Theoretical Influences on the Evolution of the Cultural Ecology of Health & Change

By

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Theoretical Influences on the Evolution of the CEHC

1. Introduction to the Cultural Ecology of Health and Change

The Cultural Ecology of Health and Change (or CEHC) is a system of anthropology based theoretical paradigms, and research and technical assistance programs that I have been developing for several years[1]. The paradigms and programs of the CEHC evolved from 35 years of involvement as an anthropologist in community based initiatives (CBIs) in the United States and abroad[2]. During this long career of working with other professionals, organizations, groups, and activists involved in research, and the planning, implementation, and evaluation of CBIs, I have found that non-anthropologist colleagues and community groups viewed my contributions as having the greatest value in the following areas:

- providing cultural theoretical foundations that would help in understanding community structures and CBI planning and implementation dynamics;

- bringing anthropological perspectives and research (ethnographic) methods to *community assessment research activities* that would provide data for the planning, implementation, and evaluation of *effective*[3] CBIs; and

- bringing anthropological perspectives and methods to the *planning, implementation, and evaluation* of *effective* CBIs.

As such, over the years, I have continued to develop *theoretical paradigms, programs, methods, materials, and organizational structures* to enhance those contributions, and to be able to better communicate and transfer the benefits gained from my knowledge, skills, and experiences to my students, non-anthropologists, other anthropologists, and members of the communities with whom I worked. The purpose of this working paper is to provide a brief introduction to the theoretical paradigms and programs of the CEHC. Discussion of CEHC Materials and organizational structures will be added later.

The CEHC in its entirety is an applied research and technical assistance system with a primary focus on the planning, implementation, and evaluation of CBIs. The CEHC differs, however, from other models with similar purposes, in that it:

(1) use conceptual paradigms based on theories of culture that address the complexities of the socio-cultural *contexts*, *processes*, and *meaning* systems that influence individual ideas (knowledge, attitudes, values, beliefs, etc.) and behaviors, including health related behaviors, and should therefore, be considered in the design, implementation, and evaluation of CBIs;

(2) is made up of *four interrelated systems* (See Appendix 2, Figure 1[4]), each with multiple programs

[1] While the conceptual paradigms of the CEHC evolved solely from Dr. Whitehead's work, various colleagues and students have assisted in the development of CEHC programs.

[2] A community based initiative may be defined as an activity that has the following characteristics: (1) *goals* that include alleviating or improving a select health or social problem within or among a targeted community or population; and (2) *a high level of involvement* by members of the community or population targeted by that activity in its *planning*, *implementation and evaluation*.

[3] The term effective is used here to refer to the planning, implementation, and evaluation of CBIs that score highly in achieving the eventual outcomes desired by those involved in their implementation and planning.

that integrate community assessment research, and strategies of CBI design, implementation, and evaluation; and

(3) committed to the development of Program Technical Manuals (workbooks), and monographs that are being designed for the transfer of CEHC knowledge and skills to those involved in the design, implementation, and evaluation of CBIs;

The CEHC in total is a *cultural, ecological* and *social change* paradigm or model that is informed by multiple theoretical approaches cutting across several disciplines: anthropology, health behavior and promotion, communications, social psychology, and so on. However, the CEHC is made up of three distinct, but highly interrelated theoretical paradigms: (1) the *Cultural Systems Paradigm (or CSP);* (2) the *Cultural Systems Approach to Change (or CSAC); and* (3) the *Community Based Approach to Program Planning, Implementation, and Evaluation (or CSAPPE).* The four applied research and technical assistance subsystems of the CEHC are:

(1) The Ethnographically Informed Community and Cultural Assessment Research Systems (EICCARS)

(2) The CEHC System in Project Design and Implementation Plan (PDIP).

(3) The CEHC Project Implementation Programs (PIPs); and

(4) Ethnographic Assessment & Evaluation Systems (EAES)

There will be no further discussion of the four programmatic subsystems of the CEHC in this paper. More detail on these systems can be found in CECH Working Papers and PTMs dedicated to these subsystems and the CEHC theoretical paradigms that inform them. Since the present paper , however, does focus on the various theoretical contributions to the evolution of the CEHC, following are a little more detail on the three CEHC paradigms, The CSP, the CSAC, and the CSAPPE. This discussion will be followed by the theoretical paradigms from Public Health and the Social Sciences (predominantly Anthropology) that informed the development of both the CEHC theoretical paradigms and programmatic subsystems. In the next section of this paper, we will discussMore detail discussion of these paradigms and subsystems are found in The remainder of the present paper, however, will focus on the various theoretical orientations from public health and anthropology that led to the evolution of the CEHC.

Trends and Developments in Public Health Science and Practice: From Ecological to Individual Perspectives and Back Again

Early Environmental Perspectives in Public Health

Both the science and practice of public health has long acknowledged the importance of environmental (or ecological) influences (including social influences) on health outcomes (e.g., See Zinsser 1934; Siegerist 1943). In fact the origins of the field of public health can be traced to concerns for environmental conditions, and perceptions of their relationship to health and community life (Seip 1981). The work of John Snow in understanding the spread of cholera, even before the organism which causes it was identified, is an example of early epidemiology which was sensitive to environmental factors. The

[4] Other paradigms for designing, implementing, or evaluating CBIs do not integrate these three activities in a single interrelated system. The CEHC does so and is visually illustrated in Appendix 2, Figure 1.

Theoretical Influences on the Evolution of the CEHC

"Agent-Host-Environment" model of public health epidemiology (Lilienfeld and Stolley 1994), for example, examines aspects of the environment, characteristics of individuals and characteristics of the disease causing agent to understand and predict the distribution and spread of disease. Appropriate action could then be taken to halt its spread. During this century, however, there has been a significant change in the approach taken within epidemiology, based in part on the availability and widespread use of certain analytic methods. These advances in analytic methods combined with a political economy which rewarded scientific approaches to the study of contemporary problems, have led to significant changes in the way epidemiologists conceptualize health and disease (Pearce 1996). Pearce describes a movement in epidemiology from a population perspective (traditional approach) to an individual level perspective (modern approach). In the same series of papers, Susser and Susser (1996) characterize this modern approach to epidemiology as the "black box" approach, in which individual level risk factors or exposures are assessed in relation to outcomes.

