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Formative Research and Community Resilience: A Case of Under Addressed Youth Problem Gambling

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Formative Research and Community Resilience:
A Case of Under Addressed Youth Problem Gambling

by

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GRATITUDE

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   My parents, Curtis Calvin Ewing and Mildred Leone Ewing, who have committed their lives personally and professionally to their belief that it is a desirable and doable evolutionary necessity to grow a world in which we can live together harmoniously based upon honoring and loving the diversity of all life forms and each other. My research journey has made it so clear to me, on a personal level that establishing robust individual and community resilience –whatever the process-is going to be effective to the degree that it is rooted in these values.   This thesis is a gift back to my mother and father—and to the magnificent life force that connects us all.

ABSTRACT

The overarching research topic for this study is the issue of effectively engaging and informing community and government decision makers about health issues that can negatively impact a community's resilience. The question guiding this study is ***how can formative research engage and inform community and government decision makers about the under addressed issue of youth problem gambling (YPG) in Windham County, Vermont?*** The study has two aims: 1) to develop a formative research conceptual framework and evaluate its effectiveness in addressing the public health issue of youth problem gambling, and 2) to use the formative research methodology to develop a better understanding of Windham County community dynamics relative to the public health issue of youth problem gambling. As defined in this study, formative research is the first stage of a health intervention initiative through which the dimensions, dynamics, stakeholders and general community awareness and understanding about a health challenge are established (Gittelsohn, J. Steckler, A. and Johnson, C. 2006; Valente, 2002). Research methods included interviews based upon snowball sampling, focus groups, journaling, relevant document review and informal conversations. Interview analysis was based upon Computer Aided Thematic Analysis (CATA) and developed within the framework provided by Greenhalgh et al's (2005) five-step qualitative research protocol. The study's conclusions, as well as informing next steps for approaching the under addressed issue of youth problem gambling in Windham County, Vermont, establish the broad applicability of formative research as a methodological approach for addressing all public health concerns whether the health risk is socio-economic, political, environmental and/or spiritual in origin.

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CHAPTER I

INTRODUCTION

Youth problem gambling is a nationally and internationally identified and extensively
researched public health issue. As a public health issue, this topic of human health research is linked
to global environmental change (GEC) through the interrelated dynamics of vulnerability and
community resilience (Matthew & Fraser, 2002). Broadly defined, resilience is the capacity of a group,
individual, or organization to withstand loss or damage or to recover from the impact of an emergency
or disaster (Buckle, Marsh, & Smale, 2001). The Earth System Science Partnership (ESSP) identifies
two types of disasters that are risks to the community (Confalonieri & McMichael, 2006). The first type
of disaster can result from "a sudden calamitous event bringing great damage, loss, or destruction,"
including natural GEC events such as floods and droughts (www.merriam-webster.com). The second
type of disaster takes the form of "a great misfortune or failure" ("Disaster," n.d.) This type of disaster
can be driven by socio-economic conditions, poverty, public health issues, and lack of access to
resources (Walter, 2004; Confalonieri & McMichael, 2006). These are conditions that can exist prior
to a calamitous event and/or be precipitated or intensified by such an event. As a public health issue,
youth problem gambling represents this second form of disaster or risk factor to community resilience.

Both types of disasters share in common human decision-making dynamics as a causal
factor. These decision-making dynamics reflect through the socio-political, economic, environmental,
and cultural spheres of the community. A community's vulnerability depends upon the extent to which
these multi-spatial, interdependent dynamics impair its ability to marshal its resources in developing
adaptive responses to a risk factor (Matthew & Fraser, 2002).

Public health concerns reflect challenges that must be addressed on all levels of community
life ("Ottawa Charter for health promotion," 1986; Wallerstein & Duran, 2003). Community references
an entity that is bounded geographically and/or relationally containing individuals living in multiple
interdependent communities that are also bounded geographically and relationally.

One of the research priorities within the general topic of building community resilience is
understanding the process of community adaptation to risks, including but not limited to its decision-
making dynamics; the roles played by various stakeholders and community social networks; and the

potential challenges, limitations, and costs (Walter, 2004). "Without such information, it is impossible to design appropriate adaptation policies" (Confalonieri & McMichael, 2006).

The adaptive measures a community develops for strengthening its resilience reflect the diverse risks that it faces – risks that can be socio-economic, political, environmental, and/or mental/physical health in origin. One type of community adaptation to a public health risk is the development of a health initiative - an adaptive mechanism design that engages multiple levels of community interaction. As defined by the Ottawa Charter (1986), the health intervention framework is "a comprehensive social and political process; it not only embraces actions directed at strengthening the skills and capabilities of individuals, but also action directed towards changing social, environmental and economic conditions so as to alleviate their impact on public and individual health . . . to increase control over the determinants of their health" (p.1). A central design element of a health intervention initiative is that it is community-specific. The initiative design and implementation will reflect the community's pertinent socio-economic, political, cultural, and environmental dynamics. The overall intention of the initiative is to address the immediate negative risk impacts of a particular health concern while at the same time fortifying the community's long-term resilience (Walter, 2004).

Within the context of a community's resilience, clarifying the spheres of influence pertaining to a particular health issue occurs through the process of identifying and engaging its various stakeholders and social networks. From this engagement with the community, the researcher can develop insights into its existing knowledge, perceptions, and resources relevant to the health concern.

This community-specific information is essential for the development of a health initiative. Formative research provides one methodological approach for clarifying community-specific information pertinent to a particular health concern. It can reveal existing community adaptive mechanisms, the possible need for more comprehensive intervention, and both challenges and resources relevant to the public health concern. This study is based upon the use of a formative research design to address the public health concern of youth problem gambling in Windham County, Vermont.

The Public Health Concern: Negative Impacts of Problem Gambling

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As a public health issue, youth problem gambling can potentially negatively impact the community's resilience on multiple levels of individual, socio-economic, and political interactions (Adams, 2007; Grinois, 2004; Korn & Shaffer, 1999; Messerlian, Derevensky, & Gupta, 2004). Research results show that youth problem and pathological gamblers, like adult problem gamblers, not only adversely affect themselves, but also affect from five to seventeen lives of people connected to them (Volberg, 2001). From a clinical perspective, youth with gambling problems exhibit higher rates of depressive symptoms, increased risk of suicide ideation and attempts, higher anxiety levels, and increased risk of alcohol and substance abuse disorders. From a behavioral perspective, youth problem gamblers show an increased delinquency, criminal behavior, poor academic performance, high rates of high school dropout and poor attendance, and generally problematic peer and family relationships (Messerlian, Derevensky, et al., 2004).

Several studies address the socio-economic impacts of problem gambling. Economist Earl Grinois (2004), in his book, *Gambling in America: Costs and Benefits,* quantifies some of the economic and social costs of problem and pathological gambling. The overall monetary cost to United States taxpayers is estimated at $54 billion a year   This does not include costs related to child neglect and abuse nor the loss to society of creativity and fruits of their labor (Shaffer, 2003). Grinois estimates that each problem gambler and pathological gambler costs society annually an estimated $3,222 and $11,304, respectively. Sixty to eighty percent of total gambling revenues derive from the ten per cent described as "regular" gamblers (Grinois, 2004). These figures are significant because studies indicate that it is not uncommon for recovering and active adult problem gamblers to have been introduced to gambling as children or youth (Grinois, 2004; Thompson, Gazel, & Rickman, 1997). The average onset age of problem gambling is ten to eleven years old (Hardoon, Gupta, & Derevensky, 2004; Winters, Stinchfield, Botzet, & Anderson, 2002).

More broadly applied, the discussion of the addictive dynamics relevant to youth and problem gambling provides a window into the addictive patterns of the larger socio-economic political environmental system (Jones, 2008). This national addictive pattern presents itself not only in the historical roots of gambling as a normalized, federally supported monetary instrument, but also, in the country's present addiction to the use of fossil fuels (Allenbright, 2004; Davis, 1917; Sobel, 2000).

This macro public health concern, viewed through the lenses of this study, will be explored in the Conclusion.

<div align="center">**Research Topic**</div>

The overarching research topic is how formative research can engage and inform community and government decision makers about health issues that can negatively impact a community's resilience. The study's main research question is how can formative research engage and inform community government decision makers about the issue of youth problem gambling in Windham County, Vermont?

This study has two aims: 1) to develop a formative research conceptual framework and evaluate its effectiveness in addressing the public health issue of youth problem gambling, and 2) to use the formative research methodology to develop a better understanding of Windham County community dynamics relative to the public health issue of youth problem gambling.[1]

Background

This study grew out of a service learning project with the Vermont Council on Problem Gambling (VCPG). The original service project design with the Council consisted of interviews with individuals recommended by the Council's director who had over the past several years expressed concern about youth problem gambling. These interviews included a Student Assistance Professional (SAP), one of 10 K-12 state health professionals, the director of a youth services agency, a legislator, a lottery official, and a Gambling Council official. The service project design also included one focus group with a Gamblers' Anonymous (GA) group, consisting of recovering adult problem gamblers with several members who had been introduced to gambling as youth.

The service project's consensus finding was that youth problem gambling is an unaddressed issue in Vermont prevention education in spite of substantial evidence defining it as a national public health concern (Derevensky & Gupta, 2004b; Jacobs, 2000; Welte, Barnes, Tidwell, & Hoffman, 2008). The Vermont state protocol, "What Works: Preventing Substance Abuse in Your Community," which addresses youth substance abuse and related risky behaviors, does not mention gambling

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[1] In the gambling research literature, youth is defined as 10 to 22. Studies show that frequently gambling behavior begins as early as 10 years old. The term gambling refers to all forms of wagering, both legal and illegal, from lottery tickets to bingo to wagering personal belongings to Internet poker (Shaffer, 2003).

(Jacobs, 2000; Winters et al., 2002). There has been no official Vermont state prevalence study for assessing Vermont youth problem gambling. This omission is despite the fact that since the mid-1980s, the results of prevalence studies conducted in adjacent states, including Connecticut and New York, as well as in Canada, Australia, and New Zealand, indicate that youth problem gambling is an increasingly significant public health problem (Derevensky & Gupta, 2004b). In addition to no state level prevention education protocol, there are presently no community-sponsored gambling prevention programs in Windham County.

Concerned with an apparent lack of quantitative data relevant to the issue of youth problem gambling, the Vermont Council on Problem Gambling's Executive Director submitted three gambling questions to be included on the 2007 Youth Risk Behavior Survey (YRBS). Developed in the 1990s by the Center of Disease Control to monitor youth risky behaviors, study trends, and develop, evaluate, and improve school and community programs, the YRBS is administered every two years by Vermont's Department of Health Division of Alcohol and Drug Abuse Programs. The results of the 2007 survey were scheduled for publication in 2009.

Importantly, the gambling questions that VCPG provided were the same as those used on the New York YRBS. So not only could Vermont 2007 YRBS survey results have provided quantitative evidence for more effectively making decisions about how to address the issue in Vermont, it also established a context for comparative studies with New York, initiating the possibility of regional analyses and discussion.

Although, the Department of Health had apparently accepted the Council's suggestion to include these questions, when the survey questions and results were published on the Department of Health website in fall 2009, there was no reference to gambling (J. Mitchell, personal communication, November, 2010). Vermont's apparent lack of youth problem gambling research statistics, combined with gambling's exclusion in all state prevention education protocols, suggested that the public health concern, a co-curing youth risky behavior, was not being adequately recognized and/or acknowledged.

So when my dissertation research was initiated in the spring of 2009, no studies were

available on Vermont youth problem gambling[2]. The Vermont Council was anticipating the first

statistical data in the upcoming above-mentioned 2009 Vermont Risk Survey to be published that fall.

The only other broadly applicable study had been alluded to by an interview participant in the 2008

service project. It was a 1990's population study on adult problem gambling to which very few people

had access. It was not until well into the research process that I was able to gain access to this

population study. Of all of the interview participants, only one interviewee referenced knowledge of

any relevant studies.

Given these factors, I became interested in clarifying the community's knowledge, or lack

thereof, relative to youth problem gambling. This clarifying information might indicate community

concern as well as the lack of concern—both of which would be important information to

stakeholders, practitioners, organizations, and policymakers in considering or developing health

intervention initiatives. Thomas Valente's application of formative research provided a methodological

basis for identifying community-specific dynamics and information relevant to the issue (Gittelsohn et

al., 2006; Valente, 2002).

Dissertation Outline

The central focus of the second chapter is to develop a formative research conceptual

framework through an analysis of the principles of participatory action research and narrative inquiry,

two widely used methodologies in the development of health intervention initiatives. The chapter's

premise is that a methodology's conceptual framework provides critical guidelines for its application in

a research study design. The third chapter presents the methods used in the study and the rationale

for the choice of the methods. The fourth chapter presents an analysis of the data results and

discussion of the research process. The fifth chapter discusses the research results and future

research directions. In addition, this final chapter explores the significance of formative research in

addressing the wide range of risk factors to the community including those that are socio-economic,

political, cultural, and/or environmental in origin.

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[2] As it turned out, the questions submitted to the Health Department in 2007, were referenced in the 2008
Vermont State Youth Health Survey, but not included in the 2009 Vermont Youth Risk Survey. The Council
did not become aware of the omission on the 2009 Risk Survey and the gambling statistics included on the 2008
Youth Health Survey until the fall publication of the results of the 2009 Survey.

CHAPTER II

CONCEPTUALIZING FORMATIVE RESEARCH

This chapter developed from the fact that formative research as a methodology lacks a conceptual framework. As stated above, this chapter's purpose is to develop a formative research conceptual framework based upon analysis of the principles of participatory action research and narrative inquiry methodologies.

This chapter has two premises. The first premise is that that the conceptual framework of a methodology is a critical component of utilizing the methodology effectively. The principles that comprise the conceptual framework of a methodology provide guidelines for implementing that particular methodology. Broadly defined, a conceptual framework is comprised of a group of framing ideas that provide a systematic approach, rationale, and tool for organizing, interpreting, and integrating information. Conceptual frameworks often take the form of "word models." Word models basically describe a construct designed to facilitate the making of meaning. These include, and are not limited to, theories such as communication theory, the rationale underlying the structuring of a research design, and the principles underlying a research methodology ("Conceptual Framework," n.d.; Greene, Caracelli, & Graham, 1989).

The concepts underlying a word model, in whatever form, shape its unique construction, guide the way in which the particular model is implemented, and provide a framework for evaluating its use. For example, it is the conceptual framework, the guiding principles of community-based participatory research, upon which the National Expert Panel on Community Health Promotions evaluated and critiqued the CDC's community-focused health initiatives (Navarro, Voetsch, Liburd, Bezold, & Rhea, 2006).

The second premise is that it is possible to develop a conceptual framework for formative research by exploring conceptual principles of other health research methodologies. Based upon the above two premises, this chapter explores the principles and critiques of participatory action research (PAR) and narrative inquiry in order to clarify the conceptual principles and framework underlying formative research. These two methodologies are chosen because of their wide application in health research.

What is formative research?

Formative research, at times used interchangeably with formative evaluation, is applied in widely varied fields from technology development to virtual learning. Within the context of health research, formative research can describe research that occurs during a program's implementation as a monitoring and evaluation process, or research that precedes the development of a health intervention initiative.

Formative research, preceding a health intervention initiative, is developed for the purpose of assessing and defining the attributes of the community or target audiences that are relevant to a specific health issue (Gittelsohn et al., 2006). Just as ethnography serves as the methodology for anthropological research, formative research, as defined by Thomas Valente (2002), provides a research methodology for gathering the community-specific information necessary to create appropriate community based participatory research (CBPR) health interventions.

Valente (2002) states, "Formative research is conducted before a program is designed in order to understand a population's existing knowledge, attitudes, beliefs, values, motivations, norms, expectations and practices" (p. 57).[3] The objective of formative research is to facilitate a more effective health promotion/intervention design and implementation by clarifying the community's stakeholders, resources, biases, and concerns relating to a particular health challenge. It is essentially the process of clarifying a community's resilience or adaptive dynamics around a specific health challenge.

As discussed in the Introduction, the World Health Organization's (WHO) framework for developing health intervention initiatives, defined in the 1986 Ottawa Charter, underscores the need for socio-economic, political, environmental, and cultural understanding that is specific to community. This community specificity is essential to engaging and empowering community members in addressing and alleviating a health concern. Central to this directive and framed in the principles of the PAR/CBPR methodologies, is the public health field's fundamental principle of starting from where the people are. This drives a "bottom up," community empowerment health prevention focus based

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[3] Formative research is not the baseline research which usually becomes a tool for creating a pre-test/post test evaluative process for an intervention. (Hernandez, 2000).

upon processes of community awareness, collaborative participation, and capacity building (Cargo & Mercer, 2008; Cornwall & Jewkes, 1995).

The underlying design principle of the health initiative—to find ways to effectively communicate and engage, often within a multi-scale, multi-generational, multi-cultural, multi-gender, multi-ethnic community construct — takes place within a larger socio-economic-political framework that can directly and indirectly impact the community's decision-making processes. Health initiatives, as a community adaptive mechanism to a risk factor, are one of many community adaptive decision-making processes within the interdependent dynamics of this overarching socio-economic, political, environmental, and cultural framework. And, this overarching framework may or may not have decision-making priorities that support the specific and unique dynamics and needs of the integrated, unfolding life course of the individuals and families within multiple interconnected groups that comprise a specific community. This heightens the need for shaping and implementing initiatives based upon a community's unique dynamics.

In 2006, a 25-member National Expert Panel on Community Health Promotion, appointed by the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), convened as an external review board to assess the CDC's efficacy in mounting health promotion initiatives that effectively address the social and environmental impacts of health. It particularly examined the appropriateness and thoroughness of those efforts in supporting the community's role in maintaining its wellness and vitality (Navarro et al., 2006). While supporting the positive role and outcomes based upon a socio-ecologic approach to CBPR/PAR projects, the panel identified significant gaps in their effectiveness in addressing community health challenges:

> …even the best operational measures of the socio-ecological approach missed critical opportunities for change, including mental health and wellness, spirituality, and complementary and alternative medicine; access to care; political and economic contexts of decisions; race, racism, and discrimination; cultural beliefs and values as risk factors and protective factors; and elements of community efficacy, such as social capital and community competencies… future approaches should facilitate discussions on power relationships, the political process, chronic social stressors (e.g., poverty), acute situations (e.g., hurricanes), and the engagement of nontraditional partners. (Liburd et al , 2007, pp. 5-6)

In other words, creating more effective health promotions requires developing and integrating more community-specific knowledge in the health initiatives. Factors of a community's efficacy are impacted by the overarching socio-economic and political dynamics that influence local socio-economic and political decision-making processes. Overarching influences, which can also have local

roots, include such systemic stressors as access to health care information, political and economic issues, poverty, racism, and ageism, to name a few. These influences, as well as the community's general mental health well-being of community members and spirituality, are identified in the above quotation as "missed opportunities." These factors provide geographically and culturally community-specific information invaluable to creating an effective health initiative. Inherent in clarifying the negative impacts of some of these influences is the surfacing and re-shaping of the implicit and explicit power dynamics that directly and indirectly can be contributing to the particular risk factor.

These community-specific characteristics are opportunities. In terms of the resilience framework, that these opportunities are missed suggests that the health promotion designs are not accessing a major community resource - which is its intrinsic motivation for meeting its own needs. Accessing this intrinsic motivation is the root of resilience research activities which are based upon understanding and engaging economic, cultural, and power dynamics critical to creating effective interventions (Benard, 2007; Israel et al., 2008; Minkler & Pies, 2005). In this situation, the intervention is a health initiative design that is congruent with a community's unique socio-economic, political, and cultural topography.

Formative research implemented effectively facilitates creating health interventions that are grounded and framed in the geographic and cultural uniqueness of a specific community. Gittelsohn et al. (2006) refer to this as *appropriateness*, describing it as one of the objectives and contributions of formative research to creating effective health promotions. The 'appropriateness' of a health initiative refers to the inclusion of cultural and geographic dynamics as central to the initiative design and implementation.

