

U.P. ASSESSMENTS on the STATE OF THE NATION
A Multi-Disciplinary Research and Outreach Program

Occasional Papers

Series No. 93-002

**The Meaning and
Measurement of Well-Being:
A Review of the Research Literature**

Lynna Y. SyCip

Maruja B. Asis

Emmanuel M. Luna

University of the Philippines
Center for Integrative and Development Studies

About the UP Assessments on the State of the Nation

The UP Assessments on the State of the Nation: A Multi-Disciplinary Research and Outreach Program was launched by UP President Jose V. Abueva in 1989 to inquire into eight vital areas of Philippine society: Population, Resources, Environment and Sustainable Development; Values, Culture and Communication in Relation to Nation-Building and Development; Education, Learning and Development; Science, Technology and Development; Basic Human Needs; The National Economy, Public Welfare and Global Interdependence; Governance, Public Welfare and Social Justice; and The Well-Being, Welfare and Development of People. Administered by the University of the Philippines-Center for Integrative and Development Studies, the project seeks to identify weaknesses and strengths in policies, programs and other measures that are currently being applied to the solution of our national problems. It hopes to generate reasoned criticisms and sound policy options concerning the State of the Nation.

About the UP Center for Integrative and Development Studies

The UP Center for Integrative and Development Studies (UP-CIDS) was established in September 1985 to promote interdisciplinary studies on critical topics that influence development policies and issues.

The UP-CIDS initiates and supports research involving innovative methodological approaches and multi-disciplinary collaboration. While public policy questions are the primary concern of UP-CIDS, it also encourages basic research that is needed for informed formulation of policy.

The UP-CIDS functions under the Office of the UP President. The UP-CIDS has four major programs, the UP State of the Nation Assessment Program; the Peace, Conflict Resolution, and Human Rights Program; the Educational Research Program; and Special Programs. For further information, contact: The Executive Director, UP-CIDS, UP Diliman, Quezon City. Tel. Nos. 97-35-40, 99-96-91 (fax) and 98-24-71/79 local 5518.

The Meaning and Measurement of Well-Being: A Review of the Research Literature

Ly SyCip

Associate Professor of Psychology

Maruja B. Asis

Assistant Professor of Sociology

Emmanuel M. Luna

Assistant Professor of Community Development

These authors who are all from U.P. Diliman, were assisted by
Maria Carmela Patron and Maria Regina Hechanova Alampay

TABLE OF CONTENTS

	Page
Foreword	5
The Meaning and Measurement of Well-Being: A Review of the Research Literature	
Introduction	7
Definitions of Well-Being	8
Concepts Related to Well-Being	9
Quality of Life	9
Social Development and the Use of Social Indicators	10
Measuring Well-Being	11
A Historical Background on the Measurement of Well-Being and National Development: The International Scene	11
A Historical Background on the Measurement of Well-Being and National Development: The Case of the Philippines	13
Issues in Measuring Well-Being	16
a. Single-item versus multidimensional measures	16
b. Profile versus index	16
c. Weighting	17
d. Time frame	17
e. Objective versus subjective measures	18
f. Bias in measurement	19
Unit or Level of Analysis:	
Whose Well-Being Are We Measuring?	20
a. National well-being	21
b. Well-being of communities	22
c. Well-being of households	22
d. Well-being of individuals	23

Domains of Well-Being	24
Physical Health	24
Psychological Health	26
Education	28
Leisure	29
Work and Quality of Working Life	29
Social Environment	34
Income and Wealth	35
Social Mobility	39
Housing	41
Physical Environment	46
Political Environment	47
What Next?	49
Bibliography	51

FOREWORD

This occasional paper constitutes the initial output of a research project which aims to measure and monitor the well-being of Filipinos through time. The project was conceived to complement with quantitative figures the more substantive assessments of vital areas under the UP State of the Nation Assessments Program. Apart from providing summary measures, the project also intends to supplement and validate the findings of similar surveys.

Like the related concepts of human development and quality of life which have become buzz words in the last three decades, *well-being* defies easy definition and measurement. Fortunately, the research team composed of a psychologist, a sociologist, and a community development expert, can build on similar efforts here and abroad.

In the Philippines for instance, the Development Academy of the Philippines (DAP) undertook the Social Indicators Project in the 1970s which identified health and nutrition, earnings, income and consumption, employment, non-human productive resources, housing, utilities and the environment, public safety and justice, political values, and social mobility as basic Philippine social concerns. The Social Weather Stations Inc., a private social research organization has further developed the field of social indicators research. These initiatives and the literature which guided the subsequent phases of the project are documented in the SyCip, Asis and Luna paper.

Since the review of the literature, the research team has developed an instrument which drew insights not only from the literature but also from focused group discussions held in urban and rural areas and three roundtable sessions with academics, government officials and members of non-government organizations.

We look forward to the results of the pre-test on a bigger sample in early 1994 and the first national survey by June of that same year.

The University of the Philippines - Center for Integrative and Development Studies (UP-CIDS) wishes to acknowledge the editorial assistance of Professor Winifreda Evangelista. Joy Aparis, Bella Lucas, Ellen Cometa and Stretch Payawal of UP-CIDS saw the report through the different stages of publication.

Maria Cynthia Rose Banzon Bautista, Ph.D.
General Editor

INTRODUCTION

There have been many attempts to define and measure well-being. As early as the 17th century, social scientists of the day considered subjecting social topics to quantitative analysis (Andrews and Withey, 1975:2). Apparently, the idea took root because by the 19th century, such an exercise was termed "social symptomology."

Today, social indicators have replaced social symptoms as the signs of the times, particularly as they reflect the well-being of individuals or societies. Well-being or its kindred concepts – quality of life, life satisfaction, happiness, among others – continue to be among the widely studied concerns of social scientists.

It is easy to understand this longstanding fascination with defining, measuring, and monitoring well-being. An examined life is not only worth living; it can also help towards planning a better life. As Andrews and Withey (1975:2) pointed out, since social life is our own making, it can be subject to our own direction.

Although there is an extensive literature on the topic, we were not quite sure how well-being had been studied in the Philippine context; hence the idea of exploring the Filipino well-being was born. Basically the research project addressed the following questions: What is well-being? How is it measured? What have been the experiences of other countries in defining and measuring well-being? What has been the Philippine experience in studying the topic?

This review of the literature is one of the initial outputs of the project. It guided the construction of a preliminary instrument to measure Filipino well-being.

As the review of literature indicates, there have been precedents in the study of well-being in the Philippines, and it is likely that there will also be future attempts. We hope that all these efforts will serve not only to understand the bases of our well-being but will also inspire us to action where and when it matters most.

DEFINITIONS OF WELL-BEING

Well-being is a term which sounds so familiar to everyone. However, upon deeper examination, it is actually quite difficult to define.

Bradburn and Caplovitz (1965) describe an underlying assumption that there is a dimension variously called mental health, self-adjustment, happiness or psychological well-being, and that individuals can be meaningfully described as being relatively high or low on such a dimension.

At present, there is neither a generally agreed upon name for this dimension nor agreement as to the appropriate methods for its measurement. Andrews (1974:361) conceived well-being to mean the level of life quality, that is, "the extent to which people can avoid the various miseries which are potentially the lot of each of us."

Diener (1984) classifies the many definitions of the term into three categories: subjective, objective or normative, and life satisfaction. *Subjective well-being* is the preponderance of the positive affect over the negative affect and stresses pleasant emotional experiences. It can be described in terms of happiness, satisfaction, morale and positive affect. Similarly, Okun, Olding, and Cohn (1987) define subjective well-being as an abstract, superordinate construct involving the affective reactions of individuals to their life experiences along a positive and negative continuum. They explain that the concept may be measured using indicators of happiness, morale and life satisfaction. Happiness is defined as the ratio of positive to negative affect an individual is currently experiencing. Morale is viewed as the degree of optimism an individual has about what his or her future will be like, while life satisfaction is seen as the extent to which an individual is contented with how his or her life has turned out. On the other hand, Griffin (1986) discusses well-being as synonymous to "utility" which he defines to be pleasure and the absence of pain.

A second definition of well-being is according to *objective* or *normative criteria* and happiness is viewed not as a subjective state, but rather as that which possesses some desirable quality judged from the particular framework of the observer (Diener, 1984).

Finally, a third category takes into account the *life satisfaction* of the individual according to his or her standards of what is good in life.

Shin and Johnson (1978) pose the idea that it is the global assessment of a person's quality of life according to his or her own chosen criteria that matters. They elaborate that the concept has two traditions: utility as a mental state (*i.e.*, pleasure and pain) or a state of the world which fulfills desires (*i.e.*, the economist's preferences). These two traditions are incorporated in what they term the "needs account" definition of well-being which is the level at which basic needs are met. Basic needs here are understood to be the minimum ingredients for a worthwhile life. Griffin (1986) adds that the basic needs tradition requires defining a standard of people's expectations, or defining minimum criteria of what most persons have. However, he criticizes the needs accounts for being too rigid, ranking basic needs above mere desires, regardless of the levels of satisfaction of each that are in question. He proposes that basic needs should be considered alongside the importance that people attach to them. In general, a basic need assumes less importance to the extent that it has been met, and will cease to be important at some level of satisfaction. Thus, he concludes that well-being is the level to which basic needs are met so long as they retain importance.

CONCEPTS RELATED TO WELL-BEING

Quality of Life

The United Nations Declaration of Human Rights (Article 25) defines quality of life as "a standard of living adequate for the health and well-being of the family, including food, clothing, housing, medical care and necessary social services, and the right to security in the event of unemployment, disability or lack of livelihood in circumstances beyond the individual's control" (cited in the Social Welfare Indicators System report of the Department of Social Welfare and Development, 1992:2).

The term quality of life goes beyond the idea of material well-being to include various aspects of development, and gives priority to individual aspiration. It is an expression of the degree to which a person is satisfied with his or her situation as well as of the freedom to change it in accordance with individual needs and interest (United Nations, 1991).