In addition to changes in available analytic methods and the role of "science" in decision-making, the "epidemiologic transition" (Omran 1974; McLeroy and Crump 1994) resulted in the dominance of chronic illnesses with complex and multiple sources of causation. These trends seemed to converge, producing an approach to epidemiology, and public health more generally, that focused on examining the health outcomes of individuals based upon the presence of individual level risk factors. These risk factors have tended to include attributes (such as age, gender, race, SES) and behaviors of individuals.

Individual Lifestyle Approaches to Public Health Science and Practice

As the behaviors of individuals represent those risk factors most amenable to change, public health science and practice has become focused on individual “lifestyle” factors related to health (McLeroy and Crump 1994). Some of the most visible examples of this individual lifestyle approach to public health include large-scale community-based health studies/interventions funded by the National Institutes of Health, such as the Stanford Five Community, the Minnesota Heart Health and the Pawtucket Heart Health Studies (Elder et al., 1986; Farquhar et al., 1985; Jacobs et al., 1986). These studies, while targeting their interventions at different segments and levels of the community, focused their research and evaluation on ways that behaviorally related outcomes of individuals were modified (such as weight loss, smoking cessation, cholesterol reduction, etc.) (Mittlemark, Hunt, Heath and Schmid, 1993).

Emerging from these trends has been a period of intense emphasis on understanding individual level determinants of behaviors that increase risk for various preventable health problems. Theories have been developed that examine behavioral choices of individuals based primarily on psychological and social psychological theory. One of the earliest theoretical models, developed in the early 1950s, was the Health Belief Model (HBM) (Hochbaum 1958, Rosenstock 1990). The HBM was one of the first attempts to describe individual disease prevention and health maintaining behavior through identification and assessment of the balances between expectations for action and reward. The creators of the HBM drew on value-expectancy approaches and decision-making theories, which sought to explain choices that people make under conditions of uncertainty (Becker & Maiman 1983). As originally conceived, the model postulated that people will not engage in disease-preventing behaviors unless they have some knowledge and motivation, and, more importantly, believe themselves to be at risk or vulnerable, and feel the potential condition is threatening. They must also believe in the efficacy of the intervention and perceive few barriers to following recommended actions (Rosenstock 1974).

The key components of the model included (1) perceived susceptibility and severity, (2) a subjective estimate of the benefits of action, weighed against the barriers to taking action, and (3) a "cue to action," which would serve to activate the appropriate behavior. The "cue" could be provided either by symptoms (internal cues) or from messages encountered from friends, the mass media, or acknowledged experts (Becker & Maiman 1983). After Bandura (1977) introduced the concept of self-efficacy (e.g., the conviction that one can successfully execute the behavior required to produce the outcome), many advocates of the

Theoretical Influences on the Evolution of the CEHC

HBM believed that this concept must be incorporated into the HBM to increase its explanatory power (Rosenstock 1990). In fact, Hochbaum (1983) specifically called for this inclusion during a special seminar convened to review the model. Yet while considering the impact of social and cultural factors that influence individual behavior, the HBM was designed to try and explain why individuals did not participate in programs to prevent or detect disease. Other important theoretical models that emerged during this time tended also to focus on cognitive processes or behavioral modeling of desired behaviors of individuals (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980) and the stages by which individuals change (Prochaska 1982; Rogers 1995).

Tensions in Public Health Science and Practice: The Inadequacy of Individual Approaches

The emphasis of social psychology on the science of health promotion has also had a profound effect on the practice of health promotion. This academic perspective on theory, with its emphasis on hypothesis testing has been adopted by health promotion practice, which should be focused on problem solving in public health (McLeroy et al. 1994). The result has been health promotion interventions designed around single mid-level theories such as the Health Belief Model or Social Learning Theory. The problem, as McLeroy et al (199?) points out is that "most of the problems that we as health educators are called upon to address are socially produced and maintained, and as a result no single theory, certainly no psychological theory, is adequate for developing truly effective and comprehensive health education programs." Even within the "science" of public health, dissatisfaction has been growing in recent years with this focus on individual level causes and individual level approaches to public health problems. Both Susser and Susser (1996) as well as Pearce (1996) have called for a new paradigm in epidemiology that returns us to a population perspective and examines individuals within the broader physical and social environment.

These tensions have existed in Public Health for quite some time. In fact, in recalling his own experience while on the faculty of the Department of Health Education at the School of Public Health at UNC (1976 to 1987), Whitehead remembers how these competing paradigms and emphases became manifested in factions within the faculty. The primary factions were often described in terms of their orientation toward "patient education" vs. "community organization." Part of this factionalism, in reality, was related to issues of "science" and "epistemological" orientations, which were reflected in their methodological orientations toward understanding the human condition. The patient education group who focused more on the individual were more oriented towards a more positivist "quantitative/hypothesis testing" approach to research, while the community organizing group were oriented towards a more "qualitative/exploratory" approach to understanding the human condition.

Whitehead remembers Guy Steuart coming into his office fuming over the factions which existed in the department. When Whitehead asked Steuart which faction he (Whitehead) belonged to, Steuart commented with a smirk "you belong to all of them." Perhaps this was due to Whitehead's "holistic" epistemological orientation from anthropology, which values the role of the individual, but places that

individual within the socio-cultural environments in which his or her daily life is experienced. Thus, as an anthropologist-ethnographer, Whitehead's research methods orientation was predominantly qualitative, but he also accepted quantitative methods in helping him to understand various aspects of the human condition as part of this more holistic epistemology.