The formative research process is designed to facilitate the development of an end product—the health intervention initiative—that is multi-spatial, multi-ethnic, inter-generational, and culturally specific. Formative research is like an ambassador, creating relationships, shared knowledge, and understanding, building a foundation in anticipation of this longer term relationship. The quality and nature of the relationships and information that emerge from formative research will influence the specific intervention's effectiveness.

In terms of a community's resilience, formative research serves to more fully understand a community's adaptive mechanisms by clarifying its existing knowledge, perceptions, and resources relevant to a particular community risk   This occurs through the process of identifying and engaging the various stakeholders and social networks. What emerges from formative research is shared knowledge of available resources and communication processes for decision-making.

A formative research study of a community's particular health challenge is designed to clarify vulnerability and resilience attributes and dynamics that are specific to the community and often unique to groups and individuals within the community. Identifying and engaging the community's dynamics relevant to an existing health challenge such as youth problem gambling can increase understanding of community resilience dynamics relevant to other potential "disasters" affecting the community's health, such as larger socioeconomic and/or natural events (Buckle et al., 2001; Confalonieri & McMichael, 2006).

Formative Research Challenges

There are challenges to creating an effective formative research design. One of the key gaps is limited information on the process of developing formative research goals, objectives, and implementation plans (Gittelsohn et al., 2006). This in turn creates challenges in the data collection and analysis design for both quantitative and qualitative research projects. This lack of clarity in the design elements and processes of formative research can confuse the study's results. This, in turn, challenges the usefulness of such studies in creating a longer term health initiative. In their obesity study, Wilson et al. (2007) point out that although the formative research phase precedes a health promotion design, it does not provide "operational guidance concerning where and how to intervene in the mix of social and environmental factors" (p.38S). Again, if the goals of the formative research process are not clear, challenges will arise in translating and applying the resulting information.

In part, these challenges to an effective formative research plan present a design problem. A useful way to start thinking about a design problem is to ask, "What is the end goal?", and then work backwards. In this case, the end goal is an effective health intervention initiative. The health intervention initiative, as previously described, has specific goals, characteristics and dynamics: it is community-focused; its function is to empower community members to effectively address a health

challenge; and it must find a way to communicate often within a multi-scale, multi-generational, multi-cultural, multi-gender, multi-ethnic construct within a larger socio-economic-political context. As previously stated, formative research is designed to provide community-specific information to support this process.

The overall function of formative research is clear i.e. identifying community specific information relative to a particular community health concern. The question is how does the researcher achieve the goal? In all research methodologies, the principles of the methodology's conceptual framework are a key component in developing a research strategy based upon the methodology's particular approach. Without a conceptual framework, there are no guidelines for implementing a formative research study.

The following sections provide the rationale and principles of a formative research conceptual framework. Valente's (2002) formative research application is a process of gaining comprehensive, multi-scale community knowledge that seeks to facilitate and engage a wide range of community voices. Participatory action research and narrative inquiry provide the basis for the analysis because of their broad application in developing health initiatives. The principles of participatory action research address the community dynamics of multi-scale intervention. The use of narrative inquiry supports the importance of the individual voice in health research initiatives. Both models provide guidance for the researcher's role.

It is important to note that this is the first phase of analysis in creating a formative research conceptual framework. A second stage could analyze and incorporate into its discussion the principles of other methodologies, for example, formative ethnography and cultural anthropology, both of which also have application in health and other community-focused research projects.

Participatory Action Research

As a research methodology, participatory action research has dominated international public health research for over thirty years (Rice & Ezzy, 1999). Within the last twenty years, health intervention initiatives in the United States have transitioned from the traditional individual and expert-based research designs and health delivery models to designs that include community members in both the development and delivery of health initiatives (Butterfoss & Kegler, 2002). Within the body of

health literature, PAR is referred to in many ways, including action research, participatory research, collaborative inquiry, participatory community research, rapid appraisal assessment, emancipatory inquiry, feminist participatory research and popular epidemiology (Lantz, Israel, Schulz, & Reyes, 2006; Wallerstein, Sanchez-Merki, & Dow, 2004). Within the last fifteen years, health research literature has adopted the term community-based participatory research (CBPR).

CBPR has evolved from a cross-pollination of the two traditional approaches to the various action/participatory research constructs (Rice & Ezzy, 1999). The northern tradition, originally known as action research (AR), grew from the work of Kurt Lewin and Eric Trist in the early 1940s. The AR focus was oriented to creating a more effective mechanism for getting results, particularly within organizational environments such as work sites and schools.

In the early 1970s, the southern tradition, participatory action research (PAR), began surfacing in Latin America, Asia, and Africa, growing out of development efforts in communities that were vulnerable to the larger global economy. Dominant processes that characterized the southern tradition included the transformation of academic knowledge through collaborative community engagement, and the creation of a new perception of community from an object of study to an active, vital participant with a focus on an iterative, cyclical-questions-based communication process (Wallerstein & Duran, 2003). In this context, PAR, often used interchangeably with AR, evolved as a transformative, emancipatory process for addressing the inequities directly attributed to economic and political oppression by Western-European cultures in these communities.

The worldwide feminist movement has contributed significantly to the CBPR form of PAR. It has emphasized the omission of the unique dynamics of women's oppression and exclusion in the PAR construct. Feminist critiques have questioned the use of the terms "poor," "oppressed," and "marginalized," pointing out that there are problems with these designations. The objectification of the terminology does not recognize and identify differences between the communities that are categorized as "poor" and "oppressed." More importantly, it raises the questions of "who is making the categories and why." (Wallerstein & Duran, 2003, pp.39-40).

Regardless of origins, the PAR variations, including CBPR, share the overarching objective of creating an equitable, horizontal collaboration between academic researchers and community

researchers. This objective presupposes that community researchers possess both information and capacity to address their own problems. In fact, the collaboration with outside researchers is based not on the presumption of the outside researchers' superior knowledge but on the principle that collaboration by a group of concerned, equitably engaged individuals will generally produce superior results in the amount, depth, and quality of the information gathered (Greenwood & Levin, 1998).

Thus, central to the CBPR research design is an iterative exchange of knowledge and experience between academic researchers and the participant researchers in the target community, the latter equally contributing to the research design (Minkler & Wallerstein, 2005). Within the context of health research, the intended results of CBPR are to create interventions that engage multiple levels of stakeholders in improving a community's health and well-being through social change-oriented action (Lantz et al., 2006; RTI International, University of North Carolina, 2004).

CBPR facilitates equitable input processes designed to address the structural inequalities between academic researchers and community researchers including, but not limited to, decision-making about the use of resources and the knowledge gained in the research process. This focus reflects the influence of PAR's southern tradition on the development of the CBPR approach. The overall objective is that a CBPR-driven health initiative's outcomes will meet the goals of both the outside and community researchers. Implicit in the CBPR initiatives is the potential for a transformative experience for the participating researchers (Israel, Schulz, Parker, & Becker, 1998).

CBPR principles are based upon 1) perceiving the community as the research focus; 2) engaging in a participatory; equitable engagement between community and outside researchers; 3) establishing a process of co-learning; and 4) community empowerment through capacity building (Minkler & Wallerstein, 2005). In "Ethical Challenges for the 'Outside' Researcher in Community-Based Participatory Research," Minkler (2004) specifies that these principles provide guidelines for both community and outside researchers in developing systems and processes that support community capacity building and empowerment. In addition, drawing on the southern tradition, the CBPR construct addresses the public health challenges of privilege, racism, and the importance of understanding the roots of oppression in their impact upon individual and community well-being (Chavez et al., 2004).

Communication

Central to engaging these multiple aspects of the PAR/CBPR research model is the process of communication. This is generally considered the essential key in the outside researcher's role in creating and developing relationships with the community researchers. As Parrott (2004) discusses in *Emphasizing Communication in Health Communication* this communication takes many forms, including, but not limited to, dealing with community power dynamics, brainstorming strategies for interventions, negotiating use of information gained from research, and addressing allocation of resources between the outside and community researchers.

An integral, sometimes forgotten communication dynamic in this process, is the role of listening, underscored in Greenwood and Levin (1998) discussion of the academic or institutional researcher's role as the "friendly outsider" in AR. This dynamic supports and facilitates engaging the above stated CBPR principle, that the community researchers possess both information and capacity to address their own problems.

Another key communication focus for the outside researcher, and a distinguishing characteristic between CBPR and traditional research models, is the "who" and "how" questions: Who defines the research problems? Who generates the analyses? And how and who owns and acts upon the information? Another important "who" question is "who has control over health, health care, health science, health research?" (Rice & Ezzy, 1999) Important "how" questions include: How is information generated, analyzed, represented owned and acted up? And how can we openly confront, and attempt to address power differentials based upon race, class, gender and professional hierarchy? (Minkler & Wallerstein, 2005; Minkler & Wallerstein, 2008)

The questioning process facilitates both epistemological and methodological reflexivity. The epistemological aspects of the cycle relate to "What is the purpose of this research?" "Who are we as researchers?" "What are our priorities?" "How do we researchers address our different epistemologies in this research process?" "How do our epistemologies limit and enhance the research process?" "Are some epistemological commitments more appropriate than others within the research context?" (Symon, 2004). Implicit in the questions and their answers is the process of

clarifying the power dynamics of the project as described in the preceding paragraph. In short, where does the power lie at each stage of the research process? (Cornwall, 2003; Wadsworth, 1998)

In addition, addressing these questions offers a valuable co-learning opportunity for the academic and community researchers. The complexity of the questions begs multiple voices in developing a viable, shared understanding that can inform the design and implementation of a health initiative. The iterative addressing of these questions in an ongoing, co-learning relationship facilitates the outside researcher's goal of creating an equitable and collaborative engagement with the community. Methodological reflexivity provides the rationale for choice of research methods, the impact of the methods on the research process, their credibility, and their limitations (Cornwall, 2003; Wadsworth, 1998). These, too, are central ongoing questions in creating an effective collaboration.

Emphasizing the critical role of communication, Anisur Rahman, in the opening address of the 1994 Dakar International Workshop on Participatory Action Research, describes the central action of PAR as that of forming a safe communicative space, a space that will support those engaged in the collaborative research effort in arriving at a "mutual understanding and consensus about what to do" (Reason, 2001, p. 3). Rahman further describes action research as being positioned to create "open space for communication and dialogue where there was none…improve and develop the quality of communication and dialogue to create more effective communities of inquiry" (Reason, 2001). It is through the interactions and activities of this space that the researchers exchange information, develop knowledge, and find practical solutions to everyday challenges (O'Brien, 1998).

Community

The locus of CBPR-based health initiatives is the community. The central role of community was established by the Ottawa Charter in 1986, which states that "the empowerment of communities, their ownership and control of their own endeavors and destinies" is the primary objective (WHO, 1986, p.3). The term community can be defined by geographical and/or relational boundaries. For example, a community can be a school, a church, a region, a neighborhood, or a professional group.

In its most basic function, a community evolves when a group of individuals has experiences, beliefs, goals, and/or aspirations that give them a shared identity (Labonté, 1997). By this definition a geographic region would be comprised of multiple, interacting communities, and the individuals within

the region will exist within different community contexts defined by both geographic and relational boundaries.

CBPR Challenges and Critiques

The primary critique of CBPR projects, and PAR-based projects in general, lies in the power dynamics framed by the "who/how" questioning construct discussed in the preceding section. One criticism of CBPR-based projects is that they are often conceived and dominated by the community elites (i.e., those who are most literate and have access to the most resources). This leads to the second criticism, which is that the project design tends to incorporate the local community's existing norms of exclusion. These norms remain operative in the research study despite democratic efforts of some academic researchers. The result is a planning and implementation process that is heavily influenced by local power, gender, and authority dynamics. This leads to the third criticism, which is that academic researchers' opinions often dominate and align with local power dynamics. This affords the outside researcher undue influence in defining community needs, and the community's role becomes a process of legitimizing a project's pre-established priorities (Wallerstein & Duran, 2003).

Given the above discussion, a CBPR project's power challenges can play out in numerous ways. The ways in which power dynamics, both real and perceived, play out in a health intervention is far beyond the scope of this discussion. However, the following examples illustrate some ways that power issues can develop, each contributing to or driven by the above project design challenges.

Research critique shows that 'objectification' is a challenge in CBPR projects. This objectification has two faces: in loosely defining community and in how community members themselves are identified and described (Minkler & Pies, 2005). The lack of a solid conceptual framing of the "community" contributes to challenges in program implementation. The basic criticism is that there is a tendency to presume that local communities exist as distinct, clearly bounded, well integrated, primarily homogenous entities (Wallerstein & Duran, 2003).

Within this contrived framework, community members are presumed to have a shared culture, value system, and norms. In short, 'the community' of the research design becomes a construct of the research project, the project facilitators and/ or one of administrative or geographic boundaries. This predefined construct replaces an emergent self-defining of community that reflects

the complexity and heterogeneity of the local infrastructure, particularly as it relates to the needs, challenges, and priorities relevant to the particular health concern (Wallerstein & Duran, 2003). The result of this externally constructed community is that the research study process undermines its objective by alienating, marginalizing, or simply missing the voices of community members who are central to the research study's overall goals (Israel, Schulz, Parker, & Becker, 2001, pp.60-1).

The challenge of the objectification pattern extends to the researcher language used in describing the individuals living in the community. For example, Fals-Borda and Rahman (1991) refer to the primary task of the participatory-based project as "the enlightenment and awakening of common people" (p.vi). The terminology both objectifies and marginalizes individuals and communities, raising questions that are central to the critique of participatory action research: Who are the "common people"? Who's making the decision? Who's making the decisions about enlightenment and awakening? What is enlightenment? In short, who is defining the discussion? What are the power relations? (Cornwall & Jewkes, 1995)

Two other aspects in which power issues surface are in 1) the process of choosing who in the community is going to be a participant researcher in the project, and 2) the mechanism of the funding dynamics and procedures. Again, both situations are influenced by who is defining the discussion. The process of determining who the community researchers will be is, in itself, usually an intrusion upon the existing community power dynamics. This intrusion often leads to what Minkler and Pies (2005) describe as unintended consequences. And traditionally, with rare exception, one of these consequences is that the poorest and most marginalized community members and organizations are not represented as significant stakeholders in the choosing process (Cornwall & Jewkes, 1995).

The second issue, access to funding resources, represents an intrinsic power dynamic that can and often does strongly influence how and who within a community is included in the research conversations. Frequently, it is the outside researchers who have access to the primary financial resources. The source for these resources is often the same systemic political and economic drivers that have caused/contributed to the particular health concern (Minkler & Wallerstein, 2008).

Finally, it is understood that CBPR projects, while addressing power dynamics within the research project's design, also exist within an overall structure of complex power dynamics. It is a

given that the most ideally implemented program may be successful in addressing community empowerment dynamics related to a specific health challenge, yet the larger systemic issues of, for example, poverty and environmental issues will remain a limiting factor to the health initiative's overall effectiveness (Minkler & Pies, 2005).

Solutions to PAR Challenges

Addressing potential primary CBPR design pitfalls requires that outside researchers apply themselves to three critical aspects of a research project. They must 1) shift their perspective to view the community researchers as truly equal participants and not objectify community participants as "oppressed," "poor," etc.; 2) take the time required to clarify the community's identities and the dynamics that shape it including, but not limited to, its multiple normative and value constructs, power dynamics, mechanisms of communication, and socio-economic influences; and 3) establish collaboratively-defined equitable relationships between the research entity and the community so that the community works collaboratively within the project rather than simply being the setting where the research takes place.

Addressing these aspects is facilitated by the process of establishing and maintaining the previously discussed safe communication space. This becomes a collaborative process that allows the project researcher/s and community participants to establish and implement mutually agreed upon research goals and activities, create mechanisms for recognizing and resolving differences, and implement egalitarian processes of sharing and disseminating information and resources, to name a few CBPR research design objectives (Lantz et al., 2006). What does this discussion of CBPR offer in terms of identifying the conceptual principles for a formative research conceptual framework?

CBPR Principles: Formative Research Conceptual Framework

Formative research, as a research phase, is the exploratory community study that can precede a CBPR research design. A health initiative seeks to impact public and individual health by influencing the socio-political and economic aspects of community life in ways relevant to addressing a particular health challenge. If the formative research study is to serve its function—to inform the CBPR design—the formative research study must also seek a multi-spatial, multi-ethnic, multi-generational understanding of and relationship with community.

Therefore, like CBPR dynamics, the formative research study must be designed to engage in establishing collaborative, mutually beneficial relationships in which community members are willing to share aspects of their lives. Like CBPR, to achieve an inclusive end result, the formative research project has to facilitate an inclusive communication process both in 1) arriving at a definition of community that is acceptable to the community itself and 2) in finding ways of engaging the community's multiple groups and voices. Essential to this communication process is what Borda and Rahman (1991) define as the central participatory research activity: creating and maintaining a safe communication space that supports the varied and ongoing communication activities comprising the research process.

From this discussion, we arrive at three formative research conceptual principles pertinent to community dynamics: 1) recognition that the definition/s of community must emerge from the community voices; 2) engagement with the self-defined community as its own "content expert" capable of articulating its challenges and fully participating in creating solutions; and 3) development of collaborative, equitable relationships that are mutually beneficial including, but not limited to the decision-making about how information gathered is used. As discussed on page 15, this framing of collaborative engagement reflects the CBPR principle that …*in fact, collaboration with outside researchers is based not on the presumption of the outside researchers' superior knowledge, but on the principle that collaboration by a group of concerned, equitably engaged individuals will generally produce superior results in the amount, depth and quality of the information gathered* (Greenwood & Levin, 1998).

In addition, this discussion also provides formative research direction for the outside researcher's role and activities in relationship to the community. The outside researcher guidelines that emerge from the CBPR discussion are to 1) find a way to engage with the research community as one of her/his personal communities; 2) recognize that s/he is engaged in a co-learning process; and 3) recognize and participate in the act of listening as a vitally important dynamic in all aspects of the project (Greenwood & Levin, 1998; Minkler & Wallerstein, 2008). As will be discussed in the following section, while CBPR principles specify the outside researcher's goals, narrative inquiry

principles provide the outside researcher with guidelines for developing a perspective and approach that will support and facilitate his/her role in collaboratively engaging with the community in research.

Narrative Inquiry

Why Narrative Inquiry?

Narrative inquiry is critical to this discussion because it focuses on the importance of relationship dynamics and the necessity of recognizing and operationalizing shared humanity in developing and implementing an effective research design. In addition, narrative inquiry's framing of the relational complexity of the communication space further rationalizes and reinforces that it takes time to fully engage in the activities involved in clarifying the community's identities and the dynamics including, but not limited to, its multiple normative and value constructs, power dynamics, mechanisms of communication, and socio-economic influences (Lantz et al, 2006; Israel, Schulz, Parker, Becker, Allen, & Guzman, 2003). This last point is important in that the formative research processes, particularly when qualitative in design, can often be undervalued in terms of allocation of adequate time and financial resources (Lantz et al., 2006; Minkler, 2005).

What is Narrative Inquiry?

Narrative inquiry, a research tradition within the larger field of narrative knowledge, particularly associated with cultural anthropology, education, and psychology, emphasizes stories or narratives as the basis of understanding the nature of human beings (Rice & Ezzy, 1999; Rimmon-Kenan, 2006). Broadly defined, stories are characterized by a narrator, a plot, and a temporal sequence in which present, past, and future understandings and references are placed (Rice & Ezzy, 1999). The narrative serves to give meaning and purpose to the daily events within the narrator's life expression (Polkinghome, 1988). The stories can be analyzed and coded in various ways depending upon the research focus. These include and are not limited to literature, art, music, film, interviews, dance, conversations, and traditional story-telling.

