Quality of life: perspectives and review

Glenn R. Hawkes
Iowa State University

Richard A. Hanson
Iowa State University

Jeanne W. Smith
Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/specialreports
Part of the Economics Commons, and the Sociology Commons

Recommended Citation
http://lib.dr.iastate.edu/specialreports/81

This Book is brought to you for free and open access by the Iowa Agricultural and Home Economics Experiment Station Publications at Iowa State University Digital Repository. It has been accepted for inclusion in Special Report by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
QUALITY OF LIFE:

PERSPECTIVES AND REVIEW

North Central Regional Research Publication 264

Agricultural Experiment Stations of Alaska, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin and the U.S. Department of Agriculture cooperating.

Agriculture and Home Economics Experiment Station Iowa State University of Science and Technology Ames, Iowa

Special Report 86 October 1980
North Central Regional Project NC-128
Quality of Life as Influenced by Area of Residence

This publication is sponsored by the Agricultural Experiment Stations of Arizona, California, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Nevada, Ohio, and Texas and the Science and Education Administration, Cooperative Research, U.S. Department of Agriculture.

PARTICIPANTS BY STATE

University of Arizona
Rumaldo Z. Juarez

University of California
Glenn R. Hawkes
Richard A. Hanson
Jeanne W. Smith

Colorado State University
Carole J. Makela
Peggy S. Berger*

University of Illinois
Marilyn M. Dunsing
Jeanne L. Hafstrom
Seymour Sudman, Sampling Consultant

Purdue University
Flora L. Williams
Sarah L. Manning**

Iowa State University
Earl W. Morris
Mary Winter

Kansas State University
Stephan R. Bollman
Anthony P. Jurich

Michigan State University
Dennis R. Keefe

University of Minnesota
Hazel S. Stoeckeler
M. Geraldine Gage

University of Missouri
Edward J. Metzen
Sandra Helmick

University of Nebraska
Florence S. Walker
Duane A. Olsen

University of Nevada
Jeanne S. Williams

Ohio State University
Nancy M. Rudd

Texas A & M University
William P. Kuvesky
Michael V. Miller
Elmira Gilbert

U.S. Department of Agriculture
Elizabeth Y. Davis
Frances M. Magrabi

Administrative Adviser
Norma Compton, Purdue

First listed person for each state is the member of the Technical Committee.

*Served with USDA during a portion of time covered by this project

**Now at SUNY, Buffalo
This NC-128 project reflects the dedicated cooperative efforts of social scientists representing 14 states and numerous academic disciplines (e.g., economics, family and consumer economics, child psychology, family sociology, home management, housing, and rural sociology). Data collected represent over 4000 individuals and about 2000 families from both metropolitan and non-metropolitan areas and from different ethnic groups.

Some of the members of the NC-128 technical committee have been working together on regional research efforts since 1967 when Project NC-90 (Factors Related to Patterns of Living of Disadvantaged Families) was instigated.

An analytical approach to the quality of life is generally recognized to be of significant importance as a tool to improve understanding of social issues and to develop social policy. However, past approaches to quality of life assessment have been fraught with many difficulties. Our NC-128 researchers undertook the task, well aware that the complexity of interrelationships among individual, family, and community variables and perceived quality of life would demand application of the most advanced theories and statistical methodology available to social scientists.

Approximately seven regional publications are planned to disseminate the procedures and results of this study, including a literature review, a metropolitan-nonmetropolitan focus, a family focus, community inventories, and a comprehensive overview report.

It has been a unique administrative experience for me to participate in this multidisciplinary research endeavor and the interpersonal social processes necessarily involved. I am confident that these researchers have made a significant contribution to quality of life assessment and that their work will lead the way to additional studies in this important area.

Norma H. Compton
Administrative Advisor

CONTENTS

Summary ............................................. 4
Introduction ........................................... 5
Perspectives related to quality of life ...........  5
Cultural aspects ...................................... 5
Experiential aspects ................................. 7
Historical aspects .................................... 10
Social indicators ..................................... 11
Quality of life ....................................... 12
Social change ........................................ 17
Theories of social change ......................... 17
Patterns of social change ......................... 18
Twentieth century social change ................ 18
Conceptual models of quality of life .......... 20
The negotiated approach ......................... 21
The individual actualization model ............ 21
The two-dimensional role-value model ........ 22
The Liu model ..................................... 22
The integrated conceptual framework ......... 24
Metropolitan and nonmetropolitan residential correlates of quality of life .......... 25
Bibliography ....................................... 29
This monograph, first in a series from the North Central Regional Project 128 (NC-128) Quality of Life Project, describes the project’s theoretical foundations and objectives and gives a review of literature related to quality of life in the United States. The well-being of persons both individually and collectively has been a subject for study from several perspectives and at various levels of discrimination.

The cultural aspects of life quality study are frequently the result of social evolutionary processes. When basic survival needs have been met, quality of life becomes a concern. Technological development and urbanization frequently parallel social and cultural evolution and are complimentary trends.

Experiential aspects of life quality become evident as the cultural milieu shapes the experience of persons while reciprocally individuals and groups have a developmental impact upon the culture. The man-environment phenomenon is evident in ecosystems combining far, intermediate, and near environment's interface with society, community, and family systems. The cultural experiences and practices are reflections of demographic realities and cohort human experiences.

Historically, quality of life research in the United States was initiated for a brief period in the 1920s but declined until revived in the late 1950s when there was a resurgence of interest. A major effort in social indicator research, however, was not launched until the 1970s. During the past decade, numerous researchers have made contributions to quality of life methodologies and findings.

Social indicators have been developed to describe the process aspects of society from a normative perspective by operationally defining concepts for evaluating social systems and environments. Criticism of this research has been centered in lack of recognition of cultural bias, in skepticism about the validity of social indicators, and in the reduction of complex human behavior to statistically measurable components.

The "quality of life" concept has become a subjective factor linking happiness with perceptions of satisfaction of human needs over time rather than with meeting of transitory human wants. It is linked with individual and group expressions of fulfillment and may have a moral dimension indicating a larger cultural framework. Various domains of life satisfaction and behavior have been explored, and the importance of the phenomenological approach has been noted. Observable and unobservable social indicators are recognized as parts of the theoretical framework.

Social change has been recognized as fundamentally related to perceived quality of life. Social institutions serve as carriers of values for individuals who seek to enhance their life experiences. During the 20th century in the United States, economic forces have combined with other forces to produce significant social change. Recent population changes have decreased the size of young population cohorts resulting in larger percentages of the elderly; geographic population shifts have occurred between metropolitan and nonmetropolitan areas. Increased numbers of married women are entering the work force while family size and composition have changed.

Conceptual models have been developed to facilitate analyses of social change as related to life quality. The negotiated approach utilizes reciprocal-commitment factors balancing the welfare of the individual with the good of society. The individual actualization model emphasizes personal development based on a hierarchy of needs. The two-dimensional role model involves measurement of the interaction of values and roles in people's lives.

The Liu model quantifies physiological inputs as a function of individual status, general economic conditions, and the political system relating these factors indirectly to "unmeasurable" psychological factors. Several other researchers have proposed integrated conceptual frameworks for the assessment of life quality.

The metropolitan/nonmetropolitan dimension has been an intriguing criticism for examining quality of life. Community and privacy, relationship and communication, as well as social systems and cultural institutions have amplified effects in urban and nonurban settings. Population shifts and economic forces are related to these geographic factors.

As social scientists attempt to assess quality in complex life environments, the introspective stage of the U.S. civilization continues. Societal planning can be enhanced through a greater understanding and appreciation for quality of life.
Quality of Life: Perspectives and Review

by Glenn R. Hawkes, Richard A. Hanson, and Jeanne W. Smith

Quality of life refers to the well-being of people individually or in groups and to the well-being of the environment in which these people live (Environmental Protection Agency, 1973). What are quality of life components? Do they vary among different populations, locations, and situations? The NC-128 Quality of Life Project is directed toward answering these questions.

This monograph, the first in a series, will present the project’s theoretical foundations, objectives, and a comprehensive review of literature related to quality of life in the United States.

One of the pressing problems of our time is the maldistribution of population over available, inhabitable space. A Presidential Commission concluded in 1972 that 54% of all citizens thought that the distribution of the population was a serious problem, as great a problem as population growth itself.

One serious tangent to this situation is the seeming concentration of disadvantaged families in central areas of metropolitan cities. Advantages thought to be available to city dwellers may be outweighed by disadvantages. The central city phenomenon has had a negative impact on many small communities, eroding their economic viability and significantly hampering their capability to maintain requisite social institutions and public services. Not only do many rural residents suffer income deprivation, but it is very likely that there is a parallel absence of societal support mechanisms in terms of community facilities and critical services. Rural areas, however, may have advantages over metropolitan areas that result in improved quality of life and satisfaction of the residents.

Quality of life involves subjective perceptions of reality and experience, as well as objective aspects of experience. Knowledge of these elements and how they vary by types of populations could enhance policy formulation aimed at improving the well-being of families, including the economically disadvantaged and the ethnic minorities in the United States. In our pluralistic society, people’s values, aspirations, and life styles vary widely, and these variations produce different conceptions of what constitutes a satisfying existence.

The development of systematic knowledge of quality of life is complicated by at least two factors: (1) There is no sufficiently broad conceptual framework to embrace a multidisciplinary attack on the subject. Such a framework will be developed in the course of this project and will attempt to integrate the insights of several academic disciplines. (2) There is no baseline for longitudinal study to uncover the varying nature of change and the critical elements impacting on change. This project will develop a baseline for further quality of life study.

PERSPECTIVES RELATED TO QUALITY OF LIFE

Cultural Aspects

The stage of development of a culture may be a prime indicator of its willingness and ability to look at itself in a critical and thought-provoking way. This cultural perspective is crucial. Theory says that a culture cannot begin self-evaluation and criticism until it reaches a particular evolutionary stage. There is anthropological evidence supporting that theory.

One appropriate analogy for use in the argument concerning cultural evolution is the recapitulation principle: Individual growth can mirror a system’s growth. Around the turn of the century, G. Stanley Hall (1904) postulated that individuals mature and grow in a way similar to the evolution of species. Anthropologists also have used the analogy in speaking of humanity as one man slowly changing throughout the centuries and eventually coming of age. That important assumption implies a pattern of cultural evolution. At various stages of a culture, certain things are likely to happen, and other things are likely not to happen. According to this logic, societies mature; they age and are qualitatively different later in their evolution than at earlier points. Social change becomes a viable term indicating a process: an ongoing accumulation of impetus for change. The pattern of this change is likely contingent upon the state of society with reference to the "revolutions" that are a part of cultural evolution.

