Yukon Health Promotion Research Program - Part 1

An Accounting of Health: What the professionals say

A review of the considerations of the health promotion research program

November, 1992

The Yukon Government
Executive Council Office
Bureau of Statistics

This paper is one in a series of four reports on the Yukon Health Promotion Research Program. Report #1: **What the professionals say**, provides a review of the relevant literature of interest in the consideration of a health promotion survey. Report #2: **What the individuals say**, outlines the results of the qualitative research component of the research program. Report #3: **What the groups say**, provides documentation of the focus group methodology and results. Report #4: **What the numbers say**, presents the methodology and results of the 1993 Yukon Health Promotion Survey.

- Report #1: **What the professionals say** — Fall 1992

  A review of the considerations of the health promotion research program

- Report #2: **What the individuals say** — Fall 1992

  A review of what Yukoners say about the concept of health

- Report #3: **What the groups say** — Winter 1992/93

  A review of what the stakeholder groups say about the issues and concepts of health

- Report #4: **What the numbers say** — Fall 1993

  A review of the methodology and results of the 1993 Yukon Health Promotion Survey

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Glenn Grant
Director, Yukon Bureau of Statistics

Yukon Health Promotion Research Program

A. *Introduction*

What are the concepts, correlates, and priorities of health? How do Yukon residents perceive their health? What do Yukon residents do to promote their health? What are the life-style behaviours, attitudes, and beliefs of Yukon residents? What are the interrelationships and correlates between Yukon residents' attitudes, behaviour, and subjective measures of health? These are the questions of the health promotion research program.

The Health Promotion Research Program contributes to the translation of public policy into action. Without a theoretical or programmatic knowledge base, the links between political direction, policy, and programming are tenuous at best. As an integrated and policy-focused program of inquiry, the Yukon Health Promotion Research Program contributes subjective knowledge of community and organizational health and health needs of the Yukon.

Health strategies and policies are built on knowledge--knowledge of the communities' concepts of health, their beliefs, attitudes, behaviours, and priorities. The combined components of the Yukon Health Promotion Research Program are oriented to obtaining this knowledge.

B. *Mission*

The overall mission of the Health Promotion Research Program is to contribute to the improvement of the social, mental, spiritual, and physical well-being of all Yukon residents. This broad objective translates into the following goals:

- To contribute a knowledge base related to the achievement of healthy life-styles by providing a Yukon understanding of the concepts of health and healthy life-styles.

- To foster behaviour to improve health within living and working conditions indirectly through the development of information for health professions.

- To increase public awareness and knowledge by providing usable knowledge and by assuming the responsibility for interpreting and disseminating this knowledge.

- To increase the effectiveness of practitioners by providing a variety of explanatory knowledge including qualitative and quantitative forms.

- To provide theoretical and program information to develop new programs and improve existing programs. Policy and programs are built on knowledge; it is the objective of social science research to reduce the uncertainty of the decision-making environment.

- To provide a focus to and coordination of strategies and policies for the Government of the Yukon. The research itself serves as an important catalyst between interdepartmental interests and attention to health.

- To involve stakeholders and increase public participation. The research serves as a case study in formal public consultation. Both the qualitative and stakeholder components are important experimental consultative tools.

- To increase Yukon residents' capacity to exert control over the factors that affect their health by developing Yukon definitions of health and by providing Yukon residents with Yukon information and knowledge to make their own decisions and to screen critically the messages received from all sources.

- To undertake and provide meaningful organizational and policy research consistent with the mandate of the Yukon Bureau of Statistics. This is a personal commitment by the YBS to take its role seriously in the organization and to accept the responsibility not only to develop professional research but also to ensure the integration of this research into the policy and program functions of the organization.

- To shed light on life-styles and health behaviour, personal characteristics related to life-styles, perceived environmental conditions, and perceived health, and to determine the prevalence, distribution, behaviours and status of the population.

Program Overview

The objective of this research is to develop a broad reporting of behaviours, attitudes, and understandings related to health. It is the intention of the research to build policy-focused research that will support the implementation of the Yukon Health Act. This Act is based on a socio-ecological perspective of health. As a consequence, the research program uses methodologies that are sensitive to Yukon residents, their unique understandings of health, and their priorities. This multi-method research program includes both qualitative and quantitative methodologies. The research also incorporates policy integration and utility-focused evaluation. The substantive content of the research is the development of information necessary for health policy and program implementation. Several phases are undertaken.

The first three phases:

Phase I: Literature review, Phase II: Qualitative Review, and Phase III: Stakeholder Review -- these first steps are formalized consultation and community validation phases required to ensure a Yukon grounded knowledge base. In addition, the Stakeholder Review represents pre-survey research (of concepts, meanings, language, and priorities) necessary to ensure the greatest utility and effectiveness of the next phase.

Fourth phase:

Phase IV: Yukon Health Promotion Survey (YHPS) -- this phase involves the design and administration of a general population survey in the Yukon.

Last phase:

Phase V will be undertaken to provide the analysis and final integration of results into the needs of the organization.

The pre-survey phases represent a thoughtful research strategy to develop an understanding of Yukon residents' views of health. The stakeholder review, in conjunction with the literature and qualitative review, will assist in defining a collective consensus on the concepts of health. This research strategy represents an innovative approach to confirming or verifying the reading of the analytical categories of health promotion (health promotion literature) and the statements of the Yukon residents (qualitative research). Phases I, II, and III are unique research endeavours unto themselves and produce knowledge oriented to the immediate policy and evaluative demands of the newly enacted Yukon Health Act. These initial phases provide an understanding of Yukon's concepts of health, what Yukon residents perceive as meaningful ways of measuring health (health indicators or how one knows when health is present in the community), and what are Yukon residents' priorities when viewing health?

The pre-survey research provides a sound base on which the Yukon Health Promotion Survey is constructed. The purpose of the pre-survey research is to ensure a meaningful health promotion survey: meaningful in terms of the participants' expressed needs, the policy needs, and the demands of the North and national program implementation.

1 The Review: An Account of Health

1.1 A road map of this review

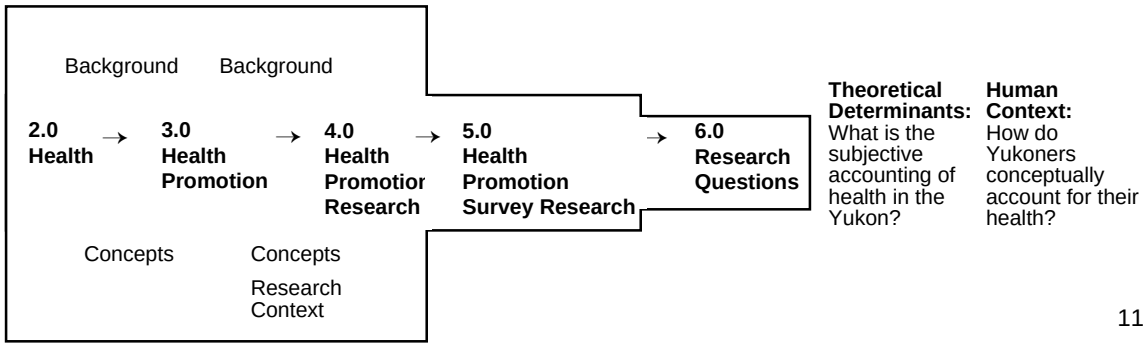
This is the thread that binds this review of the literature - its concern with research.

This review documents the theoretical concepts of health that inform the Yukon Health Promotion Research Project. To be effective, research must be tied to the content area through the historical and theoretical grounding of that discipline. This is the thread that binds this review of the literature - its concern with research. Health promotion researchers must be cognizant of the tradition they build upon and the knowledge they contribute. They do this by understanding and using the analytic and cultural language of health promotion. Users of the research as well must be sensitive to the many factors and dimensions of health promotion—a necessity to appreciate the research model adopted.

The needs of this research are broad and do not focus on any single area of health research. Participation of Yukoners and negotiation of the specific research topics by stakeholders and health professionals will ultimately influence the research content and theoretical format. To accommodate a cooperative research model, the review of the literature will build a base for subsequent research, not a single theoretical proposition. This base will be a summary of the health promotion language and logic required to participate fully in the local health research as well as a contribution to the larger community of professional health promotion researchers. Research is a process of learning and participating, not an end unto itself. The literature review is only useful in informing the participants and users of the reference or framework in which the research was constructed and has utility. This role of the literature review will be served by providing a discussion of the influential literature that informed and shaped the research program.

Section 1.0 develops the theme of an accounting of health and represents the objective of the research. The second section (2.0) of the health literature review provides the health context for the research and elaborates on the ambiguity and variation inherent in the concept of health. This section is followed by a discussion of the specific health objectives of the research (3.0) representing the needs and purposes of health promotion. Several of the substantive issues of health promotion measurement are summarized in section four (4.0) and then expanded in the context of the determinants of health in section five (5.0). The last section (6.0) states the research questions emerging from this accounting of health.

Figure 1: The Plan of the Literature Review: Health Promotion



1.2 *The origin: health*

The undeniable success of science and the biomedical model of health in the twentieth century has secured a prominent status for biomedicine in our health care system.

It is helpful to consider, as a starting point, the foundation upon which our modern concept of health was established. The origins of western health are essentially ecological and holistic (Noack, 1987). As an ecological perspective, health was built on the concepts of equilibrium between the environment and individual ways of living from a Hippocratic tradition. Medical intervention in this tradition was interpreted merely as a support to the natural order, not something apart from nature. In contrast to these natural beginnings of western medicine, the introduction and dramatic achievements of the scientific tradition radically changed the purpose and meaning of health. This shift to the scientific paradigm of knowledge is well documented (Schwartz and Ogilvy, 1979) and has permeated virtually every field of inquiry in western culture. The undeniable success of science and the biomedical model of health (Noack, 1987) in the twentieth century has secured a prominent status for biomedicine in our health care system. Although the biomedical model has been accepted as having effected significant change at the individual level, success, measured in the lowering of the rates of mortality and morbidity of the population, was experienced primarily as a result of the scientific advances in nutrition and sanitation of the late nineteenth and early twentieth centuries (Berliner, 1984). This fact appears paradoxical to the biomedical claims of having the major role in the advancement in overall population health. Our modern setting of health, with its technology, scientific knowledge, reductionism, expense, and positivist stance, is unquestioningly accepted in the minds of most professionals and customers of modern health care. This acceptance represents an almost complete shift from the the origins of the historical ecological foundation from where our concept of health began.

... a voice of discontent is growing over the exclusive dominance of health by the biomedical perspective.

However, new voices are emerging to challenge the dominance of health by the biomedical perspective. They call for a focus upon the broader social context in which to integrate health and health intervention. These voices need not be viewed as a threat to the logic of the biomedical model or the value of what that model has to offer, but as a call for balance and an end to the exclusivity of a single form of knowledge or explanation. The purely positivistic world view has long been dispelled in many of the disciplines of the natural and social sciences, and this enlightenment appears to be making significant inroads into the discipline of medicine.

Health promotion leads the way in integrating an ecological approach to health ...

Health promotion leads the way in integrating an ecological approach to health as illustrated by its current focus on social and environmental issues and community action. Calls have also been made to recognize such other 'ways of knowing' as the phenomenological and hermeneutic traditions of thought. The implications of this shift are significant to the present research. Both the expansion of the definitions of the medical models and the acceptance of a broader range of knowledge profoundly influence the role and stance of research. At the heart of the expansion is a shift of our ontological and epistemological perspectives, and methodological change is a consequence. In

How the boundaries of a problem are framed ... will determine the information and the evidence that is appropriate ...

short, our boundary expansions are interrelated since a concept of health flows from the logic of a culture's 'way of understanding', while measurement of health is a direct result of how we come to know the reality of health. This observation forms the preface to this research. How the boundaries of a problem are framed (definition and 'ways of knowing') will determine the information and the evidence that is appropriate and, equally important, what information is disregarded or considered inappropriate.

