits within which the product will work and to revise the curriculum so that it will work well in the real world (as opposed to the research environment).

The issue of how effective prevention programs are once they leave the more stringent research environment has been repeatedly identified as an important need by researchers, public policy-makers, and community members; yet few researchers have tackled these difficult issues (Rogers, 2000; CSAP, 2001, NIH, 1997). This study begins to answer some of these questions and provides some solutions.

Increasingly, federal agencies and private organizations are formulating registries and lists of programs that have been proven effective (SAMHSA, 2003; NIDA, 2001; Urban Institute, 2000). The rationale of developing these lists is they provide guidance for constituents to increase the quality of their program. However, identification of effective programs is simply the first step toward achieving behavior change. Programs must be successfully adapted and implemented. It is hoped that the research around the re-invention of “Focus on Kids” lends some insights on bringing programs to scale without compromising their quality.

Summary

In summary, this examination of the re-invention of an HIV prevention program offers useful information to understand methods of improving implantation quality. While previous studies have focused on amount of adaptation, the present study supports a further understanding of the barriers and prospects of quality re-invention. Further research is needed on the factors impacting variance of re-invention to ensure that effective programs remain effective as they are brought to scale.

APPENDIX A: “Focus on Kids” fact sheets and description of “Focus on Kids” activities

Focus on Kids

Overview of the Curriculum

Focus on Kids is a community-based 8-session HIV/STD prevention program for high-risk urban youth ages 9-15. It has been effective in giving urban youth the skills and knowledge they need to protect themselves from HIV and other sexually transmitted diseases. The curriculum uses fun, interactive activities such as games, role plays, discussion and community projects to convey prevention knowledge and skills.

Although *Focus on Kids* is an HIV/AIDS prevention curriculum, it covers topics and skills pertinent to teen pregnancy prevention such as: correct use of condoms; decision-making, refusal, communication and advocacy skills; abstinence; and sex and drug pressures faced by youth.

Curriculum Objectives:

At the completion of this program, youth will be able to:

- State correct information about HIV, AIDS and other STDs including modes of transmission and prevention.
- State their own personal values and understand how these relate to pressures to engage in sexual risk behaviors.
- Be skilled in decision-making, communicating and negotiating with other youth regarding sexual topics and drug topics, and be able to use a condom correctly.

Focus on Kids includes the following 8 sessions:

Session 1: Trust Building and Group Cohesion

Session 2: Risks and Values

Session 3: Educate Yourself: Obtaining Information

Session 4: Educate Yourself: Examining Consequences

Session 5: Building Communication Skills

Session 6: Information About Sexual Health

Session 7: Attitudes and Skills for Sexual Health

Session 8: Review and Community Project

Unique Features of the Curriculum

Focus on Kids includes the following features that distinguish it from other HIV prevention curricula:

- It focuses on the needs of urban youth, ages 9-15, in community-based settings.
- It includes interactive activities that have proven to be effective learning strategies such as games, role plays, and community projects.
- It makes use of "friendship groups" to strengthen peer support.
- It strengthens community connections and support for youth.
- It includes booster sessions which help keep the learning alive and relevant.
- It includes one all-day outing.

Theoretical Framework

Focus on Kids is based on Protection Motivation Theory, a social cognitive theory which emphasizes the balance between pressures to engage in the risk behavior, the risks involved and the consideration of alternatives. *Focus on Kids* addresses each of these critical elements of the theory by:

- **Providing opportunities to consider the personal and social rewards (pressures) of engaging in sexual risk-taking behavior.** Through all its varied learning activities, youth learn to create positive feelings about themselves without engaging in risky behaviors. In addition, in Session Two, youth dispel the myth that all peers approve of risky behavior.
- **Examining the health risks involved in unprotected sexual behavior.** Sessions Two, Three, Four and Seven increase youth's sense of vulnerability to becoming infected with HIV and their awareness about the difficulties of living with HIV.
- **Identifying the alternatives to sexual risk-taking behavior.** Through the SODA Decision Making model, the Family Tree Activities, and role play activities, youth learn to consider the alternatives to risk-taking behavior and practice decision making, communication and condom use skills necessary to act on healthy decisions.

Rogers, R.W. (1983). Cognitive and physiological processes in fear appraisals and attitude change: A revised theory of protection motivation. In Cacioppi, T.

& Petty, R.E. (Eds.), *Social Psychology*. (pp. 153-176). New York, NY: Guilford Press.

Curriculum Costs and Training Information

Curriculum Costs: The *Focus on Kids* curriculum includes an implementation section with instructions for group leaders, lesson plans, activity guides, handouts for duplication, consent forms, and other materials relevant to program implementation for \$29.95. An accompanying video, *What Kids Want to Know About Sex & Growing Up*, is also available for \$59.95.

To receive more information and to order, contact:

ETR Associates

Phone: 1-800-321-4407

Fax: 1-800-435-8433

Internet: www.etr.org

Training:

Two-day educator trainings for *Focus on Kids* are available on a fee-for-service basis from ETR Associates. Fee-for service trainings are provided by request from a state or local education or health agency for groups of approximately 20-50 people. Costs vary depending on the size of the group trained. Average costs include approximately \$5,600 for staff time to prepare for and conduct the training plus travel cost (average \$2,500 depending on location) and curriculum and training materials costs at \$105.00 per person. For more information, contact ETR Associates' Training Department at training@etr.org.

In addition, there may be a local trainer in your state who is qualified to provide *Focus on Kids* trainings.

Evaluation Fact Sheet

Intervention

In the spring of 1993, African American youth were recruited from nine recreation centers associated with three public housing developments to attend eight weekly sessions of an AIDS risk reduction intervention. Grounded in a social-cognitive theory (Protection Motivation Theory) and developed to be culturally appropriate for the target audience, the intervention provided facts about HIV and AIDS and emphasized skills development with regard to communication, decision making, and condom use. The youth formed intervention groups consisting of two to 10 same-gender friends who were within three years of age of each other. In addition to condom use, abstinence and avoidance of substance use and drug trafficking were emphasized in the curriculum.

Behavioral Findings

At baseline, condom use rates did not differ significantly. However, at the six-month follow-up, rates were significantly higher among the intervention group than the control group (85% versus 61%, $P < .05$). The intervention was especially strong among boys (85% versus 57%, $P < .05$) and among teens aged 13 to 15 years (95% versus 60%, $P < .01$).

Other Significant Findings

Youth did not differ in their intentions to use condoms at baseline, but in the post-intervention period, intervention youth were significantly more likely than control youth to intend to use a condom. Likewise, in the post-intervention period, intervention youth perceived greater peer use of condoms and increased personal vulnerability to HIV.

Research Design

The 76 naturally formed peer groups consisting of 383 African American youth were randomly assigned to receive the *Focus on Kids* intervention ($n=206$) or a control condition ($n=177$). The control condition consisted of eight sessions which provided facts about HIV and AIDS prevention but did not emphasize skills development with regard to negotiation, communication or condom use and was not delivered to the naturally occurring groups of friends.

Participants completed questionnaires via a "talking" Macintosh computer at baseline and six months after the intervention. Measures assessed actual risk behaviors, perceptions of risk behaviors, and intentions.

References:

Stanton BS, Li X, Ricardo I, Galbraith J, Feigelman S, Kaljee L. A randomized, controlled effectiveness trial of an AIDS prevention program for low-income African-American youths. *Archives of Pediatrics and Adolescent Medicine* 150:363-372.
Session I: Trust Building and Group Cohesion

Focus on Kids: Activity Descriptions

IA. Introduction Game: Flying Objects

In this activity, the youth build group cohesion and learn each other's names. The group stands in a circle, and an object is thrown to one member after calling out her or his name. That person, then, throws the object to another person after calling out her or his name, and so on. After the first round, the group performs the same activity again, but this time, 3 objects are thrown in succession.

IB. Introduction Game: Double Letter

This activity is targeted toward younger youth to help them build group cohesion. Youth sit in a circle and are asked to think of an adjective that begins with the first letter of their name (e.g. Loveable Lakisha). Then the students introduce themselves to each other.

2. *Focus on Kids* Program Overview

The group leader explains the purpose and the events of the program to the youth in this activity. The youth also create a group name, an opening ritual, a closing ritual and their ground rules.

3A. Group Cohesion Activity: Crossing the Canyon (Formerly Burning Buildings)

Youth stand facing each other on two wooden planks and are told that they are at a canyon where there is a wildfire burning. The youth on one side are the firefighters and the youth on the other side are trapped people. The firefighters must cross the canyon to save the youth on the other side, but none of the youth may fall off the planks.

3B. Group Cohesion Activity: Human Knot

Youth stand in a circle and hold hands of person *across* from them with their right hand (not next to them). Then, with their left hand, they join hands with a different person across from them. The youth are instructed to untangle the knot without letting go of their hands.

4. Establishing Ground rules

Group leader leads youth in this activity where they establish their own ground rules that must be followed by everyone.

5. Family Tree: Urban or Suburban Version

Youth are given a skeleton of a family tree and asked to create the circumstances of and relationships between the family members. The family tree is used in the SODA Decision-Making Models throughout the *Focus on Kids* course.

6. SODA Decision-Making Model: Step 1: Stop

This activity introduces youth to the SODA model, which stands for Stop, Options, Decide and Act. In this section, youth concentrate on the first step in the acronym, Stop, which is illustrated through a story from the family tree.

Session II: Risks and Values

1. How Risky Is It?

In this activity, youth are asked to decide whether behaviors are “Risky”, “Safe”, or if one should “Use Caution.” Youth then discuss the reason for their choice for each particular behavior, and they are given the appropriate information about the behavior.

2. What Are You Concerned About?

For this section, youth discuss what concerns they have about life. Youth are then told that their concerns are normal and that this program will help teach them how to protect themselves about some of these concerns.

3. Why Do People Feel Invulnerable?

Youth are asked a series of questions regarding how invulnerability leads to risky behavior.

4. Defining a Value

Youth learn what a value is, where values come from, and that values help determine choices that people make.

5. Rank Your Values

Youth are given strips of paper that have values written on them. They then put these values in order of importance to them and a discussion is on why values differ.

6. Values Voting

This activity involves youth to disagree or to agree with certain values. A discussion is held after the activity that teaches youth that values determine behavior.

7. What Youth Can Do

Youth discuss how they can help better the world and are instructed to think of ways they can put these ideas into action for their community project at the end of the program.

Session III: Educate Yourself: Obtaining Information

1. SODA Decision-Making Model: Step 2: Options

The first step of the decision making model is briefly reviewed and the second step, Options, is illustrated using vignettes from the family tree.

2. Finding Information for Good Decisions

Youth go through the different ways of obtaining information about the options that were created from SODA Step 2: Options. Also, youth are given guidelines about how to talk to an adult.

3. Telephone Exercise: Gathering Information

Youth practice obtaining good information for decision making by calling resource hotlines.

4. Video: *What Kids Want to Know About Sex and Growing Up*

Youth watch a video about puberty. Then a discussion is led about the changes that happen in the body during puberty.

5. Field Assignments

Youth are instructed to complete field assignments, including a “Condom Hunt”, “Parent Interview”, and calling a hotline.

Session IV: Educate Yourself: Examining Consequences

1. Parent Role play

Group leaders model negative and positive parent-child encounters. Youth perform role playing scenarios as well. A discussion is held about the positive and negative aspects of each scenario.

2. M&M's Game: How Many Kids Are Really . . . ?

Youth are asked how many kids they think are having sex using 100 M& M's. Youth are then given the actual percentage, which tends to be dramatically different than the youth's perception. The same activity is repeated for how many kids use condoms, how many kids sell drugs, and how many kids use drugs.

3. Condom Demonstration

The correct way to use a condom is demonstrated using a cucumber or dildo. The strength of condoms is also demonstrated with a gallon of water.

4. Condom Race

Teams of youth race to see what team can *properly* put on a condom the fastest.

5. SODA Decision-Making Model: Step 3: Decide

The first two steps are reviewed briefly. The third step, Decide, is illustrated using scenarios from the family tree.

6. Additional Field Assignments

Youth are assigned field assignments that were not completed at the end of Session III. An additional field assignment is added where youth can talk to a parent about what they have learned in the program and what they can learn from that parent about decision making or gathering information.

Session V: Skills Building: Communication

1. SODA Decision-Making Model: Step 4: Action

The first three steps in the model are reviewed and the final step, Action, is illustrated with a scenario from the family tree. From this scenario, youth identify skills that are needed to act properly, including communication, listening and negotiating skills

2. Communication Styles: Aggressive, Assertive and Nonassertive

A volunteer plays the part of “Al Bundy”, a shoe salesperson, in this roleplaying exercise. The group leader plays the part of a customer, and demonstrates the three communication styles. A discussion is lead about the most effective form of communication.

3. Communicating Without Words

In this activity, youth stand in a line facing the same direction. The person at the end of the line is given an action or emotion to communicate to the person in from of her or him without using words, and the process is repeated with the next person. A discussion is lead about the (mis)communication that frequently occurs without words.

4. Sex: A Decision for Two

This activity illustrates the drastic results that can occur by miscommunications using a story about date rape. The myths and facts of acquaintance rape are discussed, along with how that miscommunication could have been avoided.