Quality of life includes philosophical and psychological elements and is based on a person's assessment of his or her situation and cannot be measured by just a few technical indicators.

Quality of life is more than just the satisfaction of basic needs. The United Nations 1991 report notes that once the threshold of satisfaction of basic needs has been passed, greater material prosperity was not accompanied by an increase in personal well-being. The increased means supplied by technology proved to be extremely valuable in raising the overall standard of living, but they also contributed to the deterioration in the environment, thereby leading to individual and collective frustration.

Andrews and Withey (1976) explain that the usual meaning of quality of life is related to environmental and external circumstances of an individual's life. Such circumstances, however, form only a limited aspect of the overall satisfaction that makes life worthwhile. An important question is whether they constitute a major share of an individual's well-being, or whether they are dominated by internal psychological factors such as a sense of achievement, love and affection, perceived freedom and so on. To answer this question, a somewhat deeper look has to be taken at quality of life as the individual experiences it.

In the Philippines, improved quality of life has been identified as a national goal. The Medium-Term Philippine Development Plan 1993-1998 (NEDA, 1992) identifies a better quality of life as the core concern of its thrust of human development and people empowerment. A better quality of life for Filipinos is characterized by a "healthy and well-nourished, knowledgeable, educated, skilled, decently-housed, and socially secure population" (NEDA, 1992). The plan identifies the three proximate determinants of quality of life to be: a) economic productivity indexed by employment and wage rate; b) effective and meaningful political, community and cultural participation; and c) the physical and psychological ability to enjoy life.

Social Development and the Use of Social Indicators

The definitions of social indicators are numerous. They range from narrow conceptions of economic growth to broad conceptions that cover practically all good things – all economic, social, cultural, ethical, political and other goals and values that a society might pursue.

The U.S. Department of Health, Education and Welfare (as cited in Andrews and Withey, 1976:3) defines social indicators to be "statistics of

direct normative interest which facilitate concise, comprehensive and balanced judgement about the condition(s) of major aspects of a society." They are seen as a direct measure of welfare and are subject to the interpretation that if they change in the "right" direction, while other things remain equal, things have gotten better and people are "better off."

According to the Comprehensive Social Indicators Programme of the Organization for Economic Cooperation and Development (OECD, 1976:14), a social indicator is "a direct and valid statistical measure which monitors levels and changes over time in a fundamental social concern." Social concerns "denote an identifiable and definable aspiration or concern of fundamental and direct importance to human well-being" (OECD, 1976:7).

The Social Indicators Project of the Development Academy of the Philippines (1975) describes social indicators as the derived summary series of data designed to portray the state of, and trends in, social conditions that are, or are likely to become, the subject of public action or concern. They are specific and measurable elements of each social concern and reflect the degree of improvement and the degree of sharing in that improvement among individuals.

Social indicator efforts seek to find a limited yet comprehensive set of coherent and significant indicators of well-being which can be monitored over time and which can be disaggregated to the level of the relevant social unit.

MEASURING WELL-BEING

A Historical Background on the Measurement of Well-Being and National Development: The International Scene

Economic growth was the goal of development in the 1950s and 1960s, and income at the national level – measured by the gross national product (GNP) – was used to determine a country's level of economic progress. The GNP measures "the total mass of quantity of goods and services produced (by a country), weighted by their respective prices," rather than a measure of individual well-being (United Nations Development Programme, 1990:104). During this period, it was assumed that well-being would follow automatically from economic growth. By the 1960s, however, it became clear from many

developing countries that income growth did not necessarily bring about improved well-being of the citizenry. Thus, income distribution and equity became additional objectives of development, and led to a re-examination of the concept of income and its adequacy as a measure of development.

It was during the 1970s that efforts to identify alternative indicators of development – or social indicators, as they came to be known – flourished. In 1976, OECD produced a comprehensive list of social concerns and indicators as measures of social well-being at the national level. Social well-being was defined by the OECD study as "the well-being of individual human beings and the way in which it is affected by their relations with other human beings and the physical environment" (OECD, 1976:12). The OECD list of social concerns included health, education and learning, employment and quality of working life, time and leisure, command over goods and services, physical environment, social environment, and personal safety.

This period also saw the development of the Physical Quality of Life Index (PQLI) by M. Morris (1977) which measured national development as "achieved well-being." The PQLI was the social scientists' attempt, though admittedly limited, to come up with an index of social development to complement the economists' index of economic progress, which was income. Income is a price-weighted sum of quantities of different goods and services exchanged in the marketplace. The PQLI, on the other hand, is a single, unweighted index of a nation's welfare, determined on the basis of three indicators, namely infant mortality, life expectancy at age one and literacy.

The perception of development has since shifted – first from economic development to socioeconomic development, and now, in the 1990s, to "human development" which emphasizes the widening of human choices and access to various options for progress (United Nations Development Programme, 1990). Within this new context, the Human Development Index (HDI) was born. It was designed to measure a country's level of development, integrating both economic and social indicators. The HDI is computed using data for three indicators: life expectancy, literacy and real gross domestic product (GDP) per capita. These variables were chosen because they approximate the results or outputs of "social investments" made by a country on the health, education and employment of its populace. The

HDI, much like the PQLI, ranks the different countries of the world on the basis of their achievements in development; and in the process, identifies those countries which are in most need of global assistance.

A Historical Background on the Measurement of Well-Being and National Development: The Case of the Philippines

The 1950s saw the Philippines aiming for economic progress, much like any other country in the world during those times. However, no systematic national accounting of family income and expenditures – which were essential in the computation of the gross national product (GNP) – was in place until March 1957. (Previous data collection efforts, such as the 1948 Census, were limited to individual, rather than household, incomes.)

Mijares (1977) reported that in 1956-57, a national sample survey of households in the labor force, known as the Philippine Statistical Survey of Households (PSSH), was conducted by the National Economic Council, now the National Economic and Development Authority (NEDA) in cooperation with the Bureau of Census and Statistics.

From 1958 onwards, the surveys were conducted regularly with the content expanding from mere income and expenditures to demographic and socioeconomic questions such as educational attainment, borrowing practices, disability and family savings.

The 1970s saw the Philippines as a participant in the rising efforts to construct social indicators of development. Mangahas (1986) noted that the onset of the martial law regime in the Philippines was also the time when the worldwide social indicators movement began.

In 1973-75, the Development Academy of the Philippines (DAP) implemented the Social Indicators Project (SIP) to look for a way of quantifying national well-being, and measuring it over time. National well-being was defined as "a composite of national achievements in the basic social concerns" like health, education, employment, peace and order, etc. (Development Academy of the Philippines, 1975:2). The project identified health and nutrition, learning, income and consumption, employment, nonhuman productive resources, housing, utilities, the environment, public safety and justice, political values, and social mobility as basic

Philippine social concerns; and proceeded to list specific indicators for each. Two of the indicators identified were "food threshold" and "total poverty threshold." Using these indicators, the DAP study found that poverty in the Philippines had increased in the decade of the 1960s.

In 1975, the University of the Philippines (U.P.) and the DAP formed a consortium of researchers tasked with conducting further studies on each of the social concerns identified by the Social Indicators Project of the DAP. The research program was entitled "Population, Resources, Environment and the Philippine Future (PREPF)." Between 1975 and 1977, the PREPF group, composed of researchers from the DAP, the U.P. Population Institute and the U.P. School of Economics produced volumes of technical reports on the country's health, nutrition, education and population growth scenario.

One of the recommendations of the DAP/PREPF study was for the government to adopt an official poverty line. The Marcos administration, however, never accepted such a recommendation.

In 1983, a DAP monograph entitled "Measuring the Quality of Life: A 1982 Social Weather Report" authored by F.B. Miranda, V.B. Paqueo and M. Mangahas was suppressed by the government. This was just one of the instances which made it apparent that the Marcos government was more interested in projecting a favorable image of itself than in learning whether the problems of the poor were being solved or not. Mangahas (1986) further noted that part of the window dressing by the government was the dissemination of an official report, "Philippine Social Development 1970-1980" which gave the reader the impression that the Philippines had no major social problems during that period.

In the last few years of the Marcos government, more and more research on poverty came to be done by non-government, academic organizations and several research institutions like La Salle Bacolod Social Research Center, Visayas Research Consortium, Eastern Mindanao Area Research Consortium and the Luzon Secretariat for Social Action. As their conclusions began to diverge more and more from official assessments, their relationship with the government tended to grow more confrontational rather than cooperative.

Under the Aquino regime (1986-1992), the government began undertaking poverty measurement exercises. Making use of the 1971 and 1985 Family Income and Expenditure Surveys (FIES), the National Economic and Development Authority (NEDA) developed the 1986 poverty line.

Since then, a number of research groups have continued the work on finding more ways to appropriately measure national well-being. The Social Weather Stations, Inc. (SWS) – a private social research organization – has been most active in the field of social indicators research. The SWS uses the self-rating approach to the measurement of poverty incidence and poverty thresholds (Arroyo, 1990c). It also measures Filipino well-being in terms of the reported levels of satisfaction and happiness of respondents to multipurpose surveys conducted annually using both national and metropolitan samples (Arroyo, 1991d). Still another indicator used by the SWS to measure well-being is the proportion of "optimists" versus "pessimists" in their sample, determined on the basis of whether respondents see their lives as improving or deteriorating in the immediate future. The SWS also uses the proportion of "losers" and "gainers" in the sample as indicative of the level of living of Filipinos. Here, the respondents are asked to compare their past and present living conditions and evaluate whether their lives have taken a turn for the better or for the worse, or whether there have been no changes at all (Arroyo, 1991c).

Another recent effort in social indicators research is the proposed Social Welfare Indicator System (SWIS) developed by the Department of Social Welfare and Development (DSWD) and the National Statistical Coordinating Board (NSCB) in 1991. Its conceptual, statistical and operational frameworks, however, are still undergoing revisions at this time, in view of the 1991 Local Government Code and the 1993-1998 Medium-Term Philippine Development Plan.