In addition to the tensions that Whitehead became aware of within the department, he also learned that these tensions existed elsewhere within the School of Public Health and in a number of public health professions. As funding sources and professional journals emphasized the quantitative analysis of individual lifestyle risk factors and health outcomes, pressure mounted for the school to respond to this emphasis. Other schools perceived to be models of this type of research and practice orientation where held up to the faculty in the UNC's School of Public Health as standard bearers to which

all faculty within the school should aspire.

Beyond Individual Perspectives: Towards More Comprehensive Models of Public Health Including the Concept of Community Participation

Even while there was a move towards individual lifestyle approaches, there continued to be models that advocated a more comprehensive approach to understanding health related behavior. For example, in 1974, Marc Lalonde proposed one of the first holistic models called the Health Field Concept (HFC), which suggests four large categories of contributors to health behavior and status: human biology, life style, environment, and health care organization. Dever (1980 and 1984) took the HFC and provided a concise framework for utilizing the four major categories in data collection. This data could then provide the basis for interventions that utilized community participation as a primary factor. With the growing dissatisfaction with individual approaches, one of the developers of the Health Belief Model (Rosenstock 1990) also noted that other variables may influence perception, and thereby indirectly influence health-related behavior. He cited demographic, socio-psychological, and structural variables, and especially educational attainment. He does note, in discussing critiques of the HBM, that after many applications of the model, it is coming to be widely believed that "both individual and socio-environmental factors should be targeted for health interventions" (Rosenstock, 1990:49).

As the emphasis on community participation in public health began to grow, elements of the preceding models were incorporated. One of the more popular is the PRECEDE (Predisposing, Reinforcing, and Enabling Causes in Educational Diagnosis and Evaluation) Model, developed by Green and his colleagues (1980). The PRECEDE model addresses key aspects of health related behavior, namely behaviors which may predispose an individual or group to risk, thus reinforcing existing behaviors or enabling a behavior to occur or continue. The primary focus of PRECEDE is to establish the cause-and-effect relationship between behavior and health, and to develop educational interventions to change unhealthy behavior. It assumes that the decisions and practices of individuals, and aggregates of individuals within a community, are influenced by knowledge, values, perceptions, and motivations which underlie behavior (Green, Kreuter, Deeds & Partridge, 1980).

After applying the PRECEDE model to a wide variety of health problems, Green proposed an addition to the model which acknowledged the importance of the role which policy formulation and administration plays in institutionalizing change. This revised model is the PRECEDE - PROCEED MODEL (in which Proceed stands for Policy, Regulatory, and Organizational constructs in Educational and Environmental Development (Green and Kreuter, 1991). Here Green and Kreuter's purpose is to bring attention to a broader body of issues which will contribute to understanding health and illness behavior, and will be influential in developing health prevention and treatment/cure programs that are sustainable. Such a broader perspective was taken in 1988 when several researchers in health promotion proposed an ecological model for health promotion (McLeroy, Bibeau, Steckler, and Glanz, 1988). This model contains elements of Green and Kreuter's PRECEDE-PROCEED framework (Green & Kreuter, 1991).

The PRECEDE-PROCEED models, more than any of the others that have been discussed here, are oriented towards community-based planned change, and as such has become the most popular in the planning, implementation, and evaluation of CB-PCPs. PRECEDE-PROCEED has influenced the development of other models. For example, it informed the development of the Planned Approach To Community Health or PATCH Model by the U.S. Centers for Disease Control and Prevention for use around the country (Green & Kreuter, 1992; Kreuter, 1992).

However, while PRECEDE-PROCEED is fine model for providing categories (i.e., predisposing, reinforcing, and enabling contributors to risk behaviors, and policy, regulatory, and organizational constructs) for factors that should be considered in the planning, implementation, and evaluation of community based planned change projects (CB-PCPs), it is limited as a holistic or comprehensive model for identifying the

range of factors that might influence project outcomes. This limitation is related to another weakness of PRECEDE-PROCEED, as well as of the other models that have been discussed in this chapter, in conceptualizing the *sociocultural contexts*, *processes*, and *meaning* systems that are inherent in complex community based change programs. More on considerations for socio-cultural contexts, processes, and meanings in community health will be discussed in Chapter 3.

Social Ecology as an Alternative to Social Psychology in Public Health

With the movement away from a domination by individual life style models of health related behaviors to more social context models, In the late 1980's and throughout the 1990's we saw a growing interest in ecological models in both the science and practice of public health. In this development, it appeared that public health practice took the lead, and public health sciences has been responding and catching up. Building on the work of Bronfenbrenner in the child development literature, as well as Belsky (1980) in child maltreatment literature, and Steuart (1985) in health education, McLeroy et al. proposed an ecological framework for health promotion (McLeroy et al. 1988). In this model they describe patterns of health behavior

as being influenced by several social levels, including : intrapersonal factors; interpersonal processes and primary groups; institutional factors; community factors; and public policy. Green et al.(1996) noted that this framework, by including four levels of social influence beyond the individual, makes this perspective "resolutely ecological."

The comments by Green et al. (1996) appeared in a special issue of the American Journal of Health Promotion that was devoted to social ecological approaches to health promotion. In this special issue, leaders in the field of health promotion presented the history and foundation of this approach, and its implications for research and practice. In the editor's review of the issue's articles, O'Donnell (1996) describes the basic tenant of the social ecological approach as an understanding that health behaviors are embedded in social systems that influence and maintain behaviors. Changes in health behaviors require changes in those social systems in order to support those changes. This perspective seems narrower than some of the contributors' who also see the wider ecosystem (including physical environment, social environment, social systems, norms and beliefs) as directly influencing health and quality of life, apart from the influence it has on behavior (Green et al. 1996). According to Green et al. (1996) in their description of the ecological foundations of health promotion, health is seen as a product of the interdependence between the individual and the various subsystems of the ecosystem. To promote health, they argue, economic and social conditions must be conducive to health and healthy lifestyles. They note two models influenced by social ecological thinking that are currently of considerable influence within health promotion. These include the Ecological Perspective on Health Promotion developed by McLeroy, Bibeau, Steckler and Glanz (1988), and the more recent applications of the PRECEDE-PROCEED model (Green and Ottoson, 1994; and Green and Kreuter, 1991).