Session VI: Information about Sexual Health

1. Ways to Show You Care

Youth are shown reasons why people have sex and asked to come up with other possibilities. Then, youth are asked to decide whether these reasons can be accomplished “With or Without Intercourse” or through “Intercourse Only”. Almost all reasons are possible without intercourse, including pregnancy. Youth are then asked to brainstorm about other ways to show you care without having sex.

2. HIV Transmission Game

Youth participate in a game where the rapid rate of HIV transmission is demonstrated. A discussion is held about the rapid rate of transmission.

3. Contraception Lesson

The forms of birth control and their positive and negative aspects are discussed with youth.

Session VII: Attitudes and Skills for Sexual Health

1. Goal Setting: My Future

Youth are asked to draw the goals they wish to achieve by the time they are 25. Then, youth are given Adjustments to the Future cards, and asked how they can still achieve their goals with these adjustments.

2. Images of Sex

Youth draw images of sex (e.g., family, love, STD clinics). Youth then put those images on a Good/Bad continuum. A discussion is then held.

3. Role play: Saying NO or Asking to Use a Condom

The assertive communication style is reviewed, and youth role play a scenario where they say “no” or ask to use a condom. A discussion is then held.

Session VII: Review and Community Project

1. The Knowledge Feud

Youth divide into two teams and compete against each other in game of review questions.

2. Pat on the Back

Youth and group leaders hang blank signs on their backs. Then everyone writes a personal, positive statement on other people’s signs.

3. Community Projects Discussion

Youth determine their skills, and interests and how they can better their community with those skills and interests. Youth then decide on a community project that relates to HIV, and put that project into action.

**APPENDIX B: RE-INVENTION MEASUREMENT INSTRUMENT:
INTERVIEWER VERSION**

(Phone script)

Hello, is _____ in?

_____, this is Jennifer Galbraith at University of Maryland. This is the time we had scheduled for our interview. Is this still a good time? I am going to proceed by reading you the questions. Please answer them to the best of your ability. If there is anything you do not want to answer just let me know. If you would like to terminate the interview please let me know. The interview will take approximately 30 minutes and everything will be confidential. As noted before we will be looking at the answers in aggregate with all of the site coordinators answers lumped together. Please feel free to stop me at anytime if you have questions. We will now begin the survey.

Pre-interview: There are no right or wrong answers in this survey. We are interested in finding the various ways individuals and agencies are utilizing the “Focus on Kids” curricula. We hope that this information will help researchers design programs that better suit service providers needs.

Will you allow me to tape-record this interview?

Can you tell me what materials to you have in front of you to refer to regarding your answers?

Interview Date:

Time:

Name:

Title:

“Focus on Kids” Program name:

Organization name:

How long have you been with organization?

Phone:

Re-invention Measurement Instrument

Section A: Demographics

- _____ 1. How would you define the type of organization:
- 1) Community Based
 - 2) State Dept. of Ed.
 - 3) Research Institution (i.e., University)
 - 4) National Non-Government Agency
 - 5) Government Agency
 - 6) Other, explain:
- _____ 2a. Is the organization domestic or international?
- 1) Domestic (skip to B)
 - 2) International
- _____ 2b. In what country is your organization located?

Section B: Relationship to Innovators

- _____ 1. Who trained you in the “Focus on Kids” curriculum? (Name of individual or organization.)
- _____ 2. When were you trained?
- _____ 3. Were you trained in the whole curriculum? 1) Yes 2) No
- _____ 4. Does your program have any contact with the original developers of the “Focus on Kids” curriculum?
- 1) Yes
 - 2) No

If yes, what was the nature of your contact with the original developers?

Section C: Target Audience

- _____ 1. What is the average size of your “Focus on Kids” groups?
- _____ 2. How many groups have you run?
- _____ 3. What is the gender make-up of the groups?
- 1) Mixed gender
 - 2) Single gender
- _____ 4. What is the social structure of the groups?
- 1) Friendship groups
 - 2) Class
 - 3) Not all youth familiar
 - 4) Youth familiar/not defined friendship groups

- _____6. Who were the facilitators? (Include all that apply)
- | | | |
|--------------|--------------------------|--------------|
| 1) Paid | 3) Community Members | 5) Full-time |
| 2) Volunteer | 4) Non-community Members | 6) Part-time |
- _____7. Were peer educators used?
- | | |
|--------|-------|
| 1) Yes | 2) No |
|--------|-------|

Section E: Adaptations and Methodology

- _____1. How was the “Focus on Kids” curriculum chosen?
- _____2. How did you like the program?
- _____3. Were changes made to the program?
- | | | |
|--------|-------|------------------------------|
| 1) Yes | 2) No | If no, proceed to Section F. |
|--------|-------|------------------------------|
- _____4. Briefly describe what changes were made. *Prompt: What activities were dropped? What activities were added? What activities were adapted?*
- _____5. Did you receive any guidance on how to adapt the program? *Prompt: For example, an advisory board consulting on risk behaviors that needed to be addressed.*
- | | |
|--------|-------|
| 1) Yes | 2) No |
|--------|-------|

If yes, from whom did you receive guidance and what guidelines were given?

- _____6. Was research of any kind conducted or consulted to aid in adaptation? *Prompt: For example, Focus Groups, ethnographic interviews, participant observation, other qualitative research?*
- | | |
|--------|-------|
| 1) Yes | 2) No |
|--------|-------|

If yes, what research was used?

- _____7. How were changes communicated to group leaders?
- | | |
|---------------------------|---------------------------|
| 1) Orally at training | 3) In writing |
| 2) Orally not at training | 4) New curriculum written |
- _____8. When making changes did someone in your organization consult with:
- | | |
|----------------------------|--|
| 1) Original FOK Developers | 3) The Health Education Standards Analysis |
| 2) ETR Associates | |

Section F: Curriculum Adaptations

Session One: Trust Building and Group Cohesion

_____ 1a. Was the Introduction Game: Flying Objects or Double Letter activity:

- 1) Conducted exactly as in curriculum → Go to Question 2a
- 2) Conducted exactly as in curriculum but in a different order Go to 2b
- 3) Not conducted at all → Go to Question 2a
- 4) Conducted with changes → Go to Question 1b

_____ 1b. Describe the change(s) made to this activity including any changes to where the activity was placed.

_____ 1c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 2a. Was the “Focus on Kids” Program Overview activity:

- 1) Conducted exactly as in curriculum→ Go to Question 3a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 2b
- 2) Not conducted at all→ Go to Question 3a
- 3) Conducted with changes→ Go to Question 2b

_____ 2b. Describe the change(s) made to this activity.

_____ 2c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

_____3a. Was the **Group Cohesion Game: Burning Buildings or Human Knot** activity:

- 1) Conducted exactly as in curriculum→ Go to Question 4a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to 3b
- 2) Not conducted at all→ Go to Question 4a
- 3) Conducted with changes→Go to Question 3b

_____3b. Describe the change(s) made to this activity.

_____3c Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____4a. Was the **Ground Rules** activity: *Prompt: Were any special new rules added by you, the group leader?*

- 1) Conducted exactly as in curriculum→ Go to Question 5a
- 1a) Conducted exactly as in curriculum but in a different order →Go to 4b
- 2) Not conducted at all→ Go to Question 5a
- 3) Conducted with changes→ Go to Question 4b

_____4b. Describe the change(s) made to this activity.

_____4c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____5a. Was the Family Tree: Urban or Suburban Version activity: *Prompt: Did you create a new version of the family tree?*

- 1) Conducted exactly as in curriculum→ Go to Question 6a
- 1a) Conducted exactly as in curriculum but indifferent order→ Go to Question 5b
- 2) Not conducted at all→ Go to Question 6a
- 3) Conducted with changes→ Go to Question 5b

_____5b. Describe the change(s) made to this activity.

_____5c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____6a. Was the SODA: Decision Making Model: Step One: Stop activity: *Prompt: Did you change any of the steps in SODA?*

- 1) Conducted exactly as in curriculum→ Go to Question 7a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 6b
- 2) Not conducted at all→ Go to Question 7a
- 3) Conducted with changes→ Go to Question 6b

_____6b. Describe the change(s) made to this activity.

_____6c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____7a. Was the **Wrap-Up and Closing Ritual** activity:

- 1) Conducted exactly as in curriculum → Go to Question 8a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 7b
- 2) Not conducted at all → Go to Question 8a
- 3) Conducted with changes → Go to Question 7b

_____7b. Describe the change(s) made to this activity.

_____7c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Two: Risks and Values

_____8a. Was the Introduction and Opening Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 9a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 8b
- 2) Not conducted at all → Go to Question 9a
- 3) Conducted with changes → Go to Question 8b

_____8b. Describe the change(s) made to this activity.

_____8c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain _____

9a. Was the **Review of Session One** activity:

- 1) Conducted exactly as in curriculum → Go to Question 10a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 9b
- 2) Not conducted at all → Go to Question 10a
- 3) Conducted with changes → Go to Question 9b

____ 9b. Describe the change(s) made to this activity.

____ 9c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

____ 10a. Was the **How Risky Is It?** activity: *Prompt: Did you add any behaviors to the activity?*

- 1) Conducted exactly as in curriculum → Go to Question 11a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 10b
- 2) Not conducted at all → Go to Question 11a
- 3) Conducted with changes → Go to Question 10b

____ 10b. Describe the change(s) made to this activity.

____ 10c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 11a. Was the **What Are You Concerned About?** activity:

- 1) Conducted exactly as in curriculum → Go to Question 12a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 11b
- 2) Not conducted at all → Go to Question 12a
- 3) Conducted with changes → Go to Question 11b

_____ 11b. Describe the change(s) made to this activity.

_____ 11c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 12a. Was the **Why Do People Feel Invulnerable?** activity: *Prompt: Did you add any questions about vulnerability?*

- 1) Conducted exactly as in curriculum → Go to Question 13a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 12b
- 2) Not conducted at all → Go to Question 13a
- 3) Conducted with changes → Go to Question 12b

_____ 12b. Describe the change(s) made to this activity.

_____ 12c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 13a. Was the Defining a Value activity:

- 1) Conducted exactly as in curriculum → Go to Question 14a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 13b
- 2) Not conducted at all → Go to Question 14a
- 3) Conducted with changes → Go to Question 13b

_____ 13b. Describe the change(s) made to this activity.

_____ 13c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 14a. Was the Rank Your Values activity: *Prompt: Did you add or delete any of the values in rank your values?*

- 1) Conducted exactly as in curriculum → Go to Question 15a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 14b
- 2) Not conducted at all → Go to Question 15a
- 3) Conducted with changes → Go to Question 14b

_____ 14b. Describe the change(s) made to this activity.

_____ 14c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 15a. Was the Values Voting activity: *Prompt: Did you change any of the value voting items? Did you tell youth there was a right answer to any of the questions?*

- 1) Conducted exactly as in curriculum → Go to Question 16a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 15b
- 2) Not conducted at all → Go to Question 16a
- 3) Conducted with changes → Go to Question 15b

_____ 15b. Describe the change(s) made to this activity.

_____ 15c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 16a. Was the What Youth Can Do activity:

- 1) Conducted exactly as in curriculum → Go to Question 17a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 16b
- 2) Not conducted at all → Go to Question 17a
- 3) Conducted with changes → Go to Question 16b

_____ 16b. Describe the change(s) made this activity.

_____ 16c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

_____17a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 18a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 17b
- 2) Not conducted at all → Go to Question 18a
- 3) Conducted with changes → Go to Question 17b

_____17b. Describe the change(s) made to this activity.

_____17c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Three: Educate Yourself: Obtaining Information

_____18a. Was the Introduction and Opening Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 19a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 18b
- 2) Not conducted at all → Go to Question 19a
- 3) Conducted with changes → Go to Question 18b

_____18b. Describe the change(s) made to this activity.

_____18c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 19a. Was the Review of Session Two activity:

- 1) Conducted exactly as in curriculum → Go to Question 20a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 19b
- 2) Not conducted at all → Go to Question 20a
- 3) Conducted with changes → Go to Question 19b

_____ 19b. Describe the change(s) made to this activity.

_____ 19c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____ 20a. Was the SODA Decision-Model: Step Two: Options activity: *Prompt: Did change the vignettes? Did you talk about what their feelings were? Did you talk about what information they would need?*

- 1) Conducted exactly as in curriculum → Go to Question 21a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 20b
- 2) Not conducted at all → Go to Question 21a
- 3) Conducted with changes → Go to Question 20b

_____ 20b. Describe the change(s) made to this activity.

_____ 20c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____21a. Was the Finding Information for Good Decisions activity: *Prompt: Did you develop a new vignette?*

- 1) Conducted exactly as in curriculum → Go to Question 22a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 21b
- 2) Not conducted at all → Go to Question 22a
- 3) Conducted with changes → Go to Question 21b

_____21b. Describe the change(s) made to this activity.

_____21c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____22a. Was the Telephone Exercise: Gathering Information activity: *Prompt: Did you make new resource lists? Did you have them call resources? Did you have them look things up on the internet?*

- 1) Conducted exactly as in curriculum → Go to Question 23a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 22b
- 2) Not conducted at all → Go to Question 23a
- 3) Conducted with changes → Go to Question 22b