One hypothesis is that a culture cannot begin looking at social indicators and the quality of life of its members until it: (a) has provided for the basic physiological needs of its people, (b) has the time and energy to devote to mental gymnastics of this nature, and (c) has a ruling class of individuals, philosophers, and statesmen possessed of sufficient speculative thought to deal with the question of the quality of life. This discussion centers on the idea of cultural evolution and a related ability to examine the needs of people objectively. It is possible to connect cultural change and a basic-need hierarchy (Maslow, 1954). Maslow’s hierarchy placed basic physiological needs at the bottom of the pyramid, moved up to safety needs, belongingness and love needs, esteem needs, and the need for self-actualization.

Childe (1935) speculated that three great revolutions have significantly changed societal devel-
opment: (1) food revolution, (2) technological revolution, and (3) urban revolution.

The food revolution is a significant occurrence. Earlier societies functioned primarily in a hunting and gathering mode. Their method of providing for basic needs was to go out and look for food and to gather what was available (depending on the natural milieu of the environment). At that point, need satisfaction is basically at the survival level. Most of the history of the human species has been made up of cultures in that stage of development.

Hunting and gathering gives way to an agrarian society, which usually provides a better way of life. The food revolution meets the needs of people on the basic physiological level. At this point, it may be possible to begin meeting needs on slightly higher levels.

The technological revolution also is significant, although perhaps more subtle than the food revolution. The technological revolution is multifaceted in nature and long-term in adoption, but the effects are no less significant. The technological revolution is related to the food revolution. Technology has increased the ability to produce food, theoretically increasing the ability to meet basic needs. Even so, in its formative stages, the technological revolution is a bit tentative and requires much energy on the part of a people and a culture. There is little extra time to proliferate and expand the scope of helping networks.

Although the technological revolution is an ongoing one, some tangents have been produced that have been quite significant in their own right. One such revolution is the so-called urban revolution. Related directly to the technological revolution, with concomitant increases in free time and leisure pursuits, the urban revolution has brought a different level of maturity to societies. It now is possible to introspect and look to the needs of all the people to find out what is happening within the culture. That was not possible earlier when the consummate energy of the culture was directed toward building and developing. Today, some of that energy, perhaps a great deal, can be directed more productively elsewhere.

Redfield (1953) saw cultural change and the resultant ability to look inward to be a product of the transition from a precivilized to a civilized society. Primitive, preliterate folk societies had several outstanding characteristics: (1) The communities were intimate and homogeneous; an ability and willingness to share traditions was present. (2) There were no “full-time specialists” (also noted by Childe, 1935). (3) The predominance of interpersonal relations was primary in nature; men and women were seen as people rather than as utility functions. (4) Groupings of kinship were very important in the delineation of the society, as were roles and status within the group; mutual usefulness of people to each other held the early community together.

Precivilized societies were different from post-technological and urban societies:

Each precivilized society was held together by largely undeclared but continually realized ethical conceptions. (Redfield, p. 15)

The essential order of these cultures seems to have been moral, in the broad sense of being moral. There was shared function, value, and tradition, and undoubtedly there was common purpose of mind. Redfield goes on to state that it appears that the length of time that humans spent in such precivilized societies is “…at least five times as long for the entire period of civilization.”

Civilization may be thought of as the antithesis of the folk society. It may also be thought of as that society in which the relations between the technical order and moral order take forms radically different from the relationships between the two which prevailed in precivilized society. (Redfield, p. 22)

Technological order in the precivilized society is small, while moral order is great. Because of the inherent nature of cultural evolution, the technological order is great (in degrees) in the civilized society, although the moral order is not always small. The moral order, however, almost always is very complicated and varying in its influence.

What is intriguing is that societies do not depart from the folk characteristics at the same rate, nor uniformly. But, as Redfield indicates, as a society moves away from the folk society to civilization, the intellectual and religious conceptions within the culture change: The literati and the rural farmer become distinct sets of people; the moral order comes to be managed by an elite or functional class of managers. These people (or subset of the population) make many weighty decisions in terms of the direction of the culture and have a great deal to do with assessment of the progress of the culture.

Figure 1 compiles the transition of Redfield’s folk society to civilized society, Childe’s three fundamental revolutions, and Maslow’s hierarchy of human needs. These three dimensions (the macro dimension, the process dimension, and the need dimension) work together in the evolution of a culture. Depending on the stage of the culture, certain amounts of energy and concentration will be invested in each level of needs. These three dimensions are interdependent for mutual achievement and resolution. It is not until we reach the stage of evolution indicated on the right side of Figure 1 that society can begin to take the time and use the energy for introspection. At that stage, we develop indicators of social development and seek behavioral solutions to the problems unique to the culture.

The quality of life needs to be assessed in terms of the quality of human experience (Campbell, 1972). That quality depends on the reciprocal interaction of the forces mentioned in Figure 1. As individuals begin to change in their relative position in society, the requirements that the individual places upon society also change qualitatively. In a civilized
society, which has gone through the three revolutions mentioned, Cantril (1963) states that seven requirements are placed upon the culture. The individual must have: the opportunity to develop (1) a sense of personal integrity and identity, (2) a sense of worthiness, and (3) a sense of community; and an opportunity to enlarge (4) a sense of self in both time and space, (5) a sense of personal development, (6) a sense of commitment (value system), and (7) a societal mechanism that will ensure the satisfaction of human appetites (Cantril, 1963).

The points mentioned by Cantril indicate needs beyond simple physiological/safety. They are indicative of cultural evolution sufficient to support development in the measurement of social indicators. As societies get to the point of effective self-inspection, it is important that they evolve a system for social change. As Green and Hawkes (1974) pointed out:

Social mechanisms need to be reordered to put first things first. No headway can be made if we do not set up procedures whereby physiological needs can be met... To expect an individual to develop to the point of Maslow's self-actualization is highly unrealistic when few opportunities for growth are provided within the community setting. A sense of personal identity, of worth, and of self-constancy cannot and will not come when the individual is denied the opportunity to participate in the transactions of his own society. (Green and Hawkes, 1974)

The cultural milieu is essential in determining the culture's ability and willingness to devote time and energy to finding out how and why certain things happen. Social indicators research (quality of life) is dependent on the direction and depth of social change and evolution.

**Experiential Aspects**

A culture is many things. It is an interaction between persons and their environment; it is a group of artifacts and symbols; it is a language and a system of communication; culture is process. When all these things are added up, we have the experience of a particular culture.

Experience is a product of all of the cultural forces—environment, values, beliefs, technology. Culture also is a product of experience. The relationship between culture and experience is simultaneously unitary and causal; i.e., culture produces experience, but there also is a reciprocal relation between the two concepts. Hence, the components of culture are often products of the situation (environmentally, climatically, aesthetically).

Quality of life operates in the same manner because it is part of culture. Experience as well as values, artifacts, and behaviors of the culture produce the aspects of quality in terms of life events. In investigations of quality of life, the experience and relativity of the situations need to be considered. As one would expect, the experience of people greatly affects their perceptions of the quality of life. What is termed important in terms of life quality in one culture is disregarded in another.

**Man-environment phenomena**

There are several ways to consider the experience that man has with a culture. On one level, man could be observed as a performing organism, task-oriented and geared to output of some kind (Altman, 1973). In terms of experience, the human is conceptualized according to what is produced. The environment is structured and designed accordingly. Performance-related skills can be maximized, with a minimum of impediments to an individual's performance.

Viewing the experience of the individual in this way makes him just another component in the system. His flexibility is greatly reduced. There are relatively few opportunities to alter environments or to operate in flexible ways (Altman, 1973). In this sense, the effect of experience is to homogenize and codify behavior. This ensures, at least in theory, cultural efficiency and uniformity. Culture's ex-
Another way to look at man-environment phenomena is through inspection of internal processes of the individual. These processes include perception and cognitive responses to the environment as well as motivational and emotional states. This model highlights interaction between experience and the related culture in terms of attitudes and belief systems (Altman, 1973). Experience can and does define the interpersonal psychological states of individuals.

The dictates of experience affect the nature of cooperation in the culture, as well as conformity and sources of influence. Again, it may not be individuals who determine the values inherent in a culture; instead, it may be the collective experience of the people in the culture that is predominant in forming the values and behaviors.

Perhaps the most appropriate way to conceptualize experience in culture is through use of an ecological model. Four basic premises for this model are related to the experience of the culture:

1) Environment and behavior are nearly inseparable. Behavior must be understood in an environmental context. The ongoing experience affects (usually reinforces) the nature of the environment.

2) There is a reciprocal relationship among the elements of the ecological system (Figure 2). Experience affects the environment, which, in turn, affects the individual. The individual, however, also interprets the experience, which at some point may also affect the environment.

3) The relationship between the elements of the ecological system are dynamic rather than static. Social systems, ideas, and individuals all cope with contingencies attached to the situation. Consequently, there are periods of change and flux.

4) The ecological system described operates on several levels as a coherent system (Altman, 1973). Four levels are personal-social, instrumental, feeling, and symbolic. At each level, the reciprocal relationship between man, the environment, and his or her experience is operational and defines what elements make up the quality of life.

Quality of life is affected by the human ecology range and the corresponding social milieu (Steidl, 1970):

1) Far environment (society). The individual has little control, and much adaptation is required.

2) Intermediate environment (community). Personal consideration is less, and some adaptation is required.

3) Near environment (home). Individuals and families have potential maximum control, with minimal adaptation.

Family management within the near environment greatly affects the unit’s quality of life. An understanding of the interaction of the environment contributes to the ability to create and control; it decreases the need to adapt and react. The content and quality of the near environment influences the development of human resources and productivity. Nonhuman resources can be maximized. Shared resources become a family and community management challenge (Paolucci et al., 1977). Personal, moral, and social values frequently are products of family socialization. Values influence the setting of goals and making of decisions in the management process. The family organization operates within the ecological ranges for various levels of life quality (Figure 3).

**Cultural experience**

The experience of a culture may affect behavior through high population density. Studies of population density and its effects on animals reveal that certain forms of pathological behavior are associated with situations of high density. The effects, however, are not uniform across different species (Galle et al., 1972).

How might crowding in human habitat systems be related to pathology in humans? As the number of individuals increases, obligations in terms of social contacts increase, and there is a concomitant need to inhibit individual pursuits. Crowding also greatly increases available stimuli. It is not, then, possible to ignore all the aversive stimuli. Conflict may result from crowding and the invasion of personal space.

What effect does that sort of experience have on the behavior of individuals in the system? Galle et al. (1972) suggest that population density may relate to higher death and birth rates and to tension and irritation in the home, leading to family breakup, juvenile delinquency, and psychiatric disorder.