The SWIS is designed as an integrated data system for monitoring the changes in the quality of life of the disadvantaged population, defined as those families living below the poverty line (5.82 million families). The system is envisioned to help review and evaluate the responsiveness of the planned targets to the policy measures and programs based on the target beneficiaries' current status and conditions of living.

The SWIS proposes to measure well-being along the following social concerns: health and nutrition, education, housing, income and employment, and psychosocial development

Issues in Measuring Well-Being

Developing appropriate, reliable and comprehensive measures of well-being and quality of life among individuals is not as straightforward as it may seem. There are problems in identifying relevant indicators, in measuring them, and in utilizing them in intergroup comparisons.

Following are some of the issues that researchers have had to contend with in developing measures of well-being.

a. Single-item versus multidimensional measures

Single-item instruments on health and well-being refer to those which contain only one question or statement to assess an individual's well-being status. The question could be as broad as "*How would you describe your health at present?*" or as narrow and specific as "*How many days have you been sick these past two weeks?*" Multiple-item measures, on the other hand, use a number of questions or statements, and responses are combined in some way to produce a score.

Single-item scales have the advantage of brevity, but multiple-item surveys are more reliable (Diener, 1984). In fact, Okun *et al.* (1990) contend that researchers should measure multiple components of well-being simply because it is a multidimensional construct.

Many of the recent measures of health status and well-being are, in fact, multidimensional. They incorporate physical, psychological and social components of well-being in a single instrument. Examples of such instruments include Rossen's Classification of Illness State, Quality of Well-Being Scale, the Functional Status Questionnaire and the Coop Function Charts, to name a few (Wilkin *et al.*, 1992).

b. Profile versus index

Wilkin and his colleagues (1992), in a review of instruments that measure aspects of health and quality of life, identified two approaches to the

development of general health status and well-being measures: one is the use of *profiles* and the other, the use of an *index*. Profiles are summaries of information about levels of function and well-being within discrete areas, while an index is a composite of information designed to provide a single scale of health status or well-being. Wilkin *et al.* (1992) note that some indices are constructed so that scores can either be presented as profiles or as an overall score.

The task of creating a single index of "measureable welfare" is not without difficulty. The Physical Quality of Life Index (PQLI) for example, has been criticized for its choice of indicators (Ghai *et al.*, 1988). The Human Development Index (HDI) has likewise been the subject of similar criticism (UNDP, 1992).

Campbell *et al.* (1976:77) argue however, that an index is more reliable than a number of single-item measurements. Furthermore, an index is more economical than presenting profiles for each specific domain or aspect of well-being. Respondents' evaluations of their lives as a whole can best be explained as a weighted summation of the degree of satisfaction with the various domains.

c. Weighting

Every composite measure explicitly or implicitly assigns weights to its components. And the construction of a composite index involves not only explicit but also implicit weighting problems. These derive from the way the individual indicators are scaled and how calibrations affect the composite index.

Often, developers of indices choose to assign equal weights to indicators. This was the case of the PQLI where equal weights were given to each of the three components because there was no reason to treat any one indicator as more important than the other (Morris, 1977). The HDI follows the same principle (UNDP, 1990). In the end, however, "the usefulness of (any) index depends on the accuracy and availability of data" (Morris, 1977:4).

d. Time frame

In reviewing the performance of various measures of well-being, Campbell *et al.* (1976) remark that it is imperative to keep in mind the

dimension of time frame. The authors recommend choosing indicators or measures that are more stable and are a generalized assessment of the individual's reaction to his current situation.

e. Objective versus subjective measures

It has become common to divide social indicators into two types – objective and subjective. Objective indicators refer to those that are accessible and manipulable. Most of these indicators are products of accounting or record-keeping of institutions and agencies with specific interests and functions.

Subjective indicators, on the other hand, refer to the individuals' cognitive and affective perceptions of particular aspects and experiences of their lives.

Andrews and Withey (1976) however believe that this classification is neither clear nor very useful. According to them, objective measures such as births and deaths, for example, can turn out to involve subjective judgements as well. Conversely, many subjective indicators (such as evaluations of people's lives) provide rather direct and objective measurements of what they intend to measure.

Mangahas (1988a:8) forwards the same opinion when he says that there is a "false dichotomy" between subjective and objective indicators. According to him,

Any measurement process should be objective in the sense that results are not biased by the persons doing the measuring. Nonetheless the matter can be subjective in that the individual has the final say on what his perception is.

Rather than focus on the division between objective and subjective indicators, Andrews and Withey (1976:5-6) contend that it would be more helpful to consider the following phenomena:

- 1) extent to which people agree on how to characterize a phenomenon;
- 2) degree to which the same sensory or neural input at some level of the nervous system is available to co-observers; and

- 3) extent to which different people can take similar action toward a phenomenon.

The quality of life is not just a matter of the conditions of one's physical, interpersonal and social setting, but also a matter of how these are judged and evaluated by oneself and by others. Perceptual indicators complement the externally based, objective ones because they provide different but no less important information about well-being (Andrews and Withey, 1976).

Mangahas (1988a:8) believes that subjective indicators (or perception indicators) may, in some instances, even be superior to objective indicators. He cites the case of the 1988 Social Weather Survey data on poverty – derived by using the "self-rating approach" – which exceeded the official poverty incidence figures by as much as 10 percent (Arroyo, 1990c). Poverty, as the antithesis of economic well-being, is officially measured in the Philippines in terms of the poverty line and poverty incidence. The official source of data for these are the Family Income and Expenditure Surveys (FIES). The Social Weather Station, on the other hand, uses the "self-rating approach" by asking respondents to characterize themselves as either "poor, borderline or not poor." Mangahas (1988a:8) remarked that "(the SWS data) may not correlate well with official standards; in which case the former would appear to be superior in the sense of being more indicative of real stress."

f. Bias in measurement

Campbell *et al.* (1976) mention some biases in the measurement of well-being. These are: 1) *positivity bias*, which refers to the tendency of most respondents to use the positive side of the rating scale more heavily than the negative side; 2) *social desirability*, which refers to the tendency of respondents to give answers during an interview that they feel would be acceptable to the interviewer; 3) *acquiescence*, which refers to the tendency of respondents to agree on both propositions when given bipolar items, rather than agreeing with one and disagreeing with the other; 4) *personality bias*, which refers to the idea that some people may be inherently more optimistic or pessimistic than others; and 5) *conditions of the interview* such as the physical circumstances during the interview, fit of race, gender or social class between respondent and interviewer, respondent's reactions towards the interviewer and respondent's reactions during the interview.

Campbell *et al.* (1976) suggest including measures of response bias in the instrument as well as ensuring that no particular sub-group with a heavy response bias dominates the sample to prevent inflation of positive responses.

Diener (1984), on the other hand, identifies two major issues on the measurement of subjective well-being (SWB). The first issue is concerned with the extent to which the measurement of SWB is influenced by momentary mood at the time of completing the scale, and the second is concerned with the validity of self-report measures. As to the first issue, Diener acknowledges that both current mood and long-term effect are reflected in SWB measures. In the end, however, the best measure in terms of time covered and stability will depend on the particular theoretical questions that the investigator wishes to study.

As regards the issue of validity, Diener (1984:551) concludes from his review that the evidence thus far is very encouraging. In fact, some of the issues which Campbell *et al.* (1976) caution researchers about were not generally found to seriously erode the validity of subjective well-being. He cites the following observations:

- 1) None of the scales which were reviewed showed high social desirability effects;
- 2) Most scales are balanced in terms of response direction;
- 3) Scales usually correlate with personality measures and show high convergent validity;
- 4) Self-report scales correlate with non-self-report data (*i.e.*, demographic variables); and
- 5) Most scales have adequate temporal reliability and internal consistency.

He further observes that existing well-being scales show interesting theoretical relationships with other variables and that scales and measures on well-being are becoming increasingly specific and better defined.

Unit or Level of Analysis:

Whose Well-Being Are We Measuring?

The measurement of well-being implies two facets: the *subject* whose condition is being evaluated; and the area of life, or *domain* in which

well-being is assessed (Diener, 1984; Levy and Guttman, 1975). The subject, or the unit of analysis, determines to a large extent what indicators will be used to measure well-being, and how information for these will be collected.

a. National well-being

A good number of studies on social indicators have dealt with the well-being of *nations*. Indicators of national well-being are often objective, measurable accounts of achievements in particular social concerns deemed important by the country.

A 1973 study on Social Indicators conducted by the U.S. Office of Management and Budget, for instance, identified eight widely accepted social concerns for a country, namely: health, public safety, education, employment, income, housing, leisure and recreation and population (Miller, 1977). Some of the indicators used to measure achievements in these social concerns included life expectancy rates, average disability days, crime rates, school enrollment, employment and unemployment rates; median family incomes, proportion of the population viewing television, and population growth rates, among others. Data focus on objective conditions and show national totals.

The PQLI, as mentioned earlier, uses national data on infant mortality, life expectancy and basic literacy to determine "how well" a country is faring. The HDI likewise uses national-level indicators of life expectancy, literacy and GDP as measures of a country's well-being.

In the Philippines, the DAP (1975) quantified national well-being by using similar "objective" indicators as life expectancy, infant mortality rates, school enrollment rates, unemployment rates, proportions in the population having dwelling units serviced by water and electricity and crime incidence rates.

The project also identified several "experimental" indicators which could be classified as "subjective" in the sense that these indicators ask the respondents' perceptions or evaluations of specific aspects of living. These indicators include indices of housing adequacy, political awareness, political participation, political mobility and perceived social mobility.

b. Well-being of communities

Instruments have also been developed to measure the well-being of *states and communities*. Miller (1977) cites the Social Economics Political Scale developed by the Midwest Research Institute (Wilson, 1969) to measure the "good life" of a *state* in terms of: status of the individual (widening areas of choices), equality, democratic process, education, economic growth, technological change, agriculture, living conditions and health and welfare.