_____22b. Describe the change(s) made to this activity.

_____22c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

_____23a. Was the Video: *What Kids Want to About Sex and Growing Up?* activity:
Prompt: Did you show another video?

- 1) Conducted exactly as in curriculum → Go to Question 24a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 23b
- 2) Not conducted at all → Go to Question 24a
- 3) Conducted with changes → Go to Question 23b

_____23b. Describe the change(s) made to this activity.

_____23c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____24a. Was the Field Assignments activity: *Prompt: Did you use the condom hunt field assignment? The parent interview? Did you add additional field assignments?*

- 1) Conducted exactly as in curriculum → Go to Question 25a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 24b
- 2) Not conducted at all → Go to Question 25a
- 3) Conducted with changes → Go to Question 24b

_____24b. Describe the change(s) made to this activity.

_____24c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

_____25a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 26a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 25b
- 2) Not conducted at all → Go to Question 26a
- 3) Conducted with changes → Go to Question 25b

_____25b. Describe the change(s) made to this activity.

_____25c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Section Four: Educate Yourself: Examining Consequences

_____26a. Was the Introduction and Opening Ritual (Did you complete the Review of Field Assignments) activity:

- 1) Conducted exactly as in curriculum → Go to Question 27a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 26b
- 2) Not conducted at all → Go to Question 27a
- 3) Conducted with changes → Go to Question 26b

_____26b. Describe the change(s) made to this activity.

_____26c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____27a. Was the Parent Role-play activity:

- 1) Conducted exactly as in curriculum → Go to Question 28a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 27b
- 2) Not conducted at all → Go to Question 28a
- 3) Conducted with changes → Go to Question 27b

_____27b. Describe the change(s) made to this activity.

_____27c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____28a. Was the M-n-Ms: How Many Kids Are Really? activity: *Prompt: Did you change the statistics according to your site? Did you change the behaviors you asked about?*

- 1) Conducted exactly as in curriculum → Go to Question 29a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 28b
- 2) Not conducted at all → Go to Question 29a
- 3) Conducted with changes → Go to Question 28b

_____28b. Describe the change(s) made to this activity.

_____28c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____29a. Was the Condom Demonstration activity: *Prompt: Did you use real condoms for the demonstration?*

- 1) Conducted exactly as in curriculum → Go to Question 30a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 29b
- 2) Not conducted at all → Go to Question 30a
- 3) Conducted with changes → Go to Question 29b

_____29b. Describe the change(s) made to this activity.

_____29c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____30a. Was the Condom Race activity: *Prompt: Did you use real condoms for the demonstration?*

- 1) Conducted exactly as in curriculum → Go to Question 31a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 30b
- 2) Not conducted at all → Go to Question 31a
- 3) Conducted with changes → Go to Question 30b

_____30b. Describe the change(s) made to this activity.

_____30c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____31a. Was the SODA Decision Making Model: Step Three: Decide activity:

Prompt: Did you change the vignettes?

- 1) Conducted exactly as in curriculum → Go to Question 32a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 31b
- 2) Not conducted at all → Go to Question 32a
- 3) Conducted with changes → Go to Question 31b

_____31b. Describe the change(s) made to this activity.

_____31c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership 10) Other, explain

_____32a. Was the Additional Field Assignments activity:

- 1) Conducted exactly as in curriculum → Go to Question 33a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 32b
- 2) Not conducted at all → Go to Question 33a
- 3) Conducted with changes → Go to Question 32b

_____32b. Describe the change(s) made to this activity.

_____32c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership 10) Other, explain

_____33a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 34a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 33b
- 2) Not conducted at all → Go to Question 34a
- 3) Conducted with changes → Go to Question 33b

_____33b. Describe the change(s) made to this activity.

_____33c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Five: Skills Building: Communication

_____34a. Was the Opening Ritual and Review activity:

- 1) Conducted exactly as in curriculum → Go to Question 35a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 34b
- 2) Not conducted at all → Go to Question 35a
- 3) Conducted with changes → Go to Question 34b

_____34b. Describe the change(s) made to this activity.

_____34c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

____35a. Was the SODA Decision-Making Model: Step 4: Action activity: *Prompt: Did you change any steps?*

- 1) Conducted exactly as in curriculum → Go to Question 36a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 35b
- 2) Not conducted at all → Go to Question 36a
- 3) Conducted with changes → Go to Question 35b

____35b. Describe the change(s) made to this activity.

____35c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

____36a. Was the Communication Game: Changing Messages activity:

- 1) Conducted exactly as in curriculum → Go to Question 37a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 36b
- 2) Not conducted at all → Go to Question 37a
- 3) Conducted with changes → Go to Question 36b

____36b. Describe the change(s) made to this activity.

____36c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____37a. Was the **Communication Styles: Aggressive , Assertive, and Nonassertive** activity: *Prompt: Did you change the scenario? Did facilitators role-play first? Did youth have a chance to role play?*

- 1) Conducted exactly as in curriculum → Go to Question 38a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 37b
- 2) Not conducted at all → Go to Question 38a
- 3) Conducted with changes → Go to Question 37b

_____37b. Describe the change(s) made to this activity.

_____37c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____38a. Was the **Communicating Without Words** activity:

- 1) Conducted exactly as in curriculum → Go to Question 39a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 38b
- 2) Not conducted at all → Go to Question 39a
- 3) Conducted with changes → Go to Question 38b

_____38b. Describe the change(s) made to this activity.

_____38c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____39a. Was the Sex: A Decision for Two activity: *Prompt: Did you change the story?*

Did you add anything about alcohol or drugs? Did you change any of the questions?

- 1) Conducted exactly as in curriculum → Go to Question 40a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 39b
- 2) Not conducted at all → Go to Question 40a
- 3) Conducted with changes → Go to Question 39b

_____39b. Describe the change(s) made to this activity.

_____39c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____40a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 41a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 40b
- 2) Not conducted at all → Go to Question 41a
- 3) Conducted with changes → Go to Question 40b

_____40b. Describe the change(s) made to this activity.

_____40c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Six: Information about Sexual Health

____ 41a. Was the Opening Ritual and Review activity:

- 1) Conducted exactly as in curriculum → Go to Question 42a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 41b
- 2) Not conducted at all → Go to Question 42a
- 3) Conducted with changes → Go to Question 41b

____ 41b. Describe the change(s) made to this activity.

____ 41c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

____ 42a. Was the Ways to Show You Care activity: *Prompt: Did you talk about the largest organ of pleasure, etc? Did you define sex? Did you add behaviors NOT youth driven? Did you look at advantages and disadvantages of showing you care without intercourse?*

- 1) Conducted exactly as in curriculum → Go to Question 43a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 42b
- 2) Not conducted at all → Go to Question 43a
- 3) Conducted with changes → Go to Question 42b

____ 42b. Describe the change(s) made to this activity.

____ 42c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____43a. Was the HIV Transmission Game activity:

- 1) Conducted exactly as in curriculum → Go to Question 44a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 43b
- 2) Not conducted at all → Go to Question 44a
- 3) Conducted with changes → Go to Question 43b

_____43b. Describe the change(s) made to this activity.

_____43c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____44a. Was the Contraceptive Lesson activity: *Prompt: Did you talk about contraception not in the book? Novelle? The patch? Nuva ring? Emergency contraception? Sterilization? IUD? Did you NOT talk about any of the contraception? Norplant? Sponge?*

- 1) Conducted exactly as in curriculum → Go to Question 45a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 44b
- 2) Not conducted at all → Go to Question 45a
- 3) Conducted with changes → Go to Question 44b

_____44b. Describe the change(s) made to this activity.

_____44c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain_____

45a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Question 46a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 45b
- 2) Not conducted at all → Go to Question 46a
- 3) Conducted with changes → Go to Question 45b

_____45b. Describe the change(s) made to this activity.

_____45c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Seven: Attitudes and Skills for Sexual Health

_____46a. Was the Opening Ritual and Review activity:

- 1) Conducted exactly as in curriculum → Go to Question 47a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 46b
- 2) Not conducted at all → Go to Question 47a
- 3) Conducted with changes → Go to Question 46b

_____46b. Describe the change(s) made to this activity.

_____46c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____47a. Was the **Goal Setting: My Future** activity: *Prompt: Did you change any of the adjustments to the future cards?*

- 1) Conducted exactly as in curriculum → Go to Question 48a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 47b
- 2) Not conducted at all → Go to Question 48a
- 3) Conducted with changes → Go to Question 47b

_____47b. Describe the change(s) made to this activity.

_____47c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____48a. Was the **Images of Sex** activity:

- 1) Conducted exactly as in curriculum → Go to Question 49a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 48b
- 2) Not conducted at all → Go to Question 49a
- 3) Conducted with changes → Go to Question 48b

_____48b. Describe the change(s) made to this activity

_____48c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____49a. Was the **Role-play: Saying NO or Asking to Use a Condom** activity:

- 1) Conducted exactly as in curriculum → Go to Question 50a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 49b
- 2) Not conducted at all → Go to Question 50a
- 3) Conducted with changes → Go to Question 49b

_____49b. Describe the change(s) made to this activity

_____49c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____50a. Was the **Wrap-Up and Closing Ritual** activity:

- 1) Conducted exactly as in curriculum → Go to Question 51a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 50b
- 2) Not conducted at all → Go to Question 51a
- 3) Conducted with changes → Go to Question 50b

_____50b. Describe the change(s) made to this activity

_____50c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Session Eight: Review and Community Project

_____51a. Was the Opening Ritual and Review activity:

- 1) Conducted exactly as in curriculum → Go to Question 52a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 51b
- 2) Not conducted at all → Go to Question 52a
- 3) Conducted with changes → Go to Question 51b

_____51b. Describe the change(s) made to this activity

_____51c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____52a. Was the **Knowledge Feud** activity:

- 1) Conducted exactly as in curriculum → Go to Question 53a
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 52b
- 2) Not conducted at all → Go to Question 53a
- 3) Conducted with changes → Go to Question 52b

_____52b. Describe the change(s) made to this activity

_____52c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____53a. Was the **Pat on the Back** activity:

- 1) Conducted exactly as in curriculum → Go to Question 54a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 53b
- 2) Not conducted at all → Go to Question 54a
- 3) Conducted with changes → Go to Question 53b

_____53b. Describe the change(s) made to this activity

_____53c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____54a. Was the **Community Projects Discussion** activity:

- 1) Conducted exactly as in curriculum → Go to Question 55a
- 1a) Conducted exactly as in curriculum but in a different order → Go to Question 54b
- 2) Not conducted at all → Go to Question 55a
- 3) Conducted with changes → Go to Question 54b

_____54b. Describe the change(s) made to this activity

_____54c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

_____55a. Was the Wrap-Up and Closing Ritual activity:

- 1) Conducted exactly as in curriculum → Go to Section F: Part 2
- 1a) Conducted exactly as in curriculum but in a different order→ Go to Question 55b
- 2) Not conducted at all → Go to Section F: Part 2
- 3) Conducted with changes → Go to Question 55b

_____55b. Describe the change(s) made to this activity

_____55c. Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Section F: Part 2

- 1. Were additional sessions added?
- 2. If yes, how many additional sessions were added?
- 3. What was the subject of the additional session(s)?
- 4. How long was each of the sessions?
- 5. Where did the sessions fall in the curriculum?
- 6. How were the new sessions developed?

New Activities:

Can you describe each of the new activities included?

1) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

2) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

3) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

4) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

5) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

6) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership

10) Other, explain

7) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

8) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

9) Name of the activity:

Purpose:

Description:

Why were these changes made?

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

What incentives were used for the program?

Section G: Evaluation

1. Was there an outcome evaluation (an outcome evaluation is used to determine if the program was successful at lowering risk behaviors amongst the participants)? If yes, can you share the results of the evaluation?
2. Was there a process evaluation? (a process evaluation is used to determine if the program is running successfully)

Section H: Level of Institutionalization (Loin) Scales for Health Promotion Programs

For this section of the questionnaire when we say “aspects of the program” we are talking about the “Focus on Kids” curriculum, logistics, space, facilitators, etc. of your “Focus on Kids” (or their name for “FOK”) program. If interviewee is relatively new or can not answer these questions ask if there is administrator who would better be able to answer this section.

Production Subsystem

- _____ 1a. Have the program’s goals and/or objectives been put into writing?
- | | | |
|----------------------------|---|-------------------|
| 1) Yes | → | Go to Question 1b |
| 2) No | → | Go to Question 1c |
| 3) Not Sure/Not Applicable | → | Go to Question 2a |

_____ 1b. If yes, for how many years have written goals & objectives actually have been followed?

_____ 1c. Of all the aspects of this program that could have written goals & objectives, what is your best estimate of the proportion which actually have written goals & objectives?

- | | | | |
|---------|--------|---------|--------|
| 1) None | 2) Few | 3) Most | 4) All |
|---------|--------|---------|--------|

_____ 2a. Have any of the plans or procedures used for implementing this program been put in writing?

- | | | |
|----------------------------|---|--------------------|
| 1) Yes | → | Got to Question 2b |
| 2) No | → | Go to Question 2c |
| 3) Not Sure/Not Applicable | → | Go to Question 3a |

_____ 2b. If yes, for how many years have such written plans or procedures actually been followed?

_____2c. Of all the aspects of this program that could have written plans or procedures, what is your best estimate of the proportion which actually have written plans or procedures?