It is likely that the experience of cultural population density contributes to each of these issues. The exact causal relationship remains unclear, although there is undoubtedly a relation between the experience of the culture and the behavior of the individuals within the culture.

Other interesting examples of how the experience of the culture affects behavior within the culture have been provided by Marvin Harris in *Cows, Pigs, Wars and Witches: The Riddles of Culture* (1974). Harris’s work answers questions about cultural practices within other societies.

For example, given the abundance of cows present within the country of India, why do the people not eat them? With the poverty and hunger present in that country, why don’t those people avail themselves of this walking storehouse of protein? It is even claimed that irrational cow worship is the number-one cause of India’s hunger problems.
Upon first glance it does seem that cattle are a big problem in India: Tourists on their way through New Delhi, Calcutta, Madras, Bombay, and other Indian cities are astonished at the liberties enjoyed by the stray cattle. The animals wander through the streets, browse off the stalls in the market place, break into private gardens, defecate all over the sidewalks, and snarl traffic by pausing to chew their cuds in the middle of busy intersections.

Love of cows affects life in many ways. Government agencies maintain old-age homes for cows at which owners may board their dry and decrepit animals free of charge... Farmers regard their cows as members of the family, adorn them... pray for them when they are sick, and call their neighbors and a priest to celebrate the birth of a new calf. (Harris, pp. 12-13)

There are reasons why "cow love" has some appropriateness for Indian culture. The milk of cattle is used for feeding people. True, the breed of cattle in India is not known for excessive milk production, but the milk they produce is used.

The primary source of power for working the farms is oxen. Cattle are breeders of oxen; without the cattle, there is no chance of keeping the oxen supply adequate. To try to substitute modern agricultural methods probably would not be functional. As Harris points out:

...the inevitable effect of substituting costly machines for cheap animals is to reduce the number of people who can earn their living from agriculture and to force a corresponding increase in the size of the average farm. If agribusiness were to develop along similar lines (similar to America), jobs and housing would have to be found for a quarter of a billion displaced peasants.

...an additional massive buildup of the urban population can only lead to unprecedented upheavals and catastrophes. (Harris, pp. 17-18)
The manure of the cattle is a valuable economic resource. About half the manure is used for fertilizer, and the other half is used for fuel. If any is left over, it can be mixed with water and used for a flooring material. "The cattle convert items of little direct human value into products of immediate utility" (Harris, p. 25).

The experience that a culture undergoes produces values and commensurate behavior that violate the standards of other cultures. Therein lies the problem. The experience of the Indian culture dictates an appropriate manner of cultural survival. Any sudden change would bring about a cultural disaster of immense human cost. As Harris summarizes:

...cow love is an active element in a complex, finely articulated material and cultural order. Cow love mobilizes the latent capacity of human beings to persevere in a low-energy ecosystem in which there is little room for waste and indolence. Cow love contributes to the adaptive resilience of the human population by preserving temporarily dry or barren but still useful animals; by discouraging the growth of an energy-expensive beef industry; by protecting cattle that fatten in the public domain or at landlord's expense; and by preserving the recovery potential of the cattle population during droughts and famines. (Harris, p. 30)

Our analysis of the quality of life in India undoubtedly differs from their perception of quality of life. It is clear that the experience of the Indian culture is creating a set of unique values and expectations. The quality of life also is unique from other cultural patterns. Seemingly irrational behaviors and bizarre attitudes usually are experience-related phenomena, culture-bound, and quite appropriate for that situation.

Historical Aspects

Within the perspective of the western world, a more specific historical perspective illuminates research on social indicators.

During the 1920s, "keepers of the moral order" decided it appropriate to investigate what was happening to the people. Society in the United States had evolved through all the revolutions. It was ready to consider cultural self-actualizing activities and enhancement of the life of people. In 1929, a presidential commission was empaneled to produce a quantitative picture of this society. The results of that early study were published in 13 monographs that included demographic data, unemployment rates, crime rates, and levels of consumption. De Neufville (1975) described the study as "...an active, deliberate effort to select and present an array of measures of social change." That work and the underlying cultural and philosophical concepts laid the foundation for research on social indicators. The study suggested that a central planning strategy was needed. The absence of a strategy limited the report's impact upon the culture.

During World War II, the culture marshalled its resources to deal with the conflict. Research on social indicators had a low priority, becoming largely dormant. A study, entitled America's Needs and Resources, was made during that period (De Neufville, 1975). Similar to earlier social-indicator studies, it was an investigation of consumption patterns, income discrepancies, housing adequacy, and health delivery systems. This could be considered an activity of a self-actualizing culture or an effort in support of the war. Whatever the reason, social-indicators research was still viable.

From the end of the war to the late 1950s, research on the quality of life was minimal. In the evolution of cultures, there are times when reorganization is paramount. In such periods, there is regression along the need dimension. Actualization is secondary as social forces retreat to stabilize the culture.

A force from outside the country impelled the culture out of a placid reorganization mentality. The outside push was in the form of a technological leap forward by Russia's orbiting Sputnik satellite. For the citizens of the United States, it was a traumatic event. It represented a deficit in advances at the height of the cold war. This state of affairs was decidedly unacceptable.

Attention again was focused on the measurement of social occurrences, or social-indicator research. A Commission to Study National Goals was appointed in 1960 by President Eisenhower (De Neufville, 1975). The return to social-indicators research marked an intensification of governmental efforts to determine what was happening within the culture. The term "social indicators" became popular. Society again was willing to introspect and to implement programs for change.

Kantona (1951) published the Psychological Analysis of Economic Behavior, which was basic in defining an etiology of wants and general relations between attitudes and behavior. Other studies also examined the creation of individual value patterns and social concerns, relations between the individual and the social milieu, and actual measurements of life satisfaction among various groups of people (Kantona, 1951; Duncan, 1961; Cantril, 1965; Neugarten et al., 1961; Sprout and Sprout, 1965).

Quality of life and the use of social indicators was a part of Lyndon Johnson's Great Society Program. That era's concern centered on oppressed individuals and a variety of social problems. The Great Society is a classic example of cultural evolution as it became appropriate to be introspective. President Johnson assigned the task of developing social indicators to the Department of Health, Education, and Welfare (De Neufville, 1975). A U.S. Senate bill set up a system of social accounts and monitoring procedures. Attempts were made to place quantitative labels on facets of the social system. De Neufville stated:
It was analogous to the idea of a doctor giving a check-up. He would check temperature, white count, breathing, and a number of other factors that he had some reason to suspect would be associated with ill health. He would probably have taken some other indicators into account in some complicated and often intuitive way. This medical analogy is appropriate because a diagnosis is often the product of experience rather than well-evolved theory. (De Neufville, p. 43)

Expectations on the utility of social indicators are frequently unmet. In the 1960s the disillusionment was eclipsed by a mounting concern over Vietnam, economic problems, and racial unrest. Implications of methods of research on social indicators plateaued, awaiting the next surge.

### SOCIAL INDICATORS

Early quality of life studies made use of the methods of research on social indicators. The term "social indicator" probably was used initially by Bauer (1966) in studies of the impact of the space program on society. Those studies included economic, political, and social indicators for measuring what was happening within the milieu of the culture.

To measure quality of life by the use of social indicators, it is necessary to define "social indicator." Parke and Sheldon (1974) defined a social indicator as: "...statistical time series that measure changes in significant aspects of a society."

The United States Department of Health, Education, and Welfare, in *Toward a Social Report* (1969), used this definition:

> ...a statistic of direct normative interest which facilitates concise, comprehensive, and balanced judgements about the condition of major aspects of a society. (p. 97)

Carlisle (1972) defined a social indicator in still another way:

A social indicator is defined as the operational definition of any one of the concepts central to the generation of an information system descriptive of the social system.

These definitions have similarities: A social indicator has a normative interest in the culture and is descriptive of the normative aspects of that society. Social indicators also are relevant in the formulation, implementation, and evaluation of social policy. There is a logical sequence to the development of social policy. Social indicators play a role in generation of a social policy and in evaluation of resulting social programs.

These definitions imply that social relations and interactions represent processes. The continuity of quality of life allows for introspection and for intervention into the process within social systems. The components of the system interact in a functionally reciprocal fashion.

There may be "second-order consequences" that are significant even though not particularly visible. Bauer's (1966) work is important because he added a qualitative dimension to the ability to assess quality of life measures. He was convinced of the importance of the secondary effects of social movements. Some of these were apparent and some were not. Bauer used the term "second-order consequences" to describe the impact of a social occurrence in an unanticipated area. The space program had obvious technological impact (e.g., use of materials, computer technology, and propulsion systems). Each of those primary effects had one or a number of unanticipated secondary effects, often not felt immediately. Much of what is measured in quality of life research can be called second-order consequences.

Land (1975) suggested three specific rationales for the use of social indicators:

1) **Social policy rationale.** Social indicators are used to evaluate specific social programs in terms of salience and appropriateness to the population. A system of social accounts is established to monitor social needs and systems. The analogy to a business system and the assumptions contained therein create difficulties in developing sound human social programs. National goals and priorities can be developed from evaluative social-indicators research.

2) **Social change rationale.** Social indicators provide social scientists and policymakers with data relevant to changes in the attitudes and needs of a people. Social change represents the "blood pressure" of the society and is indicative of many social and political occurrences. It seems to be related directly to the quality of life inasmuch as segments of a culture insist on social changes to meet group needs while other groups seek to slow change so as to preserve their niche. A monitoring of social change is essential.

3) **Social reporting rationale.** Increasingly, sophisticated methods of measuring social change are reflected in the social-reporting rationale. The culture may be able to facilitate appropriate change through the use of prediction. For example, anticipation of a "second-order consequence" may be productive and useful to the people of a culture.

Quality of life research as a product of cultural evolution rests heavily upon these three rationales. Social policy becomes an exterior entity. It is exterior to the individual and often is articulated by a "class" of policymakers within the culture. With social policy come programs designed to meet the needs of individuals in a polyglot society. Postindustrial societies need to monitor both interior and exterior elements of the culture change. Consideration should be given to change that results from social programs as well as to change that occurs in spite of social programs.
If possible, social indicators should be limited yet comprehensive. They should be indicators of significant aspects of the culture that can be measured. Social indicators need a longitudinal aspect that is applicable to the relevant social unit (Andrews and Withey, 1976). A sophisticated and accurate instrument is required.

Carlisle (1972) noted four central concepts in social indicators:

1) Reciprocal systems components operationalized in social indicator research. Second-order consequence can be anticipated through understanding of societal structure.

2) The performance of a part of the system must coincide with the goals of the system. Goal setting requires a cultural consciousness not necessarily a part of the "folk-cultures." A system goal is "...a state of affairs considered desirable by the members of a system and towards which action is directed" (Carlisle, p. 26). That definition can be reinforced by an awareness of the "whole" of society, an awareness that may be fundamentally a product of the culture's evolution.