At the *community level*, Miller (1977:276) refers to the Social Vulnerability Index developed by John Maloney in 1973, which was constructed to "measure the relative extent to which persons residing in specified geographic areas of the community were vulnerable to experiencing adverse social and physical strains beyond their ability to cope without help." The index consists of eight sufficient but not exhaustive variables which were determined by factor analysis: median family income, percent of families below poverty level, percent of families with both husband and wife, percent of housing without some or all plumbing facilities, percent of the labor force who are unemployed, percent of households lacking an available automobile, rate of ambulance runs per 1000 population and rate of tuberculosis per 1000 population.

The "Living Standards Measurement Study" of the World Bank (United Nations Statistical Office, 1980), designed to improve the quality and analysis of social data, collected the following data to determine well-being at the community level: demographic situation, infrastructure, transport, migration, education, health and agriculture (Ghai *et al.*, 1988).

c. Well-being of households

Still other studies have focused on the well-being of *households and families*. A good number of these studies dwell on poverty measurement and analysis. One such effort is the Wisconsin Basic Needs Study (BNS) cited by Colasanto *et al.* (1984:129). In the BNS, a household's well-being was defined in terms of economic well-being, measured by using both objective indicators such as income, expenditures, employment and other demographic

characteristics of the households; and subjective self-assessments of the economic situation of the household. The BNS defined a household as "a single person living independently or as a set of people living together who are either (a) related by blood, marriage or other legal arrangements or (b) share most major expenses." In the BNS surveys, the respondent is the person with the most responsibility for the financial well-being of the household. In cases where two or more people share the financial responsibility, the respondent was determined randomly.

The well-being of households in the 1980 Living Standards Measurement Study (LSMS) of the World Bank, on the other hand, was measured using data on: household composition, housing conditions, education, health, employment, migration, agriculture, non-farm rural activities, capital and inventory, households expenditures, food expenses, home production, fertility, remittance and income, credit and savings (Ghai *et al.*, 1988).

The definition of the unit of poverty analyses raises some important issues. Ideally, the unit should be the individual as it is ultimately an inquiry into the issue of the welfare of the individual. However, in practice, most studies take the household as the basic unit of analysis. According to Quibria (1991), this is due to the difficulty of obtaining data from an individual within a family. Another important consideration for taking the household as a unit is that it can take into account items of expenditures which have "public good" characteristics for family members. However, it is possible that within the family, there are unequal standards of living between members. In light of this fact, Quibria (1991) notes his reservations about the use of the household as the proper unit of analysis for poverty measurement.

d. Well-being of individuals

Most of the existing measures of well-being still dwell on the physical, social, emotional and psychological conditions of *individuals*. This is particularly true of subjective measures of well-being, which ask respondents to evaluate specific domains of their lives along scales of happiness, satisfaction and optimism.

A number of such instruments will be discussed in detail in the following section of the report featuring measures of particular domains of well-being.

DOMAINS OF WELL-BEING

Physical Health

The concept of good health, however it is defined, constitutes a reference value. Any evaluation or assessment of physical health is implicitly done to determine whether there is a discrepancy between the individual's present state and the "normal" state, with a discrepancy implying a state of less-than-ideal health (Carver and Scheier, 1982).

Several instruments have been developed to measure the state of an individual's physical health. In a review of existing measures of physical functioning, Wilkin and his associates (1992) found both objective and subjective indicators of health and illness. Objective measures include those that assess the absence or presence of pain, handicap, disability, disease or chronic illness that hinders an individual's physical functioning and daily activities. Subjective indices, on the other hand, include self-evaluations of people's health status as well as their perceptions of the extent and degree by which poor health impairs their daily activities.

Carroll (1990) designed a health inventory which ascertained how often respondents experience headaches, spells of dizziness, heart/chest pains, severe itching, asthma attacks, cold hands and feet during hot weather, back pains, upset stomach, nausea, throat, colds, digestion and elimination problems. The inventory also asked respondents a global health assessment question: "Are you always in poor health?" Although not explicitly stated, good health was operationally defined in terms of low scores in the inventory.

A study by Robbins and her colleagues (1991) which tested the relationship between several personality traits and the health and academic performance of college students, measured physical health in terms of self-reported health complaints and health maintenance behaviors and beliefs. They used the Health Complaints measure developed by Spence *et al.* in 1987. This instrument has 22 items, each accompanied by a 5-point scale asking how frequently the individual has experienced various physical problems in the past year. The problems fall into four areas: headaches, quality of sleep, problems of digestion and elimination and respiratory problems.

In the same study, Robbins *et al.* (1991) also designed an exploratory measure of physical health that consisted of six items which respondents rated along a 5-point scale. Three of the items refer to the frequency of health-enhancing behaviors such as exercising, eating well-balanced meals and maintaining proper weight. Two of the items assess the respondents' beliefs about the influence of their behavior and attitudes on their own health and the remaining item asks how likely respondents are to follow their physicians' advice when they seek treatment for illness.

A relatively sizable relationship between self-rated health and subjective well-being has been shown by a number of studies. Satisfaction with health was found to be a strong predictor of subjective well-being (Diener, 1984). Part of the influence of health on subjective well-being is not simply its direct effect on how people feel physically, but also on what it allows people to do. As Blai (1991:46) puts it, "a valuable benefit of good health is the freedom to choose which it allows."

Wilkin and his colleagues (1992) also found multidimensional measures of health. The Nottingham Health Profile (NHP) designed by Hunt and company in 1981 is an example. In this instrument, physical health was measured in terms of the responses to items on physical mobility, pain, sleep, social isolation, emotional reaction and energy. Respondents are asked to indicate for each item whether they experience the problem at the moment. Scores are presented in terms of a profile rather than as an overall score.

A similar multidimensional measure of global health is the McMaster Health Index Questionnaire (MHIQ) designed by Chambers and colleagues in 1976. This instrument measures health in terms of physical, social and emotional functioning. The authors adopted the World Health Organization's definition of health and developed separate indices of physical, emotional and social functioning. Physical function items cover physical activities, mobility, self-care and communication abilities and pertain to the day on which the MHIQ was administered. The MHIQ has been tested for self-completion, telephone interviews and personal interview administration.

Still another aspect of physical health for which measures have been developed is *physical anxiety*, defined by Good and Parker (1977) as the

amount or extent of worry an individual has about specific conditions of his body. The authors developed a self-report measure consisting of 33 statements, and respondents were asked to indicate which statements are true or which apply to their situation.

Country-level indicators of physical health often include statistics on life expectancy, mortality and morbidity. Bond (1991) used data taken from the 1986 WHO World Health Statistics Annual and the 1984 Demographic Yearbook in his culture-level examination of the relationship between health and values. He used three indicators of longevity: 1) live births, 2) life expectancy at birth, and 3) probability of dying before age 5; and 17 measures of mode of death as indicators of the health of a country's population.

Another objective indicator of physical health at the national level is the number of days of disability among workers. The Social Weather Station surveys asked respondents how many days they were unable to work because of illness during the two weeks just prior to the interview. Abrera-Mangahas and Bautista (1990) found that the median length of disability days among Filipino workers was about a week. Forty-two percent of the sample reported having had episodes of sickness ranging from 7-14 days.

The literature on physical health also includes studies on its relationship with other aspects of life. One such aspect is laughter and humor. According to Nezu, Nezu and Blissett (1988), humor can serve to reduce depression, relieve pain and positively enhance the function of the immune system. What kind of humor style correlated with positive physical health? Carroll (1990) found in his study that elements of good natured play, fantasy and making fun of the foibles of the opposite sex promoted wellness among women. Humor that showed little compassion was related to health problems.

Psychological Health

Psychological health, according to Maslow (1954), is possible only with the satisfaction of a hierarchy of needs, namely physiological needs, security, safety, belongingness, and self-esteem. A study by Lester *et al.* (1983) which tested Maslow's hypothesis defined psychological health as low levels of neuroticism measured by the Eysenck Personality Inventory (1968) and a strong belief in an internal locus of control measured on a Locus of Control Scale developed by Levenson in 1974.

Many of the earlier tests on psychological health were measures of depression and anxiety. The Zung Self-Rating Depression Scale (SDS) developed by Zung in 1965 measures the subjective experience of depression of adult individuals. The test is composed of 20 items each rated on a 4-point scale. Respondents are asked to rate how each item applies to them using a scale of 1=none or little of the time to 4=most or all of the time. The instrument is self-administered and is one of the most widely used self-evaluation measures of depression.

The Beck Depression Inventory (BDI) designed by Beck *et al.* in 1961 is another example of an instrument that measures psychological health in terms of the existence and severity of depression as reported by the respondents. Psychological health is implicitly taken to mean low levels of depression on this instrument. The test is composed of 21 items describing particular manifestations of depression in the areas of self-esteem, general life satisfaction, mood, relationships with others, appetite and sleep. Items consist of four self-evaluative statements which are scored 0 to 3 to indicate the degree of severity of depression. The instrument is also self-administered.

Wilkin and his colleagues (1992) have identified two other instruments which measure not only the existence of depression and mood disorders among respondents but also the degree of severity of depression. These are the Montgomery-Asberg Depression Rating Scale (MADRS) developed by Montgomery and Asberg in 1979 and the Hospital Anxiety and Depression Scale (HAD) developed by Zigmond and Snaith (1983). The HAD is self-completed while the MADRS is interviewer-administered.

Other measures of psychological health were measures of mental health. The Mental Health Inventory (MHI) developed by Ware *et al.* in 1979 measures both distress and psychological well-being. Psychological distress was operationally defined in terms of anxiety, depression and loss of behavioral and emotional control while psychological well-being was measured in terms of general positive affect and strong emotional ties.

The Life Satisfaction Index (LSI) developed by Neugarten and Havighurst in 1961 measures psychological well-being of older people in terms of zest, resolution and fortitude, congruence between desired and achieved goals, positive self-concept and mood tone. The LSI is composed of

20 items and respondents are asked to indicate whether they agree or disagree with the items. Both instruments are self-administered.