1.3 The destination: an accounting of health

The term "account" has been purposefully chosen to reflect the need to portray health in an ecological context beyond the objective measures of mortality and morbidity.

The final destination of this research is an accounting of the health of Yukoners for the purposes of health promotion. This review is offered as a guide to the author's path - the underlying assumptions of this account. The term 'account' has been purposefully chosen to reflect the need to portray health in an ecological context beyond the objective measures of mortality and morbidity. To ensure that the term 'accounting of health' is operationally clear, it is noted that the definition of the word 'account' includes both a financial meaning of rigorous calculation and a social meaning of narration or description. The latter interpretation offers an opportunity to pursue a descriptive framework consistent with an accounting of a social phenomenon; this is the intention of the usage of 'accounting' throughout this discussion.

A responsibility is felt by the researcher to invest effort into understanding the term 'accounting' and the debate that surrounds the concepts of health. This research will provide information determined by the boundaries and purposes of the understanding of an accounting of health. Selectivity is a responsibility that cannot be individual and must be extended to the community and to the users who will ultimately make decisions based on the accounting. This responsibility can be illustrated by considering the problem of linking the concepts of health with an accounting of health. An accounting of health provides measures essential to a specific definition of health. These facts do not have meaning without this theoretical reference point. Our accounting, then, provides the information that is central to evaluating and redefining health. This observation carries with it a responsibility to those individuals who are affected and influenced by the development and reporting of a specific accounting of health. Consequently, the challenge of the research is to account for health within an accepted and collective definition of health. The imperative for research is to recognize the implications of the accounting of health—what is included becomes health while what is excluded is not.

Our accounting, then, provides the information that is central to evaluating and re-defining health.

... the assignment of meaning to any accounting of health must be developed from within the community and the Yukon.

In conclusion, health is measured and understood according to the prevailing views of health (New Zealand Department of Statistics, 1989). As there is no formal consensus on what factors should be included or excluded from the definition of health (Mooney, Rives and Norfeld, 1978), the assignment of meaning to any accounting of health must be developed from within the community and the Yukon. What is included or excluded from the concept of

health is determined by the values espoused within the community (Hayes and Willms, 1990). Clearly, an accounting of health is only useful if it is related to a definition, structure, or conceptual framework. The first challenge of an accounting of health is to address the question of what is health, or more modestly, what are the shared understandings of the prevailing views of health?

2 The Context of the Account: Health

2.1 Shared understandings of health

Concepts of health set the boundaries in which individuals relate to their own health and a framework for professionals and policy makers to interpret their roles and approaches to health care.

The research program must be built on some concept of health. Consequently, the first objective will be to develop a common understanding or acceptable conceptual language of health. This concern for the conceptual framework and definition of health is not merely an academic interest, it is a necessary step for research. Concepts of health set the boundaries in which individuals relate to their own health and establish a framework for professionals and policy makers to interpret their roles and approaches to health care. An elaboration of the issue of the concepts is essential to an accounting of health: it defines what is or is not health, what knowledge is legitimate or silent, or what health practices are funded or not funded. The concepts of health are central to the research, understanding, evaluation, and advancement of any system of medicine (Salmon, 1984).

In a Kantian sense, concepts are merely organizations of reality. For the constructionist, a concept is the socially agreed-upon convention of ontology, an adaptation of perception that "fits" (von Glaserfeld, 1991). A positivist would define a concept as a theoretical construct or corresponding set of operations or theoretical explanations (Miller, 1985; Nagel, 1979). From any of these stances, a concept is the filter through which an individual comprehends a phenomenon and communicates their understandings to others, in this case the phenomenon of health.

... health concepts are ambiguous; they are explanatory and evaluative notions that are normative as well as descriptive ...

Unfortunately, health concepts are not easily articulated as they are profoundly ideological (Burrage, 1987), and represent the "values, beliefs, knowledge and practices shared by lay, professionals, and other influential peoples" (Noack, 1987). Engelhardt (1974,1975,1976) warns that health concepts are ambiguous; they are explanatory and evaluative notions that are normative as well as descriptive. Health concepts are normative as they reflect the society in which they are embedded (Goosens, 1980; Jingfeng, 1987). In the words of Engelhardt (1974), health concepts are normative because "to say one is healthy or ill, has well being or lacks it, is to indicate what one ought or ought not to be" (p. 235).

Different health concepts are neither right nor wrong, they simply have different purposes and fields of application (Evans and Stoddart, 1990). This statement underlines the need of the researcher to explore and make explicit the concepts informing the research choices. It is the responsibility of the researcher

to be aware of the different purposes, contexts, and applications that are shared within a given society. Understanding the nature of the concepts of health provides insights into how health questions can be addressed or accommodated in the language and understandings of the participants. At the very broadest level, the western concepts of health tend to be scientific or analytical in contrast to non-western cultures that reflect more phenomenological perspectives. Our 'local knowledge' or 'interpretation' of health is strongly influenced by the rational etiological system (Ngokwey, 1988) while non-western interpretations can be supernatural or cosmically-based.

... the western concepts of health tend to be scientific or analytical in contrast to non-western cultures that reflect more phenomenological perspectives.

Finally, the concept of health is separate from the concept of disease. Disease is not health, it is merely one negative state of health. Disease is an explanatory model of a constellation of symptoms, "explanatory accounts are not things; things are what explanatory accounts explain and disease is a mode for explaining things—in particular, ill humans" (Engelhardt, 1975). The concept of health then is not the absence of disease, it is more holistic and positive in its formulation. Concepts of health relate to the way individuals and collectives make sense of the phenomenon of health, but still what is health?

The concept of health then is not the absence of disease, it is more holistic and positive in its formulation.

2.2 The organization of these understandings

From the basic understanding of health emerges the models that structure and guide the way we think and act upon health matters. Models are expressions of concepts and these abstractions generally tell us more about how we view or organize our reality than how reality actually is. Models of health reflect the many philosophical and societal influences that underpin health (Salmon, 1984). Designed to simplify, the models of health indicate causality in the relationships between the determinants of health and the overall health of a population. However, it is the determinants identified and relationships stressed that constitute a model of health.

Models of health reflect the many philosophical and societal influences that underpin health.

The importance of a health model cannot be overemphasized. The model we choose, or is chosen for us, has great implications for how health is seen, attended to, and organized. From the perspective of government and policy, the explication of the models and concepts of health is as essential as the framework from which health policy is formulated.

"Models do not tell us more about the risk factor but about ***the way we perceive*** the exposure routes to the risk factor in the population. As such the model may be useful to policy makers, not in assigning quantitative values to the causal contributions of the determinants of health, but more in assigning subjective estimates in the probability of success when intervening through different levels." (Gunning-Schepers and Hagen, 1987, p. 950, emphasis added)

The model of health provides the language and the logic that guide questions asked and solutions considered. These boundaries are essential to understanding the research, its interpretation and its utility to policy. To illustrate the basic

variations in the organization of health, the following summarizes three overlapping models for consideration.

2.2.1 Biomedical model

Health in this interpretation is related to the metaphor of a machine: cure is repair, repair is cure.

As the most prevalent schema of modern scientific medicine, the biomedical model has been implicated with the positivist view, Cartesian mind-body dualism, and the mechanistic world view. Depending upon one's perspective, this stereotypical description can be interpreted positively or negatively. Much criticism of the scientific foundations of the biomedical model is consistent with the ongoing attack on the reductionism and elitism of western scientific thought. This debate aside, the biomedical model shares much of its success and limitations with the natural sciences. Although the biomedical model is partly based on humanitarian concerns (Saldor, 1990), social scientists criticize its exclusion of the social domain of health (McKee, 1988). No one seriously sees this health model to be exclusively concerned with biomedical processes, yet the essential features of this model are diagnosis, treatment, and prognosis. Health in this interpretation is related to the metaphor of a machine: cure is repair, repair is cure (Tones, 1990). The model strongly biases intervention to discrete solutions to discrete problems.

... the search for causes and "things" that create disease dominate and overshadow the more subtle interrelationships of the socio-ecological mode ...

Berliner (1984) characterizes the biomedical model as having three basic assumptions: (1) disease as a materially-generated etiological agent, (2) the patient as a passive object, and (3) a method of invasive manipulation aimed at restoring the patient to statistical norms (Berliner, 1984). These assumptions typify the model and the resultant delivery system of modern health care. The first assumption has strongly influenced the type of information sought in health research—evidence of material agents of ill-health. Whether epidemiology or laboratory research, the search for causes and "things" that create disease dominate and overshadow the more subtle interrelationships of the socio-ecological model. The second assumption reflects the authoritative stance of the professional with the exclusive ownership of the knowledge for care-giving. Patients are now questioning the effectiveness of this position. The last assumption has been challenged because it may not be appropriate to apply the same normative standards to all individuals. All these assumptions have influenced the acceptability of the biomedical model by those who are participating in the health process.

Discontent with the biomedical model has been attributed to an accumulation of many factors including: change in disease and demographic patterns, passive nature of the patient, limitations of the hospital setting, technological dependency and alienation, curative emphasis rather than preventive measures, and rapid escalation in costs (Berliner, 1984). These factors have raised doubts about the ability of the biomedical model to adapt to these changing influences. Structural change of the health environment dictates some form of adjustment to how health is viewed. Few practitioners would forecast the end of the biomedical model as it is well entrenched in the health care system; however, the

influence of the health promotion and health prevention fields has begun to introduce socio-ecological dimensions to health (Salmon, 1984).

... the influence of the health promotion and health prevention fields have begun to introduce socio-ecological dimensions to health.

2.2.2 Socio-ecological model

General systems theory has long since rejected the concept or possibility of a single truth. This rejection is evident in the application of systems theory to health. With a systems approach comes the implicit assumption of reciprocal causation between an individual's health and his or her environment (McElroy and Townsend, 1988). The socio-ecological perspective is dynamic and emphasizes interrelatedness between the individual, his or her health, and social, economic, and physical environments. This dynamic state involves subsystems and interrelationships. Health is now moving towards the systems or socio-ecological approach, one in which not only the biomedical sub-systems are recognized but also those sub-systems of the physical and social environments which interact with the individual (Stachenko and Fenicek, 1990).

Saldor (1990) offers three health sub-systems: the individual, health institutions and organizations, and society (political, economic, and demographic). Although the names of the sub-systems may vary, the fundamental principles of interdependency, interaction, and dynamics are maintained. The dynamic equilibrium of these interactions defines the state of health (Noack, 1987). This new "sociological paradigm" (Noack, 1987) or "web of causation" (Seraganian, Sinyor, and Schwartz, 1989) is multi-factoral and expands health research to include biomedical, sociological, and physical factors.

... the fundamental principles of interdependency, interaction, and dynamics are maintained.

The adoption of this socio-ecological approach introduces components of variety and complexity to the issues of health research. Implicit in the adoption of this model of health is the elimination of singular causalities, individual responsibilities, or simple solutions. This model of health expands the scope of health (some critics have used the terms 'medical imperialism' or the 'medicalization of society') to encompass connections of the individual, social, economic, and physical domains. This broadening also extends to the way health is perceived, measured, or defined. This expansion of scope demands the recognition of not only the traditional objective measures of mortality and morbidity but also the subjective indicators inherent in the physical, mental, or social environments (Rootman, 1989).

This model of health expands the scope of health ...

Socio-ecological health emerges as "a pattern that connects" the natural and man-made elements of life (Kickbusch, 1989). It connects the previous model of biomedicine to the social context in which it exists. Although the previous biomedical model was silent on issues outside its domain, the socio-ecological model cannot ignore the biomedical model in the same way (Groce and Scheer, 1990). As a reference point for research, the socio-ecological model expands the determinants of health into the social, economic, and environmental domain while expanding the types of information acceptable. The challenge of this

model is its inclusiveness, as opposed to the exclusiveness of the biomedical model. By adopting the socio-ecological model, research is faced with the task of balancing an ever-expanding set of variables with pragmatic needs.