3) Policy may be imposed upon the system. An important index of cultural viability and impending social change may be the congruence of system and policy goals. Policymakers may have one set of goals to improve quality of life while the population's operationalized goals may have quite another definition.

4) Adaptive mechanisms inherent in the system may be a measure of cultural maturity. An inability to adapt produces alienation and abrupt social change. Appropriate cultural amelioration techniques can bring about positive and appropriate social change. Comprehensive data on culture-bound problems, such as incongruence of goals, are a central concept for social-indicator research. Data on social problems may make it possible to anticipate future problems but will direct the resources of the culture to the task of improving the quality of life.

Carlisle has also described four classes of indicators:

1) Informative indicators, which describe the social system and represent operationalized system components and goals in time series.

2) Predictive indicators, which are components and goals of explicit social system models. (These are essentially informative indicators that are part of a formal model and are assessed over a long period.)

3) Problem-oriented indicators, which produce information on problematic areas within the system.

4) Program-evaluation indicators, which are policy goals that have been operationalized with the capability of monitoring policy progress. This is evidently the purist form of bureaucracy.

The concepts presented are a cross section of the ideas basic to social-indicators research. Quality of life is directly measurable only through adequate social indicators. Quality of life movement and social-indicator research are dynamically related, dependent upon one another, and subject to the same criticism.

Ross (1962) asks social researchers seven questions that relate to the monitoring of complex interaction between individuals, groups of individuals, and the social system. Quality of life researchers must answer the following questions:

1) Does social science research merely elaborate the obvious?

2) Is it possible to account for most of the variation in human behavior, given the irrationality and unpredictability of the species?

3) How do we observe, much less measure, the private behavior of human beings? What is the validity of inferences made from public behavior?

4) Can we even study society objectively? Given the inherent biases, can social scientists make any objective claims about the quality of life?

5) How can we isolate relevant variables, given the complexity of social behavior?

6) Is there a pattern to human behavior and interaction? If there is no discernible pattern, is the study futile?

7) What sort of reliability do social predictions have?

Sheldon and Freeman (1972) were specific in their criticism of social-indicator research. They state that three of the claims of social-indicator research need to be approached very cautiously:

1) Setting goals and priorities for social indicator research may be politically expedient but subject to cultural bias and lacking in objective social policy development. Social indicators can be input for a complex sociopolitical realm. They have not historically been the sole basis for social policy change within a system. Political considerations are likely to supersede social reality.

2) Evaluations of social indicator programs seldom have high validity. "Social indicator analyses cannot approximate the necessary requirements of sound design in order to provide for program evaluation" (Sheldon and Freeman, p. 100).

3) Development of a balance sheet (in analogy with business procedures) is somewhat bothersome. There is a problem in the conversion of indicators to similar units. It is not possible to reduce human experience to a profit-and-loss statement. Although economic reality may exist, it represents only one small aspect of human experience. That is why subjective components are difficult to measure and compare.

QUALITY OF LIFE

The phrase "quality of life" can be semantically divided into its component parts. Human wants and needs can be differentiated and related to the quality of life. Quality of life can be defined and discussed in the several dimensions found in the literature.

A particularly cogent piece discussing quality of life from a semantic perspective was written by McCall (1975). He defined quality of life by dividing the phrase into its component parts.

The word "quality" has two distinct aspects. In
one sense, the word is nonevaluative. A quality may be an attribute or a characteristic of a given entity. Conversely, quality also can be an evaluative word; "...it is a name which characterizes different societies to different degrees, desirability being directly proportional to degree" (McCall, p. 231). In this sense, the word "quality" is evaluative, implying degrees of attainment and differentiating aspects of experience.

When the evaluative phrase "quality of life" is used, it can describe useffulness of aspects of life, the efficiency of other aspects, and the value of still others. "Quality of life" as a phrase has evolved to include many of those evaluative meanings, if not all.

When persons specify what contributes to the quality of a particular occurrence or life event, it becomes incumbent to measure that quality. It is not possible to identify only a single measure of quality of life. A measure for quality of interpersonal relationships is not the same as a measure for quality of communities. Measurement criteria probably are highly intercorrelated, and all factors contribute to quality of life.

McCall noted two outstanding characteristics of psychosocial environmental entities that constitute a frame of reference:

1) Quality is multicriteria. The quality of life depends upon the presence or absence of a number of clusters of properties;

2) Quality is type-dependent. Different criteria are used for determining quality for all elements of a frame of reference. Different aspects of life call for different measurement criteria because of inherent differences in the type of entity.

McCall defined quality of life in two ways:

1) Quality of life is "obtaining of the necessary conditions for happiness in a given society or region." Happiness often is considered an elusive term, too "soft" for good analyses and too subjective for meaningful discussion. However, a subjective perception of level of happiness may be the crucial variable in performance on more objective measures.

McCall described happiness as a state of life-enhancement with four basic elements:

a) Happiness is not episodic. Pleasure (hedonism) most often is a function of the situation and often is short-lived. Feeling happy now is quite different from being happy.

b) Happiness is closely related to fulfillment. It may be that happiness is fulfillment. Given the variability in meanings of fulfillment, a difficult dimension is added to this definition of quality of life.

c) There may be a moral dimension to happiness. McCall is uncertain about this component. It is possible that happiness includes a concern for the well-being of other individuals and for the preservation of long-standing values.

d) Happiness may be found in the easiest fashion by not looking for it. That is an interesting comment on the entire life-quality research move-

ment. Is it possible that all the psychological and sociological variables that are part of the expensive and elegant research models actually explain little of the variance in individual happiness in our culture?

2) Quality-of-life units are referred to as general happiness requirements (GHR's). Fulfillment of the GHR's lies in the satisfaction of human needs. Happiness does not lie in the satisfaction of human wants. McCall distinguishes between needs and wants:

a) The satisfaction of a want may not involve reference to an end state. A want is a proliferating concept; satisfaction of a want may lead to the creation of more and different wants. The individual has so-called illegitimate needs. A person may want something simply to have it, with no existential requirement for it.

b) Wants are controllable in a way that needs are not. It is inappropriate to need something eagerly. A need is a functional requisite, and, without it, functioning will be hampered or reduced. Fulfillment of needs may be conceptually out of an individual's reach.

c) Wants very often bear a close resemblance to beliefs. That synergistic composition of attitudes and values often is irrelevant to what is needed to maintain satisfactory levels of human existence.

d) People are good judges of what they want, but often poor judges of what they need. This implies a human irrationality in determining the phenomena in our lives that are predictive of our feelings about quality of life.

Wants can escalate; persons stop wanting one thing so that they can begin wanting something else. This principle is responsible for the development of a unique form of physical and intellectual poverty called "relative deprivation." This factor may be the reason that some people in marginal social and psychological situations indicate that their quality of life is generally acceptable, whereas objective measures indicate that they should feel deprived and exhibit a lower perception of quality of life. This factor also is in operation cross-culturally in comparisons of objective measures (e.g., yearly income) and subjective measures (e.g., satisfaction) between a premodern society and a society such as America's.

McCall stated that the degree of satisfaction actually is a function of the relationship between expectations and attainment:

degree of satisfaction = attainment/expectation.

This formula implies a dynamic psychological relation between the constructs and also implies a cognitive transaction in operation. This transaction is fundamental; the quality of life is dependent upon the outcome. As the degree and level of expectations change, attainment and degree of satisfaction also change.

McCall concluded that needs do not escalate and that, if needs are used in quality of life studies, effective comparisons and predictions will be possible. If
the focus is the level of wants; the result is going to be confused in terms of comparative potential.

There are a number of other ways of defining quality of life. Examples of these differing points of view are:

1) quality of life refers to human experience, and the criteria of quality of life are those dimensions of life by which people experience levels of satisfaction and dissatisfaction. (Terhune, 1973, p. 22)

In conceptual terms speaking to the varietal nature of human experience, Terhune has emphasized that quality of life concerns human experience. This implies an interaction between the individual and the socioeconomic system, an interaction that is the key to the quality of life.

2) an individual's overall perceived satisfaction of his needs over a period of time. (Mitchell et al., 1973, p. 37)

This definition involves needs versus wants. It also emphasizes an important dimension, the concept of time. This dimension is crucial because satisfaction is an ongoing state, and the time element is vital. Momentary or retrospective analyses lack this dimension.

3) a person's sense of well being, his satisfaction or dissatisfaction with life or his happiness or unhappiness. (Dalkey and Rourke, 1973, p. 210)

This definition reinforces McCall's basic themes. In terms of conceptual frameworks of quality of life, work of Campbell, Converse, and Rodgers (1976) is illuminating and instructive. They had two basic elements in their study design: (1) Their sphere of interest was the U.S. population, and (2) the study was to be part of a continuing series of comparable efforts. They were concerned with the experience of life, not the conditions of life. This is a fundamental distinction; the experience of life is less directly measurable than the conditions of life.

Campbell et al. concentrated on satisfaction measures rather than the idea of happiness. They considered satisfaction a "cleaner" definition. In addition, the use of satisfaction was politically expedient, and the concept of satisfaction was attractive because of its adaptability to study design. The focus of that study was individual life domains, the relations of one domain to the others, and their respective contributions to overall life quality. The domains include areas such as family life, health, neighborhood, job, and standard of living. The conceptual design of the study by Campbell et al. is indicated in Figure 4.

Quality of life involves, not only an outsider's judgments of quality, but also the privately known and evaluated aspects of life. There is a dichotomy in the conceptualization of quality of life: (1) objective indicators, which are products of accounting and record keeping, system variables, and measurable entities; and (2) subjective indicators, which include personal, perceptual, and evaluative items such as happiness and satisfaction.

Andrews and Withey (1976) believe that distinction to be spurious and useless. Objective indicators often depend heavily upon subjective judgments. It is difficult, if not impossible, to separate the two factors. Subjective measures provide basically objective measurements.

There may be other ways to consider quality of life.

---

The diagram shows the relationship of domain to life satisfaction and behavior. It includes personal characteristics, standards of comparison, objective attributes, perceived attributes, evaluated attributes, satisfaction with domain, life satisfaction, coping, and adaptive behavior. The diagram is from Figure 1-2, The Quality of American Life, by Campbell, Converse, and Rodgers, (c) 1976 by the Russell Sage Foundation, New York. Reprinted by permission.
life. For example, it is more useful to consider the following three dimensions:

1) The extent of agreement on characterization of a given phenomenon. At times there is considerable agreement; at other times, there is considerable disagreement. An index to the degree of agreement would be profitable.