Some of the most interesting ideas presented in the discussion by Green et al. (1996) had to do with the primary limitations confronted in the application of ecological models to health promotion. The first had to do with the overly mechanistic and deterministic approach these models often use in explaining human behavior. They argue that "ecological approaches must stretch their biological and sociological foundations to account for unobservable factors such as culture, values, and ideational and subjective aspects of quality of life." They go on further to say that ecological models must provide for at least the bi-directional connection between behaviors and environment, recognizing that behavior is not merely manipulated by environment, but also influences environment. A second area of concern had to do with the overly complex nature of such models and the difficulty of using them for planning and research purposes. The two models they describe are seen as attempts to make ecological frameworks more accessible and useful to programs and research designs.

Theoretical Influences on the Evolution of the CEHC

Early (Graduate School) Social Science Contributions to the Evolution of the Cultural Ecology of Health and Change, with Particular Reference to the Cultural Systems Paradigm and Their Overlap with Later Public Health Theoretical Influences

Much of the conceptual work that has been included in the Social Ecology models, as well as some of the critiques offered by Green and his colleagues (1996) are incorporated in Whitehead's Cultural Ecology of Health and Change. There was also earlier work that also influenced Whitehead's thinking that also contributed to the evolution of the CEHC. During the period of time from Marc Lalonde's introduction of the Health Field Concept (HFC) in 1774, and the critique of the social ecology model offered by Green and his colleagues (1996), the components of the CEHC were evolving in Whitehead's head and in his work. Moreover, while Whitehead had been influenced as a graduate student by the work of Lalonde, he had also been influenced by the even earlier work of Talcott Parsons (1951) and his colleagues (Parson and Bales 1955). However, as a graduate student in anthropology during the early 1970s, it was the work of the medical anthropologist, Fabrega who had the greatest impact on Whitehead's thinking regarding health related behavior.

Although Whitehead never took a course from him, Fabrega was a faculty member where Whitehead was trained in anthropology, and his writings were mandatory for training in the sub discipline that Whitehead chose to develop as a specialty--medical anthropology. The Illness Behavior Model (the IBM) promulgated by

Fabrega (1973) proposed four large categories for understanding illness behavior:

(1) The biological system which focuses on genetic, chemical and physiological processes;

(2) The social system which provides information about the attitudes and expectations of an individual's social group about the illness condition, as well as group and individual responses;

(3) The phenomenological system which addresses the individual's awareness and self definition; and

(4) The memory system which includes past experience with illness and medical attitudes, beliefs and practices which provide feedback to and influence on the other systems (Fabrega 1973; Becker 1990).

What is of interest about the IBM is that Fabrega, as an anthropologist, defined illness behavior as being culturally constructed. Thus the basis of decisions about when one is ill, what causes a specific illness, what one should do when ill, and where one seeks help for illness are also culturally defined. Therefore, the IBM is useful in cross-cultural applications, including application in culturally diverse societies such as the United States. The last two categories of the IBM, addressed areas of the human condition that the popular individual lifestyle and social ecology models did not adequately address. Fabrega's discussion of human phenomenological systems addresses the concern by Green and colleagues (1966) that while the strength of social ecology models was in advocating that health behavior is a product of interdependence between the individual and the various subsystems of larger social systems, they were overly mechanistic and deterministic in trying to explain human behavior. Fabrega's focus on the "memory system" addresses a component of human culture that receives little attention in most of the models that have been more popular in
public health, and that is the cultural phenomenon of "shared memories" of illness experiences.

This idea regarding shared memories of illness experiences means that the experiences that motivate illness related behaviors (i.e. what is an illness, what causes an illness, what one does when ill, and where one seeks help) are part of the cultural knowledge of a cultural group. As such, a person might sometimes talk about a particular illness episode as his or her personal experience, without actually having experienced the illness episode. What the person is reflecting is an illness story that is part of the shared

memory of his or her cultural group.

These cultural memories of illness experiences that Fabrega includes in his IBM, are similar to Kleinman's (1975, 1978, 1980) concept of Health Explanatory Models (HEM). In the HEM, Kleinman posits that when humans in any cultural setting become ill, there are three general concerns that emerge: (1) what is the malady and its symptoms; (2) what caused it; and (3) what can be done to overcome it? Explanatory models, which are culturally constructed, provide responses to these questions. Also similar to Fabrega's work, Kleinman's HEM provided a framework for cross-cultural application, and became one of the dominant research paradigms in the field of medical anthropology.

In January of 1976, just prior to receiving his Ph.D. in anthropology, Whitehead went to work as a new faculty member in the Department of Health Education (since named the Department of Health Behavior and Health Education) at the School of Public Health at the University of North Carolina. There was a number of other medical anthropologists who had had an impact on his thinking by the time that he reached UNC, but he went back to Fabrega because his work seemed to be more akin to the leading theoretical paradigms that were being used by health educators. The Health Belief Model began to influence Whitehead's thinking, primarily because it was the most dominant theoretical paradigm in health education at that time, and one of the architects of the HBM (Godfrey Hochbaum) was a senior member of our faculty. Later, Whitehead began to patch parts of Green's PRECEDE-PROCEED model with the social systems aspects that he had taken from both functionalist sociologists (e.g. Parsons and Bales) and Fabrega.