Clandinin (2006) describes narrative inquiry as a very old human practice of living, of telling stories about their living, of creating meaning in their personal lives, and of enlisting each other's help in building personal and shared community lives. In "Merely Telling Stories?" Martin Kreisworth (2000) quotes Roland Barthes:

> …the narratives of the world are numberless…it is first and foremost a prodigious variety of genres, themselves distributed amongst different substances-as though any material were fit to receive man's stories. Able to be carried by articulated language, spoken or written, fixed or moving images, gestures, and the ordered mixture of all these substances;…moreover, under this almost infinite diversity of forms, narrative is present in every age, in every place, in every society'…nowhere is nor has been a people without narrative. All classes, all human groups, have their narratives…Narrative is transhistorical, transcultural: it is simply there, like life itself. (Barthes 1977:79)

Kreisworth points out that narrative, in the same way as "meta-concepts" such as "reason" or "language," is perceived as co-existent with humanity. From this point of view, it is this ubiquitous quality that creates the narrative's appeal for the human sciences.

Based upon the above discussion, narrative in its multiple forms is shared by all categories of human beings and is present in every age group as a means of giving meaning to individual lives and building community. If this ubiquitous quality of narratives is accurate and if successful communication between multiple stakeholders in multiple contexts is critical, then it is useful to have a basic shared and familiar way of communicating. Obviously, there are variations in storytelling use and delivery based on such factors as gender, ethnicity, cultural background, and age. However, as a familiar and generally shared communication dynamic, narrative or storytelling in its varied forms becomes a way of creating common ground between parties that are working to develop greater shared understanding.

The purpose for engaging in narrative inquiry is to more fully understand the life of the research entity, where the entity could be an individual, a community, or an organization. It is a process of exploring the individual, cultural, social, and institutional dynamics as narratives through which the entity is shaped, finds expression, and is enacted and perceived by others. Through stories, the research entity interprets its/his/her daily life, defines who they and others are and interprets its/his/her/their past and future (Clandinin, 2006).

To understand a population's existing knowledge requires exploring the cultural, social, and institutional narratives through which the community has been and is being shaped. The narrative inquiry goal and process of more fully understanding the life of the research entity through the above defined process, when the entity is a community, essentially describes the goal of the formative research process as defined by Valente (2002): to understand "a population's existing knowledge,

attitudes, beliefs, values, motivations, norms, expectations and practices" (p.57).[4] Engaging in a

formative research process is seeking the multiple voices of the community through the multi-spatial,

socio-economic, political, environmental, cultural, organizational, and individual expressions of the

community as a self-defined entity.

Clandinin and Connelly (2000) describe the narrative research process as a three-

dimensional inquiry space in which the researcher explores and interacts. The three dimensions of

this metaphoric narrative inquiry space are (1) personal and social; (2) past, present, and future; (3)

and place. It is working within this three dimensional space that allows the narrative

inquirer/researcher to discover the framework that supports and facilitates the exploration of the

relational complexity of their topic.

Formative research is a specific form of relational complexity. The three dimensions of the

narrative inquiry space correspond to important aspects in developing a CBPR or formative research

project. The narrative inquiry dimension of personal and social dynamics corresponds to the CBPR

multiple spheres of engagement identified as the individual, interpersonal, institutional, and larger

socio-economic influences. The narrative inquiry time dimension corresponds to the critical role that

time plays in a CBPR/FR design, and the narrative inquiry aspect of place corresponds to the

CBPR/FR focus on geographic and cultural specificity.

Use of narrative forms as a knowledge source not only can facilitate the process of

contextualizing the complexity of a specific health challenge, it also can afford the researcher unique

insights into the causes for a community's compromised capacity for taking action against a particular

risk factor, in this case, youth problem gambling. The reasons for this compromised capacity are likely

to be multiple and interdependent. They can reflect a lack of awareness about the actual problem

and/or lack of awareness of the available resources and avenues for addressing the problem (Riley &

Hawe, 2005).

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[4] In this study, the research community is Windham County and the goal is to understand the individual, cultural, social, and institutional dynamics/narratives as they interact with and impact a specific health challenge of youth problem gambling.

Role of the Narrative Researcher

As discussed, CBPR principles detail the role and activities of the outside researcher with the community. Narrative inquiry's conceptual framework offers primary principles that operationalize the researcher's role as defined by CBPR principles. Effectively, the narrative inquiry perspective of the researcher's role provides the formative researcher with a compelling approach for developing her/his relationship with the community.

Based upon the conceptual framework of narrative inquiry, the narrative inquirers' basic purpose for engaging in a study of an entity's experience — whether individual, community, or organizational — is to create greater understanding for/between themselves as researchers and others. As stated, narrative inquiry is a process of understanding and making meaning out of the complexities of human experience and its interactions. The narrative inquiry process anticipates that this enhanced understanding will be accompanied by enriching, often life-transforming, experiences for the narrative inquirer conducting the study, other narrative inquirers, and individuals who interact with the study. It is inherently the making of meaning (Clandinin, 2006). Narrative inquiry and CBPR share transformation as an overall design dynamic.

Narrative Inquiry Principles

Three principles guide the narrative inquirer in his/her research process. First, the narrative inquirer acknowledges that s/he is entering the field of inquiry (the research community) and its multiple levels and forms of stories with his/her personal stories. Acknowledging this common ground facilitates the researcher in creating a research dynamic that essentially becomes two entities intersecting to produce a community of shared interests, concerns, and resources shaped by the research process.

The second narrative inquiry principle that informs the formative research conceptual framework guides the perspective from which the researcher regards the research process. It becomes a process of making, sharing, and seeking understanding as an act of honoring the sacredness of our shared humanity (Hendry, 2007). The field of inquiry becomes a place where, as Hendry describes, "…we become present to our relationships and interconnections with others"

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(p.496). This shifts the field of inquiry from simply a production site for generating interviews, surveys, and observational data that are categorized, dissected, compared, and recorded to a relationship based upon a more intimate exchange. The research process becomes a way of living and being that "deconstructs the duality of research/non-research, subject/object, and knower/known"(Hendry, 2007).

The primary action of the narrative inquirer in engaging from the perspective of sacredness is listening. This is the third narrative inquiry conceptual principle that is incorporated in the formative research conceptual framework. Hendry (2007) considers that listening is "the core task in which we are engaged as researchers" (p.494). It is listening that is tied to receiving. Reinforcing this point, Hendry quotes Fiumara's book, *The Other Side of Language* (1990), "…irreplaceable and yet ignored, the value of heeding and hearkening is once again advocated: it is precisely this aspect of our culture that rationality has largely neglected" (p. 8).

Hendry gives guidelines to this central researcher activity by describing what listening is and what it is not. In Hendry's discussion, a relationship that focuses upon listening to receive is based upon humility and faithfulness. Listening to receive is not a process of prioritizing the need to engage in the activities of ordering and explaining including, but not limited to, analyzing, scrutinizing, exploring, and using questions as interrogation. It is not characterized by the frequently engaged researcher's inner dialogue of constantly asking: What should I be asking? What am I missing? How can I get more from this?" (Hendry, 2007, p. 497)   This is not the listening process that Hendry considers as the researcher's most important act.

 Rather, Hendry offers that listening to receive focuses upon acknowledging the inherent validity of meaning that evolves from the relationship itself. From this perspective, the emphasis on listening to receive places more emphasis on the power of and trust in the relationship for providing the quality of data sought by the researchers in their study rather than on the strategic use of methods.

Narrative Inquiry: FR Conceptual Framework

These three narrative inquiry principles operationalize the previously discussed CBPR principles pertinent to the researcher's (as discussed on p. 24): 1) finding a way to engage with the

research community as one of her/his personal communities; 2) recognizing that s/he is engaged in a co-learning process; and 3) recognizing and participating in the act of listening as vitally important in all aspects of the project (Greenwood & Levin, 1998; Minkler & Wallerstein, 2003). The narrative inquiry principles provide the researcher with a blue print for achieving the researcher goals as defined by the discussion of CBPR.

Hendry's framing and detailing of the connection between the role of listening and the sacredness of the researcher/community participant relationship that re-informs the significance of listening by removing it from the act of simply opening one's ears to accurately record information to a dynamic way of being in creating collaborative meaning. In explaining how one must listen, Hendry describes a way of being that fosters shared humanity and trust as the underpinning of the research process. In turn, this relationship process becomes the operating dynamic for what both formative research and CBPR designs identify as their most important activity — creating and maintaining a safe communicative space in which all the multiple levels of community participants and the outside researcher can develop a mutually beneficial relationship.

As previously discussed (p.17), this safe communication space is critical to facilitating the already identified formative research conceptual principles pertinent to community dynamics which to refresh are: 1) the acknowledgement of the community as the research entity capable of articulating its challenges and fully participating in creating solutions; 2) recognition that the definition/s of community must emerge from the community voices; and 3) engagement in collaborative equitable relationships that are mutually beneficial including, but not limited to, the decision-making about how information gathered is used.

Summary: Formative Research Conceptual Framework

The formative research conceptual framework consists of three principles derived from each methodology. Although, there is definitely overlap, broadly speaking, CBPR principles describe essential elements in the relationship functions of the researcher and the research community. Narrative inquiry principles provide the researcher with guidance for how to engage both internally with self and with the research community.

Formative Research Conceptual Framework

From narrative inquiry principles:

1) the narrative inquirer acknowledges that s/he is entering the field of inquiry and its multiple levels of interconnected stories (the research community) with his/her personal stories;

2) the researcher chooses to regard the research as a process of honoring the sacredness of our shared humanity, making, sharing, and seeking understanding through the exchanging of stories rather than simply a production site for categorizing, collecting, analyzing data;

3) the narrative inquirer's primary action is one of listening and trusting that the evolution of meaning (data/research outcomes) is inherent in the process without making it happen through interrogative questioning and methodological strategizing;

The framing of these principles makes the corollary CBPR researcher goals discussed on page 24 redundant on the one hand and explanatory on the other. Importantly, this framing activates and facilitates what *becomes* the ongoing safe communication space - previously discussed as the most critical dynamic of CBPR projects.

From CBPR Principles, the formative researcher is guided to:

1) acknowledge the community as the research entity capable of articulating its challenges and fully participating in creating solutions;

2) recognize that definition/s of community must emerge from the multiple community voices;

3) develop collaborative equitable relationships that are mutually beneficial to outside researcher/s and the research community including, but not limited to the decision-making about how information and resources are identified, gathered, and used.

In addition, the formative research conceptual framework inherits as an overall dynamic the potential for transformative experiences for all of those involved. This premise is shared by both CBPR and narrative inquiry. As previously explored in the CBPR discussion on page 18, this transformation dynamic can result, at least in part, from the researcher's attentiveness to his/her

epistemological considerations. In narrative inquiry, it is based upon perceiving the research process as a sacred meaning-making collaboration rooted in the participants' shared humanity.

Conclusion

This exploration is designed to provide a broad analysis and definition of CBPR and narrative inquiry principles. Widely used and critiqued, both methodologies are central to health research project design both nationally and internationally, and, therefore, provide the basis for shaping and initiating this analysis.

Based upon the above discussion, an appropriately designed formative research process can enhance the effectiveness of health promotion initiatives by addressing specific health promotion inadequacies that reflect a lack of comprehensive understanding of a community's knowledge and dynamics. Formative research design and implementation inherits the challenges of CBPR projects related to the objectification of community, power dynamics related to choosing who participates in the research project, as well as access to funding.

As outlined in the NCCDPHP outcome paper, a key challenge to effective CBPR health interventions lies in identifying and incorporating community-specific information relating and not limited to, issues of spirituality, complementary/alternative medicine, political and economic contexts that impact decision making, systemic issues such as racism and discrimination, and cultural beliefs and values (Navarro et al., 2006). These shortfalls can be significantly mitigated through developing a meticulous documentation of research sources and linkage of methods to research questions and goals. Riessmann (2008) emphasizes the importance of vigilance in these two aspects of the research process in addressing reliability and validity issues of narrative inquiry. The role and contribution of an appropriate (i.e., geographically and culturally specific) formative research design offers the opportunity for addressing these shortfalls by identifying community-specific dynamics and contextualizing their dimensions relevant to the particular health issue or risk factor, whether it is socio-economic, environmental, or physical in origin.

Guided by the conceptual framework presented in this chapter, the Chapter III will develop a formative research design for investigating the topic of youth problem gambling in Windham County, Vermont.

CHAPTER III

RESEARCH DESIGN

The overall purpose of this research project is to provide a greater understanding of the processes and dynamics of a community as it engages in addressing an issue or risk that can negatively impact its resilience. In this study the risk factor is the public health concern of youth problem gambling. Public health issues are defined as a form of disaster by the Earth System Science Partnership (ESSP) and disasters as risk factors that weaken a community's resilience (Frumkin & McMichael, 2008).

One of the research priorities within the general topic of community resilience dynamics is understanding the process of community adaptation including its decision-making dynamics and the roles played by various stakeholders and community social networks as well as the potential challenges, limitations and costs (Confalonieri & McMichael, 2006; Matthew & Fraser, 2002; Walter, 2004). Development of public health intervention initiatives are one of a community's adaptive mechanisms to public health concerns. Appropriate health interventions are community-specific, developing community awareness and understanding of the particular health issue. Primary prevention through community education and awareness are central approaches in both public health and community resilience initiatives. Formative research, a process that precedes the design and implementation of a health prevention initiative, is an exploration through which the dimensions, dynamics, stakeholders and general community awareness of the community's adaptive mechanism/s is established relative to a health issue. Using formative research, this study explores the public health issue of youth problem gambling in Windham County, Vermont located in the northeastern region of the United States.

Building on the conceptual framework for formative research developed in Chapter II, this chapter explains its application in addressing the issue of youth problem gambling in Windham County, Vermont. This chapter describes each of the study's research design components including the main research question, research study aims and their associated research questions, the study site, the role of the formative researcher, research methods and rationale, the challenges of the study and the study's audience.

The discussion is contextualized within the formative research framework as outlined in Table 3.1 below.

Table 3.1   Formative Research Conceptual Framework Principles

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The researcher:

- acknowledges that s/he is entering field of inquiry and its multiple levels of interconnected stories (the research community) with his/her personal stories;

- chooses to regard the research process as an act of honoring sacredness of our shared humanity thru making, sharing and seeking;

- seeks understanding through the exchanging of stories rather than a production site for categorizing, collecting, analyzing data;

- acts primarily to listen and trust the evolution of meaning (data/research outcomes) inherent in the process w/o making it happen through interrogative questioning and methodological strategizing;

- acknowledges the community as the research entity capable of articulating its challenges and fully participating in creating solutions;

- recognizes that definition/s of community must emerge from the multiple community voices;

- recognizes that the collaboration is not based upon the presumption of the outside researcher's superior knowledge but on the principle that collaboration by a group of concerned, equitably engaged individuals will generally produce superior results in the amount, depth and quality of the information gathered.

The first three principles guide the researcher in understanding and orienting his/her

relationship dynamics with the community, particularly, if the researcher has little or no prior

connections or interactions with the research community. The second three principles define the

community as a self-defined entity collaborating in the research study relationship. The researcher

principles guide the outside/academic researcher in facilitating the development of the safe,

communicative space which Anisur Rahman describes as the most critical dynamic in establishing

successful collaborative efforts between community and outside researchers. This space supports

those engaged in the collaborative research effort in arriving at a "mutual understanding and

consensus about what to do" (Reason, 2001, p.3).

Main Research Question and Aims

As presented in Table 3.2, this research study is based upon the over arching question of inquiry: "How can formative research engage and inform community and government decision makers about health issues that can negatively impact a community's resilience?" The more specific research question is how can formative research engage and inform community and government decision makers about the issue of youth problem gambling in Windham County, Vermont?

Table 3.2 Research Questions

Overarching Research Question
"How can formative research engage and inform community and government decision makers about health issues that can negatively impact a community's resilience?"
Specific Research Question
How can formative research engage and inform community and government decision makers about the issue of youth problem gambling in Windham County, Vermont?

From the overarching and main questions, two research aims emerged for the present study. As detailed in Table3.3 below, each aim has associated exploratory research questions.

The first aim is to develop a formative research conceptual framework to facilitate and evaluate its effectiveness in addressing the public health issue of youth problem gambling. The attendant questions are: 1) Does the framework's application provide knowledge about community-specific dynamics and resources relevant to youth problem gambling in Windham, County? 2) What challenges, if any, arose?

The second aim is to develop an understanding of the challenges, resources, knowledge and other relevant community-specific information that would either facilitate or challenge the development of an appropriate health initiative for addressing the issue of youth problem gambling in Windham County, VT. There are three associated research questions. The first question is: Who emerges as stakeholders/community participants and are diverse community voices represented? The second question is: What community-specific information emerges? Possibilities of community-specific information include but are not limited to differences in the way stakeholders/community participants view youth problem gambling; power dynamics; exclusions in the snowballing process; resources, biases, and socio-economic, political and cultural dynamics. The third question is: Do

community participants believe that some sort of intervention is necessary? Why or why not?   Who

does? Who does not?

Table 3.3   Research Aims and Questions

First Research Aim
To develop a formative research conceptual framework and evaluate its effectiveness in addressing the public issue of youth problem gambling

Attendant Questions:
Does the framework facilitate providing knowledge about community-specific dynamics and resources relevant to youth problem gambling in Windham County, VT?
What challenges, if any arise?

Second Research Aim
To develop an understanding of the challenges, resources, knowledge and other relevant community-specific information that would either facilitate or challenge the development of an appropriate health initiative for addressing the issue of youth problem gambling in Windham County, VT.

Attendant Questions
Who emerges as stakeholders/community participants and are diverse community voices represented?
What community-specific information emerges?
Do community participants believe that some sort of intervention is necessary? Why or why not? Who does? Who does not?

Research Methods

Data collection methods included semi-structured interviews, focus groups, and analysis of

peer-reviewed research and other scholarly literature. Snowball sampling was used to facilitate

engaging interview participants representing health professionals, policy makers, community

organizations, youth and the general community. This sampling process was successfully used in an

earlier service project with the Vermont Council on Problem Gambling. The secondary data sources

included happenings, informal interviews, conversations and existing procedure and policy

documents. The data analysis followed Greenhalgh et al's five step protocol for analyzing qualitative

research data facilitated by Computer Aided Thematic Analysis (CATA) (Greenhalgh, Russell, &

Swinglehurst, 2005).

Snowball Sampling

A strategy, in part, to address a hidden health concern requires evolving the research

process through finding and talking with the willing individuals and organizations that are expressing

concerns about the issue. Snowball sampling is a research method that facilitates the researcher in connecting with these concerned and/or informed individuals (Noy, 2008; Patton, 2002). The snowballing dynamic occurs when an interview participant suggests additional individuals, organizations, groups, and/or resources that have concerns, information or perspectives about a particular issue – in this case, youth problem gambling.

This method was used to identify the interview participants for the previously discussed service project. Based upon the recommendations from individuals interviewed for the service project, a potential list of interview participants and focus group possibilities emerged for my dissertation study. This list of potential participants included policy makers and professionals working directly with youth, such as educators, counselors and parole officers. There were also individuals on the list who were presently addressing gambling issues.

From this list, I estimated that I would conduct at least ten to fifteen individual interviews –at least. I understood that this estimate could expand or contract during the study given the research process. The snowball ball sampling process actually produced interviews with twenty two participants.

For the study, two youth focus groups were conducted with participants from the Brattleboro Boys and Girls Club. The Boys and Girls' Club serves the Windham County community. The Club had been recommended by a couple of adult interview participants. The goal was to engage youth who were situated in traditional, socially- constructed settings such as youth clubs, middle and high schools, and correctional and alternative academic environments. The first group consisted of eight youth. The second group consisted of eleven youth.