- | | | | |
|---------|--------|---------|--------|
| 1) None | 2) Few | 3) Most | 4) All |
|---------|--------|---------|--------|

_____3a. Has a schedule (e.g., timetable, plan of action) used for implementing program activities been put in writing?

- | | | |
|----------------------------|---|-------------------|
| 1) Yes | → | Go to Question 3b |
| 2) No | → | Go to Question 3c |
| 3) Not Sure/Not Applicable | → | Go to Question 4a |

_____3b. If yes, for how many years have such written schedules actually been followed?

_____3c. Of all the aspects of this program that could have written schedules, what is your best estimate of the proportion which actually have written schedules?

- | | | | |
|---------|--------|---------|--------|
| 1) None | 2) Few | 3) Most | 4) All |
|---------|--------|---------|--------|

_____4a. Have the strategies for implementing this program been adapted to fit local circumstances?

- | | | |
|----------------------------|---|-------------------|
| 1) Yes | → | Go to Question 4b |
| 2) No | → | Go to Question 4c |
| 3) Not Sure/Not Applicable | → | Go to Question 5a |

_____4b. If yes, for how many years have locally adapted strategies actually been followed?

_____4c. Of all the aspects of this program that could be adapted to fit local circumstances, what is your best estimate of the proportion which actually have been adapted?

- | | | | |
|---------|--------|---------|--------|
| 1) None | 2) Few | 3) Most | 4) All |
|---------|--------|---------|--------|

_____5a. Has a formal evaluation of the program been conducted (this can either be a outcome evaluation or process evaluation as was defined previously)?

- | | | |
|----------------------------|---|-------------------|
| 1) Yes | → | Go to Question 5b |
| 2) No | → | Go to Question 5c |
| 3) Not Sure/Not Applicable | → | Go to Question 6a |

_____5b. If yes, for how many times has the program been formally evaluated?

____5c. Of all the aspects of this program that could be formally evaluated, what is your best estimate of the proportion which actually have been formally evaluated?

- 1) None 2) Few 3) Most 4) All

Managerial Subsystem

____6a. Has a supervisor (e.g., section chief, department head) been formally assigned to oversee this program?

- 1) Yes → Go to Question 6b
2) No → Go to Question 6c
3) Not Sure/Not Applicable → Go to Question 7a

____6b. If yes, for how many years has such a supervisory actually been formally assigned to oversee the program?

____6c. Of all the aspects of this program that could receive supervision, what is your best estimate of the proportion which actually receives such supervision?

- 1) None 2) Few 3) Most 4) All

____7a. Have formalized job descriptions been written for staff involved with this program?

- 1) Yes → Go to Question 7b
2) No → Go to Question 7c
3) Not Sure/Not Applicable → Go to Question 8a

____7b. If yes, for how many years have formalized job descriptions actually been followed?

____7c. What is your best estimate of the number of staff involved with this program who have written job descriptions?

- 1) None 2) Few 3) Most 4) All

____8a. Are evaluation reports of this program done on a schedule similar to evaluation reports most other programs in your organization??

- 1) Yes → Go to Question 8b
2) No → Go to Question 8c
3) Not Sure/Not Applicable → Go to Question 9

_____14b. If yes, for how many years has this program's funding sources been similar to those for other established programs within your organization?

_____14c. In your best estimate how permanent is the program's source of funding?

- | | | | |
|---------------------|---------------------------|----------------------------|----------------------|
| 1) Not
Permanent | 2) Minimally
Permanent | 3) Moderately
Permanent | 4) Very
Permanent |
|---------------------|---------------------------|----------------------------|----------------------|

_____15a. Is the staff most closely associated with this program's implementation hired from a stable funding source?

- | | | |
|----------------------------|---|--------------------|
| 1) Yes | → | Go to Question 15b |
| 2) No | → | Go to Question 15c |
| 3) Not Sure/Not Applicable | → | Go to Section I |

_____15b. If yes, for how many years has the staff most closely associated with this program's implementation been hired from a stable funding source?

_____15c. What is your best estimate of how permanent the funding is for the staff most closely associated with this program's implementation?

- | | | | |
|---------------------|---------------------------|----------------------------|----------------------|
| 1) Not
Permanent | 2) Minimally
Permanent | 3) Moderately
Permanent | 4) Very
Permanent |
|---------------------|---------------------------|----------------------------|----------------------|

Section I: Perceived Effectiveness

1. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in increasing knowledge about HIV/AIDS?

Low 1 2 3 4 5 6 7 8 9 10 *High*

2. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in changing attitudes about reducing risk behaviors for HIV infection?

Low 1 2 3 4 5 6 7 8 9 10 *High*

3. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in reducing HIV risk behavior in the target population?

Low 1 2 3 4 5 6 7 8 9 10 *High*

This is the end of the interview. Do you have any questions? Please feel free to call me in the future if you have any questions. I want to thank-you for your time. I will be sending you a copy of a parental monitoring video that was developed to complement the "Focus on Kids" curriculum. (Check to make sure we have correct address) Would you like me to send you a brief description of the results of this survey when it is completed?

APPENDIX C: STUDY LETTER, SCREENING QUESTIONNAIRE AND POSTCARD FOR DECLINING PARTICIPATION

Dear _____

My name is Jennifer Galbraith and I am a doctoral student and HIV prevention researcher at the University of Maryland. I am writing to ask you to participate in a research study.

The purpose of my research is to investigate adoption rates, reasons for not adopting, adaptations and re-inventions of the “Focus on Kids” HIV-prevention program. You qualify for this research because you attended a training seminar for the “Focus on Kids” program.

You are being asked to volunteer to participate in this study. Your participation in this study will include one to three telephone interviews. This interview will involve questions about your implementation of the “Focus on Kids” curriculum. I have enclosed a copy of the initial interview questions to allow you to prepare for this interview and to also save your valuable time. You may send these responses back via fax, e-mail or mail the questionnaire back in the enclosed, self-addressed stamped envelope or you can wait for us to contact you. You may also mail back the enclosed postcard and we will not contact you again. The total time for participation in the initial phase of the study is estimated to be approximately 10 minutes. If you meet selection criteria you will be asked to participate in the second phase of the study. At this time, another questionnaire will be mailed to you. This survey takes approximately 30 minutes and will be recorded if you agree. A small random sample of individuals will be asked to complete the survey a second time two weeks after completion of the first survey to test the reliability of the survey.

No risks are anticipated by participating in this study. Your participation in this study will be confidential, and all responses to the telephone interview will be reported in aggregate and not by individual or organization. Your decision to participate or not participate in this study will not affect your employment status or any current or future care you receive at University of Maryland. You will not benefit from your participation in this study, however your participation will aid us in understanding how organizations can successfully implement proven effective HIV prevention programs to new target audiences or at diverse sites. You will be compensated for your participation with parental monitoring video that can be used in combination with the “Focus on Kids” curriculum.

If you do not wish to participate in this study, please sign and return the enclosed postage-paid postcard. If I do not hear from you in two weeks, I will contact you by telephone to arrange a convenient time for the interview. Your participation is entirely voluntary and you may withdraw from the study or stop the interview at anytime.

If you have any questions, please feel free to contact me at (410) 706-2381.

Sincerely

Jennifer Galbraith
Clinical Research Specialist

I have received your information on the study involving “Focus on Kids” implementation and choose NOT to participate. Please remove my name from your list.

Name: _____

Organization: _____

Focus on Kids Preliminary Subject Screening Questionnaire

1. Have you ever utilized the Focus on Kids Program?

2. Have you ever trained anyone to use the program?

3. If so, would you be able to share that list of people you trained with us? (Please attach.)

4. Are you aware of anyone else who has used the Focus on Kids program?

5. If yes, would you be able to send us the names and contact information of those people? (Please attach.)

6. Are you aware of anyone else who has trained anyone to use the program?

7. If yes, would you be able to send us the names and contact information of those people? (Please attach.)

8. Can we contact you at a later date?

9. Please provide us with your contact information and your preferred method of contact.
Name: Phone:
Company: Fax:
Address: Email:

APPENDIX D: PARTICIPANT SURVEY

Dear Participant,

The following pages represent the *participant's copy* of the Re-invention Measurement Instrument to help you prepare for an interview. This interview will be conducted *via telephone* by doctoral student, Jennifer Galbraith.

Please **DO NOT** answer the questions on paper and send them back. Instead, please wait until your interview** on _____ to answer the questions. Further, please have available the curriculum and any additional guidelines, activities, or curricula you used in your program.

You will be asked at the start of the interview if you will allow the interview to be recorded. It is your choice if you will allow us to record the interview.

Thank you.

Jennifer Galbraith

**** As scheduled, we will be calling you at _____. If this number is incorrect, please call us at (410) 706-2381.**

Re-invention Measurement Instrument

Pre-interview: There are no right or wrong answers in this survey. We are interested in finding the various ways individuals and agencies are utilizing the “Focus on Kids” curricula. We hope that this information will help researchers design programs that better suit service providers needs.

Can you tell me what materials to you have in front of you to refer to regarding your answers?

Section A: Demographics

1. What is the name of your organization?
2. How would you define the type of organization:
 Community Based National Non-Government Agency State Dept.
of Ed. Government Agency Research Institution (i.e., University) Other,
explain:
- 3a. Is the organization domestic or international? 3b. In what country is your organization located?

Section B: Relationship to Innovators

1. By whom were you trained in the Focus on Kids curriculum? (Name of individual or organization.)
2. Does your program have any contact with the original developers of the Focus on Kids curriculum?

Section C: Target Audience

1. What is the average size of your Focus on Kids groups?
2. How many groups have you run?
3. What is the gender make-up of the groups?
 Mixed gender Single gender
4. What is the social structure of the groups?
 Friendship groups Youth familiar/not defined friendship groups Not all youth familiar
5. What is the median age of the group?
6. What is the age range of the group from youngest to oldest?
7. What is the residential area described as:
 Rural Urban Suburban Other,
explain:
8. Was the curriculum conducted in English?
 Yes No If no, in what language was the curriculum taught?_____
9. How would you describe the ethnicity of the group?

10. What is the sexual orientation of the group?
 Not determined Heterosexual Bi-sexual
 Gay/Lesbian or Homosexual Mixed

11. Are there other key terms that describe your population?

Section D: Program Logistics

1. What is the program's name?
2. How many sessions does it take to complete the program?
- 3a. What is the length of the sessions: _____ 3b. What is the total duration: _____
4. How would you describe the site where the program takes place? (i.e., Church, Recreation Center, School)
5. How many facilitators do you use per group?
6. Who were the facilitators? (Check all that apply)
 Paid Community Members Full-time
 Volunteer Non-community Members Part-time
7. Were peer educators used?

Section E: Adaptations and Methodology

1. How was the Focus on Kids curriculum chosen?
2. How did you like the program?
3. Were changes made to the program? If no, proceed to Section F.
4. Briefly describe what changes were made.
5. Did you receive any guidance on how to adapt the program?
6. If yes, from whom did you receive guidance and what guidelines were given?
7. Was research of any kind conducted or consulted to aid in adaptation?
(research can be defined as focus groups, interviewing youth, parents or community leaders, survey research or questionnaires)
8. If yes, what research was used?
9. How were changes communicated to group leaders?
a) Orally at training b) In writing c) Orally not at training d) New curriculum written

10. When making changes did someone in your organization consult with:
 ___ Original FOK Developers ___ ETR Associates ___ The Health Education Standards Analysis

Section F: Curriculum Adaptations

Curriculum Activity	1) Activity conducted exactly as in curriculum 2) Activity not conducted at all 3) Activity completed with some changes	Description of Changes	Why were changes made? 1) To simplify 6) My agency 2) Did not understand activity required me to 3) Desire to narrow in on a 7) To modernize/ problem update curriculum 4) Expand to new problem 8) Time constraints 9) Increase 5) Make more suitable to ownership new target audience 10) Other, explain:
<i>Session One</i>			
Introduction Game: Flying Objects or Double Letter			
Focus on Kids Program Overview			
Group Cohesion Game: Burning Buildings or Human Knot			
Ground Rules			
Family Tree: Urban Version Or Suburban Version			
Soda Decision-Model: Step-One			
Wrap-Up and Closing Ritual			
<i>Session Two</i>			
Introduction and Opening Ritual			
Review of Session One			
How Risky Is It?			
What Are You Concerned About?			
Why Do People Feel Invulnerable			

Defining a Value			
Rank Your Values			
Values Voting			
What Youth Can Do			
Wrap-Up and Closing Ritual			
<i>Session Three</i>			
Introduction and Opening Ritual			
Review of Session Two			
SODA Decision-Model: Step Two			
Finding Information for Good Decisions			
Telephone Exercise: Gathering Information			
Video: <i>What Kids Want to Know About Sex and Growing Up</i>			
Field Assignments			
Wrap-Up and Closing Ritual			
<i>Session 4</i>			
Opening Ritual and Review			
Parent Role-play			
M&M's Game: How Many Kids Are Really...?			
Condom Demonstration			
Condom Race			
SODA Decision-Model: Step Three			
Additional Field Assignments			
Wrap-Up and Closing Ritual			
<i>Session 5</i>			
Opening Ritual and Review			
SODA Decision-Model: Step Four			
Communication Game: Changing Messages			

Communication Styles: Aggressive, Assertive and Nonassertive			
Communicating Without Words			
Sex: A Decision for Two			
Wrap-Up and Closing Ritual			
<i>Session 6</i>			
Opening Ritual and Review			
Ways to Show You Care			
HIV Transmission Game			
Contraception Lesson			
Wrap-Up and Closing Ritual			
<i>Session 7</i>			
Opening Ritual and Review			
Goal Setting: My Future			
Images of Sex			
Role-playing: Saying NO or Asking to Use a Condom			
Wrap-Up and Closing Ritual			
<i>Session 8</i>			
Opening Ritual and Review			
The Knowledge Feud			
Pat on the Back			
Community Projects Discussion			
Wrap-Up and Closing Ritual			

Section F: Part 2

1. Were additional sessions added?
2. If yes, how many additional sessions were added?
3. What was the subject of the additional session(s)?
4. How long were each of the sessions?
5. Where did the sessions fall in the curriculum?
6. How were the new sessions developed?