Whitehead was also greatly influenced by the community based orientations of his chairman and mentor at UNC, the late Guy Steuart[5], and by those of his ongoing colleague, mentor, and friend, John Hatch. Many conversations with another colleague and friend, Mr. Leonard Dawson, contributed greatly to Whitehead's evolution from a purely theoretically trained anthropologist, to the practice aspects of community based planned change. By the 1980s, Allen Steckler, a colleague who came to UNC during the same year as Whitehead did was already beginning to more towards ecological approaches in community health, and two of Steckler's former students with whom Whitehead interacted during their graduate student days, Ken Mcleroy and Robert Goodman, would eventually become two of the key contributors to the social ecology school of health promotion. But it was Whitehead's own experiences as a trained anthropologist working in the field of community health over the past 35 years that led to the development of the Cultural Ecology of Health and Change. These experiences are discussed in more detail in other CEHC Working Papers

2. A BRIEF INTRODUCTION TO THE THEORETICAL PARADIGMS OF THE CEHC

2.1. The Cultural Systems Paradigm (the CSP).

The CSP was the first of the CEHC paradigms to evolve, having its roots in my graduate training in

[5] One area of influence of Steuart was his concepts of "units of identify" and "units of solution. He defined units of identity as those with whom a population most strongly identified, such as kinship group, ethnic group, local community, work group, etc. Such communities of identity should be known before attempting a community based change program because without such knowledge, such initiatives may be designed without considering the most significant units of identity, and this oversight may be the source of failure for such efforts. At the same time, effective solutions to individual, family, or community problems usually do not rest solely with the strongest unit of identity, but may also need the input of broader social units such as the institutions or policies of the wider society, or even cross societal structures.

Theoretical Influences on the Evolution of the CEHC

public health and anthropology in the late 1960s and early 1970s, and early ethnographic fieldwork experiences of the 1970s[6]. It was highly influenced by my 12 years of work at the School of Public Health at the University of North Carolina. When I arrived there in January of 1976, as a sort of phenomenologically oriented anthropologist in a nine department school with predominantly positivist scientists, I often felt like an alien in a strange land. While the majority of my colleagues could demonstrate their work through measurement and methodological cookbooks, I was often made to feel like a non-scientist (read "non-academic) as I struggled to explain the primary, but non-standardized concepts and methods in my field, such as "culture" and "ethnography. " As such, the CSP has two primary functions, it

> 1) operationalizes the concept of culture and how the concept might be used in the planning, implementation, and evaluation of community based initiatives; and
>
> 2) provides a framework for the design and implementation of ethnographic research, including ethnographic research that might be used in the planning, implementation of CBIs.

As I worked to find my way at UNC, I addressed the concept of culture as a primary theoretical construct in Anthropology and ethnography as the primary research methodology of cultural anthyropology. Ethnographers are fond of saying that ethnography is always defined by theories of culture. But rarely do they inform you as to what those theories of culture are. In fact, throughout the history of cultural and social anthropology, there have been debates as to what the nature of culture truly is. The fact that some refer to themselves as social anthropologists while others refer to themselves as cultural anthropologists reflects one of the earliest problems with this concept. More than fifty years ago, Kroeber and Kluchon (1952) produced a book that compiled definitions of the concept of culture and came up with more than 250 conceptualizations. In fact, just recently, I had a collaborator, an applied anthropologist with a long career in public health, like myself state: "I don't think anyone can really define culture. It's too ephemeral." I agree that it is a complex and elusive concept, but in my opinion, a very important. It is for these reasons that in this section, I will give significant attention to it, and how it evolved to become my primary ontological framework for research and applied anthropological practice.

Nevertheless, the lack of a standard anthropological definition of culture contributed to my predicament early on at UNC. Surrounded by colleagues who expected a frequently used anthropological concept to be measurable or operational in applied settings, I had difficulty articulating a definition of culture. Over years of experience I began to synthesize many definitions of culture to formulate a culture concept of my own, but also one that draws on a variety of other conceptualizations. In my conceptualization of culture define it in terms of it's a number of attributes, which I expect others to oppose, but it has worked for me over the last 35 years. Among these attributes of culture, I include the following:

> (1) **Culture is a "holistic" flexible and non-constant system** with continuities between its interrelated components, which include shared *ideational systems* (knowledge, beliefs, attitudes, values and other mental predispositions), and *preferred behaviors* and *structural (social) relationships.*
>
> (2) **Culture provides rules and routines that facilitate order, regularity, familiarity, and predictability** in what is otherwise a disorganized world of people, things, ideas, and behaviors.
>
> (3) **Culture provides "meaning"** in the interpretation of people's behavior, things in the physical and metaphysical world, events, occurrences, and so on, so that people can construct and

[6] There is another CEHC working paper that focuses primarily on the CSP, and thus, the various theories that underlie the paradigm. Our discussion here, however, is a brief introduction to the paradigm. .

communicate their realities.

(4) **Culture is the primary source of a people's knowledge about the world**. In the context of ethnography, culture provides no inherent hierarchy of knowledge, instead it applies local conceptions of the definition of knowledge (See Berger 1967:15);

(5) Culture is a shared phenomenon. Members of a cultural group often share knowledge and meaning systems, or "a common sense of reality," (Berger: 1967:23), which is referred to as intersubjectivity.

(6) **Culture contributes to human communication** and ***miscommunication***. The meanings and interpretations provided by a cultural system not only facilitate communication between

those who share various aspects of such systems, but they may also give rise to miscommunications and misunderstandings between members who are from different systems.

(7) **Culture implies values,** or the preferred practices, social relationships, or ideas and sentiments of a human community.

(8) **Cultural patterns may be *ideal* as well as *rea*l.** People's statements as to what their realities are may contradict what their behavioral patterns and products imply.

(9) **Culture may be *tacit* as well as *explicit*.** Explicit culture is cultural knowledge that people can easily talk about in a direct fashion. Tacit culture is knowledge that motivates particular ideational or behavioral patterns, but about which people may not be able to directly speak. (Spradley 1979: 8-9). The concept of "personal space" (the distance of comfort in the context of personal interactions) is an example of tacit culture.