Snowball sampling, in facilitating a more community defined introduction to its dynamics and stakeholders relevant to a particular health issue, provides a potential lens into the community's loci of power. By mapping out which individuals and organizations are referred to and by whom, as well as who is not referred to, it potentially offers an opportunity for insight into the lines of communication and power. For example, if seven out of ten interviewees referenced "Jane Doe" or a"NGO X," this would suggest that "Jane" or that organization represents a significant locus of power. Which organizations or individuals were not included and the composition of dominant and peripheral

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networks provided insights into power dynamics, resources and challenges relevant to the specific health concern (Noy, 2008). At the least, it can provide a rudimentary social network.

Based upon the participants interviewed, there are voices that clearly were not presented as discussed in the Synthesis, Chapter V.   However, the recommendations of the interview participants clearly provided the basis for developing and implementing the second phase of this formative research design. The sampling process did not afford developing a power analysis. Few interview participants were recommended more than twice. However, implementing the second phase of suggested interviews and focus groups could conceivably establish a sketch of power dynamics.

In developing a power analysis map based upon the snowball sampling process, three critical considerations arise. When is the snowballing process complete, i.e. when does the process reach saturation, the point when no new names are surfacing or the same names are repeatedly offered? What if the completed sampling process clearly does not include a broad range of the community's voices? How will one determine if a broad range of voices is represented? These questions are addressed in the Synthesis, Chapter V.

Snowball Sampling and Formative Research

Snowball sampling is a sampling technique that facilitates implementation of all the formative research principles outlined in Table 3.1 above. Snowball sampling is a process that fostered my building a relationship with the community driven by the community. Each person interviewed is based upon referral from another interview participant. It effectively facilitates the process of creating an intersection between the outside/academic researcher and the research community such that the relationship can become a personal one (Greenwood & Levin, 1998). Where this intersection occurs, the research community becomes part of the researcher's world (Greenwood, 2002). The referral dynamic of snowball sampling also facilitates the autonomous, active role of community in the research process. The interview participants of the snowball sampling process shape one definition of community—as individuals who experience a connection relevant to the particular topic, relating to other members of their community who they think are important to include in the discussion by referral.

As discussed in Synthesis, Chapter V, the sampling process did not yield a broadly representative relationship; however, the process was rooted in and driven by the community's dynamics. As this study is the first phase of a two phase research design, a clear assessment of the effectiveness of the sampling technique would require completion of the second phase.

Because of my nascent relationship to the community at the beginning of the study, I decided it was not feasible to focus upon social network methods or attempt to set up participatory workshop—unless they emerged from the sampling process. Discussed in the Synthesis, Chapter V, this distance from the community changed significantly as my relationships developed through the engaging in the interview process, and I was invited to facilitate workshops on my research.

The snowball sampling techniques brought forward the adult interview participants and the youth focus groups. The interviews were conducted primarily in-person taping with two by telephone. Lasting from forty-five minutes to an hour and a half in length, the interviews were transcribed and analyzed using Computer-Aided Thematic Analysis (CATA).

Semi-Structured Interviews

To gather rich, contextualized data through which emergent themes can surface, Gittelsohn et al. (2006) recommended unstructured exchanges and in-depth interviews over semi-structured interviews and surveys. They contend that unstructured, in-depth methods allow greater flexibility for exploring a broader range of topics in detail.

However, based in part upon my experience in which using a semi-structured interview process produced in-depth, broad-ranging interviews as well as accepting the rationale of and choosing to engage in active interviewing, I decided that it was possible to have in-depth exchanges about aspects specific to the research topic using semi-structured interviews.

As seen in Table 3.4 below, the adult interview questions were open-ended and broadly framed. The suggested prompts reflect the topics that an informed individual might use in engaging in an in-depth discussion with a friend about an issue of shared concern. And, at the same time, for a professional engaged in a capacity relevant to problem gambling, the terms (e.g. problem gambling, intervention or youth addictions) may have contextualized meanings as well. The interviews were taped and transcribed. They ranged range from forty-five minutes to an hour and a half in length.

Table 3.4   <u>Adult Interview Questions</u>

1) Are you concerned about problem gambling among Vermont's youth?

2) What is the basis for this concern?

3) Is there a relationship between youth problem gambling and other youth addictions such as drugs and alcohol?

4) What are the issues involved in addressing this concern?

5) What are the considerations in creating an effective intervention?

Semi-Structured Interviews, Active Interviewing and Formative Research

       Support for the decision to use semi-structured interviews—as opposed to unstructured interviews recommended by Gittelsohn et al (2002)—was substantiated by further research which validates the effectiveness of semi-structured interviews in achieving in-depth interview results (Seidman, 1998). As Seidman points out, the fundamental goal of these questions are to catalyze and to open the door to thematic tracks, issues, concerns, biases, challenges—to be able to foster a wide range of discussion from the various interview perspectives, thus surfacing a comprehensive range of community knowledge relevant to the topic of youth problem gambling. To access this depth and range of a community's knowledge is the goal of a formative research project.

       The concept of active interviewing is also critical in implementing this formative research design. In active interviewing, unlike traditional interviewing, the interview participant is not simply a repository of knowledge from which information is elicited by the researcher (Elliott, 2005; Holstein & Gubrium, 2003; Mishler, 1991). Proponents of active interviewing retain the traditional nomenclature of semi-structured, structured and in-depth interviews. However, active interviewing differs from traditional interviewing in that the interview is an opportunity for the interview participant to explore the topic and the researcher's job is to "stimulate the interviewee's interpretative capacities by "indicating" even suggesting provocative options, different perspectives and challenging precedents (Elliott, 2005, p.21).

       The goal of the researcher participant that chooses an active interview process is to engage with the interview participant in such a way that conversation flows freely and expansively (Elliott,

2005; Holstein & Gubrium, 2003; Mishler, 1991). The interviewer's job in active interviewing is to activate the breadth of the interviewee participants' knowledge, experience, and opinions—appropriate to this study's research aims (Holstein & Gubrium, 2003).

This simply means that 1) the interviewer perceives the interviewee as an expert in his/her own right - a rich resource of experience, information and perceptions relevant to the research topic, in this case, youth problem gambling, and 2) the objective of the interviewer is to encourage an environment in which the exchange can explore the complexity of meanings of issues relevant to a particular topic. The active interview process is not unlike two friends discussing a topic in which they are both invested.

The active interview approach to engagement with the interview participant facilitates several formative research principles: 1) creating the previously discussed safe communicative space essential to effective collaborations; 2) gathering information through sharing of stories and experiences; 3) recognizing that the primary action is one of listening, and 4) recognizing that the community defines itself and is capable of articulating its problems and their solutions. It also supports the formative research principle that an equitable collaboration generally produces superior results in the amount, depth and quality of the information. The active interview approach encourages engaging, breadth and depth of community knowledge—key to effective formative research.

Youth Focus Groups

Two youth focus groups were conducted in collaboration with the youth, youth workers and myself. This decision was based upon informal conversations with youth community workers as well as participating in and observing activities at Brattleboro's Boys and Girls club. The youth focus groups were engaged following completion of the adult participant interviews. The first focus group consisted of eight youth participants and the second focus group consisted of eleven participants. The age range was 14-19 years old. Youth gambling research studies vary within the range of youth defined between 10-25 years old.

The main objective with the youth focus groups was to create a safe space for having a discussion about youth and problem gambling with youth participants. The purpose for the

discussions was to begin gaining insights and/or experience that youth in the Windham County region have relevant to gambling.

Based upon his work with the Club's youth membership, the youth director's observation was that there was very little, if any problem gambling, among the youth who participated regularly in Club activities. The Club offers closely monitored video gaming activities. Given this context, it seems most useful to catalyze a discussion by providing information and engaging in activities that would engage their thoughtfulness and, possibly, experience with the topic. To this end, I used a combination of instructive videos on youth problem gambling and the following three discussion guides (Tables 3.5-3.7). One of the guides is a gambling screen used by clinicians to assess gambling behavior. In this study, the purpose of the screen was in no way evaluative of the participants' personal behavior. It was used strictly to engage the youth participants in thinking about gambling in different ways and creating a lively open discussion.

The purpose of the third guide was to determine how the participants perceived the value of having instructive information available about youth and problem gambling. The first guide was a discussion guide. The second guides were both discussion and writing.

TABLE 3.5 <u>Video Questions</u>

<div style="border:1px solid black; padding:1em;">

1) What did you like about the video?

2) What didn't you like?

3) Did anything in the video surprise you or cause you to think about gambling in a way you hadn't thought of before?

4) What did you learn?

THANK YOU!!

</div>

TABLE 3.6 <u>Gambling Screen Evaluation</u>

1= Poor
2= Ok, could be improved
3= Good
4= Excellent

1) Do you gamble or bet on games?   Is this a good question? 1 2 3 4

2) Have you ever felt that your gambling or betting was out of control?
                                                       Is this a good question? 1 2 3 4

3) Have you ever gotten into a fight with your family or friends because of gambling or
   betting?   Is this a good question? 1 2 3 4

4) Have you ever felt like you lost too much money in gambling or betting?
                                                       Is this a good question? 1 2 3 4

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1) Which questions would you answer honestly? Do you think other students would
   answer   them honestly? Why or why not?

2) Did you find any questions excellent/poor? What made them excellent/poor?

3) What changes would you make in the questions e.g. completely different
   questions? If yes, give examples.

4) If you think there should be changes in the questions? Explain why.
                                                       THANK YOU!!

TABLE 3.7 <u>YOUR THOUGHTS</u>

1- not at all   2 – somewhat; 3 – pretty useful; 4 – very useful; 5 – important

1)   Is talking and learning about gambling useful?

2)   Give the most important reason for your choice

                                                       THANK YOU!!!

The results of the focus group activities are discussed in Findings, Chapter IV and Synthesis, Chapter V.

Secondary Data Sources

The pervasiveness of communication and relationship dynamics in formative research parallels that of the grounded theory methodology. Glaser's posits that everything is data. Data are not just what is seen, heard or recorded. Data are also how information is presented, the conditions under which the presentation or information unfolds and all the contextual information surrounding what is being presented. In addition, data also includes pertinent researcher thoughts and reactions as well as observations about the location in which the exchange takes place. There is no such thing as "bias data, subjective data, objective or even misinterpreted data. It is what the researcher is receiving, as a pattern, and as a human being" (Glaser, 2001, p.145). This is true whether the data source is a story, an interview, music or a painting.

Recognizing the applicability of the above discussion to this study, it also seemed critical to record and include secondary data sources. I maintained a field note and reflection journal for recording informal interviews and conversations. I also included documents such as organizational websites, newspapers and reports.

Data Analysis

The interview analysis is based upon Computer Aided Thematic Analysis (CATA) developed within the framework provided by Greenhalgh et al's (2005) five step qualitative research protocol.

Greenhalgh et al's Analysis Steps

When the narrative method is an interview, several levels of communication are important to identify and discuss, including the dynamics between participant researcher and the interview participant; the contexts and perspectives of both the researcher participant and the interview participant; and the actual interview content. These three aspects of communication are central to the meaning making process of the interview (Mello, 2002).

Greenhalgh et al. (2005) outlined an analysis protocol which is designed to maintain the integrity of this triadic construction. The researchers recommend five overlapping stages of analysis: 1) becoming acquainted with the interview text through a reading and creating a coding system in the

form of thematic categories for facilitating familiarity with the text; 2) successive readings and reflection upon the interview texts to identify connections; 3) exploring external references, texts and other sources to substantiate or dismiss explanations and connections from the preceding step; 4) writing a narrative of the results of these re-readings and external literature review, and 5) using quotes from the data for supporting the reported observations and interpretations (Greenhalgh et al., 2005).

The narrative material for the fourth and fifth analytic steps emerged from following the first three steps outlined above. In Findings, Chapter III, using the words of the interview participants integrated with secondary sources, I shaped a narrative of the study's results relevant to the community's knowledge, understanding, awarenesses, resources and challenges that emerged related to youth problem gambling. In Results, Chapter IV, I provide an interpretation and discussion of the findings presented in the preceding chapter.

Greenhalgh et al's Protocol and Formative Research

This study represents the early research phase of a public health concern. It is initiating a discussion about a topic that does not appear to be addressed in the context of the state's established health prevention protocols. As such, the literature offers caution in using coding in early research (Greenhalgh et al., 2005). This refers to externally defined coding through which the data material are shaped.

The caution for coding used in an "early stage" research project is that although it is widely used, it is a process that can fragment data in a way that counters the strength of narrative inquiry. Particulating narratives can, in fact, interfere with the complexity of communication conveyed in the rich, textual knowledge and information that narratives offer (Greenhalgh et al., 2005; Mello, 2002).

The coding for this study emerged from and reflects the language of the interview participants. This corresponds to the research literature perspective that an accurate coding system, that is, one that is geographically and culturally specific, cannot be established until a researcher can identify project specific assumptions relevant to both the researcher and the research community.

This type of 'personalized' information usually emerges and clarifies itself over time (Mishler, 1986).[5]

In the process of building a relationship/s—the underlying dynamic of formative research—Greenhalgh et al's thematic analysis protocol allows for both the complexity of community dynamics in defining itself and its knowledge as well as the complex, nuanced researcher/community interactions in the research study process.

Computer-Aided Thematic Analysis (CATA).

Computer Aided Thematic Analysis, developed by Dr. M.E. Kabay, Director of Information Systems at Norwich University, is a simple spread sheet based computer application that allows the ordering of a large amount of information which does not have a defined analytical framework. In this study, CATA facilitated the thematic sorting of qualitative data material, i.e. the transcribed texts of the adult semi- structured interviews.

This approach supported Greenhalgh et al's protocol of the emergent dynamic of determining results. Following the CATA protocol, I cut and pasted each line of each interview into a spread sheet. I read each line to see if it offered a topic/theme relevant to the issue of youth problem gambling. As a theme presented itself, I gave it a number. These first themes were the meta themes. If a line did not suggest a specific theme, I deleted it.

Once an interview was meta thematically outlined, I did a sort so that the lines with the same number, the meta themes, were grouped together. I then analyzed and sorted each meta theme into recurring themes using the line by line analysis and numbering procedure described above for identifying the sub themes. This process was followed for each interview. The final sorting step combined and sorted all of the participant interviews thematically.

Once each meta theme was analyzed and explored, all of the meta themes were analyzed and integrated into a comprehensive discussion of the research results. In reading and analyzing the interview comments for each theme in the context of secondary sources, the Findings and Results emerge.

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[5] For more extensive discussion of conventional coding challenges, see "Problems of the Research Interview" in Elliot G. Mishler's *Research Interviewing: Context and Narrative* (1986).

Secondary Sources

I also kept a journal for personal reflections and experiences in the interview process, insights into the research process and memos to myself as areas of concern and/or for further research that surface (Maxwell, 2004). Where appropriate, information from these secondary sources was incorporated and referenced in the narrative analysis.

Limitations of Research

There were three limitations to this research study. The first limitation was the time limit of a dissertation study. Based upon the recommendations of the interview participants, this study could have seamlessly moved into the second phase of the two phase formative research design upon which this study is based (Gittelsohn et al, 2006). In the same vein, in the same time frame, a research team, as opposed to a sole researcher, could have completed more interviews and provided the insights unique to a collaborative endeavor. And, the final limitation, is that in the Vermont community of which I am a part, unless your family has lived in Vermont at least a couple of generations, you are generally considered an outsider. My geographic roots are not in Vermont, although I've lived here for almost ten years. Based upon the length of my interview transcriptions, it didn't seem to keep people from talking or from referring me to other interview participant or focus group possibilities.

The analysis of the data from the study's interview participants, youth focus groups and secondary sources is presented in the following chapter as an integrated discussion of meta themes. This narrative reflects the fifth step of Greenhalgh et al's (2005) analysis protocol outlined above.

CHAPTER IV

FINDINGS

This chapter presents results of the analysis of the data from the interview participants, youth focus groups, and secondary sources. As detailed in Research Design, Chapter III, each interview was sorted into meta themes. The meta themes were sorted into themes and sub themes. Computer-Aided Thematic Analysis (CATA), a spreadsheet based protocol, was used for the sorting. This chapter discusses each meta theme based upon data whereas Chapter IV provides an integrated discussion of the meta themes reflecting the fifth step of Greenhalgh et al's (2006) analysis protocol discussed in the Research Design chapter. Synthesis, Chapter V, will discuss these findings relevant to the study's main research question and aims.

As outlined in Table 4.1 below, the meta themes are Money; Beliefs; Awareness (including lack of awareness); Challenges, Resources /Strategies; Prevention; and State Policy. In the process of organizing and synthesizing the information, it became clear that the meta themes of Money and Beliefs often reflected a contextual element or "back story" for the other five meta themes. Thus, the data discussion begins with these two meta themes.

Table 4.1 Meta Themes and Themes that Emerged through the Interview Analysis

Meta-Themes	Themes
Money	
Beliefs	
Awareness	**Definite cognizance of gambling** **Lack of awareness** **Public Awareness** **Misinformation**
Challenges	**Making the case** **Patterns and perceptions** **Impact of video gaming** **Youth Vulnerability** **Parents** **Money**
Strategies/Resources	**Community experience** **Points of intervention**
Prevention	**Pro-prevention** **Prevention critique**
State Policy	**Policy Dynamics** **Money**

Money

   Because of its pervasive influence in this research topic, I found it useful to identify the

complex role that money plays as represented in the comments of the interview participants. In some

ways, it is pointing out the obvious: money plays an important role in most contexts. Identifying some

of its various roles contextualizes the discussion of the other meta themes. Interview participant

comments regarding money range from a critical perspective of the questions about values that the

issue raises, to its role in prevention programs and, perhaps, most importantly gambling revenues as

a significant resource for national and state, as well as international, budgets.

   Referencing the Vermont state budget, as one interview participant put it "…*we've been using

lotteries and 50-50s and whatever for a long time to raise money... Our school systems haven't been

able to afford things. When they do lottery tickets or whatever, all of sudden they can afford uniforms."*

Another participant points out the normalization of exploiting addictive behaviors as a significant income stream for state and national budget streams. In the participant's words, "…*I don't think that it's any different than the tobacco companies or the alcohol companies who are also talking about huge, huge dollars… I would say it's got to be comparable.*" In fact, in Vermont, both the lottery and alcohol sales are state run businesses.

One participant's perspective, in expressing concern for the potential economic downside to the increasing lottery venues as a revenue source offers that "…*trying to get more money out of Vermonters' pockets when that's the opposite thing to what we needed at the time. We need Vermonters, you know, holding on to their money.*" However, as stated by the Director of the Lottery, the goal is to keep sales up by increasing venues*: "The Vermont lottery has several plans in the future to keep sales up, including adding instant ticket vending machines in stores and rest areas, which in turn will raise more money for the education fund."* And, in fact, the article points out that 2010 showed $1million increase in profits over 2009, reversing what had been decreasing profits in preceding years due to the country's economic downturn (Richardson, 2011).

The economic challenge of implementing some form of gambling prevention, even if justified, is voiced by another interview participant who points out that "…*even now, if it is a problem that has all of the characteristics of a problem that needs to be addressed… our revenues are going south on us right now… the fact that we haven't got a lot of extra money means it might not get addressed even if it's a valid problem…*" Or, more bluntly put one interview participant, *"…Given the situation with the budget …I think you have to quantify how many children in the State of Vermont are experiencing a problem with gambling…as callous as that might sound."* Both comments reflect the fact that since 2009, the Vermont state budget has faced significant budget short falls (McNichol, Oliff, & Johnson, 2011).

Another aspect of this economic backdrop is the vast gambling/gaming marketplace being expanded through the Internet. The world of the internet is a thriving, easy, friendly place of engagement for millions of gambling customers. The 2010 legalization of US online gambling sites licensed by the United States Treasury Department is estimated to increase profits from $2.5 to $20

billion within the next five years, bringing in over 42 billion dollars over the next ten years (Dodge, 2010).