Section G: Evaluation

1. Was there an outcome evaluation (an outcome evaluation is used to determine if the program was successful at lowering risk behaviors amongst the participants)?
2. Was there a process evaluation? (a process evaluation is used to determine if the program is running successfully)

Section H: Level of Institutionalization (Loin) Scales for Health Promotion Programs

For this section of the questionnaire when we say “aspects of the program” we are talking about the curriculum, logistics, space, facilitators, etc. of the program.

Production Subsystem

1a. Have the program’s goals and/or objectives been put into writing?

- 1)___Yes 2)___No 3)___Not Sure/Not Applicable

If yes, how many years have written goals & objectives actually been followed? ___Year(s)

1b. Of all the aspects of this program that could have written goals & objectives, what is your best estimate of the proportion which actually have written goals & objectives?

- 1) None 2) Few 3) Most 4) All

2a. Have any of the plans or procedures used for implementing this program been put in writing?

- 1)___Yes 2)___No 3)___Not Sure/Not Applicable

If yes, how many years have such written plans or procedures actually been followed? ___Year(s)

2b. Of all the aspects of this program that could have written plans or procedures, what is your best estimate of the proportion which actually have written plans or procedures?

- 1) None 2) Few 3) Most 4) All

3a. Has a schedule (e.g., timetable, plan of action) used for implementing program activities been put in writing?

- 1)___Yes 2)___No 3)___Not Sure/Not Applicable

If yes, how many years have such written schedules actually been followed? ___Year(s)

3b. Of all the aspects of this program that could have written schedules, what is your best estimate of the proportion which actually have written schedules?

- 1) None 2) Few 3) Most 4) All

4a. Have the strategies for implementing this program been adapted to fit local circumstances?

- 1)___Yes 2)___No 3)___Not Sure/Not Applicable

If yes, how many years have locally adapted strategies actually been followed? ___Year(s)

4b. Of all the aspects of this program that could be adapted to fit local circumstances, what is your best estimate of the proportion which actually have been adapted?

- 1) None 2) Few 3) Most 4) All

5a. Has a formal evaluation of the program been conducted (this can either be a outcome evaluation or process evaluation as was defined previously)?

- 1)___Yes 2)___No 3)___Not Sure/Not Applicable

If yes, how many times has the program been formally evaluated? ___Year(s)

5b. Of all the aspects of this program that could be formally evaluated, what is your best estimate of the proportion which actually have been formally evaluated?

- 1) None 2) Few 3) Most 4) All

Managerial Subsystem

6a. Has a supervisor (e.g., section chief, department head) been formally assigned to oversee this program?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, how many years has such a supervisory actually been formally assigned to oversee the program? ___Year(s)

6b. Of all the aspects of this program that could receive supervision, what is your best estimate of the proportion which actually receives such supervision?

- 1) None 2) Few 3) Most 4) All

7a. Have formalized job descriptions been written for staff involved with this program?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years have formalized job descriptions actually been followed? ___Year(s)

7b. What is your best estimate of the number of staff involved with this program who have written job descriptions?

- 1) None 2) Few 3) Most 4) All

8a. Are evaluation reports of this program done on a schedule similar to evaluation reports most other programs in your organization?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, how many years have evaluation reports actually been produced on a schedule similar to such reports for most other programs in your organization? ___Year(s)

8b. What is your best estimate to the extent that evaluation reports for this program are produced on a schedule similar to evaluation reports for most other programs in your organization?

- 1) None 2) Few 3) Most 4) All

Maintenance Subsystem

9a. Have any permanent staff been assigned to implement this program?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, how many years have permanent staff been assigned to implement the program? ___Year(s)

9c. What is your best estimate of the number of staff who implement the program that are in permanent positions?

- 1) None 2) Few 3) Most 4) All

10a. Has an administrative-level individual within your organization been actively involved in advocating for this program's continuation?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years has this administrative-level individual actively advocated for this program's continuation? ___Year(s)

10b. What is your best estimate of how active this administrative-level individual has been advocating for the program's continuation?

- 1) Not active at all 2) Minimally active 3) Moderately active 4) Very Active

11a. Do staff in your organization, other than those actually implementing the program, actively contribute to the program's operations?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years have permanent such staff in your organization actively contributed to the program's operation? ___Year(s)

11b. Of all the staff in your organization who could contribute to the operation of this program what is your best estimate of the proportion that actually contribute to it?

- 1) None 2) Few 3) Most 4) All

Supportive Subsystem

12a. Has the program made a transition from trial or pilot status to permanent status in your organization?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years has this program had permanent status? ___Year(s)

12b. What is your best estimate of how permanent this program is in your organization?

- 1) Not permanent 2) Minimally permanent 3) Moderately permanent 4) Very permanent

13a. Has the program been assigned permanent physical space within your organization?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years has it maintained such permanent space? ___Year(s)

13b. Of all the permanent space that this program needs, what is your best estimate of the proportion of permanent space it currently occupies?

- 1) None 2) Small amount 3) Most 4) All

14a. Is the program's source of funding similar to the funding sources for other established programs within your organization?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years has this program's funding sources been similar to those for other established programs within your organization? ___Year(s)

14b. In your best estimate how permanent is the program's source of funding?

- 1) Not permanent 2) Minimally permanent 3) Moderately permanent 4) Very permanent

15a. Is the staff most closely associated with this program's implementation hired from a stable funding source?

- 1) ___Yes 2) ___No 3) ___Not Sure/Not Applicable

If yes, for how many years has the staff most closely associated with this program's implementation been hired from a stable funding source? ____ Year(s)

15b. What is your best estimate how permanent the funding is for the staff most closely associated with this program's implementation?

1) Not permanent 2) Minimally permanent 3) Moderately permanent 4) Very permanent

Section I: Perceived Effectiveness

4. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in increasing knowledge about HIV/AIDS?
5. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in changing attitudes about reducing risk behaviors for HIV infection?
6. On a scale of 1 to 10, 1 being not at all effective and 10 being very effective, how effective do you believe the program was in reducing HIV risk behavior in the target population?

APPENDIX E: DECISION RULE CHARTS-ADAPTED ACTIVITIES
Curriculum with Protection Motivation Theory (PMT) constructs and
Adherence to National Health Education Standards (NHES)

Curriculum Activity	Change	Respondents	Decision on NHES Operationalization:	Decision on PMT Operationalization:
Group Cohesion Game: Option 1: Burning Buildings Option 2: Human Knot	changing the activity due to 9/11	116/261/253/253	Credit	Credit
	youth were already familiar or had bonded		No credit	No credit
Ground Rules				
Family Tree: Urban version Suburban version	Changed the names and story to fit culture of youth (included Vietnamese, Hispanic, rural youth, group home setting)	10/55/116/138/218/235/257	Credit	Credit
SODA Decision Making Model: Step One: Stop	Made poster to add	55	Credit	Credit
	Just did one lecture on decision making	170/203	No credit	No credit
	Did not call SODA—discussed steps	213	Credit	Credit

How Risky Is It?	Did 2 x'x	163	Credit	Credit
	Dropped activities not age appropriate	170/203/229/257	Credit	Credit
	Added activities	37/116/138/257	Credit	Credit
	More discussion	260	Credit	Credit
What are you concerned about?	Changed Examples	116/186	Credit	
Why Do People Feel Invulnerable?	Added questions	37/186	Credit	Credit
	Made it more personal	173		
Defining a Value				
Rank Your Values	Added "how would values change if HIV"	55	Credit	Credit
	Changed values to reflect culture	235/257	Credit	Credit
Values Voting	Added item	145	Credit	Credit
	Dropped items	203	Credit	Credit
What Youth Can Do	Made specific to their community	213	Credit	Credit

SODA Decision Making Model: Step Two: Options	Made poster to add	55	Credit	Credit
	Just did one lecture on decision making	170	No credit	No credit
	Did not call SODA—discussed steps	213	Credit	Credit
	Changed vignettes to reflect culture	257	Credit	Credit
Finding Information for Good Decisions	Changed vignette scenarios	186	Credit	Credit
	Lecture	203/235	No credit	No credit
Telephone Exercise: Gathering Information	Created scenarios	55	Credit	Credit
	Local resources	55/135/186/260	Credit	Credit
	Did activity at home	135/261/	No credit	No credit
	Included internet	235	Credit	Credit
Video: <i>What Kids Want to About Sex and Growing Up</i>	New video “the truth about sex” limited puberty info	145	No credit	No credit
	Talked about puberty through vignettes	257	Credit	Credit
	Question/Answer session	257	Credit	Credit

Field Assignments Condom Hunt	Roleplay added	55	Credit	Credit
	Did it as group	173	Credit	Credit
Field Assignment Interviewing parents	Youth incarcerated so interviewed counselor	256	Credit	Credit
Review of field assignments				
Parent Role Play	Discussion instead-- Listed topics they could discuss	170/213/218	No credit	No credit
	Added peer to peer role play	163	Credit	Credit
	Youth incarcerated role play with counselor	256	Credit	Credit
M-n-Ms: How Many Kids Are Really?	Local stats used	55/135/142/173/203/218/235/255	Credit	Credit
Condom Demonstration	Condom cards	55/218/260	Credit	Credit
	Youth did demonstration	142	Credit	Credit
	Wrote steps up and posted	254	Credit	Credit
	Poked holes in condoms to see what happens	254	Credit	Credit
Condom Race				

SODA Decision Making Model: Step Three: Decide	Made poster to add	55	Credit	Credit
	Just did one lecture on decision making	170/235	No credit	No credit
	Did not call SODA—discussed steps	213	Credit	Credit
Additional Field Assignments				
SODA Decision-Making Model: Step 4: Action	Made poster to add	55	Credit	Credit
	Just did one lecture on decision making	170	No credit	No credit
	Did not call SODA—discussed steps	213	Credit	Credit
Communication Game: Changing Messages	Changed how it went around circle	186	Credit	Credit
Communication Styles: Aggressive , Assertive, and Nonassertive	Changed role-plays	10/173	Credit	Credit
	Introduced idea of lying	55	Credit	Credit
	More work with aggression and non-assertive	186	Credit	Credit
	Discussed peer pressure		Credit also for NHES 4	Credit
	Got rid of labels	260	Credit	Credit
Communicating Without Words		10/55/		

Sex: A Decision for Two	Included alcohol/drugs or date rape drug in story	261/218	Credit	Credit
	Discussed statutory rape laws too			
	Rape crisis center speaker	55	Credit	Credit
	Used family tree characters	142/235	No Credit	No Credit
	More myths and facts, no questions	257	Credit	Credit
		260	Credit	Credit
Ways to Show You Care	Age appropriate changes to ways to show you care	138	Credit	Credit
	101 Ways to show you care	213	Credit	No credit for severity
HIV Transmission Game	Test tube kits	55	Credit	Credit
	Used African Marbles to exchange	213	Credit	Credit
	Had youth shake hands	138	Credit	Credit
Contraceptive Lesson	Added additional methods	145/235/254/257/256/260	Credit	Credit
	Just discussed abstinence	116	No credit	No credit
	Nurse came into discuss	235	Credit	Credit
	Rearranged order for better flow	260	Credit	Credit

Goal Setting: My Future	Discussion	213	Credit	No credit
	Changed adjustments	218/257/260	Credit	Credit
	Just goals/no adjustments	235	Credit	No credit severity, vulner.
Images of Sex	More of a alcohol discussion	55		
Roleplay: Saying NO or Asking to Use a Condom	Used scenario of African Dance	213	Credit	Credit
	Shortened-discussion	235	No credit	No credit
	Added roleplay without sex for basic communication first	257	Credit	Credit
	Did role play two times	260	Credit	Credit
Knowledge Feud	Added questions	55	Credit	Credit
	Deleted questions that had not been dealt with	203	No credit	No Credit
	Oral quiz/ Survey	116/213	Credit	Credit
Pat on the Back	Gave out High Five	213	No credit	No Credit