(10) **Cultural patterns are *horizontally*** (within generations) **and *vertically*** (inter-generationally) **reproduced.** However, there is also continuous change taking place within cultural systems. Thus in planned change programs, such concepts as "core" and "peripheral" cultural patterns are helpful, as core patterns can be assumed to be more resistant to change. But even within core cultural patterns there is continual stress for change, as well as sub-patterns that emerge, disappear, and reemerge.

(11) **The expression of cultural patterns is *highly influenced—but not determined by—environment.*** Both physical and social environmental factors influence cultural expression. Environmental influences of a physical nature might take years or even generations to express themselves; while social environmental features may influence cultural expressions immediately and continually because of cultural mechanisms of social feedback.

(12) **Culture is a *historical production*.** The emergence and continuity of cultural systems are not only products of vertical and horizontal reproduction. Significant events and processes can also give rise to the production and reproduction of specific cultural patterns.

(13) **Culture is *functional*.** It is not popular in popular scholarly discourses of postmodernism and cultural criticism to refer back to the functionalist perspectives of earlier scholars like Malinowski, Radcliffe Brown, and Parsons. But through many years of experience as an applied anthropologist working with health and human service professionals, I have found notions of culture's role in meeting an array of human needs to be very fruitful. While I share critical reviews of the misuse of the concept of culture by past anthropologists, I have found that holistic approaches to the functional qualities of cultural systems are invaluable in developing strategies

which combat simplistic programs that can do more to harm than to help.

Discerning for myself the attributes of the culture concept has helped me immensely in articulating it to others. Another necessary challenge that I have faced is in attempting to operationalize the culture concept, or parts of it, in order to use it in an ethnographic and interpretive fashion. In other words, gaining a clearer conception of culture provided a degree of standardization to the fundamental theoretical concept that underlies the ethnographic inquiries carried out by anthropologists. This step was most necessary—for the nearly 35 years that I have worked as a health ethnographer, I have been called on to provide ethnographic expertise to dozens of projects which cut across a range of health and social fields. Moreover, the research unit that I found in the fall of 1989, the Cultural Systems Analysis Group (CuSAG—http://www.cusag.umd.edu), survived for some time, like so many applied anthropologists, primarily on short-term research contracts[7]. For entities whose existence is dependent on the successful securing of such contracts, not having some degree of standardization in both methodologies and their underlying theoretical concepts means constantly 'reinventing the wheel for each new project. This is physically and mentally trying.

The CSP offers eight large analytical categories for analyzing the human condition:

1) The Human Individual as a biological, social, cultural, and cognitive being;

2) Individual and Normative **Behavioral Patterns**.

3) Individual and Shared **"Idea"** or **"Ideational" Structures** (knowledge, beliefs, attitudinal systems, values, "significant symbolisms"), which frame interpretations and meanings that underlie behaviors, including illness risk behavior**,** as well as all the other categorical contents within the CSP that are briefly presented here.

4) **Significant Social Systems** including: (a) *domestic units* (households or residential compounds); (b) *extraresidential groupings and dyads* (ethnic groups, social networks and kinship systems, voluntary associations/organizations, symmetrical dyads such as friends, coworkers or real/and fictive kin dyads, asymmetrical dyad such as employer-employee, patron-client, etc.); (c) the policies and practices of *institutions and agencies of the wider community/society;* and *(d) intersocietal systems and influences.*

5) **Material Culture** including various human made *objects, technologies,* and *artifacts.*

6) The **Physical Environment,** in which the human group resides and that group's cultural system provides a successful exploitation of life sustaining elements, protection against elements which have the potential of threatening life, and finds ways to overcome elements that constrain life sustaining activities. Cultural meaning which influences behavior, including health risk behavior,

[7] For nine years, CuSAG survived through primarily my solitary efforts to secure contracts. However, because ethnography had not yet entered the mainstream minds of those funding health contracts as worthy of long term contracts and research grants that were offered to more popular health research following the more popular positivist approaches, the contracts that CuSAG received were short term (usually a year or less), I found it impossible to maintain this type of productivity in a small anthropology department, and meet my responsibilities as a full time faculty member. Moreover, after suffering a range of chronic health conditions between 1996 and 2003 (diabetes, cancer, and hypertension), in 1998, I called a moratorium on pursuing contracts for CuSAG. Having achieved some control over my health problems, this past year I have started the revival of CuSAG, but not as a contract pursuing entity as in the past, but simply as an online entity, offering information and assistance to those who might think CuSAG has the skills that they want.

might be influenced directly or indirectly by environmental elements and/or shared or individual ways of interacting with environmental elements. Environmental factors might affect the incidence of disease in other ways. For example, intestinal parasites, that abound in African environment are suggested by Feldman (1990) to be possible cofactors in the transmission of HIV.

7) **Real and Perceived Needs** that human groups and individual members nave to meet in order to achieve physical and socio-psychological functioning. Such needs are further categorized in the CSP as: (a) *organic* (i.e. reproduction, consumption of food, water and other energy sources, waste elimination, disease prevention and cure, protection from hazardous climate conditions, and physical space); (b) *instrumental* (economic, educational/socializing, governance or political and legal, and communal); and (c) *expressive* (cognitive [meaning and orderly world view], affective [social status and acceptance, being loved or liked, self and group identity etc]; and communicative (need to explain, communicate, etc).

8) **Significant Historical Processes and Events** that may be *biophysical* (e.g. floods, droughts, etc) or sociocultural (coups, wars, new economic or marketing systems, etc.) that either institutionalize or sustain a cultural system, or a part of that system, or result in a "regenerated" or syncretized (new, combined) cultural form.