2) The degree to which identical sensory-neural input is available to co-observers. Individuals who assess quality of life need to determine how much of the difference in their perceptions is due to: (a) the level and amount of information available; (b) variation in perceptual mechanisms; and (c) the background and training of the observers.

3) The extent of individual action toward a phenomenon. Reactions toward a phenomenon can be similar to both subjective and objective indicators. An index of similarities/dissimilarities can be useful in determining the efficacy of quality-of-life research. Andrews and Withey (1976, p. 6) state: "...it may be more helpful and meaningful to consider the individualistic or consensual aspects of phenomena, the private or public accessibility of evidence, and the different forms and patterns of behavior needed to change something rather than to cling to the more simplistic notions of objective and subjective.

Another position on quality of life was articulated at an August 1972 symposium (Environmental Protection Agency, 1973). It was found that quality of life revolves around several related perspectives:

1) Interdisciplinary: A pluralistic, polyglot society requires measurement systems that reflect its heterogeneous nature. There is therefore a need to develop pluralistic indices. A quality-of-life measure must include environmental, economic, and social components.

2) Environmental: Man now is willing to redefine his relationship to the environment. Quality of life and its measurement is basic in environmental planning and management. It is manifested in wildlife management, definition of life-style spheres (e.g., no-smoking areas), and other changes in near and far environments to meet individual perceptions. An effective balance between the forces of nature and man can occur with weighting of environmental aspects. This process is an emotion-laden issue.

3) Economic: This aspect is traditionally quantitative, although it is changing and improving qualitatively; materialistic quantifiers no longer suffice as a base of quality of life.

4) Psychological: Human need theories of Maslow and others center on this aspect of quality of life.

5) Sociological: Social class, race, ethnicity, status, and role are considerations in assessing quality of life.

Parke and Sheldon (1974) indicated several different activities that can be used to describe quality of life:

1) Exploitation of existing data sources. These include statistical reports and series that can provide a quantitative envelope for quality-of-life research.

2) Replication of baseline studies. This dimension allows measurement of social change, a fundamental concern in quality-of-life research.

3) Construction of models. The social system process, with input and output modalities, is assessed through the construction of models.

4) Creation of subjective measures. Parke and Sheldon describe surveys of life satisfaction. Subjective well-being is a fundamental aspect of quality life.

The social-indicator research movement is basic to quality of life investigations, particularly with regard to methodology and conceptual framework. A social indicator needs to be defined.

Bunge (1975) lists three definitions of an indicator: (1) It is a symptom of some condition. (2) It is an observable trait (physical, biological, social, etc.). (3) It indicates the value of some other trait, usually an unobservable one.

This definition parallels earlier ones. There is: (a) a reaffirmation of the indicator's symptomatic relationship to the object, (b) a tendency to speak in terms of the indicator's observability, and (c) an implication that indicators are reflective of processes. This definition minimizes the normative descriptive aspects of indicators, denies the interactional nature of social indicators, and marginally addresses the social system's continuity. Indicators sample time-dependent characteristics, necessitating a time series.

The relationship between indicator and item may be inaccurate or misleading (Bunge, 1975). Some indicators may be relatively reliable; they accurately and truly depict the quality that they are designed to measure. For example, if quality of air is a concern for the scientist studying a community, available technology can give an adequate indicator of the breathability and acceptability of the air.

This reliability comes into serious doubt when the observer questions respondents on perceptions of air quality and whether the individual's behavior is affected. A reliable indicator, quality of air, has become a somewhat unreliable indicator, perceived quality of air.

Other indicators are more misleading. Quantified data often are lacking. Quality can be a highly subjective term. Bunge delineated the nature of variables so as to limit the ambiguity of social indicators by using the following classification (Bunge, p. 69):

Variables:

a) Observable
   — Valuable in themselves
     (e.g., total population)
   — Valuable as indicators
     (e.g., size of police force)

b) Unobservable
   — Scrutinizable via indicators
     (e.g., social cohesiveness)
   — Occult
     (e.g., the mood of the nation)
All indicators are variables, though not all variables within a societal context are indicators (Bunge, 1975). Variables can be divided into observable and unobservable groups. The latter group usually is more individualistic and subtle. Some of the observable variables that can be measured are useful as indicators in the social sense.

Variables that are private or inaccessible are divided into those that are essentially occult (subjective and difficult to assess) and a group of variables that are scrutinizable through the use of social indicators. Quality-of-life research utilizes both observable indicators and more subtle processes (satisfaction, cohesiveness).

Quality-of-life indicators assess individuals' well-being. Bunge expressed concern about the objectivity and scientific validity of past and presently used indicators. He made three specific suggestions about the state of quality-of-life research and its fundamental direction:

1) A specific theoretical framework is needed. Theory guides research and facilitates effective collation of information. Quality-of-life research has no conceptual framework. Much of the research has been guided by intuition and wishful thinking.

2) Some quality-of-life indicators are normative as well as descriptive. Certain levels or standards approximate a common way of thinking and feeling in a society. If these normative dimensions can be identified, it will be possible to learn more about the quality of life and expectations of people. Social policy may be one example of a normative indicator.

3) Some quality-of-life indicators are subjective, intrinsically connected with the individual's frame of reference. Satisfaction variables are indicators that have an almost completely subjective base. Their relative worth is in terms of the importance given these variables. Subjective indices measure subjective conditions.

Quality-of-life indicators are multifaceted. They have objective aspects in the demographic and statistical realm. Quality-of-life indicators also have a normative element, sharing the relative worth of life-course events. There also is a significant subjective aspect to quality-of-life indicators. Subjectivity is appropriate in considering human perceptions. To study human quality of life is to examine subjective assessments of the life space.

The human personality has a multivariate structure. The term "multivariate" originates in statistics and research methods. The logic of multiple regression is based on a multifaceted explanation for variance in a given phenomenon. Analogy with the human personality is appropriate in view of the distinct multiplicity inherent in the human being.

Levy and Guttman (1975) demonstrated a multilevel approach to the process of relating to a social system (Figure 5).

This model introduces the concept of domain, which indicates the subjects (e.g., Mexican Americans in California) and the aspects of their well-being that are assessed (e.g., housing: quality, size, location, and satisfaction). There is a range of descriptors for the item being measured. In assessing an individual's well-being, the normative concept is established by the referent domain. The range of descriptors varies from very satisfactory to very unsatisfactory.
satisfaction with housing, the affect-descriptor would be scaled to describe that person's feeling. The range for assessment of type and size of house would be scaled differently.

The model is linked to society by the scaled range's normative nature. In affect-descriptors, there may be a normative feeling toward housing correlated with referents for that area. Referents may be the individual, family, or a combination of all. In other scales, the normative dimension may be replaced by a more objective measurement: the average number of bedrooms in the U.S. home, compared with the number in the respondents' homes.

Domain involves cognitive, affective, and instrumental assessment of the level and treatment of a social group in some life area. Range is appropriately scaled according to the normative criterion of the respondent for that area of life. This may be a function of several aspects of the individual's life. A sense of well-being is generated primarily from feelings within the individual. The community and other aspects seem to be of secondary importance. Well-being items tend to correlate more within the stratum of self than with the stratum of community (Levy and Guttman, 1975).

**SOCIAL CHANGE**

Push for change is related fundamentally to quality of life. Social mechanisms affect the general satisfaction level of people within a system. People want a sense of personal development and an opportunity to enlarge a sense of self. They respond to their environment and life space.

As people's feelings about quality of life are assessed, there will be indications of areas of low satisfaction. Social change can fulfill individuals in a culture.

Social change on all levels—sociological, personal, psychological, and ecological—is related fundamentally to the perceived quality of life. At the same time, theories of social change do not always correspond with reality. Economists' theories are precise and logical when all extraneous variables can be controlled. The real world seldom offers similar control and predictability.

...no discipline offers a simple but comprehensive system for explaining social change. (Cochran, 1972, p. 12)

**Theories of Social Change**

Societal change and quality of life have a complex relationship. Social and personal relationships to institutions are a consideration.

Social change is a process in which participants seek to maximize net value outcomes (values) by employing practices (institutions) affecting resources...

...change is social since it is interactive, involving in varying frequency and intensity all participants. (Lasswell and Holmberg, 1966, p. 16)

The process of social change has valued outcomes. Individuals seek to maximize outcomes to enhance their quality of life. Within this process, the institutions of a society, including the political-power institutions, have a production function. They shape values. Institutions also are involved in outcomes. They are the carriers of society's values. This relationship can be charted (Lasswell and Holmberg, 1966) as in Figure 6.

**Figure 6. Shapers and sharers of value categories. (Adapted from Lasswell and Holmberg, 1966.)**

The movement to change the basic societal structure or improve the quality of life is simultaneously phenomenological and behavioral. Dealing with images and abstractions is combined with the action process. Understanding of the change movements requires understanding of their motivation. A purpose of quality-of-life research is identification of motivating forces in cultures.

Stein (1966) identified three levels of social change structure: (1) the cultural parameters (broad), (2) the intermediaries (less broad), and (3) the agents of social change (most specific) (Figure 7).

**Figure 7. Model of social change. (Adapted from Stein, 1966.)**
This model identifies a level between the agents of social change and the cultural values as a whole. This intermediate level is the difference between societal acceptance or rejection of the information produced at the primary level. Quality-of-life researchers operating as agents of change measure cultural parameters. Before any change can occur, the information must be processed by individuals whose cultural mandate is to evaluate appropriate suggestions.

By this process, many sensible and appropriate suggestions never receive cultural consideration. This conceptualization also helps to explain the slowness of social change. Even in times of revolution, there are aspects of cultures that are unaffected. It is possible to overthrow a political regime, yet not change the basic structure and function of the family.

**Patterns of Social Change**

In the broadest of all possible perspectives, social change takes three patterns: evolution, diffusion, and acculturation (Lauer, 1977):

1) **Evolution:** implies change from a lower to higher form of cultural life. It is possible that evolution is a major part of the quality-of-life phenomenon. A culture matures to a certain point before it becomes introspective. Lauer stated, "...culture is a self-generating phenomenon that enfolds the existence of every individual, and thereby explains all of man's behavior" (p. 287).

Growth and change must be understood in terms of the culture being investigated. Ethnocentric practices and policies explain much of a culture's behavior. Social change and quality of life should be described in terms indigenous to the culture.

That is not to deny the existence of "multilinear evolution" (Steward, 1955). There are significant cross-cultural regularities in evolutionary patterns. Cultural innovation will not be accepted until the intermediaries recognize the culture's amenability to innovation. Steward proposed a cultural ecology model suggesting that behavior is partly determined by environmental factors. The study of cultural ecology involves: (a) analysis of the interrelationship of technology and environment; (b) analysis of behavior patterns involved in the exploitation of a particular area by means of a particular technology; (c) determination of the extent to which those behavior patterns affect various other facets of the culture (Lauer, 1977, p. 288).