Importantly, online poker, fantasy football, and casino gambling, the traditional online gambling venues, have paved the way for multiple forms of video gaming. The increasing impact of online gaming options, described as the new online gambling addiction, is reflected in the 2008 Harris Interactive Poll which indicated that 8.5 per cent of American youth could be considered pathologically or clinically addicted to video gaming (Gentile, 2009).

One of the most well-known forms of video games is the massively multi-player online role-playing games (MMORPGs), a virtual online gaming option. Although, there are several popular games within this genre, at the time of the writing of this paper, the most well-known was World of War Craft. A highly lucrative business, the MMORPGs as reflected by one interview participant's description of World of War craft, has a subscriber base "… *rivaling some small countries…. millions of subscribers that pay a subscription fee to, something like fifteen dollars a month…"* Maintaining the subscriber base requires that, "...*you have to keep people coming back and paying their monthly (fee),"* the interview participant goes on to explain. This increases the overall economic value of the game through its associated marketing and development activities because to maintain profitability, again in the participant's words, "…*you implement ideas and concepts into the design of the game that promote addictive behavior and compulsion to play it."* Further economic benefits are available to the game's winning participants who can sell their game rewards on EBay because "… *people will pay you enormous sums of real world money for you to transfer this [*the reward*] to their character*."

A final aspect of this economic backdrop is the issue of collective values as they are reflected in gambling and gambling related issues. The discussion of gambling brought different reflections from the participants in terms of broad-based implications for the community. Recognizing that increased gambling venues are designed to offset revenues lost through increased unemployment precipitated by the loss of millions of jobs nationwide, one participant observes that:

> …*it seems to be more of a challenge to get people jobs…the community and the culture in general must begin valuing people's lives more…we almost have to redefine work, how we look at it….. Let' say you buy a machine that replaces five people and, then you reconsider: well maybe I should hire five people instead of the machine… but then you worry that your business won't be competitive…*

Another interview participant, expressing concern about the lottery specifically as a government sponsored business, speculates on what appears to be the contradictory value of the lottery's contribution to the state budget pointing out that "…*we spend millions of dollars every year (to) persuade people to buy lottery tickets… that this is their ticket to a better life…and this undermines all of the money that we spend on education, law enforcement, etc.*"

Commenting in a similar vein, another interview participant suggests that addressing the need for some form of prevention, in fact, would be a conflict of interest for the state:

> *...the state can not educate people about the dangers of the lottery. They only show the benefits of gambling… they get more money because more people are buying… you don't see anything on the door (of stores) saying we card for lottery tickets.*

These comments are not in any way conclusive. In some instances, they may fall equally appropriately under other meta themes. However, like the following section on *Beliefs, they* are evocative and signal underlying subtext perspectives and dynamics that interplay with the other meta themes.

Beliefs

Beliefs are the second meta theme that contributes to the back story of this analysis. Interview participant comments indicating beliefs ranged from beliefs about gambling, to the world of youth, to the role of parents, to the meaning of life. Whenever a participant used the phrase "I believe…" or "I think," I categorized the comment under the meta theme Beliefs. Also included are several comments that did not explicitly use these phrases.

Opinions about individuals having gambling challenges ranged from disbelief to assuming a predisposition to problem gambling to gambling as a perverted form of behavior. One interview participant, watching a woman losing $3000 in $100 slots found that "… *It was unbelievable. I could not believe that anyone would do that.*" For another interview participant, gambling is one of the many perversions "…*like a drug perversion, like an alcohol [perversion] whatever…too much time…too many beers, you're on the Internet, you can end up taking a bus down to Massachusetts to the casinos.*" And for another interview participant, problem gambling is simply a matter of having the type of personality that, in the participant's words, "...*would tend to get involved in risky behaviors and addictive things that can become addictions.*" Or as one participant put it, "…*I can only imagine*

that—you know that there are patterns that lead to problems with drug and alcohol that are similar patterns."

For one of the above participants, problem gambling represents a collective crisis of meaning reflecting that we have "… *gotten away from basics of our culture."* In this participant's view, gambling is "…*just another way to detach yourself from what I think the real root of life is: it's peace and understanding, how you are part of a community, and it's your responsibility to help people in this world and save your piece of the environment."*

This general crisis of meaning is also reflected in the words of an interview participant explaining her perception of the challenges both she and the youth in her program face. From her perspective "… *few kids really feel truly satisfied and alive in this culture…Some, yes, I think that there's a real loss of self among most of the kids … So they turn to these other things for thrill."* Further commenting, this participant finds it challenging to provide effective guidance and support to her youth because "…*the structures we have in place aren't dealing with …the root issues… It's like we isolate the issue from its core."*

The range of opinions about the need for prevention is also broad. For one interview participant, prevention initiatives aren't necessary because youth problem gambling is not even a concern. In the participant's opinion "… *it [gambling] is a problem and can be a problem. I just personally don't rate it very high up."* Another interview participant, in commenting on the inadequacies of prevention efforts for addressing other addictive behaviors, offers gambling itself as a form of prevention as a preferred addictive behavior. As the participant puts it, "… *we're not winning the war that's convinced people to stop getting high… people that are hurting their lives to the point they could kill themselves… if somebody was going to choose between smoking crack or gambling, I would say, well, go gamble."*

For other interview participants, gambling is not an alternative behavior to other addictions. Tied to a moral imperative for these interview participants, problem gambling necessitates some form of intervention that assists both children and their parents. As one of these group of participants puts it "…*if having that class gets one kid to recognize that behavior, it's one less person whose going to bankrupt themselves, you know, and that's a worthy—yeah, every person you can save is valuable."*

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And as voiced by another participant "*…kids and parents have a tough enough time as it is, you know, and I think if we can make the road a little bit easier for them, for both the kids and the parents, that's what we should be doing—without being judgmental about gambling.*"

And as to the present lack of youth gambling prevention education, the following perspective is shared by several participants, that is, it will only become a priority if a crisis presents itself. As one participant puts it:

> *…You know, if I asked you for a thousand dollars today, you'd probably tell me you don't have it. If somebody just walked up to you and injected you with some kind of toxin and I had the anti-venom and asked you for a thousand dollars, you'd find the thousand dollars, ok? So, it's a question of how important something is to you.*

This "tragedy" aspect of this discussion is explored in the section *Challenges.*

Even if there is a decision to provide gambling prevention education, one participant's perspective is that "*… it's a parent's right to take their kid away from them [prevention classes] if they don't want them to hear it. That's just the way it is."* This point of view was echoed in an informal conversation with a mother who did not want her high school daughter taking sex education classes. From her perspective, these classes were simply making engagement in sexual activity accessible to her daughter. Sexual activity like youth problem gambling is a youth risky behavior. It appears that the concern of some parents is that the in depth discussion offered by prevention education for a risky behavior can trigger engagement in the behavior as well as prevent it. This point of view contrasts with the premise of prevention education, which is that knowledge is empowering.

The interview participants' comments under the meta themes Money and Beliefs provide a sense of the weave of dynamics and issues that pertain to the community relationship with youth problem gambling. This discussion is not conclusive, definitive or all encompassing. However, the comments serve to provide insight into the multiple levels of impacts and thoughts within the community's life relevant to the issue. The following five meta themes more closely explore these dynamics and issues.

Awareness

Four themes emerged within the meta theme Awareness: 1) definite cognizance of gambling as a risky behavior; 2) lack of awareness; 3) public awareness; and 4) misinformation. The theme

lack of awareness has one sub theme: lack of awareness about what youth with problem gambling

issues might look like—the invisibility of problem gambling behavior.

The theme *definite cognizance of youth problem gambling* as a health issue, ranged from

individuals who were quite aware of youth problem gambling dynamics to developing awareness of

youth problem gambling as a health issue either related to their employment or as initiated in the

interview process. From one school professional's perspective who works closely with youth *"….*

there is no doubt that problem gambling is a huge problem…the suicide thing is there, yeah, they get

in so deep, they don't know how to get out." Another participant's experience is that gambling *"… is*

an issue in many forms."

 For one interview participant, recent employment has produced a heightened awareness: *"I*

think I noticed more after I got into this job... I mean, it's just so common with the 50-50 drawings at

the UVM men's basketball games… they have young kids up there drawing the numbers out." Some

participants found their awareness catalyzed during the interview process as they began identifying

familiar behaviors as actually being associated with gambling. In the course of an interview, one

participant moved from *"I have no specific information about youth and gambling in our community"* to

"I'm thinking about it more…" to, finally, relating a rich experience with youth and deer hunting based

gambling behavior. In telling the story, the participant integrated the memory with a reflection about

gambling behavior similarities to other youth risky behaviors.

In the same vein, another participant's initial response was that they had seen no gambling

with youth. They went on to relate that they had observed youth in online video gaming activities. In

the course of responding, the participant made the connection that offline traditional gambling venues

and online video gaming is one and the same in terms of being a gambling youth risky behavior.

This brings us to another aspect of the theme *definite cognizance,* which is the connection

between gambling and video gaming as addictive behaviors. Several interview participants

recognized these as variations of the same gaming behavior. In the words of one participant,"...*I am*

concerned about the amount of time that kids spend online playing games and I'm aware that a lot of

times those lead to gambling behaviors." Similarly, one participant observes *"… I can see the tie-in*

between all the games people play, the video games and, and, and the—just all the online things that

you can do now."

The next theme that emerged as a thematic aspect of the meta theme Awareness is *lack of*

awareness. Some participant comments indicated an overall lack of awareness of youth problem

gambling as a potential behavior of concern. Some participants simply had no exposure or

information pertaining to youth activities related to gambling. As one participant puts it "…*the*

gambling piece is not one that is pervasively in our minds and I think that's due to a lot of different

reasons." And in another participant's words, *"…it is interesting. I never really thought of it until you*

brought it up, and I think these are questions that do need to be asked. Because I would like to see it

not become more of a problem than it is."

Like the interview participants presented under the *definite cognizance* theme, the

comments in this section are from individuals who work directly in youth and youth related services

and/or community building activities and policy making around issues relevant to youth. This

disparate experience in awareness about youth problem gambling is referenced again in the section

discussing the Challenges meta theme.

An important aspect of the *lack of awareness* theme is the sub theme *quality of invisibility*.

One of the more eloquent representations of this aspect was offered in the following participant's

comment:

> *The reason it's hard to see a kid in trouble in high school is everyone assumes that there are
> adults there, and they're in a system and, if they're in trouble, somebody will notice. The kid is
> seen in slices of time throughout the day, so no one takes any responsibility for the whole day
> or what might really be going on. They see a slice, and the slice doesn't look that bad, and
> they don't see any more of the picture, so they don't really see the magnitude of what the
> problem is.*

The overall institutional invisibility described above is complicated by the ways in which

problem gambling manifests, which differs significantly from that of other youth risky behaviors. Key

to the *invisibility* sub theme is the inability to recognize potential/problem gambling behavior. This

aspect of invisibility differentiates problem gambling from alcohol and substance abuse and eating

disorders, each of which offers more visually identifiable behaviors. The indicators for problem

gambling require close attention because they could appear to be exhaustion, which could equally be

an indicator of all night online gambling. Or it could appear to be regularly going to the casino "for

fun," or regularly hangin' out with the guys for Saturday football. These are less definitive, more subtle possible behavioral indicators than those that might flag, for example, binge eating or substance abuse behaviors.

Participant comments reveal the sub theme of invisibility in different ways. Several participant comments emphasize the importance of the visible consequences of other youth risky behaviors in bringing about— "making the case for"—intervention initiatives. In one interview participant's words "… *you can find kids at your child's high school getting pregnant and decide you want to act out against teen pregnancy; you can see people die from drug overdose and decide you want to act out against drugs; when you don't see the consequence…you don't get motivated to act against it."* And even with the high visibility of youth involvement in other risky behaviors, an interview participant, expressing frustration with efforts to engage the community in actively participating in prevention efforts around youth alcohol and substance abuse, said "... *it's going to take somebody important losing their life or more than one kid losing their life because of drugs or alcohol before anybody's going to start waking up and, and doing something about it."* This comment again references the "tragedy pattern" discussed in the Challenges section below.

Another participant comment offers another aspect of invisibility. There are the people "*… in the forty and over crowd…"* who only associate "...*oh, he's got a gambling problem"* with " *he's broke, he lost his house, he lost his car…or sneaking off to go into like the little shack that the mob has set up someplace for you to play illegal poker,… "* not realizing that problem gamblers are more apt to "…*look like you or me – just with some real serious internal emotional pain caused by whatever is eating away at them because of their compulsive behavior."* Or one participant, who in commenting in the context of her work with youth alcohol and substance behavior, perceives gambling as "… *much more insidious…it's much more silent than …a carload of teenagers killed in a drinking and driving accident. The shock value you get from that creates a lot more waves of awareness than gambling… People don't see it [problem gambling behavior] It's not in their face the way that this is."* Again, this references the "tragedy pattern" dynamic discussed in the following section.

The third theme of the meta theme Awareness is described generally as *public awareness*, and this separated out particularly because of very specific references to public and parents. One participant's concern is that "*…in terms of education, I think adults need to see gambling as an addiction rather than just like a childish thing that kids get involved in.*" Or as one participant puts it "*… everybody knows you're going to win or lose, but that's all they think the problem is. I don't think the general public [with] regards to young kids, are aware that some personalities won't be able to stop doing it.*" A further parental lack of awareness problem is that "*…parents don't understand the technology that their children are faced with. So you have kids being exposed to things on the Internet that their parents can't grasp how they work.*"

And more generally reflecting public awareness, one participant points out, specifically, in terms of the lottery that "*...it's always been a good thing and it's very easy for people to think about it…So people don't have it in the frame of mind that it's a bad thing.*" It is challenging to address the negative impacts of gambling when it is identified with supporting education, a universally acclaimed good. This theme connects with the meta theme Challenges theme *patterns and perceptions* discussed in the following section. The *public awareness theme* also suggests potential intervention points. Intervention points are a theme discussed below in the Resources/Strategies section.

The fourth theme under meta theme Awareness is *misinformation.* Based upon interview comments, already presented, misinformation can take many forms. One is, for example, "*the forty and over crowd,*" referenced above in an earlier participant comment, that associates gambling with being broke, walking around looking like a beggar, and/or hanging out in back alley gambling dives. Another is the public awareness level based upon the misconception that inaccurately connects lottery gambling with simple "fun," with no or inadequate knowledge about gambling's downside, which is enhanced by the multiplicity and proximity of gaming venues.

The *misinformation* theme also surfaces in the discussion of individuals who have an understanding of gambling behavior based upon their experience with other addictive behaviors. As one participant states *"…I realized that some addictive behaviors or things like say crystal meth, you need to have a whole network, where with gambling, you don't need, it doesn't—it's not a social thing.*

I mean it's not where you need other people, or you just need to be able to place a bet…" The

interview participant perceives gambling as a "lone experience."

Horst et al. (2008) describe youth online activity in this way:

…Social network sites, online games, video-sharing sites, and gadgets such as iPods and mobile phones are now fixtures of youth culture… Today's youth may be coming of age and struggling for autonomy and identity as did their predecessors, but they are doing so amid new worlds for communication, friendship, play, and self-expression...In both friendship-driven and interest-driven online activity, youth create and navigate new forms of expression and rules for social behavior. In the process, young people acquire various forms of technical and media literacy by exploring new interests, tinkering, and "messing around" with new forms of media. (p.1-2)

Based upon this comprehensive research study, youth engagement with the internet through

social network and video sharing sites and online gaming is now a basic fixture in youth growth and

development The digital world is where youth explore social norms, develop friendships and technical

skills. The MMORPGs, such as World of War Craft, allow players to explore their personalities, not

unlike theatre (Itō, Horst, Bittanti, & Herr-Stephenson, 2009).

The participant's comment, on the face of it, makes sense; perhaps traditionally, gambling

was more of a loner activity, although games such as Texas hold 'em and venues such as casinos

certainly have social elements. Although, the loner dynamic is one aspect of the current youth and

problem gambling situation, in this case, the comment reflects an incomplete understanding of the

specific dynamics of the present youth culture, and, therefore, an incomplete perspective of youth

problem gambling as a public health or risky behavior issue.

The final significant aspect of *misinformation*, voiced by several participants, is that there are

no Vermont state studies relevant to Vermont youth and problem gambling. This is not accurate.

There are several studies available, albeit with lack of continuity in follow-up and consistent

comprehensiveness of coverage. Two studies address youth and problem gambling: the 2008

Vermont Youth Health Survey and a statewide survey administered in 1998 by Promos et al.,

"Gambling and Other Risk Behaviors Among 8th-12th graders'' to over 21,000 Vermont youth. In

addition, there are several state studies on Vermont youth and adult alcohol and substance abuse

behaviors. These studies include youth and adult health surveys as well a statewide comprehensive

population study conducted in 1995 by William Apao with Research Triangle Institute, "Use of Alcohol and Illicit Drugs and Need or Treatment Among the Vermont Household Population."

Although, these latter studies do not include gambling behavior statistics, because alcohol and substance abuse are co-occurring behaviors with problem gambling, statistics in these studies can be predictive in terms of evaluating the likelihood of problem gambling activities. This is particularly applicable if the alcohol/substance abuse studies' results are integrated with the available Vermont gambling studies along with relevant international and national gambling studies. The results of this integration could provide a useful evaluative tool for communities, organizations and government officials. And as previously noted, with one exception, none of these studies were referenced by the interview participants. Poorly disseminated information relevant to a particular health concern interferes with effective decision-making about the issue. This brings us to the next meta theme Challenges.

Challenges

The themes of the meta theme Challenges are *making the case, our perceptions and patterns, the enormous impact of video gaming, youth vulnerability, parents and money*. As mentioned in the preceding section, the Challenges and Awareness meta themes are closely interconnected. There is also a basic logic that connects these meta themes in that lack of awareness in any context generally creates some form of challenge.

Interview comments present various aspects of *making the case* as related to the overall economy, the previously discussed issue of invisibility, and the normalization of gambling as mainstream entertainment, to name a few. First, what constitutes "making the case," a phrase used by several interview participants? One participant, based upon experience with community project planning and policy making, spoke strongly for the need in a very specific way, that is *"… yes, there's a problem, and if we don't address it, we're going to have a real problem down the road… if you look 20, 50 years out, it's huge, so you know that's the way you make a case."* One participant, referring to a past experience suggested that what is needed is *"…something that would document that this is something that deserves attention,"* and went on to describe a 20 interview qualitative study that had

proved effective in leading to the development of addressing the issue. The participant's detailed description is discussed in the Resources/Strategy section.

One participant, in pointing out the need for "making the case" as requisite for successful funding, also speaks to the problematic issue of invisibility, stated that "…*a community might be slow to want to... spend their money, their tax money, on something that they don't see.*" Making the case, invisibility, and money are arithmetically connected by one interview participant who states that "…*I think that in today's climate ….you have to quantify how many children in the State of Vermont are experiencing a problem with gambling…as callous as that might sound.*"

And another participant raises the question that speaks to the premise *of making the case*. The question the participant offers is "…*when does it reach the point where it's considered to be a problem*?" From the participant's point of view, given the normalization of gambling/gaming, it is difficult to ascertain the point at which it becomes necessary to make a case. The participant points out the normalization as evidenced in its pervasiveness in our language, for example, "you wanna bet," "what are the odds of that happening," "give it a shot'" as well as the general depiction of gambling as family fun as evidenced by the 50-50 drawings at the UVM basketball games that use young people.