2.2.3 Alternative medical models

Alternative medicine includes such disciplines as herbalism, naturopathy, acupuncture, osteopathy, psychic surgery, chiropractic, spiritual healing, homeopathy, massage therapy, and hypnotherapy.

As varied within this group of models as between the previous two models, the term 'alternative models' designates a collection of disciplines and practices that share in some way the integration of the individual—the body, mind, and spirit (McKeen and Wong, 1990). In addition, some forms of this diverse group rely on the notions of energy, holism, and harmony (Patel, 1987) as the means of integration and focuses of health. Termed 'traditional', 'holistic', 'unorthodox', 'unofficial', or 'fringe' by some, the term 'alternative model' is used in this paper as a convenience not a value judgement. Alternative medicine includes such disciplines as herbalism, acupuncture, osteopathy, psychic surgery, spiritual healing, homeopathy, massage therapy, and hypnotherapy.

... alternative models may be good at dealing with chronic and functional diseases in contrast to the medical model which best treats acute and organic diseases.

The mere presence of alternative models of health indicates a perceived need not fulfilled within the dominant health care paradigm. Dissatisfaction with contemporary medical practices or attitudes, recognition of the totality of the individual (McKee, 1988), sensitivity to life-style issues, and the involvement of the patient in treatment have all been cited as reasons for the popularity of alternative medicines (Furnham and Smith, 1988). Jingfeng (1987) suggests some acknowledgement that alternative models may be good at dealing with chronic and functional diseases in contrast to the medical model which best treats acute and organic diseases. Despite their growing popularity and their apparent niche within care-giving, these alternative disciplines do not receive uniform acceptance within the established medical (allopathic) community.

Where charges of being unscientific hold, the acceptance of these alternative models requires a significant change in world views ...

Many reasons exist for the medical community's lack of acceptance of these forms of health care. These reasons range from presenting a threat to the power of the formal health institutions and the commodification of health needs to the lack of scientific evidence in the evaluation of the treatments offered by alternative models (McKee, 1988). Where charges of being unscientific hold, the acceptance of these alternative models requires a significant change in world views or models of reality on the part of those practitioners in the biomedical field (Patel, 1987).

From a research perspective, sensitivity to the concepts of alternative medicine is justified in the presence of those who use these models or disciplines. In addition to the research interest, Jingfeng (1987) suggests that "the lofty goal of WHO, 'Health of all by the Year 2000', will not be realized if modern medicine fights alone" (p. 659).

2.2.4 Summary

... there are several concepts and resultant models of health ... (which) provide legitimate ways to organize and create health-related activities.

All three models are important in that they inform the research process with assumptions and frameworks for what is legitimate or illegitimate knowledge for the community under study. The boundaries of the prevailing models guide the philosophy of the research while ultimately influencing methodological choices. The models of health provide a further step towards an answer to the question: what is health?

It is clear that there are several concepts and resultant models of health. Moreover, these models provide legitimate ways to organize and create health-related activities. These models are adopted by individuals who share common understandings of their reality and the ways to attend to it.

2.3 A search for a definition of health

Any form of social knowledge undergoes constant revision.

The next step in building an appropriate context for research is to arrive at some operational definition of the focus of the work, in this case, health. Definition is essential to an accounting of health as without some agreed-upon framework, an accounting would prove meaningless. The search for this definition is hampered by the cultural and social nature of the term. Any form of social knowledge undergoes constant revision. The current metamorphosis of the definition of health reflects a shift in both the scope and focus of the concepts of health over time according to the existing paradigms of health (New Zealand Department of Statistics, 1989). This definitional change is not unique to the 1990s. The historical, definitional themes of health have been succinctly presented by McDowell and Newell (1987):

> "The rising expectations of the past 150 years have led to a shift away from viewing health in terms of survival, through a phase of defining it in terms of freedom from disease, thence to an emphasis on the individual's ability to perform his daily activities, and now to the current emphasis on positive themes of happiness, social and emotional well-being, and quality of life" (p. 14).

From the definition of health will flow the entire political and administrative character of the health care system ...

Necessity for a definition of health transcends the desire for order or mere intellectual curiosity. From the definition of health will flow the entire political and administrative character of the health care system: "it will ideologically circumscribe elements of health policy and the reorganizing of medicine" (Salmon, 1984 p. 252). For the present study the question of definition is vital to the formulation of health policy questions and the provision of appropriate research responses. Equally important, the process of definition is essential in making any account of health, whether descriptive or statistical, meaningful

and useful. The challenge for the research process involved in an accounting of health, is to arrive at an acceptable and useful specification of health.

Fodor and Dalis (1974) suggest that health is a term that defies definition. They go on to argue that a definition would limit and fabricate artificial boundaries around the meaning of health. In their words: "a definition places unnecessary boundaries on its meaning. Rather than definition, a number of descriptions to convey its dynamic quality are needed" (Fodor and Dalis, 1974). Although this opinion does little for one's sense of order, it does support accommodation and variability in the perspectives of health. This direction is important to our concept of accounting and suggests the futility of a single deterministic expression of health.

... most of the definitions of health are confusing, varied, ambiguous, and for the most part, difficult to put in operational terms ...

Where to begin to define health? A review of the major definitional themes of health reveals one common opinion: most of the definitions of health are confusing, varied, ambiguous, and for the most part, difficult to put into operational terms (Chiang and Cohen, 1973). This observation only supports the contention that these definitions are local - that is, understood within a particular cultural, historical, and economic context.

Some common observations regarding the definition of health do exist but these commonalities relate to differences or deficiencies rather than similarities in definitions. First, former definitions of health appear to focus on functional health while neglecting the experiential dimensions of health—specifically how individuals view their subjective well-being (Salmon, 1984). Second, health appears to take on many forms of description and has been described as self-actualization, independence, an organization of energy fields, a dynamic state of the life cycle, an equilibrium, an environmental adaptation, or an awareness (Holden, 1990). Last, the continuum of health ranges from an undefined and positive well-being at one end to very concrete and objective biological circumstances—disease, disability, or death (Evans and Stoddart, 1990).

... health definitions fall into one of three categories: health as the absence of illness and disease; health as a dimension of strength, weakness, and exhaustion; and health as a function of fitness.

One author on health suggests that health definitions fall into one of three categories: health as the absence of illness and disease; health as a dimension of strength, weakness, and exhaustion; and health as a function of fitness (Calnan, 1987). Anderson (1981) offers five other categories: health as a product or outcome, health as a potential or capacity to achieve goals or functions, health as a process or dynamic phenomenon, health as experienced by individuals, and health as an attribute of the individual such as physical fitness or emotions. These categories reveal regularities in the definition of health that reduce the variety and ambiguity of the term.

Underlying all forms of health definitions are what de Leeuw (1989) refers to as 'irreducible minimums of health.' These 'minimums' indicate facets of health that are present throughout many of the reviewed definitions of health. The 'irreducible minimums of health' include: the ability to adapt, the capacity to perform tasks, the presence of positive and negative states of health, the

existence of multidimensional causality, and the balance of relative states of health (de Leeuw, 1989). These facets of health share some common elements found in the major definitions of health and are illustrated in the examples of the definitions of health provided in the next section.

Noack (1987) provide a useful means of organizing examples of the variation in definitions of health offered. They suggest four major categories for classification. In their typology, the definitions of health are:

- health as a holistic or multi-dimensional concept (dimensions include health as absence of disease, symptoms, illness or disability, health as a positively-valued psychological experience);
- health as balance or equilibrium to pursue goals;
- health as capacity or potential to cope with environmental and social demands; or
- health as the process of goal-directed action or effective coping (Noack, 1987).

The subsequent definitions of health reflect examples of the numerous concepts, purposes, participants, and perspectives that are present in the domain of health. For purposes of discussion, various examples of these approaches to health definition may be grouped using Noack's four categories. The simple biomedical definition of health as the mere absence of disease is not considered here; rather, a focus on the socio-ecological model is assumed. The following is a selection of examples of the definition of health.

2.3.1 health as holism or multi-dimensionality

Health, as a multi-dimensional state of human existence, has been defined as: "a multidimensional phenomena *[sic]* and a variety of factors can be identified as contributing to the health of an individual. These factors encompass physical, mental and social well-being" (New Zealand Department of Statistics, 1989, p. 16). Adding to this descriptive definition of the domains of health, Siler-Wells (1988) establishes the dimensions of health in a more dynamic and interrelated fashion by suggesting health is "being fully alive, physically, mentally, spiritually and emotionally, and being connected in a fulfilling way with a natural and human world that surrounds us" (p. 7). Illich puts a very human face to the interconnected relationships of health when he defines what makes a healthy person:

> "healthy people are those who live in healthy homes on a healthy diet in an environment equally healthy for birth, growth, healing, and dying; they are sustained by a culture that enhances the conscious acceptance of limits to population, of aging, of incomplete recovery and ever-imminent death" (p. 272).

... the World Health Organizations' (1948) definition provides a simple summary, health is "the state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity".

This theme of interrelatedness is taken further by Edelman and Milio (1986) who define "health as a totality of life processes with disease included as a process ... no disease or illness is caused by any single factor and no single factor is sufficient to maintain health" (p. 6). Although one of the most dated expressions of holistic health, the World Health Organization's (1948) definition provides a simple summary, health is "the state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (p. 100).

2.3.2 health as balance or equilibrium

The view of health as a dynamic state of life is evident in Capra's (1983) definition of health. Health is "an experience of well-being resulting from a dynamic balance that involves the physical and the psychological aspects of the organism, as well as its interaction with its natural and social environment" (p. 232). This dynamic of experience is built on by Fodor and Dalis (1974) who incorporate the view of a dynamic continuum of health:

> "... health is a dynamic quality of life rather than a static entity. No longer is the individual thought of as being 'healthy' or 'unhealthy.' Rather health during any time spans from optimum well-being to low-level wellness. Well-being fluctuates on a health continuum rather than remaining static at any one point. In reality health is not merely a continuum of physical well-being or of mental or social well-being but a combination of all three, dynamically interrelated" (p. 3).

Lastly, Scheuermann, Scheidt, and Nussel (1990) see ill-health as a disturbance of the equilibrium:

> "... the concept of health is increasingly considered as indivisible between psychological and physical well-being and this conceptualization includes the social and environmental aspects as well. Disease is regarded as disturbance of this balanced well-being" (p. 53).

The objective of health appears to be a recognition of the multidimensional nature of existence and the ability (social or individual) to balance the sphere of human experience.

Both of these categories of definitions suggest interrelatedness between the many spheres of health. The objective of health appears to be a recognition of the multi-dimensional nature of existence and the ability (social or individual) to balance the spheres of human experience. The above definitions reflect a socio-ecological interpretation of health implicitly in the needs reflected in the many spheres of human health. Health is total, interrelated, multidimensional, and the product of the human condition.

These two dynamic interpretations of health contrast sharply with the next two categories. Health as capacity, potential, or action suggests the achievement of individual or societal goals and expectations rather than the integration with the natural order of things.

2.3.3 health as capacity or potential

From a very practical and functional perspective, "health is seen as a resource for everyday life, not the objective of living; it is a positive concept emphasizing social and personal resources, as well as physical capacities" (Kickbusch, 1986, p. 321). The capacity of an individual to engage in society offers a surrogate for health; Noack (1987) suggests that "health is the imputed capacity to perform tasks and roles adequately" (p. 11). Or, more fully developed, this definition specifies health as "a relative state that represents the degree to which an individual can operate effectively within the circumstances of his heredity and his physical and cultural environment" (de Leeuw, 1989, p. 1282). Lastly, the societal reference as the metric of health, can be seen in the definition by Parson (1972) in which health is portrayed as "the state of optimal capacity of an individual for the effective performance of the roles and tasks for which he has been socialized" (p.117).