Cultural evolution has been summarized:

...passage from less to greater energy transformation, lower to higher levels of integration, and less to greater all around adaptability. Specific evolution is the phylogenetic, ramifying, historic passage of culture along its many lines, the adaptive modification of particular cultures. (Harding et al., 1960, p. 38)

2) **Diffusion:** proliferation between cultures.

Rather than describe cultural change as an internal evolutionary process, students of diffusion believe that cultural aspects are transmitted.

Support for that theory of social change comes in observable cross-cultural regularities. Diffusion has been the basic process in the creation of U.S. subculture similarities. Cultures rarely exist in isolation. In interaction with other cultures, the original culture changes.

Perceptions of quality of life often are perceptions of actual or desired cultural diffusion. Through contact with other cultures or subcultures, individual perceptions of quality of life are modified and are in direct relation to "standards" of life.

Agents of cultural diffusion include the family, peer group, and the technological communication system. The accessibility of the culture and various other cultural components may impede or enhance the change factor and influence the rate of diffusion.

3) **Acculturation:** a specific form of cultural change. Acculturation is initiated by the conjunction of two or more autonomous cultural systems (Barnett, 1954). Acculturation involves continuous first-hand contact between cultures. Diffusion may occur without cultures coming in direct contact.

Bases for acculturation are colonization, war, and other forms of cultural intervention. Convergence between cultures may be voluntary or involuntary.

**Twentieth Century Social Change**

Traditional cultural influences on quality of life are changing. Internalized sanctions based upon prestige, tradition, and religious authority have weakened. Quality of life is closely related to these cultural aspects. Changes from a sacred to a secular society have brought large-scale personal and familial change.

Technological advances brought social change and affected quality of life. Significant agricultural advances have changed the perceived quality of life for many citizens. One notable area of innovation has been the development of farm machinery. Mechanized tomato harvesting has meant a larger, more flexible supply of tomatoes for the general population, enhancing the quality of life. In contrast, people who lost jobs because of the development of the tomato harvester have experienced a significant decline in the quality of their life when viewed from employment potential. Seen from a drudge work perspective, quality may be enhanced.

A knowledge explosion has paralleled technological advances. Educational experiences have enhanced the quality of life for many people. For those lacking opportunity or ability, however, education upgrading has caused a significant decline in quality of life.

Economic growth seems to follow a five-step developmental sequence (adapted from Rostow, 1960):

1) The traditional setting—limited potential for productivity, ceiling put on development; agriculture is predominant but not particularly productive.
2) Setting the stage—conditions necessary for industrialization begin to develop; attitude change in people; content of education changes; centralized authority for the nation.

3) The take-off—application of industrial techniques in a limited number of sectors within society; growth becomes self-sustaining.

4) The drive to maturity—modern technology applied to entire society; maturity is achieved somewhere around 60 years after take-off.

5) The age of mass consumption—a number of directions are available: a) focus on welfare for its people; or b) expand consumption; or c) strive for enhanced power in the international realm.

At each stage of economic growth, quality of life has different meanings. The relationship between economic social change and the perceived quality of life is demonstrated. In the age of mass consumption, there is explicit mention of the study of life quality and its improvement. The United States has chosen to expand consumption and enhance its international situation before addressing the population’s welfare.

Economic and social forces have combined to produce significant social change. The distribution of population in the United States by age group for 1900, 1940, 1970, and 1977 has been graphed (Figure 8). The population distribution in 1900 is expansive. There are larger numbers of people in the younger age groups. This distribution is typical of many cultures that have not reached a high proportion of elderly population. In the expansive mode, each successive cohort is larger than the preceding one.

In the United States, recent population cohorts have continued to decrease in size. This results in a constrictive population pattern. The numbers of elderly are increasing, and the numbers of younger people are decreasing.

Hawkes, Hansen, and Smith (1979) have pointed out that this type of social change can affect quality of life. A social security system based on the U.S. population distribution in 1900 will function. When the same system and philosophy is imposed on the 1977 population distribution, the social security system can be dysfunctional. Elderly individuals who are dependent upon social security payments are likely to have a lower quality of life.

Geographic population shifts can affect perceived quality of life. Change shifts have occurred between urban areas and nonurban areas since 1960 (Figure 9). These shifts reflect a perception of quality of life and a desire to change that perception. People frequently move to better their lives.

Social change affects the quality and nature of family life. The structure and function of the family has changed significantly. Changes enhance and reflect quality of life. An indicator is the number of married women in the labor force (Table 1).

Increases in the participation of married women in the labor force are a sign of change. The tripling of the number of women in the labor force means re-
defining the traditional family and conception of life quality. Many women with children are entering the labor force to maintain the family's quality-of-life standards.

Even the size of the family is changing (Table 2). Social change has a vital relationship to quality of life. Lauer concluded:

The history maker must analyze each situation on its own merits in order to determine the appropriate target of his change effort, who should be involved in that effort, and what method will most likely lead to the desired outcome. We now live in the history of the future. (Lauer, 1977, p. 370)

CONCEPTUAL MODELS OF QUALITY OF LIFE

Conceptual models are varied in structure and theoretical framework. A conceptual framework sets the theoretical and methodological boundaries for analysis. Within different frameworks, various models are appropriate. There are significant dif-

**Figure 9.** Population density and mobility in the United States. (Population Education Newsletter Interchange, 1978, 5, by the Population Reference Bureau, Washington, D.C. Reprinted by permission.)
quality of life as a function of the degree to which transcendental approaches—two traditional ways of studying the quality of life on the basis of the degree to which individuals perform their role in the larger social order. The emphasis is on the community and larger social order. Individuals’ perception of quality of life is contingent upon feedback from the social system and congruence in normative behavior, expectations, and attitudes.

Gerson (1976) also suggested the negotiated frame of reference, or the reciprocal-commitment approach. Here, the individual and the social order develop through a series of negotiations. These negotiations concern who shall be who (roles), who shall be what (status), and what measure of social order shall pertain. These negotiations occur on large and small scales. On the small scale, negotiations concern who shall be who (roles), who shall be what (status), and what measure of social order shall pertain. These negotiations occur daily. Revolutions are functions of the time dimension within which the change occurs.

We need to define community quality of life in individual terms simultaneously with defining individual quality of life in communal terms. For the individual, there is a series of negotiated working arrangements for the conduct of affairs in a variety of situations (Gerson, 1976, p. 797). But individual selves are reflexive. In assessing themselves as whole beings, they may adopt the point of view of any one or combination of the situations in which they participate. Individuals are functions of the net balances in resources and constraints in their life situations, the effects of simultaneous participation in a variety of social settings, and the anticipated outcomes of incomplete negotiations.

Resources in the Gerson model may be conceptualized as money, time (organization, pressures, etc.), sentiment (affection, loyalty, esteem, etc.), and skill (ability to perform a physical or psychological task). Analysis of the flow of resources gives a fundamental feeling for the quality of life. It is important to go beyond that to a study of the negotiations ongoing in the system, the constraints on the individual and the social order, and the level of interpersonal, sociological, and technological skill in the culture. Quality of life is a function of the combination of these forces.

Gerson’s approach is abstract in analyzing people. It is important, however, in defining quality of life as a two-stage theory: the individual’s perception of quality of life in communal terms and the community’s quality of life defined in terms of individual perceptions.

The Individual Actualization Model

Maslow (1954) pioneered in defining a basic theory of human motivation and a basic theory of quality of life. He described human priorities of needs as a developmental progression in a hierarchical arrangement. The satisfaction of the early needs on a continuum opens the consciousness

---

Table 1. Number of married women in the labor force, 1950-1976.

<table>
<thead>
<tr>
<th>Year</th>
<th>1950</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Average number of children under age 18 per family, 1940-1978.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average number of children under age 18 per family</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>1.24</td>
</tr>
<tr>
<td>1950</td>
<td>1.17</td>
</tr>
<tr>
<td>1960</td>
<td>1.41</td>
</tr>
<tr>
<td>1965</td>
<td>1.44</td>
</tr>
<tr>
<td>1970</td>
<td>1.34</td>
</tr>
<tr>
<td>1975</td>
<td>1.18</td>
</tr>
<tr>
<td>1978</td>
<td>1.10</td>
</tr>
</tbody>
</table>

to the domination by a "higher" need in a progression of needs.

The individual is the primary focus in these theories. The community is a facilitation agent. By creating appropriate situations and environments, social systems foster the independent and appropriate development of individuals. Maslow's theory implies that nature of the social order, while not the primary focus of need satisfaction, creates the boundaries within which the individual develops. In an evolutionary sense, if a culture is "inhibited" in some way, the satisfaction of individual needs will be affected accordingly. If the society does not allow free choice situations, healthy growth may not be possible within that societal context.

Flanagan (1978) offered contemporary analysis of the individual-actualization approach. He suggested five dimensions to quality of life:

1) Physical and material situation, which includes material well-being, food, home, health, personal safety, etc.
2) Human relations, which includes relations with a significant other (spouse, companion), parent relations, extended family support, and social support networks of nonfamily nature.
3) The social reality, including organization involvement, community involvement and support, regulation, and other social impacts on living arrangements.
4) Personal development, including education, religious/spiritual philosophical base, occupational pursuits, and creativity and personal expression (accomplishment, ingenuity, etc.).
5) Recreation, which includes socializing with other members of the community, passive recreation (TV, music), participatory activities.

In the Maslow and Flanagan models, individual development is the ideal measure. Individual analysis gives an accurate perception of quality of life. Flanagan describes a definite advantage for using in-depth studies of individuals to identify the determiners of life quality and to define quality of life: procedures have been developed to use the individual as the unit in studying the determiners of the quality of life.

From the intensive study of one individual at a time, the facts regarding the changes that would have made or would now make this individual's present quality of life better can usually be identified...by aggregating the findings from such intensive studies of individuals comprising fairly large and comprehensive samples, insights into the optimal changes to improve the quality of life of the whole population can be gained. (Flanagan, p. 145)

The individual emphasis of the actualization model demonstrates only one aspect of quality of life. The individual exists within a political and social milieu that impinges upon perceptions and offers constraints and obstacles to planned and appropriate social change. Individual approaches are valuable, although only in concert with techniques that measure other facets of the life situation.

The Two-Dimensional Role-Value Model

Andrews and Withey (1974) proposed that quality of life is a function of the interaction between the values dimension (evaluative criteria) and the roles dimension (role-related situations of life). They stated:

people implicitly—and sometimes explicitly—engage in a process of evaluation in which events occurring in a role-specific situation are evaluated according to a set of values to produce an affective response. (Andrews and Withey, p. 3).