Community Projects Discussion	Just discussion	163	No credit	No credit
	Discussed throughout the program	261	Credit	Credit

APPENDIX F: DECISION RULE CHARTS FOR NEW ACTIVITIES AND OPERATIONALIZATION OF NHES AND PMT

New Activity Description	Respondents	NHES Operationalized:	PMT constructs operationalized:
Let's Spin	259/268/258/267/269	1	Severity
Down at the Fish Fry	259/268/258/267/269	3,5,6	Severity Vulnerability Response Cost Response Efficacy Self-Efficacy
Alcohol, Drugs, and Me	259/268/258/267/269/10	1,2,3,4,5,6	Extrinsic Rewards Response Efficacy Severity
Call In Radio Show	259/268/258/267/269	5,6	Intrinsic Rewards Extrinsic Rewards Self Efficacy Response Efficacy Response Cost
Let's Talk Sexual Abuse	259/268/258/267/269/257/10	1,5	Self Efficacy Response Efficacy
Sexual Harassment	259/268/258/267/269	5	Self Efficacy Response Efficacy
The Relationship Search	259/268/258/267/269/257/10	1,3,6	Extrinsic Rewards Intrinsic Rewards Severity Vulnerability Self Efficacy Response Efficacy Response Costs
SODA Decision Making Step Three (2)	259/268/258/267/269	3,5,6	Response Efficacy Self Efficacy Response Cost Severity Vulnerability

Tobacco Prevention	145	1	Severity Vulnerability
Mr. Gross Mouth	145	1	Severity
Straw Activity	145	1	Severity
What is really in cigarettes?	145	1	Severity
HIV/STD Factual Information	173/257/260	1	
STD activity: Paper airplane	248		Severity
Ora-Sure testing available	55	2,3	Vulnerability Self Efficacy Response Efficacy Response Cost
HIV positive speaker	142	1	Vulnerability Severity
Cultural Diversity Talk	186	4	
Pop Quiz	254/248	1	
Drunk Goggles	257/10	1	Severity
Son and Lamb on Alcohol and Relationships (SODA decision)	257	3,5,6	Response Efficacy Self Efficacy Response Cost Severity Vulnerability
Got a Letter	257/10	5,6	Intrinsic Rewards Extrinsic Rewards Self Efficacy Response Efficacy Response Costs
Video: Seriously Fresh	163	1,4	Severity Vulnerability
Are You with Me?	163	1	Severity Vulnerability Self Efficacy Response Efficacy
STD activity/paper airplane	248	1	Severity Response Efficacy
Puberty discussion	248	1	
Where do you get values?	248	4	Extrinsic Reward Intrinsic Reward Response Cost
Conflict resolution exercise	248	4,5	Response Efficacy Self Efficacy Response Costs

APPENDIX G: RAW DATA CHARTS

Table IV-2: Curriculum Activities Fidelity and Adaptation Summary (n=34)				
Name of activity	No change	Dropped	Adapted	Different order
One: Trust Building and Group Cohesion	n (%)	n (%)	n (%)	n (5)
1. Introduction game: Option one: Flying objects Option two: Double letter	21 (61.8)	8 (23.5)	4 (11.8)	1 (2.9)
2. "Focus on Kids" Program Overview	20 (58.8)	8 (23.5)	5 (14.7)	1 (2.9)
3. Group Cohesion Game: Option 1: Burning Buildings Option 2: Human Knot	13 (38.2)	10 (29.4)	10 (29.4)	1 (2.9.4)
4. Ground Rules	27 (79.4)	2 (5.9)	5 (14.7)	0 (0)
5. Family Tree: Urban version Suburban version	12 (35.3)	7 (20.6)	15 (44.1)	0 (0)
6. SODA Decision-Making Model: Step One: Stop	21 (61.8)	4 (11.8)	9 (26.5)	0(0)
7. Wrap Up and Closing Ritual	22 (64.7)	6 (17.6)	6 (17.6)	0(0)
Session Two: Risks and Values				
8. Introduction and Opening Ritual	21 (61.8)	9 (26.5)	4 (11.8)	0(0)
9. Review of Session One	21 (61.8)	6 (17.6)	7 (20.6)	0 (0)
10. How Risky Is It?	21 (61.8)	2 (5.9)	11 (32.4)	0 (0)
11. What are you concerned about?	24 (70.6)	7 (20.6)	3 (8.8)	0 (0)
12. Why Do People Feel Invulnerable?	23 (67.6)	7 (20.6)	4 (11.8)	0 (0)
13. Defining a Value	28 (82.4)	3 (8.8)	3 (8.8)	0 (0)
14. Rank Your Values	23 (67.6)	4 (11.8)	7 (20.6)	0 (0)
15. Values Voting	23 (67.6)	6 (17.6)	5 (14.7)	0 (0)
16. What Youth Can Do	21 (61.8)	11 (32.4)	1 (2.9)	1 (2.9)
17. Wrap Up and Closing Ritual	22 (64.7)	7 (20.6)	5 (14.7)	0 (0)
Session Three: Educate Yourself: Obtaining Information				
18. Introduction and Opening Ritual	20 (58.8)	9 (26.5)	5 (14.7)	0 (0)
19. Review of Session 2	22 (64.7)	6 (17.6)	6 (17.6)	0 (0)
20. SODA Step Two: Options	21 (61.8)	5 (14.7)	(23.5)	0 (0)

21. Finding Information for Good Decisions	20 (58.8)	5 (14.7)	8 (23.5)	1 (2.9)
22. Telephone Exercise: Gathering Information	8 (23.5)	16 (47.1)	10 (29.4)	0 (0)
23. Video: <i>What Kids Want to About Sex and Growing Up</i>	13 (38.2)	16 (47.1)	2 (5.9)	3 (8.8)
24. Field Assignment: Condom Hunt & Interviewing parents	8 (23.5)	17 (50)	8 (23.5)	1 (2.9)
25. Wrap Up and Closing Ritual	22 (64.7)	7 (20.6)	5 (14.7)	0 (0)
Session Four: Educate Yourself: Examining Consequences				
26. (review of field assignments) Introduction and Opening Ritual	15 (44.1)	11 (32.4)	8 (23.5)	0 (0)
27. Parent Role Play	17 (50.0)	7 (20.6)	8 (23.5)	2 (5.9)
28. M-n-Ms: How Many Kids Are Really?	9 (26.5)	5 (14.7)	20 (58.8)	0 (0)
29. Condom Demonstration	18 (52.9)	7 (20.6)	9 (26.5)	0 (0)
30. Condom Race	15 (44.1)	13 (38.2)	6 (17.6)	0 (0)
31. SODA: Step Three: Decide	21 (61.8)	4 (11.8)	8 (23.5)	1 (2.9)
32. Additional Field Assignments	4 (11.8)	28 (82.4)	2 (5.9)	0 (0)
33. Wrap-Up and Closing Ritual	22 (64.7)	7 (20.6)	5 (14.7)	0 (0)
Session Five: Skills Building: Communication				
34. Opening Ritual and Review	18 (52.9)	9 (26.5)	7 (20.6)	0 (0)
35. SODA: Step 4: Action	23 (67.6)	5 (14.7)	6 (17.6)	0 (0)
36. Communication Game: Changing Messages	25 (73.5)	8 (23.5)	1 (2.9)	0 (0)
37. Communication Styles: Aggressive , Assertive, and Nonassertive	20 (58.8)	5 (14.7)	9 (26.5)	0 (0)
38. Communicating Without Words	24 (70.6)	9 (26.5)	1 (2.9)	0 (0)
39. Sex: A Decision for Two	13 (38.2)	7 (20.6)	14 (41.2)	0 (0)
40. Wrap-Up and Closing Ritual	22 (64.7)	7 (20.6)	5 (14.7)	0 (0)
Session Six: Information about Sexual Health				
41. Opening Ritual and Review	18 (52.9)	8 (23.5)	8 (23.5)	0 (0)
42. Ways to Show You Care	24 (70.6)	2 (5.9)	6 (17.6)	2 (5.9)
43. HIV Transmission Game	20 (58.8)	3 (8.8)	9 (26.5)	2 (5.9)
44. Contraceptive Lesson	10 (29.4)	8 (23.5)	16 (47.1)	0 (0)
45. Wrap-Up and Closing Ritual	22 (64.7)	8 (23.5)	4 (11.8)	0 (0)

Session Seven: Attitudes & Skills for Sexual Health				
46. Opening Ritual and Review	17 (50)	9 (26.5)	8 (23.5)	0 (0)
47. Goal Setting: My Future	23 (67.6)	5 (14.7)	6 (17.6)	0 (0)
48. Images of Sex	15 (44.1)	12 (35.3)	7 (20.6)	0 (0)
49. Role play: Saying NO/Asking to Use a Condom	16 (47.1)	11 (32.4)	7 (20.6)	0 (0)
50. Wrap-Up and Closing Ritual	22 (64.7)	8 (23.5)	4 (11.8)	0 (0)
Session Eight: Review and Community Project				
51. Opening Ritual and Review	18 (52.9)	9 (26.5)	7 (20.6)	0 (0)
52. Knowledge Feud	23 (67.6)	5 (14.7)	6 (17.6)	0 (0)
53. Pat on the Back	20 (58.8)	10 (29.4)	2 (5.9)	2 (5.9)
54. Community Projects Discussion	13 (38.2)	16 (47.1)	5 (14.7)	0 (0)
55. Wrap-Up and Closing Ritual	22 (64.7)	8 (23.5)	4 (11.8)	0 (0)

Table IV-6: Curriculum Activities and Rationale for Change

Key to Columns

- 1) To simplify
- 2) Did not understand activity
- 3) Desire to narrow in on a problem
- 4) Expand to another problem
- 5) Make more suitable for target audience
- 6) My agency required me to change
- 7) To modernize/update curriculum
- 8) Time constraints
- 9) Increase ownership
- 10) Other, explain

Name of Activity	1	2	3	4	5	6	7	8	9
One: Trust Building and Group Cohesion									
1. Introduction game: Option one: Flying objects Option two: Double letter	0	0	1	0	7	0	1	5	1
2. "Focus on Kids" Program Overview	3	0	1	0	6	0	0	6	1
3. Group Cohesion Game: Option 1: Burning Buildings Option 2: Human Knot	0	0	1	0	7	0	0	6	2
4. Ground Rules	0	0	1	0	3	0	0	3	1
5. Family Tree: Urban version Suburban version	0	2	1	1	16	0	0	4	6
6. SODA Decision-Making Model: Step One: Stop	0	1	4	1	4	0	0	4	3
7. Wrap Up and Closing Ritual	0	0	1	0	1	0	0	1 0	1
Session Two: Risks and Values									
8. Introduction and Opening Ritual	0	0	1	0	0	0	0	1 2	0
9. Review of Session One	1	0	1	1	5	0	0	8	1
10. How Risky Is It?	0	0	4	1	8	2	3	1	1
11. What are you concerned about?	1	0	1	1	2	0	0	7	2
12. Why Do People Feel Invulnerable?	1	0	1	0	3	0	0	7	1

13. Defining a Value	0	0	1	0	3	0	0	3	0
14. Rank Your Values	1	1	2	0	6	0	0	3	2
15. Values Voting	0	0	1	1	7	0	0	4	0
16. What Youth Can Do	0	0	1	0	3	0	0	1	0
17. Wrap Up and Closing Ritual	0	0	1	0	3	0	0	1	0
Session Three: Educate Yourself: Obtaining Information									
18. Introduction and Opening Ritual	0	0	1	0	2	0	0	1	0
19. Review of Session 2	0	0	1	0	5	0	0	8	0
20. SODA Step Two: Options	1	1	1	1	6	0	0	4	1
21. Finding Information for Good Decisions	0	0	2	0	6	1	0	7	1
22. Telephone Exercise: Gathering Information	0	0	2	0	12	2	1	9	1
23. Video: <i>What Kids Want to About Sex and Growing Up</i>	0	0	1	0	5	0	0	6	0
24. Field Assignment: Condom Hunt & Interviewing parents	5	0	1	0	10	4	0	1	0
25. Wrap Up and Closing Ritual	0	0	1	0	2	0	0	1	0
Session Four: Educate Yourself: Examining Consequences									
26. (review of field assignments) Introduction and Opening Ritual	0	0	1	0	3	2	0	1	0
27. Parent Role Play	3	0	1	0	5	0	1	6	1
28. M-n-Ms: How Many Kids Are Really?	0	0	1	1	19	1	0	2	7
29. Condom Demonstration	1	0	1	1	7	9	0	1	0
30. Condom Race	0	0	1	0	8	1	1	5	0
31. SODA: Step Three: Decide	1	1	1	1	5	0	0	5	1
32. Additional Field Assignments	7	1	1	0	4	0	0	1	0
33. Wrap-Up and Closing Ritual	0	1	0	0	3	0	0	1	1
Session Five: Skills Building: Communication									
34. Opening Ritual and Review	0	0	1	0	3	0	0	2	0
35. SODA: Step 4: Action	2	1	1	0	5	0	0	4	0