One aspect of *making the case,* the "tragedy pattern," is also tied to the *patterns and perceptions* theme, as well as to the meta theme Awareness discussed above. As described by several interview participants, the "tragedy pattern" is the need for a devastating event to occur before an issue relevant to the community is considered a problem. One interview participant offered the analogy of the lack of a stop sign at a cross roads. It often requires the event of a major accident before the decision is made to install a stop sign. Reflecting a larger societal pattern, one interview participant offers that "….*unfortunately I think in this society, we don't really do much about anything until it is a huge problem. Then we try to tackle it.*" And as one interview participant observes, the invisibility dynamic of problem gambling increases this tendency dramatically because " … *until you see a horrible consequence…you know a Columbine style shooting happens… a consequence they can recognize as being about youth gambling, it'll be very difficult to see adults motivated to engage in large-scale prevention activity.*"

It's not only the invisibility aspect of gambling which makes it difficult to decide whether or not it's a problem that needs addressing. Several participant comments suggest that society's general patterns and perceptions towards the issue of gambling and those who gamble is also problematic. This brings us to the *patterns and perceptions* theme. A general pattern from one participant's perspective is simply that it is difficult to face the depressing issues and circumstances associated with this type of community challenge. The participant suggested that this difficulty contributes to the difficulty in accessing funds for prevention education, which is addressed under the *money* meta theme above.

As discussed earlier, gambling is perceived as an individual's personal choice. Again, unlike the potential familiar risks associated with other addictive behaviors, the perception is that the gambler's behavior is self-contained, or in one participant's words, "…*people that are gambling are perceived to be doing their own thing, not bothering anybody. If it affects them, it only affects them."* It is seen as an isolated behavior; however, as discussed in the preceding section, this reflects incomplete information about gambling behavior (Awareness*)* that affects perception (Challenges*)*.

Also misleading is the general perception that gambling is simply innocent family entertainment. In one participant's words "…*you hear about people winning money and that's a great thing...but something that look like so much fun, and seemingly that has so many rewards…"* is not easily perceived as other than a "good thing." In the case of the lottery, this image is enhanced by the association of lottery profits as a contribution to public education. The participant ends this comment with "…*because nobody talks about the down side of this [activity]."* This overall pattern of perceptions, which tends to mask the gambling issues which feeds into the "tragedy theme" pattern discussed above.

The final *making the case* aspect emerged in the meta theme Awareness section above. This is the challenge of effectively discussing the issue of youth and problem gambling given the wide range of awareness relevant to the issue. Based upon participants' comments, awareness ranges from "*no doubt that gambling is a huge problem*" to *"no experience or information related to youth and gambling activities."*

The third theme under the meta theme Challenges is the *enormous impact of video gaming.* As already discussed, MMORPGs such as World of War Craft, a subscription video game, has in the double digit millions of subscribers. Other popular subscriptions include EverQuest, Asheron Call, Ultima Online, Final Fantasy, Vanguard, and City of Heroes.

Importantly, most kids can play poker, blackjack, and other casino games on their PlayStations or Nintendo DS. Some games even offer them the ability to hop online to play for real money. And most of these games are rated "E" for everyone. The most recent Macarthur funded survey conducted by Pew Internet & American Life Project indicated that most youth play video games. Based upon a nationally representative sample of 1,102 young people, ages 12 to 17, and their parents, results indicated that ninety-seven percent of young respondents play video games. That's 99 percent of boys and 94 percent of girls, with little difference in the percentages among various racial and ethnic groups and incomes (Lenhart et al., 2008; Messerlian, Byrne, & Derevensky, 2004).

The Entertainment Software Ratings Board (ESRB) establishes ratings for appropriateness of video games. As detailed on their website, Lane County Prevention Gambling research shows based upon ESRB- ratings, 91 games contained words related to gambling such as "poker," "blackjack," or "slots." Seventy-three (80%) of these games were rated "E" which means everyone can play, five of the games (5.5%) were rated "T" for teens and seven games (7.7%) were rated "M" for mature. This provides many kids easy access to playing poker, blackjack and other casino games on their Nintendo play stations. In additions, some video games facilitate them accessing gambling online sites. So although, the legal gambling age in most states is 18 for lottery type games and 21 for casinos, it is actually easy for children to begin gambling in the safety of their home environment. (Lane County Health & Human Services, n.d.).

Youth accessibility to the internet, the normalization of gambling language within the games' structure and the wide range of video gaming options that, like gambling, involve high risk taking, has generated a "new" youth addiction behavior option. Based upon international and the first national study, 7 and 11 percent of youth worldwide are considered pathological gamers (Gentile, 2009; Gentile et al., 2011).

The enormity of the video gaming presence interlinks with the most disturbing theme under Challenges, which is *youth vulnerability*. There were several awareness comments that acknowledged an understanding that, although video gaming may or may not directly involve money, it is engaging and catalyzing the same addictive patterns as any risky behavior. And, importantly, youth, as evidenced by the above statistics, may be more likely to engage these video games than the traditional online gambling venues. In the words of one participant, "…*whatever it is, if it's a piece of software that reinforces the gambling behavior, it's still accomplishing the same damage, whether the monetary impact is felt … you're training people to behave with compulsive natures. And it [compulsivity] may manifest itself in gambling addiction, drug addiction—any form of compulsive activity*."

The participant goes on to point out that the effectiveness in engaging this compulsivity behavior is enhanced "…*with multi-media experience, music…sound, light, all these other reinforcing factors*" associated with video gaming and gambling venues. These reinforcing factors, like color matching, are used equally in children's learning games "… *to keep kids playing them and playing them and playing.*"

The advertising and availability of venues is particularly impactful on the youth population, indicated in another participant's comment who reminds us that "…*the brain doesn't really stop developing till we're 25, so, even once you're out of school, you're still developing during those early adult years.*" This brings us to the heart of the vulnerability issue: the potency of the expanding technology used in developing and promoting gambling venues. As expressed in another interview participant's words is the fact that "…*children (are) absorbing all this stuff from technology without any kind of valuation process… they're in the learning phase of their mental and psychological development… raised in an environment where they regard digital anything as just a natural part of their existence.*" And this participant goes to offer the opinion that this vulnerability is heightened by the fact that, for the most part "…*their parents don't understand the technology that their children are faced with. They don't understand the psychology of it; they don't understand the technology of it.*" More than one participant expressed this perspective. The significance of this vulnerability based upon biological and technological components was driven home in a telephone interview with a

business person engaged in research designed to more effectively market gambling. The focus of this participant's research is to find the visual, audio and verbal stimuli that will stimulate the brain chemistry in engaging actively in gambling activities short of addictive behavior. The lack of stability in the teen brain makes it particularly vulnerable to these stimuli (Winters & Tapert, 2010).

This brings us directly to the next meta theme Challenges theme of *parents.* Parent dynamics and perceptions play a central role in the community's relationship with youth problem gambling both in terms of clarifying whether there is a problem, and if needed, initiating, supporting and/or collaborating in the development of necessary prevention initiatives. From the above participant's perspective, one aspect of youth vulnerability is that parents are generally uninformed about the technology that is integral to their children's lives, and this is problematic. As the interview participant puts it "… *in order for parents to continue to be a useful resource to their children…they would have to continue to remain abreast of current technology."* The participant suggests that keeping up with the technology could be challenging for the teen parents who often work "*a forty or fifty hour work week and, you know, pay the bills and do whatever you do as an adult."* Other participants echoed this perspective: that the demand on parents' time to address the family's economic needs interferes with their developing an understanding of the problematic aspects of youth and problem gambling and how it may affect their children.

Another parent issue as perceived by another participant is simply that parents often tend and/or wish to see their children as innocent, "…*projecting their own need to keep the children innocent onto the child."* From another participant's perspective, this difficulty in seeing one's child as other than innocent is, at least, in part, one of perception based upon misinformation. As this participant explains, the problem is that parents "…*don't understand what betting is."* The parents' image of gambling tends to be tied to "…*going to the track, you know… sit around sleazy rooms, smoking cigars, and throwing down bets on black jack,"* and they can't imagine their children engaged in those activities. And, perhaps, more to the point, another participant puts forth simply, that the uncomfortable fact of the matter is "…*nobody likes thinking about their kid as a gambling addict…it's depressing."* One final participant comment introduces another aspect of the *parent* theme. In the language of community assessment analysis, the participant offers the perspective that "…*there's a*

*lack of community readiness…"*around this issue at this time, which in turn also reflects as a dynamic of the *youth vulnerability* theme.

Money is the final theme that emerged under the meta theme Challenges. Discussed under the meta theme Money as a larger contextualizing or "backdrop" facet of the participants' comments, *money* emerges in this section connected to community specific dynamics. Community readiness is key to initiating and implementing policy initiatives. The community is a multi-level entity consisting of local, regional, and state dynamics with parents engaging as actors in various roles on all of these levels. A participant perspective, addressing this aspect, makes the point that "…*the people who have the purse strings have to perceive this as an important enough problem to loosen those purse strings for you. Again, it's not that the money isn't there. It's just that somebody gets the money and somebody doesn't."* And the challenge again, in part, in identifying gambling as an issue of concern, is the "tragedy pattern" addressed above. Speaking to this pattern, one interview participant states that "...*our legislators… aren't going to see there's a problem until they see the cost and impact on employment and things like that. …, they don't see it as a social problem because nobody's getting hurt, no one's dyin'."*

Another perspective offered by an interview participant is that the issue isn't perhaps so much raising the money because "…*humane societies never have a problem with awareness and fund raising….talking about helping cute little puppies…rescuing kittens…everybody's on board for that."* But as the participant points out gambling abuse and related health issues, like the downside of other youth risky behaviors, and not unlike animal abuse issues, are not pleasant or easy to face.

The linked meta themes Challenges and Awarenesses, as well as the contextualizing influences of Beliefs and Money, have been explored. The next set of linked meta themes are Resources/Strategies and Prevention. Two themes emerged for Resources/Strategies meta theme: *community experience* and *suggested intervention points*. The meta theme Prevention themes emerged as *pro-prevention* and *prevention critique*. In the analysis process, Prevention is tied very closely with the Resource/Strategies meta theme, but it had sufficient presence in the participant comments, and therefore worked more effectively as a meta theme. The meta theme Prevention will be discussed in the section following the meta theme Resources/Strategies.

Resources/Strategies

   Reflecting the Resources/Strategies' theme *community experience,* the resources and strategies that emerged from the interviews were generally personal perspectives and/or tied to specific projects in which the participants had been or were presently part of. The key aspects included youth partnerships, engaging community in establishing the problem, providing alternative activities for youth, and building upon what works.

   Voiced by several participants, the strategic value and critical need for youth involvement in a non-peripheral role was clearly put forth by the interview participant who stated that "…*youth need to be resources and partners in the processes that need to be developed,"* —that in fact, from the participant's experience, "…*the more that youth are involved, the more you're guaranteed to be successful."*

   Other participants offered suggestions for overall goals and approaches for activating community involvement, as well as perspectives about important foci for the intervention design process. In terms of goals, a key reminder offered by one participant is that as a member of a community working within a community development framework, it is important to remember that identifying the particular youth challenge and deciding to create an intervention is actually the beginning of the prevention process. In the participant's words, "… *once it's begun, you actually are developing the prevention plan."* The participant goes on to reiterate that the community development approach provides a basic plan, "..*so - that instead of reacting… the community has a plan that institutionalizes basically the way young people are treated and reduces the problem from re-occurring."*

   Another participant, also referencing the community development framework, implies, by stating what appears to be the obvious - that given the multiple levels of community that impact youth "…*you have to support the kids… if you don't want the kids to gamble, same as if you don't want the kid to take drugs, you've got to have other things for (them) to do… support and education there to show them there's another way."* More broadly addressing the multiple levels of community

responsibility and influence, another participant points out that "*…educating people is important in all aspects. So educating people about positive addictions, if you will, as opposed to negative addictions is important as well as role modeling good behaviors and community responsibility.*" (The participant described exercising as a positive addiction.)

Several specific strategic approaches have already been discussed under the meta theme Challenges theme *making the case.* For example, a participant with experience with the legislative process offered that "*…the strategy that works with the legislature is informing them that in the environment we're in right now… we're gonna save money in the long run if we spend a little bit of money up front on prevention, education and treatment with these youth problem gamblers.*" The participant goes on to say that the rationale for this community comprehensive approach is that "*… potentially that person [youth problem gambler] is going to engage in riskier behaviors and potentially that person is going to become a resident of our correctional facility….and that costs us all a lot of money.*" As well as suggesting an effective strategy, the comment also speaks to the meta theme Prevention discussed in the following section.

The interview participants offered a wide range of solutions or models based upon a community's collective experience that fall under the *resources* component of this meta theme. The participants' comments represented a diverse range of project experience through which suggestions were made and information could be gleaned for guiding the decision making around the issue of youth problem gambling intervention initiatives. That is, if in fact, a consensus were to develop that the youth problem gambling is a community health issue/risk factor that requires strategic attention.

For example, one participant, further emphasizing the significant role of community, recommended, based upon experience with a project addressing the invisibility of poverty, the importance "*…of creating learning communities in small areas because we know that we function better in our own communities, in our own regions… training people in their community to understand what they're looking at.*" Another interview participant described the grassroots success of the twelve step program with its minimal costs to the clients. (There actually is a Gamblers' Anonymous International service organization that provides support resources for recovering gamblers. There is

not a branch in Windham County. Also, it does not appear to have a program specifically designed for youth problem gambling.)

Another interview participant, based upon the experience of working closely with a youth program, detailed its strategic approach for initiating the process for addressing a community problem. The process began "… *focused on a problem and the problem area became an action group…we went through stages…then we moved to meeting of community partners who had signed the Memorandum of Understanding…and our program developed from the MOU."* Another participant described an initiative that developed awareness around the issue of poverty that offers a model for addressing youth and problem gambling. This project began with *"trainings on poverty…so they have to understand what they're looking at."* The participant went on to say, referencing the issue of poverty, *"…nobody talks about the down side of this…what happens to people when they lose their money."* This echoes what also appears to be the missing discussion about the downside of gambling in the context of youth risky behaviors.

Of equal value, was a more overarching comment offered by one interview participant, providing a big picture perspective on the issue of youth problem gambling. From the participant's point of view "… *our economy needs…to work hard creating things for people to do that are positive and educational as well…… in redefining how we look at work and you get a job. We buy a machine that replaces five people… and you think, well, maybe, we should hire five people instead of the machine."*

This comment reframed my thinking about the *resources* component of the meta theme as well as the meaning of the theme *community experience.* The original rationale for *community experience* as a theme was that it offered insights into the range of expertise and involvement with similar community projects that emerged from the conversations with the interview participants . In short community experience was linked to concrete project-based experience. However, I was really struck by this last interview participant's comment regarding rethinking "how we define" work. It isn't a new idea. The manner of the participant's delivery served as a blunt reminder to me how "tip of the iceberg-like" the issue of youth problem gambling is.

Gambling is inextricably intertwined with our choices in allocation and development of

resources. Our declining tax base is directly related to the loss of jobs, which is directly related to the number of jobs that are outsourced. This business decision to downsize and outsource jobs is a choice in the development and allocation of resources. All extractive industries, whether clear cut logging or gambling, have both immediate and far reaching impacts upon the ecosystems of which they are a part (Adams, 2007). So although I had started out thinking about *community experience* as concrete projects and individuals with specific, project expertise, this participant's comment was a reminder that a great and important community resource is in clearly articulated reflective, critical thinking.

The second theme under Resources/Strategies is *suggested points of intervention*. Suggested or implied points of intervention varied ranging from financial to organizational structures to the youth themselves. One interview participant suggested that the "…*first thing…somebody should do is research to find out how much financial cost this [youth problem gambling] is to the state.*" Another recommended intervention point was to use the annual Vermont Council on Problem Gambling conference as a starting point. From this participant's perspective, the Conference was a strategic opportunity where those already concerned about the topic could "…*begin by developing a plan of action with the adults and then evolve into working with students … using knowledge gained from the first stage.*"

Another participant, reflecting the experience of involvement with both community projects and the legislative process, suggested *"…asking the Board of Education for permission to send out a survey to every school… ask the kids to fill it anonymously…because nationally it [youth problem gambling] is becoming a problem and there's documentation …we just don't have enough information locally."* Or one participant, having worked with Gamblers' Anonymous, recommended developing a point of intervention based upon the GA model, by creating a special call in number for youth and individuals concerned about youth with gambling concerns.

From another participant's perspective, two aspects of the community could serve as points of intervention - , the home and school settings. The participant recommends a clarifying question for the starting point of an intervention based upon this focus: "…*What is it that young people need in their upbringing and in their classrooms that prevents them even thinking about gambling - so that*

they have developed life skills that don't put them at risk that way?" And another intervention point suggested by one interview participant is educating parents through sharing the experience of someone who has gone through recovery *"…using them [recovered individuals] as a vehicle to think about their children and the influence on their children."*

This final suggestion as a point of intervention connects with a comment by one interview participant working closely with youth in the school system. The participant shared the personal observation that "…*for Vermonters, like for so many people, the data is just data. It's the stories…you can have the latest research but it's the stories that make a difference,*" a comment suggesting both a resource and a strategy for developing intervention initiatives. Another participant, who does gambling education, also emphasized the powerful role of life stories in increasing awareness about problem gambling.

Prevention

The health prevention framework is conceptually broad and seen in many forms ranging from flyers to five second television spots to national/international health campaigns. The interview participants referencing prevention sometimes use prevention terminology and sometimes simply identifies prevention activities by the various forms that it can take. The Prevention meta theme has two themes: *pro-prevention* and *prevention critique.*

The proponents of prevention ranged from the rationale supporting its use to "who to target" to suggestions for operationalizing a prevention approach. The rationale, from the perspective of a participant working with the legislative process is to "... *either keep them from getting into gambling or if they are in gambling, help them out as much as we can and throw the resources at 'em early to prevent them from getting into those riskier behaviors."* One participant simply quoted the old adage "*an ounce of prevention is worth a pound of cure."*

For operationalizing prevention, one participant suggested the "… *education of policymakers, at least, and I think if we can identify those folks that have the problem with gambling"* as the key targets. Operationalizing also means, based upon the words of one participant, "…*keeping those issues up front in the surveys that you're asking our youth about and track their responses from year to year."* From another interview participant's perspective "… *the fact that youth that gamble also*

tend to exhibit either risky behaviors which include alcohol and drugs… it seems to that me if we can identify youth problem gamblers, we might save them some heartbreak and hardship in their lives."

Finally, one participant's comment, while emphasizing youth involvement in operationalizing a prevention approach, also reflects, perhaps, the most critical rationale underpinning the prevention approach. In the participant's words "… *if you treat them as a partner in tackling the problem [operationalizing] you are developing a core of ability and judgment and critical thinking and planning for their lives…And, you're in the process expressing your care and your deep caring for them and their future"* [rationale and target].

Along with the pro-prevention perspectives were the participant who offered critique of the prevention approach. From one participant's point of view, if a person is gambling, prevention efforts may or may not be useful; this opinion reflected a personal experience with an alcoholic addiction that developed despite extensive exposure to prevention education. In the long run, prevention has been effective, perhaps, as the interview participant suggested, because of the "seeds" that were planted early.

One participant comment questioned the logic of prevention based on his perception of the success rate of prevention programs. On the individual level, from the participant's perspective, in terms of prevention efforts "… *you can talk about it, but if they're not doing it, they're not going to listen to you."* And on a larger community scale, the participant perspective is "…*We're not winning the war that's convinced people to stop getting high, let alone stop gambling…"* Questioning the effectiveness of drug prevention initiatives by inference raises a question about the effectiveness of gambling prevention activities.

Several participants questioned the effectiveness of prevention efforts from a monetary perspective. The primary criticism was around money wasted or inappropriately allocated. One participant offered from years of experience the observation that "….*I've seen a lot of money spent on a lot of prevention. Yet, if you study what they do, they print expensive little booklets with pictures of people who work there taking photos together, and different meetings that they have, but the actual like hands on effective stuff for millions of dollars that's spent is nothing really is happening."* Similarly stated, one participant observes about one program "…*It's a great cause…, they're not, they're*

accomplishing very, very, very, very little for millions of dollars in taxpayers, money, you know and nobody admits that." Another participant, commenting in the same vein, states that "...*most big campaigns they start at the top and the money and the effort trickles down to some hands on things*." The question of "finding a solution" continues in, the final meta theme which addresses interview participant comments around state policy.