This model also utilizes the process of integration. Affective responses from specific situations are combined to produce a general affective evaluation for that role situation. Responses to different role situations combine to produce a global affective response to life in general, an assessment of quality of life. The model in Figure 10 represents this two-dimensional situation.

The Andrews and Withey model may be extended into additional dimensions in social contexts that affect evaluations. Inquiries can be made about the basic evaluation process by which the affective response has become associated with a particular role in consideration of a particular value. The original developers do not make this extension; future research may validate the concept.

Through a variety of clustering techniques, they classified approximately 80 items into several clusters or domains. They discovered a particular subset of 12 domains that explained 50 to 60% of the variation in perception of overall life quality: (1) life #1, #2, and #3—scaled perceptions of life as a whole, (2) scaled level of life satisfaction, (3) life perception on a "feeling thermometer," (4) two-scaled happiness scales, (5) perception of need for change in life, (6) positive and negative affect (Bradburn rating scale), (7) affect balance, and (8) worries.

The Liu Model

Liu (1975b) assessed quality of life as a function of psychological inputs (PS) and physiological inputs (PH), or QOL = f(PS,PH). He does not quantify "spiritual" inputs. He does quantify the positive functions of social, economic, political, and environmental inputs:

PH = f(S, E, P), where

S is a function of: (a) individual status, (b) individual equality (discrimination), and (c) living conditions (environmental as well as facilities); E is a
E_\text{ij} = \text{Affective evaluative response to particular role-situation with respect to particular value}

E_{\text{i}} = \text{General affective evaluative response to role-situation (across values)}

E_{\text{j}} = \text{General affective evaluative response to value (across role-situations)}

E_{..} = \text{General affective evaluative response to life-as-a-whole – i.e., perceived quality of life}

This model is applicable in the sociopolitical realm of our society. Its fundamental weakness is its dismissal of the psychological situation of the individual as "unmeasurable." The deficit is critical since the psychological input of the individual, has been left undefined and untreated by the model. Inability to quantify that aspect led to its omission. Other models rely more heavily on the PS factor. The Liu model is an objective one:

The subjective component is more qualitative in nature, and generally depends upon the individual and is not now measurable, while objective components are more measurable in an aggregate form. (Liu, 1975b, p. 12)
psychology of individuals may be the most powerful
determiner of life satisfaction and accessibility to
change and growth.

The Integrated Conceptual Framework

Several researchers have attempted combinations
of quality-of-life models. Burt et al. (1978,
1979) used survey data from the National Opinion
Research Center, a probability sample of 5,736 ob-
servations, to describe the operation of life quality at
three distinct levels:

1) The innermost aspect involves derivation of
individual levels of well-being from the consumption
of goods within the society. It is assumed that this is
consumption of psychological as well as material
goods.

2) The secondary level involves defining the
relative position of the individual in the social order.
Individual perception of power to determine
personal well-being affects this dimension. The
descriptors' power and locus of control can be used
as well as the functional reciprocals anomie and
alienation.

3) The third level of well-being involves inter-
relations and internalization of conceptions of well-
being. This cognitive process represents the in-
corporation of perceptions into the idiosyncratic
structure of the individual. The level is the "struc-
ture" of well-being; it is "...a set of interrelated con-
tinua in terms of which individuals assess their exist-
ing quality of life within their society" (Burt et
al., 1978, p. 368).

According to the model, the final structure of well-
being is an interrelated entity, representing the com-
bination of affect, satisfaction with domains, and
general satisfaction. The results indicate that people
with high general satisfaction have a high satisfac-
tion with the domains, high positive affect, and low
negative affect. Individuals with high satisfaction
with domains, however, tend to have low positive af-
fact and low negative affect. The integrated model
combines "objective" and "subjective" indicators. This
type of analysis is qualitatively richer and more sub-
stantive.

Campbell et al. (1976) proposed another example
of an integrated conceptual framework for quality-
of-life research. This model delineates the relation-
ship between objective environmental characteris-
tics and levels of satisfaction experienced with
domains. Objective perceived and evaluated attrib-
utes are noted as well as the level of satisfaction
with particular domains. Domain satisfactions con-
tribute to life satisfaction, which, in turn, is funda-
mentally related to the coping and adaptive
behavior of the individual and the social order.

This work assessed people's feelings about
specific life domains, such as jobs, marriage, and
housing. A measure of overall life satisfaction was
based on a 7-point scale, with a continuum between
"completely satisfied" and "completely dissatisfied."

The key concept here is satisfaction and its cor-
relates. Campbell et al. were particularly interested
in the relationship between overall life satisfaction
and happiness, one gauge of the respondent's sense
of well-being.

Eight life descriptions formed the major cluster
of semantic differential items, giving a measure of
overall life satisfaction, the composite index of well-
being. This technique provided an accessible format
for summarization, as well as a convenient research
model. The index of reliability also demonstrated a
higher level of reliability than any of its single-item
components considered separately. This index has
acceptable reliability as a research instrument, with
the possibility of further improvement in subsequent
efforts.

A significant feature of this research model is
the analysis of life domains. Any global assessment
without consideration of domains risks limited utili-
ty. The breadth of this concept may lead to low re-
liability and may not articulate the subtle and ob-
vious differences in aspects of individuals' lives. This
research model hypothesizes that the individual's
global sense of well-being should be a compound of
gratifications and disappointments with particular
features of life. The study explored this additive rela-
tionship.

Study data were gleaned from a national sample
survey funded by the Russell Sage Foundation
(Campbell et al., 1976). This study delineated a con-
ceptual framework of some specific issues and pro-
blems in the area of quality of life research. One
specific finding related to the utility of global in-
dicators of satisfaction and happiness. The substan-
tial intercorrelations of these items are derived from
individual responses to measures at both ends of a
continuum from purely affective to purely cognitive.
It would be difficult to operationalize a measure that
was restricted to either end of this continuum. The
Overall Life Satisfaction Index, for example, seems
to lie distinctly at the cognitive pole. Because of
various phenomena, these scores are difficult to
translate into specific recommendations for an ideal
global self.

The respondent's age has a unique relationship
to global measures of well-being. The young seemed
more happy but less satisfied; the older respondents
were less happy but more satisfied.

Seventeen domain satisfaction scores explained
54% of the variance in the Index of Well-Being.
There seems to be a limit to the utility of specificity.

...if we were to attempt to put together
a picture of the general state of well-
being in the population compounded
from a set of items all of which were
focused at the level of our most reliable
specific assessments, the coverage pro-
blem would be prohibitive by an
astronomical margin. (Campbell et al.,
p. 493)

It may not be possible to assess all possible con-
Project is an examination of the differences between metropolitan area. This review also: (1) addresses living in a metropolitan area and in a non-metropolitan area, (2) discusses migration and demographic patterns in existence today, (3) discusses the effects of crowding metropolitan–nonmetropolitan differences in the actual dimensions of urban environmental quality, and urban living on human beings, (4) addresses the development of significant urban areas, with a selected life factors.

Industrial nations are characterized by the development of significant urban areas, with a concomitant decrease in the amount of arable land and increased level of agricultural efficiency. Industrial states have levels of complexity in governmental function (bureaucracy) and a typically high level of governmental intervention in the lives of the people (Fox, 1977).

United States cities are classical stereotypes of urbanization, with marked heterogeneity. They are pluralistic in race and ethnicity, varied in occupational opportunities and socioeconomic possibilities, and heterogeneous in general social life. Units in metropolitan areas have specialization of function; cities have far more pluralism, variation, and specialization than do nonmetropolitan areas.

Fox (1977) suggested four patterns of existence in metropolitan areas.

1) Separation: Geographic, social, economic, and psychological boundaries proliferate in urban areas.

2) Partial autonomy: Individualistic capabilities are contingent upon a variety of legal and bureaucratic entities.

3) Noncommunication/prejudice among the parts of the heterogeneous system: Inherent and perceived differences exist in everything from lifestyle to the food being eaten. The polyglot nature of metropolitan areas contributes to perceived differences and higher levels of misunderstanding and nonappreciation. These items provide the impetus for number 4.

4) Exclusion: certain classes, religions, races, and populations are excluded from full participation in the society.

This scenario is not the inevitable consequence of heterogeneous metropolitan human settlements. Unfortunately, however, these results are very common. The pluralistic nature of these environments dictates different ways of life, competitive situations, and loyalty questions—to the ethnic group, to the job, to the family.

Hannerz (1974) summarized modes of study for subpopulations within these heterogeneous metropolitan areas:

1) An appreciation of the complexity and particular situations of each subunit of the metropolitan area requires understanding of the "adaptive strategies" employed by that subunit in its interaction with the larger social system: (a) monopolization of activities/occupations and their use as avenues to social mobility (ethnic dominance), (b) exploitation of group identity to gain clientele or make commercial connections (entrepreneurship), (c) use of common ethnicity to mobilize political followings, work groups, or voluntary associations.

2) Individual subcultural institutions act as liaisons between the people of the subpopulation and the formal institutions of the larger social order.

Nonmetropolitan areas, in contrast, are reputed to be bucolic, stable, and ethnically and occupationally homogeneous environments. Nonmetropolitan settlements are said also to be conducive to positive family development and social relations. This "happy days" syndrome contradicts the reality of cultural evolution, particularly of cultures in the industrial revolution. The rates and types of social change are indicative of an indeterminate "modal" level of existence within evolving mega-industrial states.

Fischer (1975) suggested a theory of movement toward metropolitan areas. A synthesis of Fischer's theory of urbanism contains five basic propositions.

1) The more urban a place, the greater is its subcultural variety. Cultural variety is greater in metropolitan areas. Variation in ethnicity, social class, and significant lifestyle can be noted. Subcultural irregularities develop through "structural differentiation," or internal changes from social mobility as well as through the process of migration.

2) The more urban a place, the more intense is its subcultures. Fischer noted in highly urbanized metropolitan centers a growing force that intensifies subcultural values and customs, resulting in cross-subculture discussion and disagreement. With higher levels of urbanization, there is greater institutional completeness for each distinct subculture. Intensification of the internal power and completeness of the subculture creates greater contrasts within the urban area, resulting in increased conflict and disagreement between units of the settlement.

3) The more urban a place, the higher are the rates of unconventionality. In heterogeneous metropolitan settlements, societally divergent individuals and subunits are given an opportunity to exist. These types of groups would not survive within the more homogeneous atmosphere of a non-
metropolitan area; active participation within the larger social order would not be allowed. Levels of cultural diffusion are higher in metropolitan settlements, and so are the levels of nonnormative behavior. The boundaries of "normative" behavior have widened.