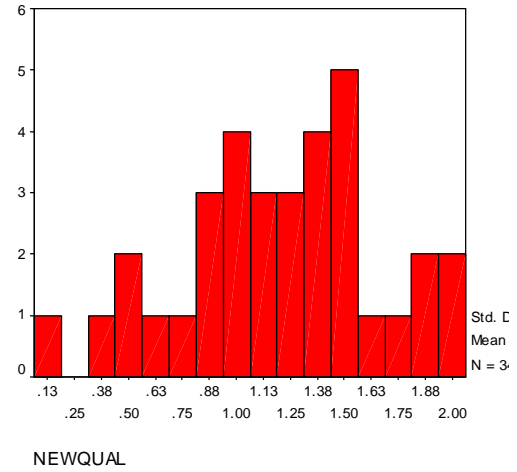
36. Communication Game: Changing Messages	0	0	1	0	1	0	0	8	1
37. Communication Styles: Aggressive , Assertive, and Nonassertive	1	0	1	0	8	0	1	4	2
38. Communicating Without Words	2	0	1	0	2	0	0	7	0
39. Sex: A Decision for Two	1	0	2	2	11	1	2	6	2
40. Wrap-Up and Closing Ritual	0	0	1	0	2	0	0	1	0
								2	
Session Six: Information about Sexual Health									
41. Opening Ritual and Review	0	0	1	0	0	0	0	1	0
								3	
42. Ways to Show You Care	1	0	0	1	4	0	0	4	1
43. HIV Transmission Game	1	0	0	1	7	0	1	2	1
44. Contraceptive Lesson	0	0	2	1	6	6	7	4	1
45. Wrap-Up and Closing Ritual	0	0	1	0	2	0	0	1	0
								2	
Session Seven: Attitudes & Skills for Sexual Health									
46. Opening Ritual and Review	0	0	1	0	2	0	0	1	0
								5	
47. Goal Setting: My Future	0	0	2	0	5	0	0	6	1
48. Images of Sex	2	1	1	1	5	2	0	9	1
49. Role play: Saying NO/Asking to Use a Condom	0	1	1	0	6	4	0	7	0
50. Wrap-Up and Closing Ritual	0	0	1	0	2	0	0	1	0
								2	
Session Eight: Review and Community Project									
51. Opening Ritual and Review	0	0	1	0	2	0	0	1	0
								4	
52. Knowledge Feud	0	0	1	1	3	2	0	6	0
53. Pat on the Back	1	0	1	0	3	0	0	8	0
54. Community Projects Discussion	2	0	1	0	3	1	0	1	0
								1	
55. Wrap-Up and Closing Ritual	0	0	1	0	2	0	0	9	0
Total	43	11	6	17	280	5	1	4	4
			5			1	8	3	5
								3	

**APPENDIX H: FREQUENCY DISTRIBUTION CHARTS
RESEARCH QUESTIONS/VARIABLES/DISTRIBUTIONS/RE-CODING
DECISIONS/CHOICE OF STATISTICS.**

Dependent Variable for all questions:

Dependent Variable: Quality of Re-invention Score

Valid	Frequency	Percent	Valid Percent	Cumulative %
.15	1	2.9	2.9	2.9
.34	1	2.9	2.9	5.9
.46	1	2.9	2.9	8.8
.54	1	2.9	2.9	11.8
.66	1	2.9	2.9	14.7
.72	1	2.9	2.9	17.6
.88	1	2.9	2.9	20.6
.89	1	2.9	2.9	23.5
.90	1	2.9	2.9	26.5
.97	1	2.9	2.9	29.4
.98	1	2.9	2.9	32.4
.99	1	2.9	2.9	35.3
1.02	1	2.9	2.9	38.2
1.11	1	2.9	2.9	41.2
1.14	1	2.9	2.9	44.1
1.15	1	2.9	2.9	47.1
1.19	1	2.9	2.9	50.0
1.24	1	2.9	2.9	52.9
1.29	1	2.9	2.9	55.9
1.32	1	2.9	2.9	58.8
1.34	1	2.9	2.9	61.8
1.42	1	2.9	2.9	64.7
1.43	1	2.9	2.9	67.6
1.46	1	2.9	2.9	70.6
1.47	1	2.9	2.9	73.5
1.50	2	5.9	5.9	79.4
1.52	1	2.9	2.9	82.4
1.59	1	2.9	2.9	85.3
1.79	1	2.9	2.9	88.2
1.85	1	2.9	2.9	91.2
1.88	1	2.9	2.9	94.1
1.98	1	2.9	2.9	97.1
1.99	1	2.9	2.9	100.0
Total	34	100.0	100.0	

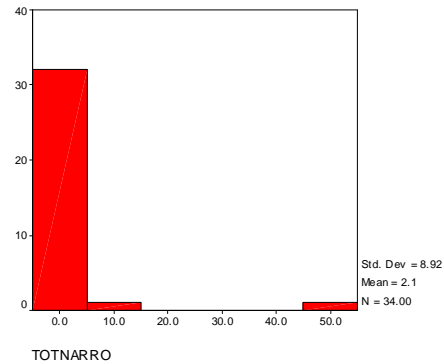


Variable is a continuous variable that appears to be fairly normally distributed.

Research question two: How are the reasons attributed for re-invention (simplification, agency requiring change, time constraints, narrowing in on a problem, expanding to another problem, making more suitable, to modernize update, and to increase ownership) related to quality of re-invention (strong adherence to PMT and NHES)? This question is really 8 different research questions. All of the independent variables (reasons) and dependent variable (re-invention quality) are continuous, however, several of the independent variables are not distributed enough to warrant analyses.

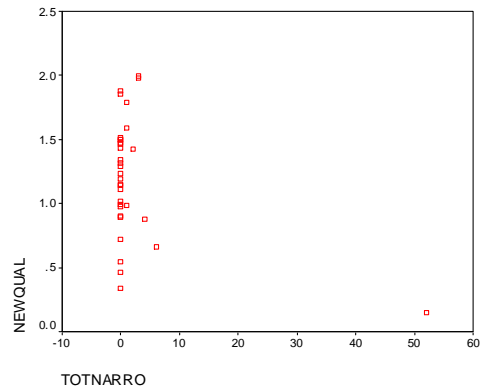
Rationale: To narrow in on a problem

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	25	59.5	73.5	73.5
1.00	3	7.1	8.8	82.4
2.00	1	2.4	2.9	85.3
3.00	2	4.8	5.9	91.2
4.00	1	2.4	2.9	94.1
6.00	1	2.4	2.9	97.1
52.00	1	2.4	2.9	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		



Decisions about variables: Drop; not enough distribution

Test statistic: None

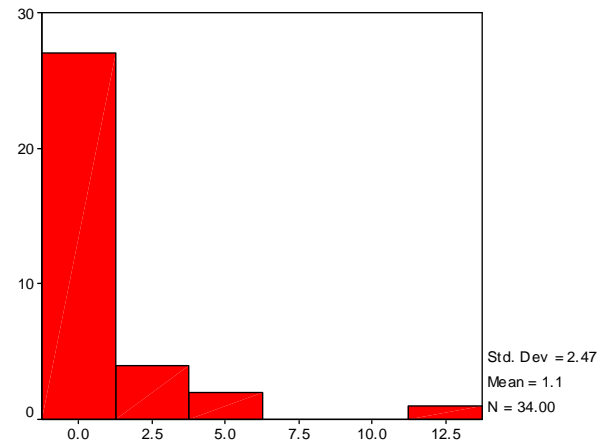


Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	20	47.6	58.8	58.8
1.00	7	16.7	20.6	79.4
2.00	4	9.5	11.8	91.2
4.00	1	2.4	2.9	94.1
6.00	1	2.4	2.9	97.1
13.00	1	2.4	2.9	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

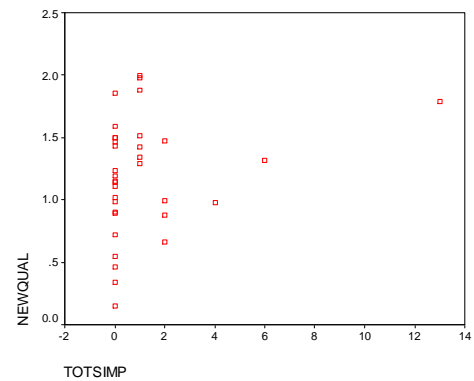
Rationale: To simplify

Decisions about variables: Drop; not enough distribution

Test statistic: None



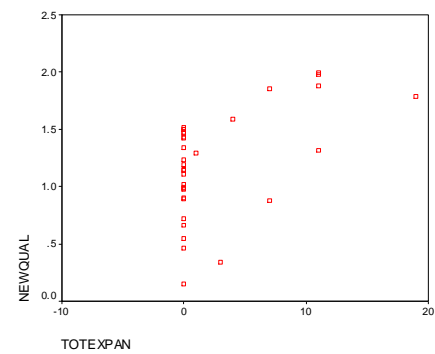
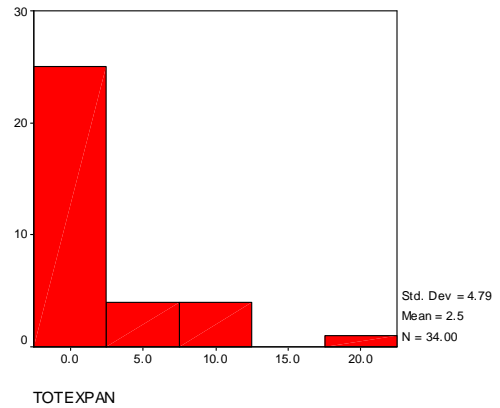
TOTSIMP



Rationale: To expand to another problem

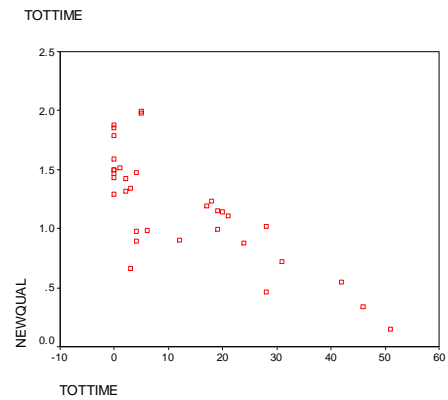
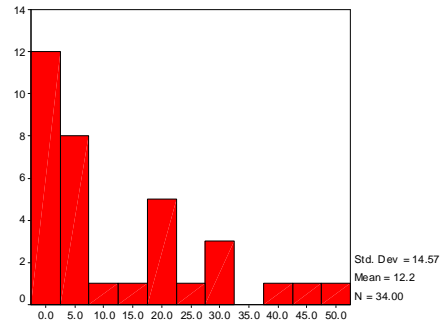
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	24	57.1	70.6	70.6
1.00	1	2.4	2.9	73.5
3.00	1	2.4	2.9	76.5
4.00	1	2.4	2.9	79.4
7.00	2	4.8	5.9	85.3
11.00	4	9.5	11.8	97.1
19.00	1	2.4	2.9	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

Decisions about variables: Keep
Test statistic: Spearman Rank Correlation Coefficient due to the independent variable not being normally distributed.



Rationale: Time constraints

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	9	21.4	26.5	26.5
1.00	1	2.4	2.9	29.4
2.00	2	4.8	5.9	35.3
3.00	2	4.8	5.9	41.2
4.00	3	7.1	8.8	50.0
5.00	2	4.8	5.9	55.9
6.00	1	2.4	2.9	58.8
12.00	1	2.4	2.9	61.8
17.00	1	2.4	2.9	64.7
18.00	1	2.4	2.9	67.6
19.00	2	4.8	5.9	73.5
20.00	1	2.4	2.9	76.5
21.00	1	2.4	2.9	79.4
24.00	1	2.4	2.9	82.4
28.00	2	4.8	5.9	88.2
31.00	1	2.4	2.9	91.2
42.00	1	2.4	2.9	94.1
46.00	1	2.4	2.9	97.1
51.00	1	2.4	2.9	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

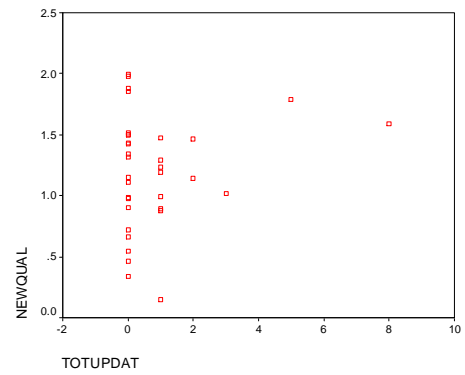
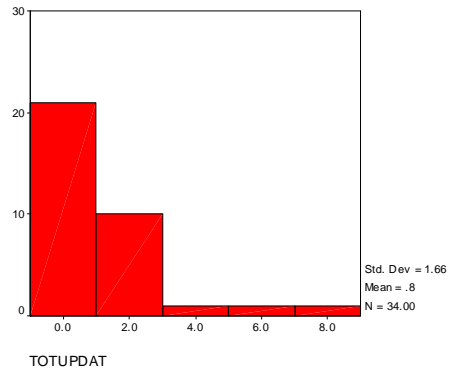


Decisions about variables: Keep
Test statistic: Spearman Rank Correlation
 Coefficient due to the independent variable not being normally distributed.