2.3.4 health as goal-directed action or coping

Coping and enabling are present in many interpretations of health. Health is "a resource which gives people the ability to manage and even to change their surroundings" (Health and Welfare Canada, 1986, p. 6). Alternately, health is "a modus vivendi enabling imperfect men to achieve a rewarding and not too painful existence while they cope with an imperfect world" (Noack, 1987, p. 11). Beyond the process of coping, health is the practical goal of living a normal life. Boorse (1977) suggests "health is normal functioning, where the normality is statistical and the functions biological ... theoretical health is the absence of disease and practical health brought the absence of treatable illness" (p. 542). All these definitions are related to the goal of living and remaining healthy. To Nordenfelt (1984) "health is defined as ability, ability means power to fulfil basic needs, the fulfilment of basic needs is a necessary condition for health. In short: health is the ability to keep oneself healthy" (p. 20).

In short: health is the ability to keep oneself healthy.

Rather than the systems interpretation of the first two categories, these last two categories provide an individual and functional definition of health. Health reflects human roles, fulfilment, and expectations. Health is related to one's ability to perform tasks, social roles, or to engage in life and live a life beyond mere existence. Contrary to the simple biomedical model, disease is not the overriding emphasis; rather, human function and positive health are the important attributes of health and life.

... disease is not the overriding emphasis; rather, human function and positive health are the important attributes of health and life.

All of these definitions serve only to illustrate the debate regarding the definition of health. The purpose of this section is to underscore the diversity and multiplicity of purposes of the definition of health. Having expressed this diversity, the last task is to review the most influential definition of health. Much of the rhetoric in the literature owes its origin to the first major expression of a non-biomedical expression of health, the World Health Organization's definition of health.

2.3.5 The WHO definition of health

In addition to the many offerings provided throughout the literature (of which those listed earlier are only a sample), special attention must be paid to the WHO definition of health as it has proven to be the most influential and pervasive elaboration. Health is "the state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (WHO, 1948, p. 100). This definition permeates any discussion of health and has inspired major changes in the way health has been viewed. Nevertheless, it has also attracted considerable debate regarding its usefulness or real contribution. The WHO definition of health was intended to serve as a framework, not as an operational definition nor as an ideal that can be aspired to but never attained (Stachenko and Fenicek, 1990). Within the positive WHO definition, there is a focus on the individual as a system rather than merely as a series of independent and constituent parts. In addition to the acknowledgement of the parts of the systems, this definition also provides a link between the internal and external environments and a personal role of fulfilment in life (Efelman and Milio, 1986).

This definition permeates any discussion of health and has inspired major changes in the way health has been viewed.

As the most influential of all definitions, the WHO denotation has attracted significant criticism. Criticism of the WHO definition focuses on the use of the word 'complete', a normative and overdetermined (Oppl and von Kardorff, 1990) rather than operational concept. The WHO definition addresses what ought to be and offers wide interpretation on all aspects of health (Salmon, 1984). Complete or optimum is a relative term with a meaning that is idiosyncratic and contingent on circumstance. Other authors (Noack, 1987; Oppl and von Kardorff, 1990) suggest that the definition is ambiguous, difficult to measure, and implies medical imperialism or an all-encompassing ideology of health in which everything revolves around health.

The WHO definition addresses what ought to be and offers wide interpretation on all aspects of health.

This definition sees health as a multi-dimensional (holistic) phenomenon, with multiple rather than singular determinants and one that is a positive construction of health (well-being). The WHO definition "has difficulty finding a place in government health systems with most of their resources invested in approaches to health defined by morbidity and mortality" (Green and Raeburn, 1990). Recognizing that this definition has difficulty both in operational terms and in the controversy it has generated is important to the research concern for an accounting of health. The gap between the rhetoric of the WHO and the reality of policy presents a real challenge that must be dealt with in considering any multidimensional definition of health.

The gap between the rhetoric of the WHO and the reality of policy presents a real challenge ...

2.3.6 Summary

A pluralistic expression of health is the final verdict and a termination of the search for definition. This verdict is an imprecise and unsettling recognition, but one that is consistent with the debate of health and its meaning. Given this stance that adopts multiple perspectives on what health represents, then what does the abandonment of the idea of a single absolute definition mean to health accounting or research?

A pluralistic expression of health is the final verdict ...

2.4 *Abandonment of the search for one health*

Some have argued that health should be specified within a framework of scientific accounting (Chen, 1979; Juster and Land, 1981; Wolfson, 1990). Success in developing such mathematical accounting models or single statistical assessments of health has been questionable and the realization of this goal may be neither possible nor desirable. Failure to achieve these deterministic objectives is related to the nature of health and its manifestation as phenomenological reality. Health is a human experience, not an objective entity. Any attempts to portray health otherwise is to exclude the experiential nature of human communities. Roger (1987) suggests that medicine in general is a 'scientific' discipline oriented towards 'scientific' solutions and this focus has created a distinctly anti-social-science bias. This bias may be the reason why single-minded objective solutions have been sought in the past and why these solutions have not been successful in circumscribing the subjective dimension of health. Rejection of subjective knowledge results in pre-determined or restricted solutions for such purely positivistic health accountings.

Health is a human experience, not an objective entity.

Health and the accounting of health are increasingly seen as extending beyond objective medicine. Salmon (1984) states: "Medicine must be correctly construed as a social science. The focus of medical practice—even granting exclusive focus on disease—must extend not only beyond the organ, but also beyond the organism." (p. 21). Further, Calnan (1987) suggests that the focus of the medical field on the methods of natural science has excluded the social and individual aspects of health knowledge—'they [those in the medical field] have concentrated on behaviour without attempting to understand the meaning of that behaviour' (Calnan, 1987, p. 7). These and other authors are calling not for the replacement of health as a natural science with one that is social; rather, they are demanding the acknowledgment that health is both biomedical and a phenomenon constructed by society, its values and its cultures.

The focus of medical practice...must extend not only beyond the organ, but also beyond the organism.

An example of the difficulties of viewing health as a single rational model occurs in the attempts to construct a single social indicator based on the model of the System of National Accounts (or their international equivalent). Economic accounting is established on a theory of regional economics and market activity. This form of accounting is theory-based and to a large extent logically and internally consistent for the purposes for which it was designed, specifically the tracking of market-based monetary transactions. Health does not have the same conceptual framework. Health is broad, value-laden, multi-dimensional, and a product of social and cultural construction; in short, it is based on experience, not theory.

Health is...based on experience, not theory.

A fuller understanding of health rests on the understanding that health is a socially constructed phenomenon. The following sections of this paper build on the theme of construction, variety, and multi-dimensionality. The objective is to provide a sense of the debate that exists, rather than prescribe a single

solution. Clearly there is a need for an "accounting of health and health status." This accounting, if it is truly to reflect the debate that exists both in and outside the health field, can neither be singular nor absolute. Knowledge is a social product and not merely intellectual discourse and there appears to be a constituency "ready to move on to updated and revitalized perspectives on health and healing" (Salmon, 1984, p. 280).

To suggest a deterministic accounting model for health requires mechanistic concepts of health and society, ones based on an objective foundation. This option is increasingly becoming undesirable if not inappropriate. The paradigm debates of social science illustrate that medical science is increasingly dissatisfied with the models of positivism. The health field is not alone. Reflective discussion on the basis of social science research is prevalent in all fields, including such 'hard sciences' as physics, chemistry, and biology. In health, the existing biomedical paradigm has exhibited an exclusive hold on medical knowledge. With the questioning of the existing models of health comes the recognition that any paradigm has a diminished ability to interpret and even perceive phenomena that lie outside its boundaries (Patel, 1987). Evans and Stoddard (1990) suggest there is a "growing unease of the exclusive authority of scientific, and positivist methods, both to define the knowable and to determine how it may come to be known" (p. 6).

With the questioning of the existing models of health comes the recognition that any paradigm has a diminished ability to interpret and even perceive phenomena that lie outside its boundaries.

Although one cannot add together individual experiences of health, one can develop information that addresses aspects or differing perspectives of health. The development of a health framework is the responsibility of the community not a single perspective. The message is that health is a social undertaking (Roger, 1987). The consequence of grounding the framework within the perspectives of the participants of health is that there will be no single concept nor one absolute measure. Specifically, the answer to the questions of what is health and what is an appropriate accounting of health is: it depends. It depends upon the questions: health for whom, health for what purpose, health in what context, and who is ultimately responsible for health? In short, these questions demand the accommodation of multiple perspectives.

...the answer to the questions of what is health and what is an appropriate accounting of health is: it depends.

2.4.1 Summary

The quest for an accounting model of health reflects a need for 1) order, 2) a reference point and 3), a common understanding of what is an agreed-upon representation of health. Without some conceptual order those concerned with health are not in a position systematically to develop policy, create programs, or evaluate actions. Some framework is necessary if information on health is to have any meaning. The financial accounting model may not be appropriate but some way of viewing health must be developed. This need does not preclude multiple models nor does it demand deterministic approaches to specifying an absolute concept of health. What is required is a way of viewing health, accommodating pluralistic needs, and making sense of health information in a way that does integrate or recognize the many stakeholders in health.

Some framework is necessary if information on health is to have any meaning.

The search for a consensus of what health represents appears to be misdirected or at least unattainable within the literature reviewed. To overuse a metaphor, the definition of health is a journey not a destination, or more to the research context, health is not found in an arbitrary definition but in learning how people describe and live their health. This process requires the understanding of purposes, perspectives, and world views that ultimately represent definitions of health, concepts of health, and accountings of health. These pluralistic understandings emphasize the fact that health is a social construction wholly dependent on its social context--health is what you define it to be; to fail to recognize this fact makes any formulation of an accounting of health invalid if not arrogant.

... health is a social construction wholly dependent on its social context ...

3 The Purpose of the Account: Health Promotion

3.1 The research heritage of health promotion

The definitions of health as developed in the previous section provide the conceptual framework for the research. Similarly, the discipline of health promotion will provide a focus for this research. For health promotion, three areas define the research interest: content, purpose, and logic. These areas represent the boundaries of the objectives and operational assumptions in which the research will be undertaken; they influence the stance, content, and theoretical foundations of the entire research program.

The origins of health promotion set the stage to understand the background inherited by the research. These origins are grounded in the discipline of public health. Over the past several centuries, improvements in health have been credited to public health in the guise of improved nutrition, protection from hazards, and quality of the environment (Breslow, 1990). The sanitation movement of the nineteenth century and the clinical preventative medicine that followed were successful during that period when natural mortality was high and community interventions effective (Guidotti, 1989). Diminishing returns to these initial steps and disillusionment with the apparent limits to medicine and their technological costs have required new measures of intervention. Subsequently, attention has been shifted to the potential effectiveness of self-help, large scale information programs, and promotion of individual control over health (Minkler, 1989). In short, health promotion is seen as the new intervention solution. Health promotion emerged not only from the need for education but, more importantly, from the need to integrate education with structural change (Kickbusch, 1986) in the form of coordinated policy. Social intervention (policy) and knowledge (education and promotion) form the dual objectives of health promotion.

... health promotion is seen as the new intervention solution.

The present discipline of health promotion is based on the principles set forth by WHO and the socio-ecological approach implied in that definition of health (Minkler, 1989). Kickbusch (1989) offers a simple chronology of health promotion that divides its history into pre-Charter and post-Charter eras (Ottawa

Charter for Health Promotion: International Conference on Health Promotion, 1986). The period around the Charter was the turning point for health promotion. Post-Charter health was understood to be a fundamental human right and the attainment of the highest possible level of health became the most important world-wide social goal. The attainment of this goal requires the structural action of many social and economic sectors including the health sector (Last, 1987). The Charter and the international adoption of its rhetoric, has profoundly influenced health policies around the world (whether health care and human health have been affected remains to be seen). Of critical concern to health promotion was the fact that the Charter, the Epp report of 1978, and the 1984 Primary Health Declaration of Alma Ata all gave weight to both individual and social responsibilities for health (Minkler, 1989; Kickbusch, 1989). Post-Charter health promotion reflects the debate between these two locuses of responsibilities.