State Policy

The final meta theme shaped by interview comments is *state policy.* Having established the range of awareness and challenges around the issue, as well as the strategies and resources related to the issue, it seems appropriate to next explore what galvanizing action around the issue might involve. The interview comments offer insights into this. Recognizing that the preceding meta themes are interconnected with taking action, two themes *money* and *policy dynamics* fall under the meta theme State Policy.

Several comments were made by participants that provided insight to state level dynamics related to youth problem gambling. The state policy dynamics seem, in part, to reflect the previously discussed "tragedy pattern" and the theme *making the case.*

One participant comment integrated policy-making, the tragedy pattern and *making the case,* offering the perspective that in "...*the state budget, with the local budgets, within the regional budgets, there are funds that can be used for things like this. Someone says we don't have the money, what they're really saying is, we don't think this is important enough to allocate money to right now."*

This statement directly connects to a participant comment familiar with state level processes who points out that "... *we on a state level tend to deal with things after they do become a problem. You know, I think that's true of the country in general."* This comment also is substantiated by another comment relevant to state level dynamics referencing *making the case.* In this participant's words, "...*I'm giving you information based on my experience in Montpelier ...you've got to make the case for yes, there's a problem, and if we don't address it, we're going to have a real problem down the road."* And speaking more specifically, in terms of receiving project funding, one participant's perspective is "*you have to make a case for numbers because resources are scarce."* The need to

make youth problem gambling visible as a problem echoed in the comments of many of the interview participants.

Having explored the themes that emerged from interviews with a range of community members, the following discussion is of the perspectives shared during the youth focus group activities.

Youth Focus Groups

The main objective with the youth focus groups was to create a safe space for having a discussion about youth and problem gambling with youth participants. The purpose for the discussion was to begin gaining insights and/or experience that youth in the Windham County region have relevant to gambling.

Two youth focus groups were conducted with participants from the Brattleboro Boys and Girls' Club, which serves the Windham County community. One group consisted of eight youth. The second group consisted of eleven youth.

In the first focus group session, which lasted 50 minutes, I showed a gambling docudrama video, produced by a group of New Jersey youth in conjunction with the New Jersey Council on Problem Gambling. Discussion of the video was followed by the written questionnaire detailed below in Table 4.1 below.

TABLE 4.2   Video Questions

1) What did you like about the video?
2) What didn't you like?
3) Did anything in the video surprise you or cause you to think about gambling in a way you hadn't thought of before?
4) What did you learn?

Two of the eight participants responded "no" or "not really" to question three. All eight participants indicated that they had learned something. Responses to question four included statements like "gambling can really cost you your life in ways that I hadn't imagined" or "I learned

gambling can change your life forever." What is significant is that the majority of the participants learned something that was new and/or important to them.

The second focus group session, which lasted 60 minutes, consisted of eleven youth participants. Based upon the request from a participant in the first session, I began this session with a short video that provided statistics about problem gambling. The large group was then divided into two smaller groups. Each participant received a gambling screen to evaluate. The screen questions are presented in Table 4.3 below.

TABLE 4.3 <u>Gambling Screen Evaluation</u>

1= Poor
2= Ok, could be improved
3= Good
4= Excellent

1) Do you gamble or bet on games?   Is this a good question? 1 2 3 4

2) Have you ever felt that your gambling or betting was out of control?
                                                                              Is this a good question? 1 2 3 4

3) Have you ever gotten into a fight with your family or friends because of gambling?
                                                                              Is this a good question? 1 2 3 4

4) Have you ever felt like you lost too much money in gambling or betting?
                                                                              Is this a good question? 1 2 3 4

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1) Which questions would you answer honestly? Do you think other students would answer them honestly? Why or why not?

2) Did you find any questions excellent/poor? What made them excellent/poor?

3) What changes would you make in the questions e.g. completely different questions? If yes, give examples.

4) If you think there should be changes in the questions? Explain why.

THANK YOU!!

The majority of the youth who participated in the first focus group were also present in this second focus group. There were four new participants in the second group. The purpose of the

informational video in the second group was in response to the youth participant who wanted more

facts about youth and problem gambling. The participants provided frank responses pointing out that

some questions were too personal and that even if they would answer the questions honestly, they

knew youth who would not. A couple of the participants indicated that because a question was

personal, they would not answer it. Again, the screen was a tool for discussing and learning, not

evaluating behavior.

The third questionnaire presented to the second focus group is outlined below in Table 4.4.

This questionnaire consisted of two questions:

TABLE 4.4   <u>YOUR THOUGHTS</u>

1- not at all;   2 – somewhat;   3 – pretty useful;   4 – very useful; 5 – important

1)   Is talking and learning about gambling useful?

2)   Give the most important reason for your choice.

THANK YOU!!!

In response to the first question regarding the usefulness of learning about gambling, nine of

the participants in the second focus group indicated that it was pretty useful, very useful or important.

Two participants answered that it was not at all useful. In explaining their responses, six participants

described knowledge as important to making decisions (e.g., "knowledge is power," "it's good to know

the facts," "if we know more about it….we're less likely to do so much"). Another participant

responded that the topic was "interesting to keep in mind," suggesting the simple usefulness of

awareness. Another participant suggested that knowing about gambling could be useful in helping

someone else from getting involved. One commented that it wasn't important because it wasn't an

activity in which the participant participated while another felt that two few youth gambled to make the discussion about youth and problem gambling important.

These focus groups provided insights into one representation of Windham County youth culture. As stated in the Methods chapter, the Program Director in working closely with the participants, observed no gambling behaviors except in the form of video gaming. In his experience, unlike other youth risky behaviors, gambling conversations had never surfaced. From his perspective, gambling was, at the most, an insignificant part of their lives.

Within this context, the first focus group results found all of the participants learning something that increased their understanding about youth and problem gambling. In the second focus group, the majority of the participants indicated that they thought it was useful to learn about youth and problem gambling. Given the increasing availability, normalization, and advertisement that encourages engagement in gambling activities and   given the co-curing relationship of gambling with other youth risky behaviors, the results of the focus groups suggest that education about problem gambling is valuable to youth. Also, the youth group activities indicate that there is a receptivity to learning about problem gambling relative to the youth community. And as awareness—in the form of other risky behavior prevention education—is an established state protocol, the focus group participant responses and feedback suggest the value and importance of incorporating gambling prevention education. Finally, the focus group participants candid responses to both the appropriateness and the effectiveness of the gambling screen questions in eliciting accurate information offers insight in how/how not to approach the data collection on youth problem gambling.

Summary

In concluding this chapter's discussion, the question is: What have we learned about the overall community's knowledge, awareness, biases, and challenges relative to youth and problem gambling?   In terms of knowledge, the interview comments revealed comprehensive experience in program initiatives for addressing community issues. Based upon participant comments, the range of awareness was from no knowledge about youth and problem gambling to being deeply concerned about its pervasive presence in the lives of youth. Community biases reflect in the normalization of gambling as a fun, family activity that contributes its profits to the state's education fund combined

with various misperceptions about gambling and those who gamble. In turn, these biases create difficulty in making the case for gambling's downside.

Challenges lie in the difficulty in engaging an effective discussion about problem gambling based upon the wide range of awareness and beliefs about youth and problem gambling, the invisibility of problem gambling, and the tendency of individuals and communities to initiate their responses based upon the principle of the "tragedy pattern." This pattern operates on the individual, organizational, and legislative levels. In addition, there is the pervasive driving influence of technology both in advertising of gambling venues and the explosion of video gaming. This heightens youth vulnerability and increases the difficulty for those technically challenged, often parents, in fully understanding the dynamics of youth and problem gambling. And finally, there are the larger questions raised about gambling as an investment by the state as a source of revenue. As one interview participant puts it, *"Is investing millions of dollars in promoting a game of chance as a major source of state revenue the message that we want to send our youth about how to best use their skills and abilities?"*

The final chapter, Synthesis, Chapter V, discusses the results of the analysis in the context of the research study's questions and aims.

CHAPTER V

SYNTHESIS

The purpose of this chapter is to discuss the findings of the data analysis within the context of the overarching research question, the specific research question and the research aims and their attendant questions. The overarching question of the inquiry is "How can formative research engage and inform community and government decision makers about health issues that can negatively impact a community's resilience?" The specific research question is "How can formative research engage and inform community government decision makers about the issue of youth problem gambling in Windham County, Vermont?" The research inquiry has two main aims. Each aim has its associated exploratory research questions.

The first aim is to develop and evaluate the effectiveness of a conceptual framework for the formative research methodology upon which this inquiry is based. The attendant research questions for the first aim are: 1) does the framework's application provide knowledge about community-specific dynamics and resources relevant to youth problem gambling in Windham, County, and 2) what challenges, if any, arose?

The second aim is to apply the formative research methodological approach in an inquiry designed to better understand the challenges, resources, knowledge and other community-specific information that would either facilitate or challenge the development of an appropriate health initiative for addressing the issue of youth problem gambling in Windham County, VT. The second aim has three attendant questions. The first question is who emerges as stakeholders/community participants and are diverse community voices represented? The second question is what community-specific information emerges? Possibilities included but were not limited to differences in the way stakeholders/community participants view YPG, power dynamics, exclusions in the snowballing process, resources, biases, and socio-economic, political and cultural dynamics. The third question is do community participants believe that some sort of intervention is necessary? Why or why not? Who does? Who does not?

The discussion will begin with the study's aims followed by addressing the findings in the context of the main and overarching research questions.

The Study's First Aim

The first aim is to evaluate the effectiveness of the formative research conceptual framework as outlined in Chapter II. How effective was the framework in guiding the formative research design? Did the framework's application to formative research on YPG provide knowledge about community specific dynamics and resources? What challenges, if any, arose?

How effective was the framework in guiding the formative research design?

This section will look at the basic formative research conceptual framework as outlined in the conclusion of Chapter II and explore its influence on the research process. The framework incorporates principles from Narrative Inquiry and Community-based Participatory Research/Participatory Action Research. I begin with those principles drawn from Narrative Inquiry.

From Narrative Inquiry:

> *Principle I: the researcher regards the making, sharing and seeking understanding through the narrative forms as an act of honoring the sacredness of our shared humanity (Hendry, 2004).*

> *Principle II: the narrative inquirer acknowledges that s/he is entering field of inquiry and its multiple levels of interconnected stories (the research community) with his/her personal stories.*

In this study, as discussed in Chapter II, the field of inquiry is the study's research, specifically, the issue of youth and problem gambling in Windham County, Vermont. The second principle is a reminder that I bring to the interview process my history and experience in general, and, specifically, my understanding and research of the issue of youth and problem gambling. The caution for me was to be aware of the presence of my stories as I talked with the interview participants and to share aspects of my stories as stimuli to the discussion—as opposed to having a need to express "my" opinion.

As encouraged by the active interviewing process discussed in Research Design, Chapter III, the researcher and the participant engage together in exploring the research topic facilitated by the interview guide. I approached each of these interviews as a learning opportunity about an unfamiliar but fascinating topic, the interviewee as a resource with a wealth of information, and the interview process as a golden opportunity. I looked forward to the experience of engaging in a conversation

with each interview participant and learning from her/his general background and history and unique understanding and experience with youth and problem gambling.

Importantly, the entire process was rooted in creating relationships or as Hendry (2007) describes it, the field of inquiry becomes a place where, "…we become present to our relationships and interconnections with others" (p. 496). So, although the production site dynamics of interviews, observational data, categorizing and recording were all taking place, the context of what was taking place rested in the engaging of a shared relationship about a shared concern. Hendry (2007) describes this as a deconstruction of "the duality of research/non-research, subject/object, and knower/known" (p. 496). These two principles underpin and support the engagement of the remaining principles.

> *Principle III: the narrative inquirer's primary action is one of listening and trusting the evolution of meaning (data/research outcomes) is inherent in the process w/o without making it happen through interrogative questioning and methodological strategizing.*

This principle is reflected in the generality of the research questions and the conversational flow of the interviews. The importance of listening, of hearing what was being said, how it was being said, reading/re-reading/re-listening to the transcripts, and hearing the interview participants speak was central to this process. Listening to and hearing the uniqueness and specificity of the interview participant voices is critical to understanding and to evaluating information that emerges in the exchange of the interview process. Sharing of information is as much 'what's not said' and 'how it's said' as what is actually verbalized. For this reason, I chose to use the interview participants' comments whenever possible to communicate the study's findings. I re-listened to their voice recordings. And, unfortunately, in some instances, the delivery adds another dimension of communication which the written word cannot represent.

I now turn to those principles of the formative research framework drawn from Community-based Participatory Research/Participatory Action Research:

From CBPR:

> *Principle IV: acknowledges the community as the research entity capable of articulating its challenges and fully participating in creating solutions, and*

> *Principle V: recognizes that definition/s of community must emerge from the community voices.*

These two principles are reflected in the original impetus as well as the design of this project's research. The study originated from one community organization's concern about the issue of youth and problem gambling. The organization's director asked if I would work with them in putting together a research project on youth and problem gambling. In initiating my investigation of the problem, the organization provided the opportunity for me to develop a service project. This project established a community- academic collaboration to begin systematically creating a better understanding about the community's relationship to this public health concern. The learning and relationship building process of the service project also supported the raising of awareness within the community about this issue. And as discussed in the Research Design, Chapter III, the initial interview participants, recommended by this organization for this project, had already expressed concern about what appeared to them to be an under addressed health challenge. The service project participants' recommendations initiated the snowball sampling which provided the interview participants and focus groups for my dissertation study.

The interview questions were diverse and broadly framed to stimulate participants' to speak freely about what they perceived as challenges and possible solutions to the issue. Based upon the length of the majority of the interviews, the questions proved effective in assisting in an open free-flowing communication process. Snowball sampling provided a mechanism for allowing the community to define itself. As pointed out in Chapter III, the study's interview participants did not include several significant community voices. This is discussed in greater detail below. Omission of significant community voices provides one direction for identifying interview participants for phase two of the research design. As discussed previously, voices omitted are as valuable data from the snowball sampling technique as those that are recommended. Community dynamics are defined both by what is presented and what is left out.

As a first phase research design, the sampling process offers implicit cautions. One caution is that, of the twenty-two interview participants—with the exception of one college student—all were professional people who recommended other professionals for interviews. The professional demographic is also associated with at least middle level income level. Youth problem gambling is a broad range community health concern for all socio-economic and educational levels. A second

caution, discussed above, is in noting the voices that did not emerge in this first round. Both cautions serve as a reminder to the researcher that community is not a homogeneous group of individuals with a shared culture, value system and norms. It is a reminder to be attentive to community-specific power dynamics inherent in most community structures.

> *Principle VI: defines collaborative equitable relationships as those that are mutually beneficial to outside researcher/s and the research community included but not limited to the decision-making about how information and resources are identified, gathered and used.*

The decision-making as in *how information and resources are identified, gathered and used* is addressed collaboratively. My initial involvement was a collaboration with the above-mentioned concerned organization that provided the opportunity for the service project. Snowball sampling facilitated the service project participants to identify potential interview participants for my dissertation. These recommended individuals could then choose whether to participate in the dissertation research.

I continue to share the research formally and informally, verbally and in writing whenever the opportunity presents itself. As included in the preceding section, the statistical studies, one of which was entirely new to the community, has been shared in the context of a workshop presentation with a key K-12 educational organization in the state as well as with state legislators and community organizations. One legislative interview participant asked that a summary of the statistical information with references for more expanded research be sent to three specific legislators. Interestingly, the legislator participant interested in securing a presentation of the results of this study for the state legislature's spring session 2011 was re-assigned to a totally unrelated position by the new Vermont administration.

The Vermont Council on Problem Gambling, for the first time, incorporated focus on issues related to youth and problem gambling at its annual 2011 conference including a workshop on my research findings. In addition, for the first time the Adult Risk Survey asked the Vermont Council on Problem Gambling to provide three gambling questions for the survey.

The second question relative to this aim is: Did the framework's application of formative research to the public health concern of youth and problem gambling provide knowledge about

community specific dynamics and resources? Based upon the discussion in the Findings Chapter IV, the answer to this question is "yes."

The third question is what challenges, if any, arose? The primary challenge was the limitations of the dissertation process in terms of time and, financial resources, which limited the research to the efforts of a single researcher. The time limitation prevented the following of the snowball sampling momentum to its completion. To some degree, at the time I concluded the study, it seemed that I actually stopped the forward momentum.

There were recommended individuals and groups that were not interviewed that would have provided more complete representations of the community. The inclusion of these recommended participants would easily have led the research into the second phase of the Gittelsohn et al project upon which this study is modeled. In addition, the completion of the snowball sampling trajectory could have provided insights into community power dynamics. And with these limitations, the interview participant group that emerged for my dissertation research offered a diverse range of perspectives, observations and insights.

Importantly, in presenting the workshops, I discovered that there are individuals working with community organizations that are not necessarily open to talking about gambling. A participant who has worked extensively to provide gambling education in general, explained that this was a very familiar reaction. As a couple of interview participants pointed out, it's not really comfortable talking or thinking about one's child as having a gambling problem. However, it was not clear from my experience with the study's interview participants or the workshop participants what caused this reluctance.

And finally, as to whether the framework principles provided clear guidance for the research process, the answer is yes. The principles served less as a template and more as a fluid referencing framework for the variety of dynamics, situations, and information that emerged in the research process.

The Second Research Aim

Who emerged as stakeholders?

This study utilized snow ball sampling, a non-probability sampling technique, to identify the interview participants / stakeholders for the study. The interview participants from the service project discussed in the preceding section initiated the snowballing process. This first round of interview participants included a key lottery official, two legislators, the executive director of the Vermont Council on Problem Gambling, a state certified student assistant professional and the director of a youth services organization.

From this initial group, interview participants were recommended that included a Brattleboro Youth Services administrator program coordinator, a director as well as youth participants at the Brattleboro Boys and Girls Club, director of a Turning Point, a recovery facility with multiple locations, a college student admittedly obsessed with fantasy football, student assistant professionals providing youth guidance and support in the high schools and middle schools, a coalition director working with multiple community organizations, a lawyer, and community development professionals. Although, the police department was referenced in an interview, none of the interview participants made reference to a specific individual or department to contact connected with the police department. The interview participants and their specific roles are presented in Table 5.1, Resources Summary Chart below.

In addition, I had an informal discussion with the Director of the Brattleboro Restorative Justice program. As part of a voluntary involvement with a restorative justice project, I became acquainted informally with youth who were in the system because of gambling issues. This is a secondary source that provided additional background information about the dynamics of youth and gambling in the community. It also offered insights for developing the second phase of this project. These conversations are not included in Table 5.1, the Resources Summary Chart.

Besides the missing the voice of the police community, two additional critical voices are not present: 1) that of the adult parental community - not directly connected to the youth services community and 2) that of youth and adults who are experiencing or have personally experienced issues associated with problem gambling.

A broader, more diverse representation of the adult community would require another level of community engagement. This engagement would include articles in the local paper, interviews on both local television and radio stations, and making information about the issue available through K-12 parent education venues as well offering parents the opportunity for participation in research focus groups and/or to be an interview participant   An interview participant recommendation was that I give a presentation about youth and problem gambling to associations that represent school principals, counselors and teachers.

As previously stated, this study is the first phase of a two phase formative research design. This expanded interview participant involvement would be implemented as part of the second phase. Also, included in the second phase would be a quantitative study. The need for current quantitative data was expressed by several interview participants. The most recent quantitative data is in the 2008 Vermont Youth Health Survey. Also, as discussed in Findings, Chapter IV, there are studies related to other co-curing youth behaviors as well as a fifteen year old population study correlating a range of youth risky behaviors.