While the eight major categories will be described and discussed in more detail—with descriptive examples in the CSP Working Paper, the major *point to note here is that the eight categories are theorized to exist* in all

human cultural groups. The CSP maintains that it *is the job of the anthropologist or ethnographer* to *discover the contents of the eight major cultural analysis categories as expressed by specific human groups*, *and how different groups, and individuals* within groups *vary in their expressions* of the contents of these categories. As such, the CSP gives greater analytical power to the concept of culture by directing us to assess how humans are different before moving on to how they are different. The broad categories of human similarities also facilitates the design and implementation of community and organizational ethnographies, and the analysis of the data from such research, by providing somewhat standardized categories, that are flexible as more is learned about the phenomena under study.

2.2. The Cultural Systems Approach to Change (the CSAC)

The CSAC was the second CEHC paradigm to evolve. Its evolution was also heavily influenced by my experiences at UNC. While the theoretical and methodological foundations of the CSP resided with my graduate training and ethnographic experiences prior to coming to UNC, the CSP did not emerge as a well articulated theoretical and methodological paradigm until I began my food related research in North Carolina. During my early years at UNC, one of the dominant research foci in the School of Public Health was in risk factors for hypertension and other cardiovascular diseases, for which food behavior, or diet was considered a key risk. Because of the strong health promotion and disease prevention (HPDP) orientation of the school, a primary reason for health research was to inform HPDP programs. After several years of epidemiological and ethnographic research in one rural county (See Whitehead 1984, 1992, 2002),) it became apparent to me, that if one expected to attempt to change food behavior in such communities, then such behavior had to be studied as part of a complex system with cultural, social, economic, historical, and psychological components (See Whitehead 1984). This was a position taken by nutritional anthropologists working in other cultural settings. For example, the cultural ecological view of food research advocated by Jerome, Kandel and Pelto (1980) was quite influential on my own thinking at this time:

"Food, by virtue of its pivotal place in human experience is at once, a bundle of energy and nutrients within the biological sphere, a commodity within the economic sphere, and a symbol within the social and religious spheres. Food ideas and attitudes, socioeconomic structure, patterns of resource

> allocation, dietary intake, and nutritional status [have] to be studied holistically as part of a single system. Techniques of food production affect the natural environment, which in turn influence dietary requirements. Patterns of land tenure, food distribution within the society, family traditional cuisines, personal tastes, and financial pressures will influence what people will eat and how well nourished they will be. Differential nutritional status, by making some people more fit than others has wide sweeping social, political, and economic implications." (Kandel, Jerome, and Pelto 1980:)

It was the North Carolina food research that led to one of the core theoretical assumptions of the CSP, and that is.

> If a particular behavior or ideation is practiced or held by *a significant number* within a human community, and *over multiple generations,* than it is quite likely that this behavior or ideation *is part of a cultural system.*

This particular assumption of the CSP led to a theoretical assumption about planning change through CBIs:

> *if a particular ideation or behavior is* part of a cultural system*, than if that behavior is to be changed, programs oriented towards such change must take* a cultural systems approach to change.

This particular assumption led to the emergence of the CSAC, which is a comprehensive model for conceptualizing the planning, implementation, and evaluation of *effective* community based, or *culturally systemic*[8] planned change.

In this working paper, the primary categories of the CSAC are briefly presented. Similar to the CSP, more detailed discussions of these categories are provided in a CSAC Working Paper, and in various CEHC programs in which the CSAC is used. Following the orientation of change initiative in communities or other social system, the CSAC has three major conceptual categories (See Appendix 1, Figure 3, which are:

(1) the **Desired Outcomes** (ultimate goals and/or objectives);

(2) **Process Input Programs** that must be carried out throughout various phases of a change initiative, if desired outcomes are to be effectively achieved; and

(3) **Instrumental Input Programs** that must be put in place in the early phases of a change initiative if the project's desired outcomes, process input programs, and other instrumental input programs are to be effectively implemented and achieved.

The adoption of "Desired Outcomes" as a major CSAC category evolved from my work with community based organizations, assisting them with project planning. In helping them understand what *ultimate* goals or objectives were, I would ask them *what did they desire* to eventually come from their various project activities. Thus, desired outcomes, is a generic term used for ultimate goals or objectives of a project.

From the literature and my many years working with CBIs, the ultimate goals/objectives of most community initiatives fall in the following six areas (See right column of Figure).

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[8] The phrase, cultural systemic, is used to suggest that the CSP is used to carry out analysis of cultural systems beyond simply local communities, total societies, ethnic or national groups, or communities. (See Section 3.1.2. for discussion of other cultural systems).

Theoretical Influences on the Evolution of the CEHC

(1) Changes in Knowledge (about the targeted problem, how to avoid or prevent the problem, or how to overcome it).

(2) **Change in Attitudes** (that put persons at risk for the particular problem, or prevent them from overcoming the problem).

(3) **Changes in Behaviors** (e.g. decrease in behaviors that puts one at risk for diabetes, or increase in behaviors to overcome such problems, or their impact).

(4) **Change** in a targeted **Health Problem** (e.g., increase in the morbidity or mortality from the target health or social problem)

(5) **Empowerment** (capacity building) or enhancement in the capacity of individuals, families, and/or communities to effectively respond to a health problem, e.g., AIDS, and its deleterious impact.

(6) **Sustainability or Institutionalization** of the changes (knowledge, attitudinal, behavioral, health status, and/or empowerment) initiated by a community based intervention.

(8) **Diffusion of** the changes initiated by a community based intervention project beyond those originally exposed to the CBI's intervention

The achievement of the various outcomes is dependent on the achievement of the project's intervention strategies, or **input programs**. As briefly mentioned above, I have divided input programs into two categories: **Instrumental Input Programs** (those that have to be put in place in the early phases of a program for its success) and **Process Input Programs** (those that are ongoing through several phases of a program, if not throughout its duration). Among CSAC's Instrumental Input Program categories are the following:

(1) **Resource Development** refers to the fiscal, spatial, personnel, technological, and other resources needed to carry out the proposed project. It addresses, in particular the issue of project financing and training that a number of scholars think are critical to a project not only being able to achieve its desired outcomes, but also to sustainability (e.g., see Shediac-Rizkallah and Bone (1998).