The Charter and the international adoption of its rhetoric, has profoundly influenced health policies around the world...

The events that surrounded the Ottawa Charter involved a rediscovery and modernization of public health (Kickbusch, 1989) resulting in the creation of the discipline of health promotion. This Charter was based on the assumption that health, inadequately measured by rates of morbidity and mortality, life expectancy, and survival, was a function more of one's economic, familial, social and physical environments than of any single disease (Green and Raeburn, 1990). In addition, the Charter and the subsequent Epp report focused on enabling individuals and communities to increase control over the determinants of health and thereby improve health through individual and collective action.

The acknowledgment that many health care problems are both self- and societally-induced permeates and subsequently motivates health promotion. A more pragmatic assumption of health promotion is 'economic rationalism' or the need to address the increasing costs of technology-intensive medicine through prevention (Colquhoun, 1990; McElroy and Townsend 1987). For these reasons, health promotion has become a growth industry. The content, purpose, and logic of the health promotion enterprise will inform this research and represent the analytical review that follows.

A more pragmatic assumption of health promotion is ... the need to address the increasing costs of technology-intensive medicine through prevention.

3.2 A shared mission

Health promotion can address the environmental (social, economic, cultural, or physical) or the individual responsibilities of health. The underlying assumptions of the latter is that individual health behaviour affects health status. This health behaviour is based on attitudes, beliefs, and knowledge, and the fact that changing certain behaviours results in the improvement of health (Lorig and Laurin, 1985). The objective, then, of health promotion is to provide "education and information intended to promote health" (Breslow, 1990). The former view identifies health promotion as systemic change to the environment to effect a modification to health status. This systemic change may be at the community, regional, or national level. In the practice of health promotion there has been a call for a balancing of both orientations to health promotion. Although recogniz-

The objective ... of health promotion is simply to provide "education and information intended to promote health".

ing the need for both approaches, the research to be undertaken here focuses on the subjective measures of health and consequently is concerned more with the individual and life-style related attitudes, behaviours, and beliefs of Yukoners.

3.2.1 The content of health promotion

In describing what factors constitute health promotion, Kickbush (1986) provides a useful link between health promotion and research. These factors include: the involvement of a broad population base (not just those at risk for specific diseases), the action of intervention focused on the causes of ill health not the disease itself, and a process that includes effective and concrete public participation. These factors suggest a broad participatory research strategy aimed at the multi-factoral nature of the causes of ill-health. Unlike some other forms of clinical health research, health promotion research should be grounded in the realities and environment of the individual.

Further, health promotion relies on social science to provide the information and knowledge required in the problems of specification, social intervention, and dissemination of information. Information and individual and societal behaviour form the essence of health promotion. The enterprise of health promotion strives to create a situation in which healthy behaviours become a social norm and social pressures influence personal choice (Guidotti, 1989).

This observation raises the issues of why health promotion is done and the fundamental questions of ethics and social responsibilities for the education and research processes of health promotion. Green and Raeburn (1990) offer a firm reminder: "first and foremost, the primary consideration in health promotion is not policy or education, but the ordinary people whose health is at stake" (p. 43). All policy constitutes some form of social intervention into the lives of others. Policy research that supports this activity must share the responsibility of ensuring clarity on why the knowledge base of health promotion is being created.

When addressing the purposes of health promotion, attention must be paid to the definition or expression of the health promotion function. Definitions of health promotion are implicated with the fate of health as they are based on prevailing definitions of health. As previously presented, agreement on a useful definition of health has been difficult (Stachenko and Fenicek, 1990) primarily because health is multi-dimensional and phenomenological in nature. Yet one common theme in the definition of health promotion is the locus of responsibility and the individual as the unit of analysis (Stachenko and Fenicek, 1990). On the other hand, the socio-ecological definition suggests environmental responsibility and a broad base of determinants environmentally interacting. Miles's law (Miles, 1978) "where we sit depends on where we stand" suggests the obvious: how we see health promotion depends on what model of health we adopt. At one extreme is individual responsibility, while at the other extreme, are societal and environmental responsibility. Green and Raeburn (1990)

...how we see health promotion depends on what model of health we adopt.

provide balance to this divergence of perspectives:

> "Few health educators or behavioural scientists in health promotion ever advocated ignoring system forces in behaviour or health; few system advocates ever asserted outright that behaviour was irrelevant or that individuals had no role in health promotion. The more experienced practitioners and politicians in health seek to merge these two perspectives into an integrated, total person-environment approach in health promotion, where responsibility for health is shared between individuals and systems" (p. 32).

The interaction between the interests of the individual and society weave the debate of responsibility through the definition of health promotion. Although recognizing that to define is to limit, the following illustrates this debate in the current definition of health.

... health promotion (may be defined as) "the art and science of helping people change their life-styles to move toward a state of optimal health".

Health promotion is "any planned activity which promotes health or illness-related learning, that is, some relatively permanent change in an individual's competence or disposition" (Tones, 1990, p. 2). Minkler (1989) simply defines health promotion as "the art and science of helping people change their life-styles to move toward a state of optimal health" (p. 18). These definitions clearly illustrate the purpose of health promotion, specifically, long-term change of individual behaviour. The individual's role in health promotion is best summarized by Health and Welfare Canada (1986):

> "Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment" (p. 400).

...health promotion is "a practical endeavour ... helping people to develop the skills they need to bring about change".

French (1990) focuses on the understanding and the enabling aspects of health promotion in his definition; here health promotion is "a practical endeavour focused on improving understanding about the determinants of health and illness and helping people to develop the skills they need to bring about change" (p. 8).

At the individual level, health promotion "aims at the improvement and at the maintenance of a given state of health" (Scheuermann et al., 1990, p. 53). Further, health promotion is directed at "enabling people to increase control over and to improve their health" (WHO, 1986, p. iii). This individual focus is further developed in a more critical view of health promotion by Salmon (1984) who suggests that for health promotion the "tools and interventions are based upon the dictum that the individual must exert greater responsibility for health—an easier set of tasks for the 'worried well' of middle-age and middle class than for

other social groups" (p. 257).

Finally, health promotion is defined as a coordinated responsibility between society and the individual. In the concept of joint action, health promotion is "any combination of health education and related organizational, political and economic intervention designed to facilitate behavioural and environmental change conducive to health" (Green, in Minkler, 1989, p. 19).

... health promotion is an intervention directed at behavioural and societal change...

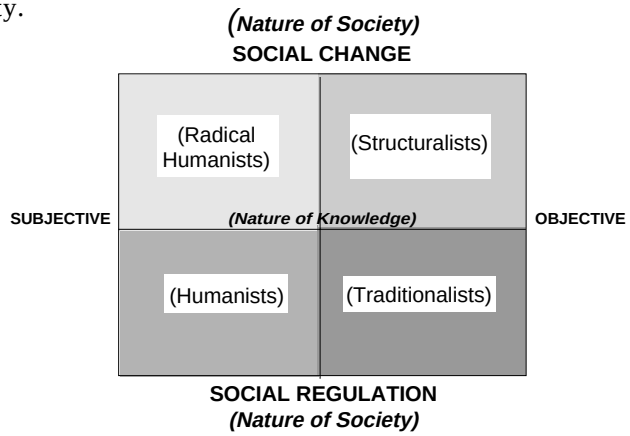
These definitions form the substantive issues of health promotion. The content represents individuals, society, and a shared responsibility for life-styles and the situations to which individuals are subjected. The point of intervention is information directed at the behaviour of individuals to effect long-term change. Whether through direct action or less imposing enabling mechanisms, health promotion is an intervention directed at behavioural and societal change—individual behavioural change and structural societal changes—in norms and standards.

3.2.2 The purpose of health promotion

Health promotion policy is ideologically-based social intervention; it exists for the purpose of influencing individual lives and to effect systemic changes in society. Caplan and Holland (1990) offer a simple but insightful model of the purpose behind the various ideological stances of health promotion, the implications for the customer, and the assumed types of knowledge bases. This model proposes that health promotion professionals adopt some theory of society that may be described as varying from extreme social change (the structuralists) to one of social regulation (principles of social order and unity) in addition to adopting a theory of the nature of knowledge. At one end of this latter dimension is the subjectivist's understanding of information as socially constructed and experiential in nature. At the other end of the knowledge axis is the information of the objectivist, a knowledge base of the world of positivism and determined causality.

Figure 2:

Purposes of Health Promotion



Adapted from Caplan and Holland (1990)

The quadrants of the resultant model serve as a useful reminder of the underlying assumptions of the many policy directions and research objectives of

health promotion. This model warrants attention because of the clarity it brings to objectives or purposes. The resultant quadrants typify the difficulty in forming any consensus on health promotion or health in general. Whether one is viewing the question from a lay or professional perspective, the multiple realities of those involved will be divergent within the model space. Although few could be placed at any one extreme, diversity and multiplicity is the lesson of the model.

The 'traditional' perspective (objective regulation) assumes that both professional and lay sectors share the same objective reality (values and understanding of the facts), yet ownership over the knowledge is the exclusive domain of the professional. The professionals have the objective 'truths' by virtue of their training and it is their role to bestow this knowledge upon their clients for their benefit.

The 'humanists' (subjective regulation) assume subjectivity yet the role of the professional is to provide the public with information from which they can make informed decisions (Taylor, 1990). The client is provided with a role in the health decision with the underlying orientation being to control and improve health-related behaviour.

The 'radical' quadrant assumes subjectivity and structural solutions from those individuals involved. The 'radical' stance is one of self-discovery health promotion policies that support community action, mutual aid, and collective decision making.

Lastly, the 'structuralists' quadrant typifies those who espouse a theoretical structuralist argument between health, illness, and economic class structure—in this quadrant, the professional's objective knowledge base provides him or her with the truth and subsequent solution on behalf of the rest of society.

3.2.3 The logic of health promotion

Behind the 'logic' of health promotion is the theory of social behaviour. Social behaviour in health promotion leads to one of the four mainsprings of ill-health: neglect, disuse, misuse, or abuse (Dalzell-Ward, 1974). Although all these words are implicitly value judgements, they typify the evaluation of how behaviour relates to health from the perspective of health promotion professionals. For example, Pender (1987) suggests that certain cognitive perceptual factors are the basis for health-promoting behaviour. These factors include the importance of health to the individual, perceived locus of control, perceived self-efficacy, implicit definition of health, perceived health status, and benefits for and barriers to health-promoting behaviour (Simmons, 1990; Pender, 1987).

... the primary goal of health promotion is to effect behavioural change and that beliefs, attitudes, and perceptions mediate this behavioural change.

These factors feature in the many models of how health promotion motivates and how individuals engage in health-promoting behaviour. Many assume

that the primary goal of health promotion is to effect behavioural change and that beliefs, attitudes, and perceptions mediate this behavioural change (Lorig and Laurin, 1985). The following suggest several explanatory models of how health promotion intercedes in the behavioural change of individuals. These models are important as they address the attitudes, behaviour, and beliefs of the individual--the selective focus of the Yukon Health Promotion Research Program.

Health Belief Model

The health belief model and its many variations state that the likelihood of taking preventive health action is based on several essential factors:

- the readiness of the individual to consider behavioural changes to avoid disease or to minimize health risks;
- the perceived threat of the disease or health-related consequences to the individual;
- perceived benefits of preventative action; and
- the perceived barriers to the health-promoting behaviours themselves (Dignan and Carr, 1987).

Fundamental to the limitations of the health belief model is its exclusion of the broader socio-ecological model.