Happiness has been commonly used as an indicator of psychological well-being. In the Philippines, the Social Weather Station used a single-item measure of happiness in their surveys. Respondents were asked to rate how happy they were by answering the question:

"If you were to consider your life in general these days, how happy or unhappy would you say you are on the whole?"

The item used a 4-point scale with 4=very happy, 3=fairly happy, 2=not very happy, and 1=not at all happy. Net happiness or the margin of happiness was operationally defined as the sum of the proportions of responses for the first two (very happy and fairly happy) minus the sum of the last two choices (not very happy and not at all happy).

Results of Arroyo's (1991d:5) analysis showed that the happy Filipino individual is "economically comfortable, enjoying the improvements in his/her quality of living, optimistic, highly educated... employed, works just enough or at least does not underwork, and has a position of leadership on the job... is young, single, spiritual, prays a lot and has found meaning in life."

Spirituality was found by Arroyo (1991d) to be important to happiness. In an analysis of the data from the Social Weather Station July 1991 national survey, he found that those who believed in God had a +86 margin of happiness compared to only +56 among the nonbelievers. He also found that respondents who said that they prayed frequently had a significantly higher margin of happiness than those who hardly prayed (+70 versus +48).

One other component of psychological health is emotional maturity, defined by Blai (1991) as the individual's capacity to cope effectively with everyday life experiences.

Education

Studies aimed at developing relevant social indicators as measures of a country's well-being have always included literacy as an indicator of national development (OECD, 1976; UNDP, 1990). Literacy rate is in fact included in the computation of the Human Development Index, and the Physical Quality of Life Index.

Data from the Social Weather Station surveys, however, have shown that Filipinos with high education have higher margins of happiness (Arroyo, 1991d). While education is seen as an invaluable component of national well-being, however, some studies have shown little correlation between an individual's educational attainment and his or her level of satisfaction or happiness (Diener, 1984).

Leisure

Perhaps the most widespread of the different criteria used to define leisure is the concept of free time. Kabanoff (1980) defines leisure as "a set of activities that individuals perform outside of their work context and excludes essential maintenance function." In contrast to work, leisure is done by individuals in the pursuit of fulfilling individual needs rather than in return for monetary rewards.

Leisure was found to have a positive effect on life satisfaction. "Leisure satisfaction is the main source of the perceived quality of life of an individual " (Gray, 1986:6). Using data from American college students who completed the Leisure Satisfaction Scale (LSS), Gray (1986) found that relaxation was the single factor that correlated with self-actualization (measured in the Personal Orientation Inventory). He goes on to say that "a self-actualized individual may have a greater ability to find relief from stress and strain during leisure (Gray, 1986:9)."

Work and Quality of Working Life

Work refers to the "set of prescribed tasks that an individual performs while occupying a position in an organization" (Kabanoff, 1980:67). The organization is generally considered to be a work organization if an agreement is made to supply the individual with monetary rewards in return for his or her services to the organization.

What constitutes a good quality of working life? Seashore (1977) was able to discern a developmental progression in the evolution of the conception and meanings of the quality of working life. These are:

- 1) *Manpower orientation*: Quality of working life (QWL) consists primarily of the provision to people of the opportunities to be gainfully employ at their optimum skill level.

Relevant social indicators include availability of jobs, allocation of jobs among population segments, availability of increments to the manpower pool, occupational structure and types of jobs available, rates of mobility among jobs and sectors of the economy.

- 2) *Economic man orientation*: QWL consists primarily of providing employment which allows relatively high pay together with collateral rewards of an economic nature to the workers.

Relevant indicators include earning rates, security of employment, availability of contingency insurances and benefits such as vacations, holidays, retirement pay and services provided to employees as part of their employment agreement.

- 3) *Welfare orientation*: QWL consists of the above plus consideration for the costly by-products of employment. Indicators include reference to income maintenance cost for the unemployed, occupational illness and injury rates, minimum wage maintenance, reasonable hours of work, equity among population groups in terms of benefits and access to jobs.
- 4) *Employee attraction orientation*: QWL consists of the above plus consideration for the noneconomic characteristics of jobs and work environments that bear upon the employers' capacity to attract and retain qualified employees and elicit adequate work role performance from the employees.

These would include: equitable treatment of employees, procedures for resolution of grievances, self-determination and autonomy at work, moderation of traditional authoritarian and hierarchical relationships, opportunities for self-improvement and advancement, pleasant and comfortable physical work environments.

- 5) *Life-enhancement orientation*: QWL consists of the above plus consideration for the by-products of employment that bear upon the total quality of life of the individual.

Relevant indicators include: delayed harm or benefit experienced by the individual, compatibility of the job characteristics with requirements of non-job social roles, job contributions to learning and self-development of the individual, opportunity for expression of individuality, change and creativity.

Seashore (1977) summarized the broad range of indicators of QWL into: 1) objective characteristics of job and job employment; 2) experienced characteristics of job and job environment; 3) outcome measures from the perspective of the workers, the employers and society; and 4) analytic variables for subpopulation comparisons.

In their review of the literature on the effect of occupational stress on the health of workers, Taylor and Cangemi (1988) found many factors that influenced workers' physical and psychological well-being. They classified these factors into five categories: objective environment, subjective environment, individual's response to stress and strain, person-environment fit and social support. The objective environment refers to situations or changes at work which exist independently of how the individual perceives them. Included in this category are changes in personnel and organizational structure or job status of workers.

Taylor and Cangemi (1988) cited evidence to show that a reduction in a worker's job status leads to increased strain and cases of diagnosed illness. The review of the literature by Caplan *et al.* (1975) also suggested that objective environmental factors affect an individual's perception. They found that what the person perceives in the work environment may actually count more than actual objective stress. They also cite studies which show that having "too much to do" (quantitative work overload) and having work that was "too difficult" (qualitative work overload) were high stress producers. A succinct summary of factors that affect job satisfaction was also provided by Taylor and Cangemi (1988:57):

...perception of underutilization of one's abilities, a high demand for concentration on the job, unwanted overtime... little variation in one's workload... role ambiguity (when an individual has inadequate information about his work role)... and role conflict (when an individual... does things he does not want to do or does not think is part of the job description).

Kiechel (1986) found that four main causes of job stress among middle managers were: time pressures, disparity between what they must accomplish and what they would like to accomplish, political climate of the company and lack of positive (or negative) feedback concerning their job performance.

Orpen and Bonnici (1990) also found that pay satisfaction was a significant component of overall job satisfaction. They cite both the *discrepancy theory* (which argues that pay satisfaction results when the amount of pay received by an individual is congruent with the amount the person feels he/she should receive) and the *equity theory* (which contends that pay satisfaction is the function of obtained pay in relation to that of referent others) as well as Lawler's (1971) model which combined the two.

Lawler's (1971) theory states that pay satisfaction is a function of how much is received, how much others are perceived to receive and the perception of what should be received. This model also suggests that pay satisfaction will be positively related to job involvement, work motivation and job satisfaction.

Objective indicators of work such as employment and unemployment rates are abundant in the literature. In the Philippines, the Department of Labor regularly accounts for these statistics. The Social Weather Station has likewise gathered employment data from national and metropolitan samples.

Abrera-Mangahas and Bautista (1990), analyzing data from the SWS survey in September 1989, found that six out of ten adult respondents were working. The question asked was: "Do you have a job or means of livelihood?" Their analysis also showed that employment was notably low for women (37%), and youths aged 18-24 years old (40%). Majority (54%) earned their keep from entrepreneurial endeavors and self-employment. Self-employment was high among female respondents (64%), older workers (63%), rural workers (57%) and those living in Mindanao.

They also reported that employment was largest in the service sector (66%) followed by the agricultural sector (26%). Jobs were also found to be segregated by gender such that agriculture was predominantly male (35% vs. 7% female) while the service sector was predominantly female (87% vs. 56% male). Filipino workers were also found to work generally long hours, with the majority (56%) working beyond the commonly prescribed 40-hours-per week schedule.

Underemployment in the Social Weather Station surveys was defined as the proportion of respondents who were currently employed but looking for a

better job or additional work to do. Abrera-Mangahas and Bautista (1990) found that 58% of respondents were underemployed. Underemployment was highest in the Visayas and Mindanao regions; it was expectedly high among those in the lowest socioeconomic group.

Among Filipino workers, one clear indication of job dissatisfaction with domestic employment, both in terms of the quantity and quality of jobs, is the great desire for overseas employment. Abrera-Mangahas and Bautista (1990) found that a third of the respondents in the September 1989 SWS survey wanted to work abroad. This desire was highest among young people aged 18-24 years old (55%); those in the urban areas (40%); those in Metro Manila (46%); males (38%); and the ABC socioeconomic group (40%). The same authors also reported that 29% of the respondents in the April 1990 SWS survey aspired to work abroad and this desire was highest among respondents in the Metro Manila area (43%).

In a study by Cangemi and Guttchalk (1986), employees identified the following factors as important to their job satisfaction: full appreciation for work done, feeling that they are a part of things and a sympathetic understanding (by employers) of their personal problems.

Ben-Porat (1981) in a study on employee satisfaction and office environmental change, measured job satisfaction using a single-item, 7-point scale question: "*How satisfied are you with the present (job) situation?*" Alternatives ranged from 1 = very satisfied to 7 = very dissatisfied. *Job context* was evaluated in terms of seven items – lighting, ventilation and temperature, access to telephones, eating arrangements, aesthetic conditions, ease of physical movement in the office and noise. Each item was measured on a 5-point scale using the question: "*How satisfied are you with this item?*." Alternatives provided were similar to those for job satisfaction. Scores on all seven items were summed to construct an index of physical setting.

Job context, on the other hand was measured in terms of feelings of control over the job, responsibility, initiative and work achievement. Each item was measured on a 7-point scale with alternatives similar to those of job satisfaction. The score of the five items were summed up to form the job context index.

Ben-Porat (1981) found that job satisfaction is a valid indicator of adjustment to work and to the organization. However, Iaffaldano and Muchinsky (1985) have found in their review of the literature that no pervasive relationship exists between job satisfaction and job performance.