Rationale: To update

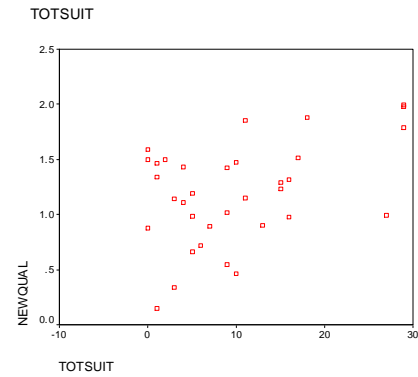
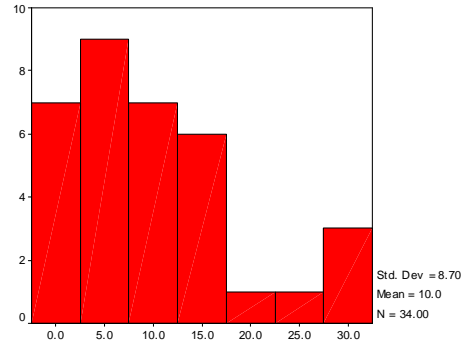
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	21	50.0	61.8	61.8
1.00	8	19.0	23.5	85.3
2.00	2	4.8	5.9	91.2
3.00	1	2.4	2.9	94.1
5.00	1	2.4	2.9	97.1
8.00	1	2.4	2.9	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

Decisions about variables: Keep
Test statistic: Spearman Rank Correlation Coefficient due to the independent variable not being normally distributed.



Rationale: To make more suitable

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	3	7.1	8.8	8.8
1.00	3	7.1	8.8	17.6
2.00	1	2.4	2.9	20.6
3.00	2	4.8	5.9	26.5
4.00	2	4.8	5.9	32.4
5.00	3	7.1	8.8	41.2
6.00	1	2.4	2.9	44.1
7.00	1	2.4	2.9	47.1
9.00	3	7.1	8.8	55.9
10.00	2	4.8	5.9	61.8
11.00	2	4.8	5.9	67.6
13.00	1	2.4	2.9	70.6
15.00	2	4.8	5.9	76.5
16.00	2	4.8	5.9	82.4
17.00	1	2.4	2.9	85.3
18.00	1	2.4	2.9	88.2
27.00	1	2.4	2.9	91.2
29.00	3	7.1	8.8	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

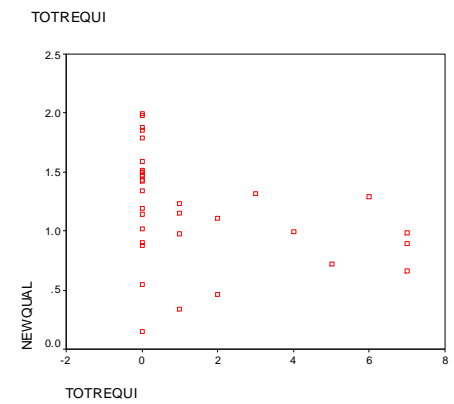
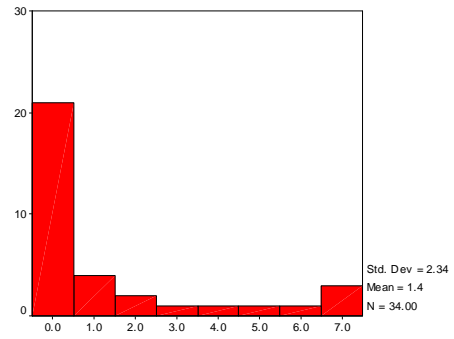


Decisions about variables: Keep
Test statistic: Spearman Rank Correlation
 Coefficient due to the independent variable not being normally distributed.

Rationale: Agency required the change

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	21	50.0	61.8	61.8
1.00	4	9.5	11.8	73.5
2.00	2	4.8	5.9	79.4
3.00	1	2.4	2.9	82.4
4.00	1	2.4	2.9	85.3
5.00	1	2.4	2.9	88.2
6.00	1	2.4	2.9	91.2
7.00	3	7.1	8.8	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		

Decisions about variables: Keep
Test statistic: Spearman Rank Correlation Coefficient due to the independent variable not being normally distributed.

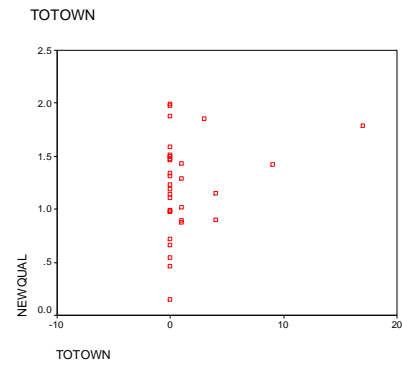
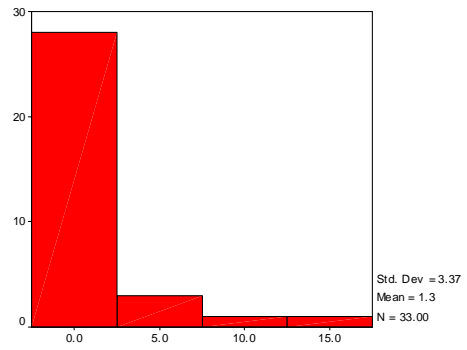


Rationale: To increase ownership

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	23	54.8	69.7	69.7
1.00	5	11.9	15.2	84.8
3.00	1	2.4	3.0	87.9
4.00	2	4.8	6.1	93.9
9.00	1	2.4	3.0	97.0
17.00	1	2.4	3.0	100.0
Total	33	78.6	100.0	
System	9	21.4		
	42	100.0		

Decisions about variables: Drop; not enough distribution

Test statistic: None

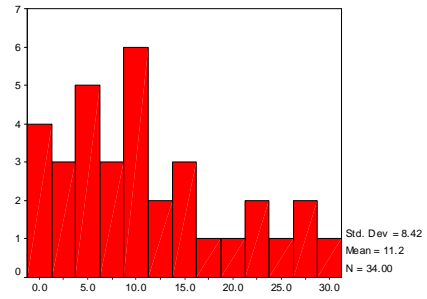


How is amount of changes related to quality of re-invention (strong adherence to PMT and NHES)?

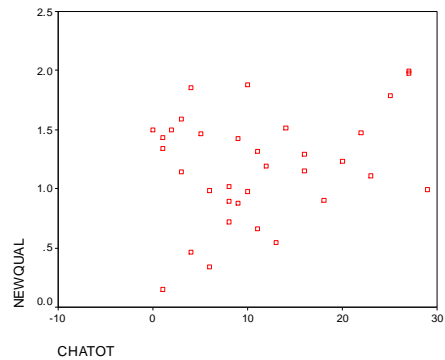
The independent variables (# changes) and dependent variable (re-invention quality) are continuous

Total Activities Changed

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	1	2.9	2.9	2.9
1.00	3	8.8	8.8	11.8
2.00	1	2.9	2.9	14.7
3.00	2	5.9	5.9	20.6
4.00	2	5.9	5.9	26.5
5.00	1	2.9	2.9	29.4
6.00	2	5.9	5.9	35.3
8.00	3	8.8	8.8	44.1
9.00	2	5.9	5.9	50.0
10.00	2	5.9	5.9	55.9
11.00	2	5.9	5.9	61.8
12.00	1	2.9	2.9	64.7
13.00	1	2.9	2.9	67.6
14.00	1	2.9	2.9	70.6
16.00	2	5.9	5.9	76.5
18.00	1	2.9	2.9	79.4
20.00	1	2.9	2.9	82.4
22.00	1	2.9	2.9	85.3
23.00	1	2.9	2.9	88.2
25.00	1	2.9	2.9	91.2
27.00	2	5.9	5.9	97.1
29.00	1	2.9	2.9	100.0
Total	34	100.0	100.0	



CHATOT



Decisions about variables: Keep

Test statistic: Spearman Rank Correlation

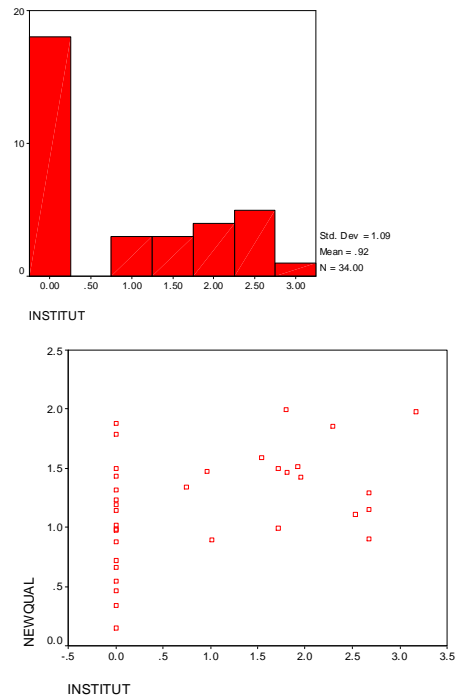
Coefficient due to the independent variable not being normally distributed.

Research question 4: How is level of institutionalization related to quality of re-invention (strong adherence to PMT and NHES)?

The independent variables (institutionalization) is ordinal, however, since there were a large number of organizations that scored very low on the institutionalization measure, a decision was made to recode institutionalization into two categories no to very low institutionalization and low to moderate institutionalization. Those agencies scoring ≥ 1.5 were scored as having low to moderate institutionalization. Those scoring under 1.5 were scored as very low to no institutionalization. Therefore the variable of institutionalization was now dichotomous and the non-parametric statistic Mann-Whitney was conducted.

Institutionalization

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
.00	18	52.9	52.9	52.9
.75	1	2.9	2.9	55.9
.97	1	2.9	2.9	58.8
1.01	1	2.9	2.9	61.8
1.54	1	2.9	2.9	64.7
1.71	1	2.9	2.9	67.6
1.72	1	2.9	2.9	70.6
1.80	1	2.9	2.9	73.5
1.81	1	2.9	2.9	76.5
1.93	1	2.9	2.9	79.4
1.96	1	2.9	2.9	82.4
2.29	1	2.9	2.9	85.3
2.53	1	2.9	2.9	88.2
2.68	3	8.8	8.8	97.1
3.17	1	2.9	2.9	100.0
Total	34	100.0	100.0	



Decisions about variables: re-code into dichotomous variable.

Test statistic: Mann-Whitney t-test

Rationale: It is uncertain whether re-invention quality for the two groups is normally distributed and the sample size is small.

Is there a relationship between quality of re-invention (strong adherence to PMT and NHES) and type of gate keeper.

This question is really 5 different research questions. Each independent variable represents whether or not the organization type was involved in the program (Community based organization, state/local education association, research organization, national non-government organization, and government organization).

Type of independent variables: Dichotomous variable.

Test statistic: Mann-Whitney t-test

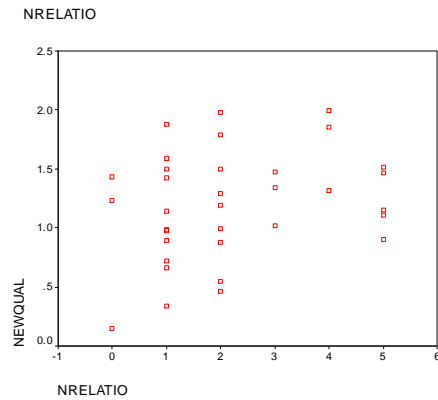
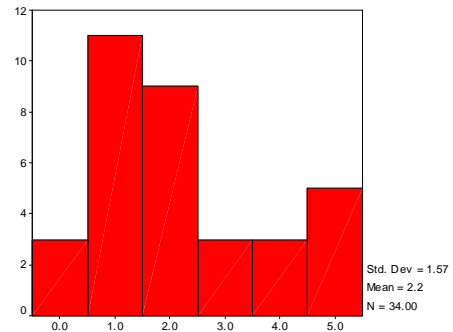
Rationale: It is uncertain whether re-invention quality for the two groups is normally distributed and the sample size is small.

6. Is there a relationship between quality of re-invention (strong adherence to PMT and NHES) and relation to the innovators?

A decision was made to recode relationship to innovator into two categories. It was determined that the crucial decision in relation to re-invention quality was whether or not the innovator participated in the decision of how the program was re-invented. Therefore all those that had no contact, were trained by master trainer, or were trained by the innovator were coded as 0 as the innovator had no part in decisions made about re-invention. The innovator did play a part in re-invention when the innovator was a consultant, part of team or the primary investigator. Therefore the variable of relation to the innovator was now dichotomous and the non-parametric statistic Mann-Whitney was conducted.

Relationship to innovator

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
no contact	3	7.1	8.8	8.8
trained by master trainer	11	26.2	32.4	41.2
trained by innovator	9	21.4	26.5	67.6
innovator consultant	3	7.1	8.8	76.5
innovator part of team	3	7.1	8.8	85.3
innovator PI	5	11.9	14.7	100.0
Total	34	81.0	100.0	
System	8	19.0		
	42	100.0		



Decisions about variables: re-code into dichotomous variable.

Test statistic: Mann-Whitney t-test

Rationale: It is uncertain whether re-invention quality for the two groups is normally distributed and the sample size is small.

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