Although the health belief model is the basis of much health promotion policy (Tones, 1990), it has been suggested that it offers only a partial explanation of health decision making. Fundamental to the limitations of the health belief model is its exclusion of the broader socio-ecological model. To be effective, the socio-ecological model must be central to the concept of health promotion (de Leeuw, 1989). The health belief model also avoids the concerns of the concepts of locus of control and self-efficacy. According to Rosenstock, Strecher, and Becker (1988), "a growing body of literature supports the importance of self-efficacy in helping to account for initiation and maintenance of behavioural change" (p. 179). The self-efficacy component is accommodated in other explanatory models discussed below.

PRECEDE

...health behaviour results from a variety of predisposing, enabling, and reinforcing factors.

Another logic of health promotion is the PRECEDE (and PROCEED) model (Green, Kreuter, Deeds, & Partridge, 1980). This model and its associated variants suggest that health behaviour results from a variety of predisposing, enabling, and reinforcing factors (Lorig and Laurin, 1985). The predisposing factors include knowledge, attitudes, beliefs and values; enabling factors involve skills and accessibility of resources; and the reinforcing factors represent attitudes and climate of support from providers of services, family and community—all of which influence health behaviours (Stachenko and Fenicek, 1990).

Social Learning Theory

The last example of the motivational logic of health promotion is the social learning theory. Rotter, in 1954, posited that behaviour is a function of the expectancy for reinforcement and the value of that reinforcement. Bandura (1986) added the supposition that future behaviour is based on one's present perception of ability to perform that behaviour, or self-efficacy (Lorig and Laurin, 1985). Bandura's social learning theory, re-labelled social cognitive theory, posits that behaviour is determined by expectancies and incentives. Expectancies include environmental cues about how events are connected, the consequences of one's actions or outcome expectation, and one's own competence to perform the behaviour needed to influence outcome, or efficacy expectation. Incentives represent the reinforcements such as the value of an object or outcome, health status, physical appearance, approval of others, or economic gain (Rosenstock et al., 1988).

... behaviour is determined by expectancies and incentives.

All of these models provide the logic of the relationships between the individual and reasons why that individual should undertake health-promoting behaviour. This logic is the point of intervention, it is the focus of promotion.

3.2.4 Research implications

When health promotion is grounded on the assumption that knowledge is the base for facilitating health-enhancing behaviour, then research is the policy base of action. The question becomes what knowledge, or, equally important, whose knowledge is legitimate?

This section has tracked some of the influential readings that guide this research: from the conceptual understandings of the nature of health promotion, through ideological purposes, and finally to examples of the logic and motivational explanations for individuals to engage in changing their health behaviour. By developing an overview of the health promotion environment, the user can be sensitized to the many assumptions that guide and inform the research program. The utility of the final research outcome must be considered within this analytical review. From this point health research can be addressed.

4 Health Promotion Research

4.1 Health promotion research

The previous three sections provide a framework in which health promotion research can exist. Health defined in socio-ecological terms forms the basis of the most current definition of health. This definition in turn prescribes the

The next task is to develop a health promotion research stance consistent with the socio-ecological concepts of health and health promotion.

boundaries from which health promotion takes its meaning. The next task is to develop a health promotion research stance consistent with the socio-ecological concepts of health and health promotion. The research builds on the purpose of health promotion as a means of educating and providing knowledge to influence social behaviour in order to improve health rather than addressing systemic social change.

The purpose of this type of health promotion research, and more specifically health promotion surveys, is "to shed some light on life-styles and health behaviour in general, personal characteristics related to life-styles, perceived environmental conditions and perceived health" (Stachenko and Fenicek, 1990). In addition, these surveys "determine the prevalence, distribution, behaviour and status of the population" (Stachenko and Fenicek, 1990). These objectives reflect the nature of social-science survey methodology: access to the subjective domain of the customers of health promotion. At a national workshop on measuring health of Canadians (National Health Information Council and the Canadian Center for Health Information: Measuring the Health of Canadians: An Agenda for Developing Health Surveys, September 1990), an agreement on the objectives of health promotion surveys included:

- informing the public and health professionals about health issues;
- supporting the planning and evaluation of policies and programs by assessing the population's exposure to determinants of health; health status; and use of services, medications, and other responses to health problems;
- supporting epidemiological research into the relationships between determinants and health status. (Stephens, 1991)

At this conference, several other important issues regarding health promotion surveys were discussed. Two of these were the need to clarify and agree upon some conceptual definition of health and the need to establish criteria for the determinants of health consistent with an accepted definition of health. As presented in the present paper, health is a social phenomenon and any definition of health represents a debate by those involved. The conference on health promotion research began this debate and provided a challenge to contribute both to practice, through policy and program information, and to theory through the determinants and conceptual issues of health promotion. As Caplan and Holland (1990) point out, "effective practice in health promotion depends on good theory" (p. 10), yet health promotion currently suffers a poverty of theory or a confusion between the means and the ends of the discipline (Hayes and Willms, 1990). This gives research many opportunities to contribute to the debate over health promotion's content and theory.

...yet health promotion currently suffers a poverty of theory or a confusion between the means and the ends of the discipline.

The substance of health promotion research is population-based knowledge,

perceptions, beliefs, attitudes, and motivations. The development of this knowledge base depends on human behaviour and access to these behaviours through social sciences and their methodologies. The nature of health promotion is to motivate a population to embrace certain knowledge to effect behavioural change. The essence of the health promotion research process is similar to that of market research. How does one get a customer to consume one's product? McElroy and Townsend (1987) suggest that health promotion is about convincing people that they need or ought to buy the message of health promotion. If the sales analogy is extended, then health promotion research must address the questions of :

How does one get a customer to consume one's product?

- what is being sold—is the product theoretically sound?
- how much does it cost to produce (in social and individual terms)?
- who should pay the bill?
- what is in it for the salesperson?

The first question deals with the theoretical framework of health promotion. Research addresses the diverse theoretical determinants of health, the relationships to the customer, and the market profile of the customer—behaviours, attitudes, beliefs, and intentions. The currencies of health promotion are credibility and utility. As a social construction, the product of health consists of determinants and causal relationships that represent a credible way of viewing the associations of health to behaviour.

The second question opens the issue of social and other responsibilities for health. Victim blaming (Ryan, 1971) or deflection of societal responsibilities represents the allocation of the costs at appropriate or inappropriate levels. Victim blaming has been described as blaming the driver for the road conditions and suggests that allocation of blame must be considered in the context of who is responsible for the outcome of ill-health. In some cases the individual has control, while in others the individual is a product of his or her environment and is limited in his or her ability to modify behaviour.

Victim blaming has been described as blaming the driver for the road conditions ...

Finally, the issue of what is in it for the salesperson opens the questions of social policy and the issues of power and the objectives and ideologies of a society. This issue is a political decision, not a research question, and therefore not part of this particular research model. Although this deflection of focus is done with unease, for practical reasons the organizational priorities are assumed to reflect those of its users and customers. This issue does remind the researcher of the need to question the purposes for which the products of social science research are applied. Are the customer's purposes being met, who are the clients in public-sector research, and most importantly, who is to gain from such social science research?

... what is in it for the salesperson ...

5 Health Promotion Survey Research

5.1 Theoretical determinants: health promotion

...our health determinants influence (and are influenced by) the way we define and think about health.

Just as language moulds the way we think, our health determinants influence (and are influenced by) the way we define and think about health (McDowell and Newell, 1987). Implicit in this statement is the imperative that health promotion measurement tells why the determinants of health are being measured and presents the definitions of health and determinants to be used (Chambers, 1991). In the absence of a single definition of health, this review assumes multiple perspectives accommodated within the socio-ecological definition of health. As the broadest and most comprehensive concept of health, the socio-ecological definition incorporates the biomedical model and the systems approach developed in section one. To address the question of the determinants of health, it is necessary to adopt some acceptable framework in which to organize the possible determinants. Many theoretical models of health promotion exist; the most comprehensive and timely expression is provided by Evans and Stoddard (1990). The objective of this section will be to describe a theoretical framework proposed by Evans and Stoddard (1990), to develop areas of this framework relevant to the present research and, lastly, to review the lay understanding of health and its theoretical assumptions.

As a preface to the theoretical framework of the research, a statement regarding the nature of health promotion research methods is necessary. The review of the relevant literature deals with survey research for health promotion purposes. Health promotion research has two basic options:

- one option represents the laboratory research of biomedical evidence

- the other draws upon the tools of social science specifically by asking the individual to provide his or her perceived health-related behaviour.

For a policy focused on health beliefs, attitudes, and behaviours, the most common alternative is subjectively to measure the determinants of health by addressing the population. Survey methodology is the efficient and effective tool of subjectively accessing the population as a whole. Subjective measures of health represent sociomedical indicators of health covering behavioural, physical, emotional, and social measures (McDowell and Newell, 1987). These measures base their validity upon their connection to psychophysics and psychometrics. The purpose and strength of such methodology is quantitative, and it serves to provide distributional and structural access to behaviours, attitudes, and beliefs.

General population surveys have been used consistently to develop the knowl-

edge base of health promotion. Recent survey research in Canada includes the General Social Survey, Campbell's Survey on Well-being, the National Health Promotion Survey, Canada Health Monitor, the Ontario and Quebec Health Surveys, and the Community Risk Factor Survey. These population surveys form the recent Canadian experience relevant to the focus of the present research.

The General Social Survey

The General Social Survey health cycle focuses on changes in health status over time and topics of health problems, such as smoking, drinking, and physical activity, as well as contact with the health care system. This survey is a rotational module that was run in 1985, 1991 and will be run again in 1996. Although relevant from a content basis, this survey excludes the Yukon and Northwest Territories.

Campbell's Survey on Well-being

Another relevant survey was Campbell's survey on Well-being in Canada (Canada Fitness Survey Follow-up). As a self-administered questionnaire in 1981 and 1986, this survey assessed physical activity and fitness in the Canadian population. Once again this survey was run in the provinces only and serves as a potential source of tested content questions.

National Health Promotion Survey

The largest and most relevant survey from a content perspective is the National Health Promotion Survey that ran in 1985 and 1990. This survey was designed to provide the basic information on the determinants of health for health promotion. The content and theoretical structure represent a significant product of extensive national consultation. This survey incorporated the Yukon in 1985 but excluded the Yukon in 1990 because of the operational problems experienced in the 1985 version.

Canada Health Monitor

The Canada Health Monitor is a semi-annual survey of wellness / health issues administered by a private agency on the behalf of its subscribers. Although described as a national survey, this instrument excludes the Yukon as part of its base.

Ontario Health Survey

The Ontario Health Survey, run in 1990, focused exclusively on Ontario. With a sample of 45,000 individuals this survey was the most comprehensive health survey conducted. The content covered all aspects of health, life-styles, and socioeconomic determinants of health. This survey was executed in both a self-administered and a face-to-face version. The experience and content of this survey are a resource for subsequent surveys, yet the $4.65 million cost limits the replication of the geographic coverage in most jurisdictions.

Quebec Health and Nutrition Survey

The Quebec Health and Nutrition Survey was carried out in 1990 and focused on Quebec. The coverage of this survey was limited to issues related to heart health and nutrition. Oriented on heart risk factors, this survey involved face-to-face interviews in combination with home and clinic contact by professions to collect information on blood pressure, blood samples, and dietetic intakes.

Community Risk Factor Survey

The Community Risk Factor Survey begun in 1985 was created to measure the prevalence of risk factors known to be determinants of health for participating communities. Focused at the community level, this offered a sample of 1000-1200 per community with the option to append community-based questions of local interest to the survey.

As with any methodological tool, survey research is limited by the implicit assumptions inherent in the purposes which instruments are designed to fulfil. All research methods are partial or incomplete in their access to knowledge. As powerful a tool of social research survey methodology is, it can benefit from methods that complement it or provide means of triangulation. Regarding the health promotion field, Foster (1987) suggests that "further scientific progress, at least for the present, depends upon other ways of seeking knowledge—more humble, soft, hermeneutic research." The call for a more humble research is an implicit acceptance of the need for more qualitative and exploratory approaches to supplement the data collected in surveys (Stachenko and Fenicek, 1990). This request for complementary methodologies has been reiterated through such health professional organizations as the National Health Information Council (Stephens, 1991).