The second missing voice, youth and adults who have experienced issues with gambling, unfortunately, has some challenges. First, there are no Gamblers' Anonymous groups in the area. In addition, the two organizations providing services for individuals in addiction recovery do not have gambling treatment programs. I was introduced to the college age participant for this study, who had recently moved into a less addictive involvement with fantasy football, through the participant's mother. She and I were discussing my research in the context of our work with another community organization. She thought that her son, who having passed through the uncontrollable, addictive stage of football fantasy, might provide valuable perspective for my research. This proved to be very accurate.

Also, through another friend, I was introduced to a person who was addressing multiple risky behaviors including gambling. Our attempts to connect were unsuccessful. However, from this experience, I became aware that it would be more appropriate to engage interview participants experiencing significant gambling issues under more structured circumstances. Addictive behavior interactions can be unpredictable as well as informative. One possibility for engaging individuals who

are actively addressing gambling problems would be within the context of a formal rehabilitation or counseling environment.

What community-specific information emerges?

As stated above, the second aim of this study was to develop an understanding of the community-specific information that would either facilitate or challenge the development of an appropriate health initiative for addressing the issue of youth problem gambling in Windham County, VT. The second aim derives from the previously discussed definition of formative research as framed by Thomas Valente. In his definition, Valente (2002) identifies possible forms of this community-specific knowledge as a "population's existing knowledge, attitudes, beliefs, values, motivations, norms, expectations and practices" (p. 57). These terms are not precisely defined, but provide a contextual framing for what comprises community knowledge.

This study's identification of community-specific knowledge is based upon the themes that emerge from the data. The meta theme categories do not represent a one to one correspondence with Valente's list of possible forms of community knowledge. Through the meta theme structure, which emerges from this study's research, the participants' comments reveal what they think, and sometimes even why they think and choose to take action or not relative to the issue of youth and problem gambling. Participant comments often reflect or imply an attitude, beliefs, values' expectations, practices, expectation and/or norms simultaneously. That particular identification is left up to the reader.

The critical criteria for the study is whether the interview comments offer community specific information relevant to the issue of youth problem gambling. What specifically has come from this analysis that will be useful to community organizations and government officials relevant to youth problem gambling?

There are three immediately useful results of the study. First, this study has addressed what appears to be a general misperception among community organizations and government officials in that there are no statistical studies pertinent to the issue of youth and problem gambling in Vermont. None of the interview participants, with one exception, referenced the studies that are available. And,

several participants expressed how valuable and critical the need is to quantify issues around youth and problem gambling.

Although requiring updates, I found that several studies do exist that can provide the basis of an informed discussion for community organizations, individuals and government officials. The most recent study is the 2008 Vermont Youth Health Survey. . This survey asks specific questions related to the issue of youth. The Vermont State Department of Health and Education (2005) references a 1995 community wide study, "Use of Alcohol and Illicit Drugs and Need for Treatment Among the Vermont Household Population" conducted by Dr. Robert, Bray et al of Research Triangle Institute in collaboration with Dr. William Apao by the Vermont Department Health Office Alcohol and Drug Abuse Programs. The 2005 study also extensively references the 2003 Risk Survey and the 2002 National Survey on Drug Use and Health. These three surveys do not specifically ask gambling questions. However, they clearly establish the high and increasing prevalence rates of substance and alcohol abuse among Vermont adults and youth. The existing extensive international and national research on the public health concern of youth and problem gambling identifying it as a co-curring behavior with alcohol and substance abuse provides a context for considering these Vermont studies and their relevance in evaluating the under addressed issue of gambling in the state's prevention education protocols.

Most exciting, early last year, I discovered a peer-reviewed collaborative study based upon a survey administered to 21,297 8th through 12th graders in 79 public and private schools in Vermont in 1998. The study engaged the combined efforts of researchers at Harvard Medical School, Wake Forest University and the University of Vermont. The study correlated gambling with drug and alcohol abuse, seatbelt nonuse, violence-related behaviors and sexual activity (Proimos, DuRant, Pierce, & Goodman, 1998).

The study identifies, comprehensively quantifies, and discusses the co-occurring presence of gambling with the above risky behaviors in which Vermont youth engage. The breadth and considered design of this statistical exploration provides a model for creating a meaningful updated version. I found it significant that no interview participants were aware of this study, including the Vermont Council on Problem Gambling. I also introduced this information in the two workshops

conducted for the state assistant professionals. Polling the workshops also showed that no participants were aware of this study.

Secondly, essential to addressing a situation is developing an awareness of it. As the participant comments indicate, there is individual awareness and concern from participants working both in government and community organizations about youth problem gambling. Also, as indicated in Table 5.1, Resources Summary Chart, eleven, or over half, of the interview participants were unaware of youth and problem gambling as a public health concern and its co-currence with other youth risky behaviors. The majority of these individuals either work directly with youth or influence policy relevant to their well-being.

Importantly, as discussed in the preceding chapter on study findings, several individual participants indicated that the interview process increased their awareness-in some cases, giving them a reference for behavior they had already observed. Also, the study findings indicate that there is a wide range of awareness – ranging from none to comprehensive.

The awareness has been further expanded through workshops I have facilitated on my findings for both the annual meeting of the state education agency and the Vermont Council on Problem Gambling. The summary sheets developed for the workshops-with recommendations-have been provided, upon request, to three legislators who were not involved the study's interview process. These summary sheets are also part of the email of appreciation sent to all of the interview participants.

Thirdly, as indicated in Table 5.1, the study identifies a broad range of community-specific knowledge and projects in addressing community issues. This is evidenced by the present state prevention framework for youth risky behaviors, excluding problem gambling and the issue of poverty. The recognition of the viability of this existing prevention framework as part of the solution for developing some form of gambling prevention education was expressed by both legislative and community organization participants.

Do community participants believe that some sort of intervention is necessary? Why or why not? Who does? Who does not?

Table 5.1 below demonstrates almost unanimous agreement among the interview participants that there is the need for some form of prevention education. The one participant who did not consider prevention efforts important based this upon the opinion that excessive gambling was not a problem for Vermont youth, that, in fact, the real problem was drugs and alcohol. This opinion about the prevalence of drugs and alcohol was also offered by another participant whose organization works closely with this individual's organization. However, the second participant's position is that even though gambling does not appear to be a problem, prevention education would be valuable. Discussed in the preceding chapter, interestingly the majority of the youth in the youth focus groups expressed that it was important to have an understanding about youth and problem gambling. Or as a couple of youth participants put it: "Knowledge is power."

Table 5.1   <u>Resource Summary Chart</u>

YS = Youth Services; SG = State Government; CO = Community Organization; CS-AG = College Student Active Gambler
CD = Community Development;   COD = Community Organization Director;   B = Business; NO=National Organization

Participant	Role	Awareness	Prevention	Stress Viability of Existing Prevention Network
1	YS; CD	Y	Y	K-12/Community organization Prevention Structure
2	YS	N	Y	
3	YS; CD	Y	Y	K-12/Community organization Prevention Structure
4	COD	Y	Y	
5	COD	N	Y	
6	COD	N	Y	Coalition
7	YS	N	Y	K-12/Community organization Prevention Structure
8	YS	N	Y	K-12/Community organization Prevention Structure
9	CD	N	Y	
10	YS	Y	Y	K-12/ Prevention Structure
11	CO	N	Y	
12	CO	Y	Y	
13	SG (Legislature)	N	Y	
14	SG (SAPs/ADAP)	Y	Y	K-12/Community organization Prevention Structure
15	NO (VCPG)	Y	Y	Existing Vermont Council Resources
16	B (State Lottery)	N	Y	K-12/Community organization Prevention Structure
17	SG (Legislature)	Y	Y	
18	COD	N	N	
19	NO (Boy and Girls Club)	Y	Y	Community org prevention program structure
20	LEG	N	Y	K-12 Prevention Program Financial Literacy
21	CS-AG	Y	Y	Parents; Supportive, non=judgmental Home/community environment
22	B	Y	Y	Y

Overall, the consensus that some form of prevention initiative is important provides the basis for developing a more comprehensive discussion with individuals in organizations and government who express a shared concern—if that is the direction the community chooses to take. Importantly, a broader based group of connected, concerned individuals has emerged for considering youth and problem gambling in their community.

In summary, this study's results offer a foundation document for creating a further, more informed discussion by 1) providing evidence of existing, but not broadly disseminated research data, and 2) identifying existing community prevention initiatives that can serve as models/vehicles for establishing intervention initiatives focused on youth problem gambling. In terms of ongoing community initiatives, it is clear that a substantial amount of experience exists in this community addressing other community risk factors, including poverty as well as other youth risky behaviors. And, although, there appears to be a consensus that some form of prevention is necessary, suggested approaches vary—as indicated by participant comments discussed under the theme Resources/Strategies in Findings, Chapter IV.

This study has led to the dissemination of further information about Vermont youth and problem gambling simply through the interview process and facilitating two youth focus groups as well as through the workshops and the summaries sent to interested legislators. The study, in effect, has become a working and foundational resource that brings together many aspects of the community's knowledge. The Proimos et al (1998) data appears to be a newly discovered statistical reference. Some of the community knowledge is old news, for example, the fact that one of the challenges in addressing the issue of prevention is the multiple unique community cultures that exist within the geographically defined county.

One interview participant commented in describing one of the challenges of identifying gambling issues with students in the school environment:

> …The reason it's hard to see a kid in trouble in high school is everyone sees the kid in slices of time throughout the day, so no one takes any responsibility... they see a slice, and the slice doesn't look that bad, and they don't see any more of the picture, so they don't really see the magnitude of what the problem is.

Each interview participant's perspective and the meta themes that emerged also represent slices of the community's relationship to the issue of youth problem gambling. The study brings many

of these slices together as a reference and basis for developing a consciously delineated plan for evaluating community and individual needs relevant to the issue—if and how the community chooses to use this study as foundation for its next steps.

This study also reveals in which direction the formative research must continue to provide a more thorough understanding of the community dynamics relevant to the topic. As recommended by different interview participants—the function of snowball sampling—further inquiry would benefit from research methods that gathered input from school counselors', teachers' and principals' associations; the justice system; from individuals/groups that are recovering/recovered adult and youth gamblers, as well as a more fully representative socio-economic range of parents.

Finally, an important question that remains unaddressed in this study, is will it be necessary to wait for a tragic situation before implementing basic gambling prevention education? Do existing Vermont statistics, their evaluation in the context of other national and international studies, the community's existing knowledge about other youth risky behaviors, and the existing prevention framework provide sufficient rationale for creating some form of intervention sooner than later?

Recommendations

Three recommendations emerge from the research results and discussion. Given the previously discussed budget constraints, I think that one step that could be taken is the development of a small strategic task force/mini think tank catalyzed in collaboration with the Vermont Council, myself, self-identified participants and other individuals who are passionate about the topic. One or two meetings could clarify whether and what next steps are possible.

Secondly, updating the Proimos et al (1998) statewide youth risky behavior study and the 1995 Bray et al population study on the Use of Alcohol and Illicit Drugs and Need for Treatment Among the Vermont Household Population would provide a valuable evaluative tool for considering the importance—or not—of gambling prevention education. Equally important, are making the stories heard of individuals, both youth and adult, who have or are experiencing challenges with youth problem gambling. Interview participants were aware of these personal stories as were participants in the workshops on the study's findings.

The third recommendation is that legislators and community organizations reconsider the omission of gambling as a risky behavior in the state education prevention protocols. This recommendation is based upon this study's findings on Vermont statistics relevant to gambling issues. It is a recommendation that also reflects participant comments acknowledging the state's culture of prevention regarding other youth risky behaviors and the issue of poverty; the strong interview participant consensus (see Table 5.1) that some form of prevention is necessary; and the strongly positive youth focus group response to the value of learning and talking about problem gambling.

Future Research: Recommendations to Community Organizations, Academic Institutions and Legislators

Three research directions present themselves. The first direction is moving into the second phase of Gittelsohn et al's (2006) research design. This involves implementing the expanded interview protocol as suggested by the recommendations from the interview participants in this study. This would also include radio, local television, local paper as well as parent, teacher and principal organization presentations of the topic. These venues would provide the opportunity for engaging the general public's voices. Based upon the results of the first phase, the second phase suggests incorporation of an additional research question: Do existing Vermont statistics, their evaluation in the context of other national and international studies, the community's existing knowledge about other youth risky behaviors, and the existing prevention framework provide sufficient rationale for creating some form of intervention sooner rather than later?

The second research direction is to develop a study which explores the window that youth problem gambling offers into the economic well-being of the community. An indicator of the well-being of living systems is the overall vitality of its progeny. Indicators of lack of community well-being, for example, as evidenced by pathological involvement with addictive behaviors are risk factors to overall community resilience. This study's exploration of the under addressed issue of youth problem gambling addresses community awareness and accountability dynamics.

Interview participant comments and literature research open the door to the larger issue of gambling as an economic decision. Is increasing gambling venues a viable decision in terms of developing long term community resilience? Can this investment be used more effectively in

supporting the development of an income stream that is not extractive? What impacts on the community's well-being does choosing to invest in an extractive industry have over time? How are these questions answered if maximizing well-being for youth is a primary indicator?

The third research direction is to expand the application of the formative research framework to other issues of community resilience ranging from quality of food in children's learning environments to transportation issues to affordable housing to voting. Community resilience, that is, the health of the community, is by definition a function of multiple interdependent socio-economic, political, physical, cultural and psychological dynamics. The 2000 Community Resilience Manual defines resilience as "the ability to take *intentional action* to *enhance* the personal and collective *capacity* of its citizens and institutions *to respond to, and influence* the course of social and economic change being" (Centre for Community Enterprise, 2000, p.5).

 Formative research is a viable methodology to facilitate individual and collective awareness. The formative research process opens the door to both individual and collective accountability and action for each of these many facets of health that can affect and reflect community resilience and well-being.

CONCLUSION

What drove this study? I was curious as to why youth problem gambling was not included in the state prevention education protocols for other youth risky behaviors such as drug and alcohol abuse, but there were two underpinning conceptual drivers. the first is my personal experience of living within a community that decided to address a challenging situation. Being part of that past process, I observed that communities, like individuals, inherently have the resources to address their problems. Engaging this inherent capacity required the community's willingness to become aware of its particular risk factors, choosing to become accountable for the challenge and then taking action to ameliorate the problem. The overarching challenge is how one systematically creates a conversation with a community relative to real or perceived risks. And how do I as a member of that community effectively engage it in this conversation?

The second driver was ecosystem theory and sustainability, developed in Capra's book, *Hidden Connections* (2002)*.*   Capra's eco-system theory is based upon the interdependency of all

living things with constant inflows and exchanges between the smaller eco-system and the larger eco-systems of which it is a part. In this sense, Windham County, Vermont exists as a small ecosystem embedded within a larger socio-economic-political-environmental one. A primary function of eco-systems is that of reproduction. A primary function of a community system is to produce healthy youth and young adults. Youth health issues reflect upon the system as a whole.

Addressing youth issues is a window into the overall system (community) of which they are a part. The challenge is finding, identifying and engaging aspects of the community that may be influencing, or can provide, insights into situations which negatively impact youth.

Formative research as defined in this study provides a process for accessing and understanding these community-specific dynamics. It premises the need for and facilitates community awareness of the problem. Its challenges beliefs and identifies resources relevant to the issue. It premises interdependency and dynamic interaction of a community's social economic, political and environmental components.

Significantly, it premises that the accountability and responsibility for addressing challenges rests with the community in its multiple definitions of itself. As such this study offers a malleable template for addressing any community risk factor on any level of community—at least within the United States. (I'm not sure that the concept of individual/community accountability is inherent in all cultural constructs. The question offers a valuable research direction.)

More broadly applied, the discussion of the addictive dynamics relevant to youth and problem gambling, within the context of eco-system theory, provides a window into the addictive patterns of the larger socio-economic political environmental system (Jones, 2008). It opens the door to the literature that describes our nation's present economic woes as being due in large part to its addiction to fossil fuels, spending and to the ubiquitous, worrisome "more is better" principle.

Literature suggests that the risk-taking propensity in our economic choices is present in this country's early development. As an instrument integral to the country's economic operation, gambling is linked to the early years of our country and the implementation of the lottery. The premise of the lottery as Alexander Hamilton outlines in his treatise on planning a lottery can be summarized as the opportunity to receive "something for nothing." A quoted in Davis' book, Hamilton's premise for

fostering the development of the lottery as a financial mechanism, was his perception that "Everybody, almost, can and will be willing to hazard a 'trifling sum for the change of considerable gain." It presupposes that there will be a sufficiently large population of "poor" people who will be willing to gamble a little and often for large gain (Davis, 1917, p. 520).

Key figures in the country's early economic development—George Washington, Benjamin Franklin, Thomas Jefferson and John Hancock—all promoted the lottery as a primary resource of government funding. The early federal and local governments encouraged lotteries. By the end of the seventeenth century, there were over 2000 government authorized lotteries, grossing over $2,000,000 annually. These early lotteries funded the building of churches; institutions of higher learning such as Yale, Princeton and King's College which is today Columbia University; the building of Federal City in the District of Columbia; underwriting war efforts; the construction and repair of roads, fire houses, canals and bridges, as well as medical research and support for the poor (Allenbright, 2004; Dunstan, 1997). Rich, poor, men, women, children and slaves to gain their freedom played the lottery. In addition, lottery schemes were used to pay off mortgages, start business ventures and sell property. Alexander Hamilton's development of interest bearing bank notes and the Bank of the United States paved the way for lottery supported businesses to begin issuing stocks and the lottery brokers to make the transition to stock brokers. This avid interest in lottery gambling extended to all forms of gaming: cards, roulette and wrestling—to name a few (Davis, 1917; Sobel, 2000).

Today, as well as being manifest in the ubiquitous presence of lotteries, gambling as an economic instrument is also the premise upon which the secondary stock market is based. This secondary market activity has been most recently seen in the extremely risky, highly publicized derivatives market and ponzi schemes that have negatively impacted the economic infrastructures nationally and internationally of communities as well as the lives of individuals. The addictive engagement in these stock market activities—the inability to stop the behavior even when presented with the potential to self and/or others- erupted with disastrous consequences to the economic infrastructure of the country and the world.

Importantly, gambling is an extractive industry in the same manner as clear cut logging, mono-crop farming and strip mining (Adams, 2007). Increasing its access and investing in development of more venues for participation raises the same concerns as increasing clear cutting strip mining or fossil fuel production.

If youth are an indicator of our community (eco-system) well-being, gambling as integral to our economic structure raises critical questions: 1) What is the message offered to youth in choosing to mobilize gambling as a significant national and state income stream? It is an activity based upon the premise of "something for nothing." 2) Is this increasing investment in gambling as an income stream maximizing the likelihood of our communities producing robust youth and young adults? 3) What are the prevention measure/s activities that will address the health challenge/s to the overall community's well-being and resilience based upon this economic choice? 4) And, in terms of this study, what is the message to Windham County's youth if we both promote and make readily available this activity that has potential to bring serious harm to them without providing education and resources to address gambling's downside. Again, referencing the Community Resilience report, "what are the *intentional actions that we can take to enhance our* personal and collective *capacity* as citizens and institutions *to respond to, and influence* the course of social and economic change?" More importantly, do we want to take these intentional actions?

Youth and problem gambling, like many community issues, form a dynamic point that offers a window into a much more complex system. Addressing any issue that compromises the capacity of youth to become productive, healthy adults raises questions about the health of the larger socio-economic, political, cultural and environmental system. What health concerns about the larger system are mirrored in as well as impact the public health concern of youth and problem gambling in Windham County,Vermont? Formative research designs can provide a facilitating mechanism for gaining insights, and increasing awareness and knowledge around these larger, complex national and global health challenges.

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