4) There is no universal direction to metropolitan unconventionality. The extremely high levels of heterogeneity allow for emergence of content-free cultural differences. Nonnormative behavior and predictive possibilities disappear rapidly in studies of metropolitan areas and their subunits.

5) Cultural differences between urban and rural persons are persistent.

The direction of social change is a vital factor in predictive strategies for assessing metropolitan-nonmetropolitan differences. Homogeneous rural areas may be recipients of urban social change. Social change is a series of "...successive waves [that] diffuse from the urban center to the rural periphery...it is in the nature of urbanism constantly to foster innovation and change" (Fischer, 1975, p. 1336).

The viability of the socio-industrial complex affects the verity of this taxonomy. The heterogeneity of settlements, the speed of social change, and the influence of unconventional actors and organizations are all contingent upon how the system operates. If there is a significant slowing, the migration patterns change in nature, social-change efforts alter in randomness, and ethnically related subcultural forces change in intensity.

The industrial revolution and its sequelae began a persistent migration from the inner city to the suburbs. The nondisadvantaged live in outlying regions, within commuting distance of work. Simultaneously, the number of people living in the country declined. People migrated for urban jobs with the decrease in agricultural jobs as farming efficiency increased and agricultural land was taken out of production.

Morrison and Wheeler (1976) noted a growth trend for most urban areas in the United States, with a continuum pattern of rural to urban migration. That reported trend, however, is in opposition to the following figures: Each year between 1970 and 1975, for every 100 people who moved to the metropolitan sector, 131 moved out; three-fourths of all nonmetropolitan counties had gains in population. Morrison and Wheeler (1976) noted a growth trend for most urban areas in the United States, with a continuum pattern of rural to urban migration. That reported trend, however, is in opposition to the following figures: Each year between 1970 and 1975, for every 100 people who moved to the metropolitan sector, 131 moved out; three-fourths of all nonmetropolitan counties had gains in population.

This trend can be labeled "rural urbanization." Significant nonmetropolitan growth and stabilization or decline of metropolitan growth is occurring in all parts of the United States. Nonmetropolitan areas have increased significantly in their attractiveness. Two demographic trends have contributed to this phenomenon: (1) People have been leaving Standard Metropolitan Statistical Areas (SMSA's) for many years; this net outflow was offset by a natural increase (high birthrates). (2) The drop in the birthrates has resulted in significant population declines for some SMSA's.

Table 3 demonstrates some of the patterns in population movement for the periods 1965 to 1970 and 1970 to 1975. The characteristics of individuals who migrate between metropolitan and nonmetropolitan areas can be summarized as follows (Morrison and Wheeler, 1976):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan to nonmetropolitan migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60% are less than 30 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5% of them are 65 years old or more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35% of them have at least one year of college education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33% of the males are upper white collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.5% are unskilled blue collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmetropolitan to metropolitan migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70% are less than 30 years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0% are 65 years old or more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45% have at least one year of college education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42% of the males are upper white collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31% of the males are skilled blue collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% of the males are unskilled blue collar</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The individuals who move from nonmetropolitan to metropolitan areas are slightly better educated and seem to be in a higher SES (socioeconomic status) bracket. Morrison and Wheeler suggest that four processes operate in the rural-urbanization movement:

1) The new process is simply an extension of the same urbanization process; the movement out of the SMSA's is simply a new form of urbanization.

2) The attractions once found in metropolitan areas have decreased in number or disappeared.

3) Many industries have relocated from cities to "lower wage" areas. Some industries have chosen to locate in more aesthetically pleasing rural areas, which allows employees desirable residential areas near work.

4) American people seem to operate within a contradiction: They want community and privacy simultaneously, representing "love thy neighbor...from a distance!"

Infrahuman research shows behavioral effects of
crowding (Stokols, 1976). Population density is a stressor for animals, having a significant negative impact on the individual animal.

With humans, however, the negative effects of crowding may be offset by familial or cultural mediating events. The social system may evolve a set of norms dictating that urban living is normative and that all problems associated with it (e.g., noise, delays, etc.) are ancillaries to normative behavior. The psychological literature suggests a variable relationship between population density and psychological or behavioral problems in the human.

Figure 11 indicates three theoretical/conceptual ways of considering the effects of population density (Stokols, 1976).

<table>
<thead>
<tr>
<th>Theory</th>
<th>Antecedent</th>
<th>Affective</th>
<th>Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) stimulus overload</td>
<td>excessive stimulation</td>
<td>confusion, fatigue</td>
<td>escape stimulation</td>
</tr>
<tr>
<td>2) behavioral constraint</td>
<td>reduced behavioral freedom</td>
<td>psychological reactance</td>
<td>leave, or improve coordination</td>
</tr>
<tr>
<td>3) ecological scarcity of resources</td>
<td>marginality, territoriality, competition</td>
<td>exclusion</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11. The effects of population density. (Adapted from Stokols, 1976.)

1) In the stimulus overload model, congestion and noise characteristic of metropolitan areas result in overloaded extrapersonal channels (transportation, communication) and interpersonal and intrapersonal channels (relations, communication). As a result, individuals living in urban areas adopt lifestyles characterized by impatience, aloofness, and a preponderance of secondary relations and institutions. Social isolation leads to higher levels of physical and psychological pathology (Stokols, 1976). Environmental occurrences and their rate of presentation represent an excess stimulus for humans. To survive, individuals must set priorities on the input, allocate less of their time to each of the many inputs, and "insulate" themselves to the dehumanizing aspects of the cultural milieu.

2) In the behavioral constraint model, overpopulation places restrictions on the individual's range of behavioral choice. The negative impact of crowding is dependent upon the individual's perceptions and needs. The psychological anticipation of crowding can create problems for the individual. Humans can withstand overcrowding if the individual's frame of reference is suited to the situation. Social and personal variables mediate the effects of crowding as much as the spatial dimensions.

3) In the ecological model, the relationships between the organisms and their environment are examined. A "behavior setting" is the basic term, with adaptation to situations indicative of temporal and spatial interactional boundaries. Crowding is a lack of personal/social resource, with an inherent infringement upon personal space and defined territory.

These three models provide us with a conceptual framework for assessing differences between urban and nonurban environments. To some individuals, urbanism implies infringement behaviorally and an overload of stimuli. To other individuals, the definition is different. The same behavior setting will produce different behavioral and psychological results.

Using a factor-analytic technique, Carp et al. (1976) demonstrated several dimensions that highlight the quality of the urban environment. The dimensions, with percentages of variance, are: noise (15.2%), aesthetics (14.8%), neighbors (10.0%), safety (7.7%), mobility (3.5%), and annoyances (5.1%).

Noise was noted as one of the more salient features of urban environments. The noise variable had five subparts, ranging from transport-related noises to neighbors.

Also important as a differentiating factor was aesthetics. This dimension included residential quality, air quality, environment maintenance, and correlates of alienation.

The proximity of people was significant. Residential environmental quality seemed to be contingent upon the types of people living near, the feelings the individuals had about place of residence, and levels of alienation and cohesiveness of the neighbors (a sense of community).

Important dimensions of urban living are safety as well as automobile and other mobility. Also of concern are annoyances that accompany city living including solicitors, the lack of privacy, and animal nuisances.

Kutner (1975) studied the poor versus the nonpoor on an ethnic and metropolitan-nonmetropolitan basis in four dimensions:

1) relationship of subculture to larger society—nine possible differences in income, employment rates, etc.;

2) nature of local community—six possible differences in population density, housing suitability, etc.;

3) nature of family—five possible differences in family structure, family cohesiveness, parenting, etc.;

4) individual attitudes, values, and character—ten possible differences.

Tables 4 and 5 present the statistically significant differences for populations.

Differences between poor and nonpoor were more numerous in the nonmetropolitan area. Differences for whites were fewer in the urban environment; differences for blacks were fewer in the rural area. The blacks had the greatest number of differences between poor and nonpoor, and Spanish-speaking subjects had the fewest differences between poor and nonpoor on all dimensions and in both localities. Factor 2 showed the greatest urban-rural disparity, highlighting the differences in the local community, the population-density situation, and the suitability of housing differences.

The only area in which metropolitan subjects showed more significant differences than nonmetropolitan subjects was in Factor 3, the nature of the family. Differences between the poor and nonpoor were more significant in the urban environment. In the other three factors, differences between the poor
Table 4. Significant differences between poor and nonpoor metropolitan population.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Ethnic/racial grouping</th>
<th>White</th>
<th>Black</th>
<th>Spanish-Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>(possible = 9)</td>
<td>6</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Factor 2</td>
<td>(possible = 6)</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Factor 3</td>
<td>(possible = 5)</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Factor 4</td>
<td>(possible = 10)</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total differences (possible = 30)</td>
<td>12</td>
<td>19</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>


Table 5. Significant differences between poor and nonpoor nonmetropolitan population.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Ethnic/racial grouping</th>
<th>White</th>
<th>Black</th>
<th>Spanish-Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td></td>
<td>4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Factor 2</td>
<td></td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Factor 3</td>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Factor 4</td>
<td></td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total differences (possible = 30)</td>
<td>18</td>
<td>16</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Total differences, metropolitan = 35 (90 possible differences)
Total differences, nonmetropolitan = 40


A complex, polyglot society has evolved in the United States. This evolution is due, in part, to societal attempts to control mechanisms for satisfying the population’s basic needs. The technological and urban revolutions also have had an impact. With this developmental posture, the society has expended energy toward cultural introspection to determine satisfaction levels of the people and sociological steps for improvement of individual life quality. The resultant development of social-indicator research has yielded a salient collection of quality-of-life literature.

Areas of concern are the "ecology" of quality of life, the historical dimensions of the research as well as the utility of social indicators. Four specific conceptual models are: the negotiated approach, the individual actualization model, the two-dimensional role-value model, and the integrated conceptual framework.

Each person’s connections to society (people and institutions) are unique. Consequently, it may be impossible, even unlikely, to assess all possible contributors to quality of life. Through research, however, social scientists may more clearly understand pertinent social conditions and more efficiently direct societal development toward what Redfield has termed "civilization."


Hall, G. S. Adolescence; its psychology and its relations to physiology, sociology, sex, crime, religion and education. New York: Appleton, 1904.


Kutner, N. G. The poor versus the nonpoor: An ethnic and metropolitan-nonmetropolitan comparison. Sociological Quarterly, 1975, 16, 250-263.


Report of the President's Commission on National
Usui, W. M. Tzuen-jen Lei, and Butler, E. W. Patterns of social participation or rural and urban migrants to an urban area. *Sociology and Social Research*, 61(3), 337-349.