..."further scientific progress ... depends upon other ways of seeking knowledge--more humble, soft, hermeneutic research".

5.1.1 A research framework

These research undertakings exist to provide the information at the heart of health promotion, specifically social intervention through behavioural and attitudinal change. Relationships between health-related behaviour and health outcomes are probabilistic not deterministic (McElroy and Townsend, 1987). As well, these relationships are ecological in nature and require a broadening of scope of what constitutes health and health promotion issues. Kickbusch (1989) suggests:

> "Focusing attention on health promotion is hampered by the general invisibility of the new risks, be they social, like poverty and unemployment; or medical, like heart disease; or environmental, like pollution-related disorders. They are silent ... They are cumulative. They present no clear causality and no simple solution. Most are linked to key social and environmental policy issues of the present and past that many political decision makers would like to avoid" (p. 4).

At the 1990 Conference at McMaster University on "Producing Health: Implications for Social Policy", Evans and Stoddard offered a framework in which the determinants of health could be conceptualized. This framework was provided as a means of attempting to address the "silent" relationships among the determinants of health. The model was based on the most recent evidence in health and represented an outline for discussion, not a specified causal model. The challenge for research was to produce the information necessary to test and

... the "silent" relationships among the determinants of health.

elaborate the proposed health framework. As a useful expression of a socio-ecological definition of health, this framework provides the structure for theoretical understanding of the research. In brief, Evans and Stoddard link disease (through the health system), health and function (perceptual and experiential), and well-being. In addition, the framework ties individual responses to their social and physical environments. Individual response represents both the biological and the behavioural responses to health and health-related stimuli. These individual responses are also related to considerations of prosperity and the nature and provision of health. The separate components of this framework express the theoretical structure useful for organizing the determinants of health for this research and will be described accordingly.

5.1.2 Evans and Stoddard Model

Social environment

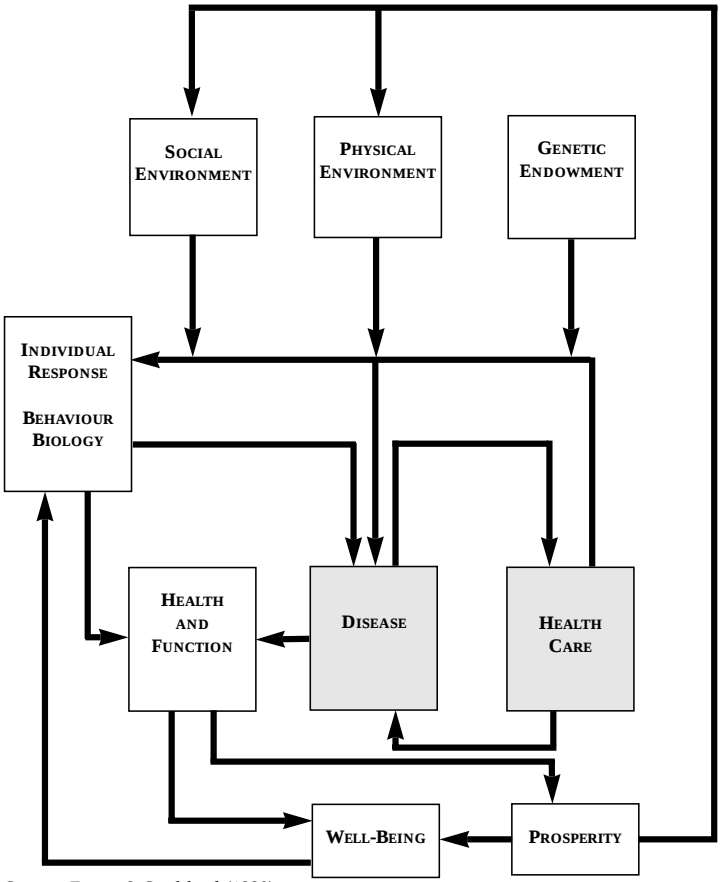
... gratification of a person's basic social needs...

Social environments play an important and significant role in health and well-being (Small, 1989). The entire social support environment can be tentatively conceived as the feedback to other individuals as part of a social network (Gottlieb, 1985). Cassel (1976) defines social support as the meeting or gratification of a person's basic social needs (approval, esteem, accordance). Cobb (1976) conceived social support to be "information leading a person to believe he is cared for and esteemed and that he belongs to a network ... not only family, friends and coworkers, but also "institutional" givers of assistance, such as ministers, teachers, counsellors and other professionals whose contribution of social support may be more formal" (Esdaile and Wilkins, 1989, p. 137). This broad interrelationship between the individual, other individuals, and institutions is the extension of health to the social environment.

Social networks are the "web of social views" that encircle individuals.

There appears to be a very strong argument for the relationship between social relationships and health. House, Landis, and Umberson (1988) state that "social relationships or the relative lack thereof, constitute a major risk factor for health—rivaling the effects of well-established health risk factors such as cigarette smoking, blood pressure, blood lipids, obesity, and physical activity" (p. 541). The link between the social environment and health comes from an interpretation that social relationships provide a supportive function which includes their capacity to buffer or moderate the stress of other health hazards (House et al, 1988). Social networks are the "web of social views" that encircle individuals (Berkman, 1984). House et al. (1988) provide an explanation of the purpose of the social environmental support function. In this understanding, social interaction includes the provision of emotional support, goods or services, knowledge, and information relevant to the evaluation of alternatives in health. An example of a social environment that illustrates the link to health is the social relationship of marriage. Unmarried people (single, separated, widowed, or divorced) experience higher mortality rates than married people (Berkman, 1984).

Figure 3: A Framework For Health Promotion



Source: Evans & Stoddard (1990)

Coping mechanisms...mutual aid...self-care...

Social environments assist health through coping mechanisms. These include such personal resources as self-esteem, anger styles, locus of control, and the interpersonal resources of family, friends or coworkers (Seraganian et al, 1989). Health-related social networks are exhibited in health phenomena of mutual aid and self-care groups. These social groups fulfil a significant health role by linking the individual to a relevant social environment for the purposes of care-giving. Mutual aid is related to social support through information and sharing of experiences. Self-care represents the decisions and actions initiated and controlled by the individual, their families, and social peers. The goals of self-care are the promotion and protection of health, the cure of minor illness, and the management of chronic conditions (Perreault and Malo, 1989). Whether as an organized health function or an embodiment of social interaction, social systems must be recognized in the quantity and quality of interaction for the individual.

Physical environment

There is growing evidence of the influence of the physical environment on the health of individuals. Chambers (1991) identifies videodisplay screens, electronic power lines, PCBs, dioxins, second-hand smoke, and acid rain as examples of physical factors that have been or are presently being researched as

determinants of health. Evidence on indoor pollution, industrial waste, and a growing list of environmental agents - all confirm this significant relationship between the physical environment and individual health (Small, 1989). Both epidemiology and laboratory testing are accumulating hundreds of associations between individuals and their physical environment. The role for health promotion surveys will be to measure the presence of confirmed physical risk factors and the prevailing attitudes on selected high-risk determinants.

... there are limits to an individual's ability to adapt and to be accommodated within the environment.

The evidence of physical determinants is complicated by the fact that individuals are uniquely vulnerable to physical threats. Although humans exhibit great adaptability and tolerance to their physical environment, there are limits to an individual's ability to adapt and to be accommodated within the environment. Disabled persons are limited within the physical environment while the human body itself has thresholds of exposure to carcinogenic agents, radiation, and the broad spectrum of industrial chemicals emerging from our physical environment. Finally, despite the view of some members of society, many individuals do not always possess the ability to move themselves out of unhealthy environments. These barriers to mobility are both economic and sociocultural and are as real as physical walls to those involved.

Health care

The health care system as a determinant of health provides a limited view of health.

At the core of the Evans and Stoddard model is the simple medical model of disease and health care. The objective of the health care determinant is to cure the disease by repairing the affected individual. The effectiveness and logic of the relationship between the health care system and health has been questioned over a long period of time (Illich, 1975). The health care system as a determinant of health provides a limited view of health. With its measures of morbidity and mortality, health care represents the negative side of health. It is reactive to ill-health, not proactive towards causes of ill-health.

The majority of health care information originates from the health care system, yet there are sectors of health care that are not measured nor in some cases legitimized. If health care is to be acknowledged as a determinant of health, some form of balance is required. The first consideration is the appropriateness of the information reported. Is this information the most convenient or the most relevant? The second consideration is the representativeness of the reporting of the determinants of health care.

... 75 to 85 percent of all health care occurs in the popular sector of health care.

There are other health care sectors that are presently excluded from the visible health care profile. To balance and provide a true profile of health care utilization, the popular, professional, and folk sectors of the health care system must be addressed. Estimates indicate 75 to 85 percent of all health care occurs in the popular sector of health care. Little attention has been placed on measuring or acknowledging the popular or other sectors of the health care system.

Prosperity

Prosperity in the context of economic conditions has been clearly linked to health status. Not only are their life expectancies lower, but people in lower socioeconomic groups are likely to perceive their health to be poorer than those in higher income groups. The National Council on Welfare (1990) reports that "well-off Canadians live longer and healthier lives on average than low-income Canadians ... due to debilitating conditions of life that poverty forces upon people" (p. 6.). Expressed in the statistic of average life expectancy, the life expectancy of Canadian males in 1986 ranged from 70.4 years in the lowest income ranges to 76.1 years in the highest income category. Alternately, Canadian females exhibited life expectancies of 79.1 years in the lowest economic category and 80.9 years in the highest economic strata (National Council on Welfare, 1990). Not only does health improve along the income gradient, it strengthens with income equality. International comparisons among developed countries confirm the relationship between the disparity of income distributions and health. Countries with a more equal income distribution had higher life expectancies than those countries with large income differentials (National Council on Welfare, 1990). Morbidity follows a gradient across socioeconomic classes exhibiting a decline in mortality with an increase in income. This relationship appears to be uniform and does not exhibit step functions associated with any base thresholds of prosperity. Prosperity is not only related to the simple access to health resources, but prosperity appears to affect perceived self-esteem, self worth, social position, control, and powerlessness - all of which represent risk factors (Evans and Stoddart, 1990).

Morbidity follows a gradient across socioeconomic classes exhibiting a decline in mortality with an increase in income.

Experience from many countries indicates that insecurity at work, unemployment, and underemployment can adversely affect social functioning, health, and well-being (Svensson, 1987). As a result, the "diseases" of economic underdevelopment affect low-income classes which include whole groups of individuals that find themselves in disadvantaged positions. An example of this situation includes status Indians living on reserves whose average life expectancy at birth in 1991 was estimated as 65.7 years for Indian men and 73 years for Indian women (National Council on Welfare, 1990).

Individual responses

In the Evans and Stoddard model, individual responses cover both behavioural and biological responses. The biological domain falls within the scope of epidemiological research and not within the immediate concern of this research. However, the behavioural aspects of individual response are of direct interest. Life-styles are classified as a collection of behavioural activities related to health promotion. "Life-styles had the largest and most unambiguous measurable effect on health" (Evans and Stoddart, 1990, p. 34). Diet, exercise, use of tobacco, alcohol, tea, coffee, and practices such as the non-use of automobile seat belts are generally classified as aspects of life-style that clearly have a relationship to health, disease, injury, or premature mortality (Last, 1987).

"Life-styles had the largest and most unambiguous measurable effect on health".