(2) **Community Involvement/Participation** refers to the involvement of members of the community or population targeted by the population, the strategies to secure community involvement, as well as strategies to develop **partnerships and coalitions** in the design and implementation of the project**.**

(1) **The Development of "Culturally" and "Community/Population Appropriate Materials".** The CSAC holds that in order for a CBI to achieve its desired outcomes, it will need to develop materials for *all* of its input programs (.i.e. materials for resource development, community participation/coalition development, intervention development and implementation, staff monitoring, research and evaluation activities, and materials for the development of materials). The CSAC also holds that efforts must be made to make sure that project materials for all project materials are *culturally* and *community appropriate*[9]*.*

[9]The CSAC uses the concept of cultural appropriateness to include other related concepts such as cultural competency, relevancy, and sensitivity. The CSAC considers **community** (local) **appropriateness** to be as important as **cultural appropriateness**. For example, one might consider a project carried out among Latinos in Los Angeles to be culturally appropriate for American Latinos in general. However, such a project might not be community appropriate for Latinos in Washington, D.C., and may not be culturally appropriate because Latinos are not a monotlitic cultural group nationally, and they are not a monolithic cultural group in large metropolitan areas, as Latinos come from different

Theoretical Influences on the Evolution of the CEHC

(4) **The Development of "Culturally" and "Community/Population Appropriate" Intervention Programs.** Consideration for the cultural appropriateness of interventions is now a standard in most CBIs carried out in the United States, and is necessary given the extensive cultural, social, economic, and regional diversity in the U.S.

Included among the CSAC Process Input Programs are:

(1) **The Monitoring and Continual Assessment of Staff Needs.** The numerous input programs of the CSAC needs an array of different types of staff skills and abilities, carried out over different periods of project implementation. The CSAC also suggests that the success of a CBI is dependent of an *ongoing process of mutual learning* and compromise between the culture of the community or population being targeted by the project, and the culture of the project. As such, the CSAC advocates continuous assessment of staff needs during different phases of the life of a CBI.

(2) **Research and Evaluation**. In the CSAC**,** research and evaluation (R&E) is viewed as an ongoing process that informs the development and implementation of all Input Programs. Community and cultural assessment carried out during the early phases of a project overlaps with formative evaluation, and formative evaluation evolves into process evaluation, process evaluation into outcome evaluation, and outcome evaluation evolves into impact evaluation[10]. The research methods include a range of qualitative and quantitative methods described in detail in Program Technical Manuals (PTM) for two CEHC Systems, "Ethnographically Informed Community and Culture Assessment Research Systems" (EICCARS) and "Ethnographic Assessment and Evaluation Systems" (EAES) (presented later in Section 3 of this working paper).

(3) Implementing Culturally and Community/Population Appropriate Intervention Materials and Methods. Of all of a CBI's input programs, the most relevant to achieving its desired outcomes is the implementation of the culturally and community/population appropriate intervention materials and methods after they are developed.

(4) "**Energizing" Community Cultural Systems** is a CSAC Process Input Program that is related to the Instrumental Input Program of Community Participation/Involvement, and the Desired Outcomes of **Empowerment (or capacity building), Sustainability,** and **Diffusion.** The CSAC concept of energizing community cultural systems means that community involvement does not stop simply with identifying community residents to participate in a CBI, or calling on their expertise in the design and implementation of culturally and community/population appropriate materials and methods of intervention. Community/population involvement includes the development and implementation of strategies for *energizing* or *enhancing* community *enthusiasm* for a CBI, as the project goes on. Enhanced community enthusiasm as the project proceeds, will result in enhanced community participation as well, and will enhance the prospects for empowerment, sustainability, and diffusion. We return to the CSP for defining a community's cultural systems as not simply a reference of the different ethnic groups that may exist within a community; but to the sign*ificant social systems of a community or population, and its ideational, behavioral and* ***material*** systems. In the case of a CBI, the focus are on those social, ideational, behavioral, and material systems that are relevant to the health or social issue(s) that is/are being targeted by a specific CBI.

2.3. The Cultural Systems Approach to Program, Planning and Implementation (the CSAPPE)

The third and final theoretical paradigm of the CEHC is the "Cultural Systems Approach to

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nations in Latin America.

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Theoretical Influences on the Evolution of the CEHC

Program, Planning and Implementation" (the CSAPPE). I received my PhD from a traditional department of anthropology, and studied with some of the leading cultural anthropology theorists at the time (George Peter Murdock, John Gillin, Alexander Spoehr, Hugo Nutini, and others), and the CSP and the CSAC demonstrated the usefulness of this training in the non-anthropological setting that I found myself working at the University of North Carolina. However, theorizing about community based initiatives were not enough in this setting, particularly in the department in which I worked, the Department of Health Behavior and Health Education (HBHE). During most of the time that I was at HBHE, the department was chaired by Guy Steuart, along with other faculty like John Hatch, Leonard Dawson, and Allen Steckler, the orientation was overwhelming community action. Working with these guys, I could not stop with the CSP and the CSAC as theoretical models, but needed to demonstrate how the benefits of these paradigms into instruments of change, which was only possible through the transfer of their capacities, to those in the communities being targeted for change. As such, whereas the CSAC is primarily a paradigm for conceptualizing effective community based change, the CSAPPE is primarily *a paradigm for operationalizing the categories of the CSAC* in order to effectively achieve *design, implement,* and *evaluate* effective CBIs. In other words, the CSAPPE provides the processes used in carrying out all CEHC programs. That opreationalization of the CSAC and CSP categories are the programs of the CEHC, and will be briefly outlined in the discussion of those programs, provided in Section 3 below. These programs are discussed in greater detail in the working papers on each.

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