Social Environment

One component of an individual's social environment is social support. Barrera (1981:395) conceptually defines social support as including "attempts to assist an individual in mastering emotional distress, sharing responsibilities, providing advice, teaching skills and providing material aid."

House and Wells (1978:60) defines social support as "a relationship with one or more persons which is characterized by relatively frequent interactions, strong positive feelings and especially perceived ability and willingness to lend emotional and/or instrumental assistance in times of need."

Social support has been found to contribute to psychological health. Researchers have examined both the direct relation between social support and adjustment and the interaction of life events and social support in relation to psychological well-being (Diener, 1984).

A number of instruments have been designed to measure the quantity and quality of social support individuals receive. The Rand Social Activities Questionnaire developed by Donald and Ware (1978) takes note of an individual's number of social contacts, amount of activity and extent of participation in group activities. This 11-item self-report inventory also asks respondents to evaluate the adequacy and quality of their relationships with such individuals who provide them support in some way.

The Social Relationship Scale designed by McFarlane *et al.* (1981) measures the extent of support received by an individual, and his/her assessment of the perceived helpfulness of people who provide him/her with support. Support was defined in terms of help or aid provided for work, money, health, family, personal and social problems.

The Duke-UNC Functional Social Support Scale (Broadhead *et al.*, 1988) measures the quality of supportive relationships individuals have, by asking respondents how much confidant and affective support they receive from friends and family.

Income and Wealth

In today's economic world, the ability to survive depends on having resources to obtain goods and services. Money, which is the tool in obtaining resources, is a necessity in order for an individual to live in society. Whether obtained via employment or other means, a person's income will determine his quality of life.

Poverty is a matter of deprivation. Atkinson (1989) defines absolute poverty as the inability to attain a minimal standard of living. Relative poverty is seen as the inability to attain a given contemporary standard of living. Its measure is usually income distribution and inequality. Quibria (1991) describes the poverty line to be the minimum acceptable standard of living for society. This is based on two concepts: a) standard of living, which encompasses all commodities an individual consumes and all activities in which he or she participates, and b) minimum acceptable levels for the following dimensions – food, health, education, clothing, fuel and transport.

Income, defined to be inclusive of savings and dissavings, is considered to be a better measure of a living standard. It is argued that it is possible for an individual to choose a level of living below his or her income. However, Quibria (1991) notes the following problems in using income as the sole measure. The first problem is its unreliability especially in identifying and assessing production for home consumption and for sale in developing countries. Income may also understate or overstate the level of living such as when the current standard of living may exceed current income or when there is rationing or unavailability of goods. The level of living may also exceed income if there is sharing. Thus, Quibria (1991) suggests that poverty incidence be calculated on the basis of household expenditures rather than income.

There are two approaches in the expenditure perspective: The first is to determine a bundle of basic goods and calculate the income required to purchase this bundle at current prices. Quibria (1991) notes that the problem with this approach is that the identification of a basic good is a value judgement. Also, some basic goods are provided from the public budget and prices of commodities may vary according to location, year and

socioeconomic status of the consumer. The other approach is to use food requirements as a basis. The weakness of this approach is the fact that nutritional needs differ according to location, occupation and from person to person. There is also the disparity between expert recommendation and actual consumption.

The Development Academy of the Philippines (1975) proposed the use of several indicators of income and consumption: The *net beneficial product* (NBP), a consumption concept which adjusts for non-beneficial expenditures within GNP, includes national government expenditures in education, public health, labor and welfare, local government and social improvement. It excludes costs of government bureaucracy such as military expenditures because they are inescapable but necessary costs for maintaining society. The *food threshold* consists of the amount of income necessary to buy the "food consumption basket" recommended by the Food and Nutrition Research Center. The *total threshold* is obtained by dividing income by 0.6 (which makes the assumption that food comprises 60% of total budget). Making use of these indicators, it was reported that incidence of poverty worsened from 1965 to 1971 and was worse in rural rather than urban areas.

The literature is replete with evidence of the effect income has on the well-being of an individual. Larson (1978); Alston *et al.* (1976); Andrews and Withey (1976); Bortner & Hultsch (1970); Clemente and Sauer (1976); and Freudiger (1980) found evidence of the positive relationship between income and subjective well-being. Satisfaction with income is also related to happiness as substantiated in studies of Braun (1977) and Campbell (1976). Berger (1959) forwards the explanation that money is a means of security and that its possession saved one from anxiety.

Rubenstein (1981) in a poll of 20,000 American respondents concluded that people who were more troubled by money often felt a lack of control over their lives, felt insecure and were often unhappy at work and at home. McClure (1984) studied the relationship between money attitudes and pathological tendencies of anxiety, neuroticism and introversion. He concluded that people with strong feelings of control over their money reported less general anxiety and were more extroverted than people with

weaker feelings of control. People who considered money very important in their lives were more anxious, more neurotic and experienced lower general life satisfaction and were more introverted than people who felt money was not very important in their lives. People who reported income dissatisfaction were significantly more likely to be neurotic than people who were satisfied with their incomes. No significant differences in attitudes towards money were found by sex, education, occupation or religion.

Easterlin (1973) found a positive association between income and happiness. Gurin *et al.* (1960) note that self-assessed happiness is also related to other aspects of socioeconomic status such as education and occupation but Americans most frequently mention personal economic consideration as the reason for being happy or unhappy. Strumpel (1974) reports a strong relationship between satisfaction with income and reports of satisfaction.

An indirect reflection of an individual's income is his or her ownership of assets. Arroyo (1990b) suggests that the ownership of consumer durables may be used as an indicator of social well-being. Data on facilities found in the home of respondents provide a shortcut for pinpointing poverty areas. In a study conducted by the Social Weather Station (1989), the findings led to the conclusion that the ratio of families with color TVs, VCRs and washing machines rises as much as the income level increases.

Quibria (1991) suggests that the income of an individual depends on his or her assets (including human capital and the return on these assets). He notes that in poorer agrarian economies, the most important asset is land, and poverty is positively correlated with landlessness. While the poor most often do not own any land, when they do, it is often less fertile, less productive and unirrigated. They are unable to improve their land since they lack sufficient income or any easy access to credit.

Other researches have shown that the influence of income is relative – that it is not the absolute level of goods and services that a person can afford. People who are wealthier tend to be happier, but as the overall level of income rises, happiness does not necessarily rise with it. Rubenstein (1981) found that money contentment was influenced by psychological factors like a person's feelings of security and self-worth, or by comparison with the amount of money that friends earned.

Economists make use of several indicators in determining what income level is sufficient for an individual to survive in society. The most common method is to place a money value on a set of goods and services which an individual is said to require. This money value is then pegged to be the minimum income that an individual should have. Another way of determining the minimum requirements of an individual and his family is to ask the people themselves what their requirements are in terms of income.

The concept of obtaining perceived minimum necessary income was previously documented in foreign studies such as that by Goedhart *et al.* (1977). In their study of 2,885 Dutch families, they first asked "*How adequate do you consider your family income?*" The options of *adequate*, *fairly adequate*, *barely adequate*, and *inadequate* were provided the respondents. From this question, the respondents were asked what the necessary perceived minimum income was.

Regressing the respondents' perceived required minimum income against variables such as actual income and family size, it was found that perceived minimum income was positively related to family size. Results also revealed that minimum income is positively related to actual income, indicating that the perception of income requirements is a relative concept and depends on the level of income to which an individual has been accustomed.

In the Philippines, a similar process was used by the Social Weather Station. They first asked respondents to place themselves into categories of *poor*, *on the borderline*, and *not poor*. They then proceeded to ask respondents how much minimum income they would require in order not to feel poor anymore. The median of the self-rated poverty line was actually lower than the official poverty line. In 1985, the official poverty threshold was P 2,381. In the Social Weather Station survey (Arroyo, 1990c:3), the median poverty line was only P 1,500. The researchers concluded that "people actually demand much less than government bodies do in order to define poverty. The perception data imply that there is more to poverty than income. While income may be the most important determinant of poverty, it is not the only one".

The survey also revealed the relationship between perceived minimum income requirements and other variables. For example, the median poverty line of the self-rated poor is always lower than the medians of those *not poor* or *on the borderline*. Data also show that the urban median poverty line was always higher than the rural median poverty line. They also found that an individual's occupation is an important factor in poverty line setting. For example, managers required P7,000/month while agricultural workers asked for only P2,000/month.

Other studies suggest that it is not only the mean level of income which is important but also the overall distribution of income. Seidman and Rapkin (1983) found that the prevalence of mental illness increased in economic downturns, but this effect is greatest when recession does not affect everyone equally. Morawetz (1977) discovered that a community with less equal incomes was less happy than a community with more equal incomes. Liang *et al.* (1980) state that the feelings of distributive justice and relative deprivation mediate the effect of income.

Diener (1984:553-554) discusses several hypotheses for the relationship between income and happiness

- 1) *Income has an effect only at extreme levels of poverty; but once the basic needs are met, income is no longer influential (Freedman, 1978, as cited in Diener, 1984:553).*
- 2) *Factors such as status and power that covary with income may be responsible for the effect of income on subjective well-being.*
- 3) *The effect of income is direct but depends on social comparison. People may know how satisfied they should be by comparing their situation with that of others.*
- 4) *Income has not only direct benefits but also some disutilities that tend to balance the positive effects. For example, income may be related to increased stress or other negative influences that may hinder subjective well-being from rising with income.*

Social Mobility

Social mobility is perceived to be a necessary ingredient to an individual's well-being on the assumptions that satisfaction and happiness partly depend on the fulfillment of aspirations, and that one basic aspiration of individuals is to improve their lot.

Sorensen (1975) found that job shifts is a function of a person's level of resources and the impact of structural characteristics that affect the level of control a person has on job transitions. The job shift may be a response to either a prior increase of personal resources in terms of additional training or education or it may be a response to a structurally given opportunity for an increase in resources without prior change in resources.