Individual choices in matters of health behaviour constitute life-styles (Breslow, 1990). Heart disease, the number one cause of death, results from serum cholesterol associated with life-styles that include the consumption of diets rich in saturated fat and cholesterol, and from stress-related high blood pressures resulting from cigarette smoking and the lack of physical exercise (Terris, 1989). Cancer, the second major cause of death, is related to life-styles with exposure to physical and chemical carcinogens such as radiation, tobacco, and alcohol (Terris, 1989). The list of major causes of disease and death strongly implicates life-style activities to diet, accidents, cigarette smoking, and excessive alcohol consumption. From an ecological perspective, life-styles are a product of the physical, economic, and social environments to which the individual responds. On the other hand, the obvious and extremely convincing association between life-styles and mortality and morbidity has been appealing to many health promotion strategies that focus on the individual.

The list of major causes of disease and death strongly implicates life-style activities to diet, accidents, cigarette smoking and excessive alcohol consumption.

Critics of the ecological approach suggest this strong connection between the life-styles of people and epidemiological and medical research cannot be ignored because it is the individual who has control and is responsible for a large proportion of death and disability. These critics would argue that life-styles are undeniably under at least some control of the individual (Green and Raeburn, 1990). It is the focus of the individual that is the source of criticism of health promotion. By identifying the individual as responsible for his or her own health environment, both the social and physical environments are ignored. Life-style theories approach disease as though ill-health were the result of personal failure. They dismiss environmental influences and ignore the essential link between individual behaviour and social norms, expectations, and rewards (McElroy and Townsend, 1988). Ryan (1971) coined the phrase 'victim blaming' to respond to the potential for misplaced responsibility for social causes of individual misfortune. Those who argue that the focus on individual responsibility detracts from the structural causes of individual behaviour call for more social accountability for the life-styles of individuals. Specifically, health promotion and research must respond to the social context of behaviour as well as the individual beliefs and attitudes associated with life-style behaviour. Individual responses are just that, responses to life-styles and conditions influenced by the individual and society. To focus exclusively on one or the other is either to 'blame the victim' or to ignore the 'free will' and individual control of humans.

Life-style theories approach disease as though ill-health were the result of personal failure.

Well-being

Wellness is seen as a dynamic, integrated concept of health oriented towards maximizing the potential of the individual within his or her environment. Wellness does not imply that there is an optimum level of wellness, but rather a path which the individual strives to attain (Neilson, 1988). Self-esteem, self-efficacy, and self-worth are all well-being determinants of health. These determinants permit the individual to integrate health and well-being. Survey studies of self-efficacy suggest strong associations between self-efficacy and

Wellness...(implies) a path which the individual strives to attain.

progress in health behaviour change and maintenance (Strecher et al, 1986). Bandura (1986) argues that self-efficacy influences all aspects of behaviour: acquisition of new behaviour, inhibition of existing behaviour, and disinhibition of behavior (such as the fear of normal and healthy behaviour after surviving a heart attack).

The concept of well-being appears to be ill-defined. The term is used in many ways, creating ambiguity for research. Recent work by Herbert and Milsum (1990) have compiled an inventory of measures of well-being. Without exception the available batteries of tests are long, complex, and focused on specialized uses beyond the capabilities of general health promotion survey research.

Health and function

Evans and Stoddart (1990) distinguish between the way individuals experience illness and the way a disease is defined by the medical community. Whereas the clinician observes the biomedical manifestation of the disease, the individual experiences the illness. This experience extends to the effect the disease has on the individual's health and the intervention of the disabling effects of the disease on his or her life and social roles. After mortality the most burdensome consequence of illness is disablement (Wood, 1989). Medicine and the allied fields have been slow to recognize the social consequences of disease and disablement. Often disablements and the interference the disease introduces into the lives of the patients are more of a burden than the original physical disease (Groce and Scheer, 1990).

After mortality the most burdensome consequence of illness is disablement.

Social marginality is the extreme form of health and function limitation as a result of disease or disability. The individual can be separated from his or her health while also being severed from his or her social network, economic base, and social meaning or role. This phenomenon is apparent in the setting of the hospital, the manner in which society treats the afflicted, and how it awards the patient the 'sick role' in society. The role of the ill in society includes separation, loss of individual power, and a passive stance distanced from other members of one's social environment.

Genetic endowment

Part of the given capacity or reserve of the individual is his or her genetic make-up. As a determinant of health, this factor defines the point of departure for any given individual. Genetic endowment is not static; it refers to the susceptibility or predisposition of any given individual to disease or other ill-health. Genetic disorders are an extreme case of human susceptibility and an important one for understanding the interaction between the host and its environment (Guidotti, 1989).

... this factor defines the point of departure for any given individual.

From a research perspective, genetic predisposition to behaviour is an essential psychological consideration when defining individual behavioural responses to health. Obsessive behaviours, co-dependency, addiction, and other behavioural patterns link or determine how individuals relate to other determinants of health.

5.2 Human context: health promotion

The last section provided a theoretical framework for the research. This section suggests another less formalized framework that must be considered. Not only does research respond to the conceptual and theoretical world of the health professional users, it must respect the subjective world of the respondent. The more subtle framework of hermeneutic understandings that are found in the interpretative sciences offers access to the human context, specifically, the respondent's and others' reality of health.

5.2.1 Health sectors

Kleinman (1980) suggests three overlapping spheres of health care contexts. These spheres include:

- the popular sector or the lay public who provide self-help;
- the folk sector, sacred or secular, which includes a wide variation of advisors ranging from astrologists, clairvoyants, and mediums to healers such as those who administer acupuncture, homeopathy, radionics or massage;
- and finally the professional sector which includes organized professionals such as physicians, nurses, midwives, physiotherapists and psychotherapists.

The popular sector is where care is given by the lay-sector referral network.

Only a small part of morbidity in any community ever reaches traditional medical care (Calnan, 1987). An estimated 70% to 90% of all self-recognized episodes of sickness are managed outside the formal health care system (Kleinman, Eisenberg, and Good, 1978; Furnham and Smith, 1988). The popular sector is where care is given by the lay-sector referral network. This network is responsible for influencing when to go for care, which practitioner to visit, when to change advisors, how long to engage in treatment, and how to evaluate the outcome of any health activity (Kleinman, 1980).

The folk sector comprises non-professional, non-bureaucratized "specialists" ...

The folk sector comprises non-professional, non-bureaucratized "specialists" who have their basis in magic and religious concepts (shamanism) or empirically based practices such as herbalism, bone setting, and massage. Folk practitioners usually treat illness effectively, but do not systematically recog-

nize and treat disease. It has been suggested that the biomedical framework has devalued, if not excluded, the knowledge of the folk sector. Consequently, this sector tends to be informal and considered marginal (Browner et al, 1988).

The professional sector

The professional sector is focused on disease, not necessarily on illness, and their concern is more for cure or repair than healing (Kleinman et al, 1978).

Contemporary medical practice has become increasingly discordant with lay-sector expectations (Kleinman et al, 1978) and this discordance may be a result of the loss of shared concepts and theories of health by the lay and professional sectors. Without an accommodation or at least a knowledge of disparate views, health promotion will have limited success and inefficient methods. Access to the lay sector 'ways of knowing' potentially can inform the efficacy of health promotion programs and policies. To accomplish this task, the lay sector associations (or correlates that depict associations between perceived variables and causal consequences of health) and their concepts of health must be researched.

Lay context of health

The biomedical professional concept of health and illness should not be assumed to be the only one that exists (Offer, 1989). Research suggests that individuals have significant control over their illness and health, and they do have their own reasons for their health behaviour (Calnan, 1987). Where professional medical scientists use scientific methodology, the lay individuals use the five senses and make decisions based on how information affects their lives (Piette, 1990). The instrumental use of lay knowledge is to solve everyday problems with common sense. This requires a very different conceptualization of health and consequently puts the lay perspective in a different domain (paradigm of knowledge) from professional medical knowledge.

It is essential that professionals understand the different nature of knowledge and approaches to problems that they face when dealing with the lay sector of health (Piette, 1990). The values and the priorities people place on health in the lay sector are done in relation to other aspects of their lives. Individual priority setting must be recognized as a fundamental issue to the study of health beliefs (Calnan, 1987). How the lay sector associates and prioritizes associations is also linked to their conceptualization of health. The lay-sector concept of health provides the means and definitions from which flow an understanding and interpretation of health.

Individual priority setting must be recognized as a fundamental issue to the study of health beliefs.

Regarding definition, Noack (1987) contends that health is seen by the lay sector in three basic ways:

- health as the absence of illness (health is not something positive, but just not being ill),

- health as a reserve that can be drawn upon as a capital asset,

- or health as the maintenance of an equilibrium. This equilibrium refers to the attempts of the individual to balance, to attain, or to maintain their health through more than purely biomedical factors (Noack, 1987).

How does one access or research the human experience and context of health? Backett (1990) suggests that qualitative analysis is required to understand respondents' own perception of health and their related behaviours. "It seems that so far, at least in western culture, not many efforts have been made to study what lay people mean by health and how they explain it" (Noack, 1987). This observation ties the theoretical needs of survey methodology and the need to understand the subjective world of Yukoners to qualitative techniques. These two methodological implications are related to the nature of the knowledge bases accessed (epistemological consequence).

"It seems that so far, at least in western culture, not many efforts have been made to study what lay people mean by health and how they explain it".

6 Research Questions

The purpose of the proceeding discussion was to arrive at the fundamental questions of the research. From the developed conceptual framework expressed in the literature of health promotion, two separate research questions arise. These questions are related and grounded in the subjectivity of the concept of health and the experiential nature of the phenomena of health.

6.1 Theoretical determinants: health promotion

What is the subjective accounting of health in the Yukon?

This question addresses the development of a subjective profile of the determinants of health within the context of a health promotion survey. As identified previously, the survey question would be focused on formulating policy-oriented information of the major determinants of health consistent with community priorities.

Further, this research question develops knowledge related to the theoretical understanding of health as articulated by those in the health field. This orientation of the research question represents a behavioural and subjective reporting of attitudes and beliefs associated with identified health-related behaviour. The methodological stance of this question is quantitative.

6.2 Human context: health promotion

How do Yukoners conceptually account for their health?

In contrast to the theoretical context, this research question accesses the understanding of Yukoners and how they interpret their health. The focus will be on understanding and developing a grounded perspective of the community. This perspective requires the adoption of a qualitative or hermeneutical approach to research methods. The first objective of a conceptual account of health is to focus on the development of the categories and language of health as seen by Yukoners. Specifically, this language explicates the relationships between personal experience and individual health by expressing the associations or correlates of health as perceived by the individual. The second objective is to understand how the individual conceptualizes the interrelated correlates of health. What does health mean and how is health interpreted as part of the experiential base of an individual's knowledge?

6.3 The research program based on these questions

Question #1 has two essential parts. First, the theoretical aspects of the survey research were informed by this present document (report #1) in addition to the participation of professional researchers in the field of health promotion. Second, the understanding developed by the experience of other health researchers and those developed in the qualitative phases of research formed the basis of the questionnaire. This survey questionnaire in turn produces a quantitative (and subjective) accounting of health based on the results of a survey. The coverage of this research was a balance between the arguments presented in the literature review, the experience of health promotion professional researchers, and the emergent understandings grounded in the qualitative phases of research.

Question #2 formed the objective of the qualitative phases of research. To successfully contribute to health promotion research the program first addressed a framework or conceptualization of the understanding of health from the perspective of the respondent. This research provided a structure in which health has meaning and from which results from the survey component can be interpreted. This understanding was accomplished with a program of qualitative research presented in research report #2 and report #3. These qualitative and focus group components of the research listened carefully to Yukon residents and developed local understandings of the phenomena of health. These conceptual accountings of health inform the design and interpretation of the survey results and form an essential and innovative component of the research.

The final research process integrates these two questions by linking understanding from the community with theory and then placing interpretation once again into the community. This final link refers to a research process that includes 1) a pre-survey stage: literature review, qualitative research, and focus group research, 2) a survey: Yukon Health Promotion Survey and a post survey program of analysis and interpretation, and 3) reporting activities.

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