The Sorensen study results also reveal that collinearity is highest among three variables: *calendar year*, *labor force experience* and *age*. *Labor force experience* is measured as the amount of time spent in the labor force before the job shift occurs and may be interpreted to reflect skills and experiences acquired in jobs. *Calendar year* reflects the impact of an overall expansion of economy. Another variable, *marital status*, was found to be significantly related to occupational mobility. Married respondents gained more in job shifts than unmarried respondents.

Featherman and Hauser (1975) note the following patterns of mobility: Professionals, proprietors and farmers displayed a marked tendency to inherit the self-employed occupations of their fathers. The three lowest white-collar groups (clerical, retail sales and service) and the lowest blue-collar (non-farm labor) both recruited extensively from other occupational statuses in the paternal generation and were sources of supply (from paternal generation) to other statuses in the filial generation.

Blau and Duncan (1967) note that years of formal schooling accounted for nearly all of the direct effects of paternal occupational status and education on the son's occupational standing. The son's education and number of siblings in his family of origin explained virtually all of the variance in occupational status between the farm and non-farm background subgroups. Those of farm origin who attained fewer years of schooling, had the higher levels of fertility of the parental generation and the lower socioeconomic background states associated with the farm residential sector.

Mobility research establishes the magnitude of difference between origin and current state. The amount of mobility indicates the openness of society, an important social indicator in a society concerned with equal opportunity. Mobility is the movement of individuals along positions in a social structure. Most often, these positions are organized in terms of occupation.

The Development Academy of the Philippines (1975:61) defined circulation mobility as an indicator of the probability of status equalization by occupational change. It was noted that it is more difficult to move between farm/manual and non-manual occupations. The DAP (1975) created the index of perceived social mobility based on the respondents' perception of changes in their quality of life.

The Social Weather Station (Arroyo, 1991c) measured changes in the quality of life of Filipinos by identifying the *optimists*, or those who foresee improvements in their quality of life, and *pessimists*, or those who predict deterioration. They then obtained a margin of optimism which is the number of pessimists minus optimists in percentage points.

They found that optimism/pessimism was related to political events such as the Ninoy Aquino assassination, the EDSA Revolution, the Honasan *Coup d'etat* and the Gulf War. In terms of locale, the findings showed that net optimism was always greater for Metro Manila. Urban respondents were slightly more optimistic than rural respondents and Luzon residents were more optimistic than those in the Visayas and Mindanao. No significant gender difference in optimism was found. However, the data revealed that net optimism decreased with age. Thus, the younger respondents were the most optimistic. Relating optimism to the respondent's perception of poverty, Arroyo (1991c) concluded that the subjectively poor had a less rosy view of their future than those who were better off.

The Social Weather Station results also showed that satisfaction with government performance figured prominently in people's expectations of their future quality of life. Those satisfied with the government were more likely to be optimistic about their future than those who were dissatisfied.

Housing

Shelter or housing is one of the basic needs of people. The World Health Organization (WHO) Expert Committee on the Public Health Aspects of Housing (1961:17-18) established the "fundamentals of a healthful residential environment" which it said should consist of:

- 1) *A safe and structurally sound, adequately maintained, separate, self-contained dwelling unit for each household, with each dwelling unit providing at least:*

- a) *a sufficient number of rooms, usable floor area and volume of enclosed space to satisfy human requirements for health and for family life consistent with the prevailing cultural and social pattern of that region, and so used as to avoid overcrowding of living or sleeping rooms;*
 - b) *a minimum degree of desired privacy both between individual persons within the household and for the members of the household against undue disturbance by external factors;*
 - c) *suitable separation of rooms, providing:*
 - i) *separate bedrooms for adolescent and adult members of opposite sex except husband and wife; and*
 - ii) *for domestic animals to be housed apart from the living area of the dwelling unit;*
 - d) *potable and palatable water supply, piped by sanitary plumbing into the dwelling-unit or in the courtyard, in quantities large enough to provide for all the personal and household uses essential for sanitation, comfort and cleanliness;*
 - e) *a safe and sanitary means for the disposal of sewage, garbage and other wastes;*
 - f) *sufficient facilities for washing and bathing;*
 - g) *appropriate facilities for cooking, dining and the storage of food, household goods and personal belongings;*
 - h) *appropriate protection against excess heat, cold, noise and dampness;*
 - i) *adequate ventilation and internal air free of toxic or noxious agents; and*
 - j) *sufficient natural and artificial illumination.*
- 2) *A neighborhood which conforms with sound town, country and regional planning practice and consists of:*

- a) a community water supply when economically feasible, sewage collection and treatment, collection and disposal of garbage and other wastes, and storm-water drainage;*
- b) an atmosphere which is free of toxic or noxious gases, odors, fumes or dusts;*
- c) protection facilities of police and fire services;*
- d) industrial, commercial, cultural, social, religious, educational, recreational and health and welfare facilities connected to the residential structures by a network of roads and public transportation and a system of footpaths; and*
- e) freedom from hazards to health, welfare and public morals.*

The United Nations Ad Hoc Group of Experts on Social Indicators for Housing and Urban Development (1971) suggested the following indicators for housing services: characteristics of the structure (number of rooms, interior size, architectural conveniences, conditions of the structure), characteristics of land parcel, characteristics of relevant community, characteristics of accessibility, and characteristics of tenure status.

The UN Ad Hoc Committee likewise put forth suggestions on other possible indicators such as: expenditure on dwelling construction, expenditure on communal services, public financing of housing and urban development, age of dwelling stock, population living in squatter or improvised settlements, urban areas lacking adequate communal facilities, environmental pollution, density of neighborhoods, recreational facilities and services, journey to work, transport services, minority groups, educational facilities, housing and urban development programs.

The Department of Social Welfare and Development (1992) identifies the following social indicators related to housing: housing materials, housing tenure, sanitation facilities and garbage system, water and drainage systems.

Ramos and Hong (1975 as cited in Luna, 1986:14) assert that livability "designates an interest in achieving a functional relationship between family activities and the architectural features provided in the design and construction of housing."

Other housing studies on living situations have been determined by asking people about their residential preferences and inferring from the responses their feelings of satisfaction and dissatisfaction; or by asking people how they feel or what they like or dislike about their home or neighborhood. Summarizing these studies, Campbell *et al.* (1976: 218) conclude that most people, including many of those living in "substandard" environments tend to be fairly content with the residential environment in which they live. The social setting and type of housing are salient factors influencing an individual's level of satisfaction with the community. Other important factors related to general satisfaction include physical conditions of the residential environment, the convenience of having nearby public and private facilities and services; the size of one's dwelling, the quality of structure, heating system, cost and the presence of conditions such as spacious, quiet and safe surroundings.

In their study, Campbell *et al.* (1976), discovered that the assessment most strongly related to housing satisfaction is whether the structure is well-built. Surprisingly, cost and housing satisfaction have only a weak relationship ($r = .19$). Evidently, satisfaction with the cost of one's housing is largely independent of satisfaction with housing *per se*. This is especially true for those who own their homes. For renters, cost is seen as an integral element of housing whereas for owners, costs are less a function of the house than of external factors such as mortgage and tax rates.

Among income groups, satisfaction is lowest for those in lower middle income groups. Reported satisfaction increases with age and length of residence. Married respondents with pre-school age children are even less satisfied than the divorced or separated.

The survey also examined respondents' desire to move to another place. Younger people are more likely to want to move than older people. Urban residents are more restless than rural residents. There is a strong relationship between desire to move and overall satisfaction with each level of the residential environment.

In the Philippines, the Social Weather Station measured the access of residents to basic public utilities and related this to socioeconomic factors. Survey findings showed that access is biased towards Metro Manila and that access favors the rich. That is, the lower class has less access to running water and displays a higher incidence of sickness. (Arroyo, 1990a)

Porio and Hollnsteiner (1975) in a study of low cost private sub-urban subdivisions in Marikina concluded that external privacy, meaning the physical and visual separation from outsiders, was given the highest priority in setting up new homes. On the other hand, privacy within the household was minimally observed. They also found that spaciousness in terms of size and floor area seemed less important than the type of construction which allowed free air circulation.

Ancog (1976) defined livability in terms of four elements: privacy, economic rental, availability and accessibility of facilities, and positive community relations. Among these elements, accessibility and availability of services ranked first among reasons for staying in a residence. This is also the primary reason for taking a dwelling unit and the number one reason attributed to having a better living condition as compared to the previous residence (Luna *et al.*, 1981).

Social relations among neighbors were influenced by situational interaction rather than mere physical residence.

The physical condition of the dwelling is the number one source of problems and dissatisfaction (Luna *et al.*, 1981).

Another study by Luna (1986) on the quality of rental housing in five areas for priority development in Sampaloc elicited the following findings:

- 1) *Satisfaction of tenants with the quality of the dwelling is affected by the quality of the dwelling itself, by rent and physical environment.*
- 2) *There are five housing components which greatly affect tenants' satisfaction with the indoor space: quality of the dwelling, size of the indoor space itself, rent, accessibility and physical environment.*
- 3) *Tenants' satisfaction with rent is affected by their rental as well as their tenure.*
- 4) *Satisfaction with accessibility is affected by the accessibility of the apartment to various functions and services, by indoor space and by the quality of the physical environment.*

- 5) *There exists a moderate correlation between the quality and the tenants' satisfaction of the physical environment.*
- 6) *Satisfaction with neighborliness or social environment is affected by the quality of support system among the neighbors and the presence of social pathology in the place. Also, tenants' satisfaction with neighborliness is affected by the quality of the physical environment.*
- 7) *Socioeconomic characteristics of the residents taken alone, are not significantly correlated with satisfaction with each housing component.*
- 8) *The level of satisfaction of the tenants with one of the housing components is significantly correlated with satisfaction with each of the other components, indicating that satisfaction with one component would have effects on their satisfaction with other housing components.*

With regard to tenant satisfaction as a whole, Luna (1986) found that the variables age, sex, educational attainment, occupation, family income, assets, number of occupants and length of stay affect the satisfaction of the tenants living in housing with the same quality.

Physical Environment

Campbell *et al.* (1976) identified community attributes to include streets and roads, public schools, garbage collection, parks and playground, police protection, climate and public transportation. In their study of these attributes, they reported that gains in expression of community satisfaction with increased age are very marked: people 65 and up show values on this domain which are more than one-half a standard deviation higher than those for the youngest people (18-24 years). Assessments of more specific attributes of the community show parallel changes by age although the differences are a little less dramatic.

Where education is concerned, the most dissatisfied are the least well-educated. The group also found that the poorly educated tend to express more criticism of specific features of the communities.

Another personal characteristic which influences reports on community satisfaction is the stage of the life cycle of respondents. This categorization

reflects individuals' marital status and development of a family. Thus, it distinguishes between those who are married but childless, those with children one to six years, among others. The life cycle category which showed the most dissatisfaction with the community, was made up of young single people. Other young people of nearly the same average age and education but who are married, report greater satisfaction. Among people over 30, single respondents and those who are divorced or separated are also less satisfied with their communities than are married persons.

Political Environment

Campbell *et al.* (1976) refer to this domain as "Country as a whole" and defines it in terms of satisfaction with the government of a nation. They stress that assessment of this domain is more global and impressionistic than that of life in the country and the public's evaluation of a broader image of national life. Their survey questions are phrased as follows:

"Now I have some questions about life in this country as a whole. Do you think that there are some ways in which life in the US is getting worse? How? Are there some ways in which life in the US is getting better? How? All things considered, do you think that things are getting better, worse or what?"

One-third of their respondents felt that the country was getting worse; almost half said that there was no change; and 17% felt it was getting better. Older, less educated and rural respondents were all more likely to report that life was not changing either for better or worse. In contrast, it was the college graduates who were more sensitive to change and specifically to changes for the better. Examining the reasons why people thought life was getting worse, Campbell *et al.* (1976) concluded that it was not the conditions of their own lives which distressed them but the behavior of other people in society – drug users, immoral people, criminals, etc.

The Campbell *et al.* study also tapped the respondents' assessment of how fairly the public officials treat citizens. Answers revealed no serious complaint about fairness of their treatment. Those who felt they were unfairly treated were mostly young and black and living in metropolitan centers.

Another aspect measured by Campbell *et al.* was the perception of freedom. Only a small minority answered this question with any complaints regarding the lack of freedom. Three times as many blacks as whites said they did not feel free, with two-thirds of these blacks specifically referring to racial discrimination. Young people under 25 complained more often of restrictions on freedom than people over 65. People in metropolitan centers were most likely to feel that their freedom was restricted.

In the Philippines, the Social Weather Station (Mangahas, 1992a) measured the political environment using a Political Sentiment Index (PSI). This index has three components: *context*, *institutions* and *issues*. The *context* of political environment within which Filipinos situate their evaluation of political institutions and processes is comprised of sentiments relating to the extent of self-rated poverty, overall gains or losses in the preceding years and prospects for the next state of public safety, and overall adherence of Filipinos to peaceful means of effecting social change.

The *institutional component* reflects the public's assessment of the performance of key political institutions and authorities within the executive, legislative and judicial branches, as well as some of the more prominent constitutional agencies. More specifically, the institutions and officials assessed were the President, the Cabinet, Senate, House of Representatives, Supreme Court, Civil Service Commission, Military and Police.

The *issues component* is the assessment of the national administration over a broad range of issues covering political administration, governance, public safety and order, economic and foreign policy and others. Some examples of issues used were: overall performance, Pinatubo relief, land reform, caring for the environment, US bases, human rights, tax collection, military discipline, insurgency, quick decisions, keeping promises, crimes, foreign debt, and graft and corruption.

The *political sentiment index* was computed by obtaining the margin of satisfaction with respect to the three aforementioned components. The margin of satisfaction is simply the satisfied minus the dissatisfied.

Arroyo (1991a) analyzed the Social Weather Station data by age and found that contrary to popular thought, the youth did not constitute a hotbed

of dissatisfaction. In fact, it was this age group (18-24 years) which was the easiest to please. The age group which had the most complaints regarding national issues and institutions were those 25-34 years. Older respondents were the most generous with their performance ratings.

The Development Academy of the Philippines report (1975) notes that voter registration ranged from 5% in 1909 to a peak of 78% in 1963 and is usually higher among males. *Voter turnout* which averages 80% is greater among rural voters, with no differences in gender. The DAP report (1975) defined *political mobility* to be dependent on the respondents' political leadership status and on their (and their children's) chances of becoming political leaders should they be interested. *Political participation* was defined in terms of whether the respondent is a nonmember, member or a leader in a political organization, and the degree of his or her participation in it. *Freedom of political dissent* is a score which depends on whether the respondent has a source of political information and the form and frequency with which he or she registers any political disagreement that he or she may have. The *political awareness index* is the score based on the number of government programs about which the respondent is aware. The *political efficacy* index is the respondent's replies to statements about the ability of common citizens to affect political decisions.

WHAT NEXT?

The well-being of individual citizens is the core concern of national development. Despite the shifts in the perspective of how development should be measured – from economic growth in the 1960s, to socioeconomic development in the 1970s, and now human development in the 1990s – the centrality of people's well-being has remained the end goal of development. It is no different in the case of the Philippines.

The 1993-1998 Medium-Term Philippine Development Plan has identified a better quality of life for Filipinos – characterized by a "healthy and well-nourished, educated, skilled, decently-housed and socially secure population" – at the heart of its national goals.

As we have seen from the foregoing review of the literature, well-being is a complex, multidimensional concept whose measurement has increasingly

become difficult and problematic. Over the years, researchers of social indicators have had to concern themselves with issues like: which unit of analysis – individual, household, community or nation – is more indicative of development outcomes; or which indicators – objective versus subjective – best capture the concept of well-being. In the Philippines, a number of studies have been conducted to identify relevant social concerns and indicators of national well-being. The Social Indicators Project (SIP) of the Development Academy of the Philippines is by far the most comprehensive study to date. Unfortunately, DAP was not able to sustain it. However, some of the individuals involved with SIP continued to pursue certain aspects on their own. The Social Weather Stations, Inc. (SWS) – with its continuing surveys – have done its share in following up the efforts initiated by DAP.

While the current literature is replete with indicators of social and economic development at the national level, no attempt has yet been made to integrate all these indicators into a single, comprehensive measure of national well-being. Considerable concentration has also been placed on the use of "objective" accounts of accomplishments along specific social concerns. Only the SWS surveys have extensively used "subjective" measures such as people's perceptions and evaluations of their well-being as bases for assessing how close the Philippines is to its development goals.

The need for the country to continually assess and examine the extent by which it has provided opportunities for the Filipinos to achieve a quality life and a sense of well-being cannot be overemphasized. Efforts to appropriately define and measure Filipino well-being should therefore be continuously pursued, if such a stock-taking is to be relevant. At present, there is a host of variables and indicators that have already been identified to measure Filipino well-being; and there seems to be much potential in the use of perception indicators to complement the picture provided by existing statistics. More studies should therefore be encouraged and undertaken, to continually "test" these indicators, and flesh out those that are most relevant to the Filipino context.

BIBLIOGRAPHY

- Abrera, Alcestis** (1976). Philippine poverty thresholds, in M. Mangahas (ed.) *Measuring Philippine development*. Manila: Development Academy of the Philippines. Cited in M. Mangahas (1988) Philippine poverty measured by the self-rating approach: Review and analysis of 1981-1988 survey data and a proposal for research. Quezon City: Social Weather Stations, Inc.
- Abrera-Mangahas, Alcestis and Luz Aguila-Bautista** (1990). Profiling Filipino worker families through a socioeconomic survey module. Paper presented during the National (1990) Employment Symposium, March 1990. Philippines: International Labour Organization.
- _____ (1991). Filipino workers' aspirations for overseas employment. *Social Weather Bulletin 91-1* (January 1991). Quezon City: Social Weather Stations, Inc.
- Allardt, E.** (1973). *About dimensions of welfare*. Helsinki Group for Comparative Sociology. Cited in S. Levy and L. Guttman (1975) On the multivariate structure of well-being. *Social Indicators Research* 2:361-388.
- Almenario, Reynaldo B.** (1979). *Quality of life in Eastern Visayas: A perspective*. Quezon City: Bureau of Agricultural Economics, Ministry of Agriculture.
- Alston, J.P., G.D. Lowe and A. Wrigley** (1976). Socioeconomic correlates for four dimensions of self-perceived satisfaction. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Amato, Paul R. and Bruce Keith** (1991). Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin* 110 (1):26-46.
- Ancog, Amelia** (1976). Bagong barangay housing projects: An experiment in social housing. Cited in E. Luna (1986) The quality of rental housing in the APDs of Sampaloc and its implication on rent control. (Unpublished thesis, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City).

Andrews, Frank (1974). Social indicators of perceived life quality. *Social Indicators Research* 1 : 279-299. Cited in S. Levy and L. Guttman (1975) On the multivariate structure of well-being. *Social Indicators Research* 2:361-388.

Andrews, Frank and Stephen Withey (eds.) (1976). *Social indicators of well-being: Americans' perceptions of life quality*. New York: Plenum Press.

Andrisani, Paul J. (1981). Internal-external attitudes, sense of efficacy and labor market experience: A reply to Duncan and Morgan. *Journal of Human Resources* 16 (4):658-666.

Arroyo, Dennis (1990a). Access to basic public utilities. *Social Weather Bulletin* 90-9 (May 1990). Quezon City: Social Weather Stations, Inc.

_____ (1990b). Measuring social well-being through the ownership of consumer durables. *Social Weather Bulletin* 90-8 (April 1990). Quezon City: Social Weather Stations, Inc.

_____ (1990c). Poverty means more than low incomes. *Social Weather Bulletin* 90-5 (March 1990). Quezon City: Social Weather Stations, Inc.

_____ (1991a). Age does matter: The public's evaluation of government performance. *Social Weather Bulletin* 91-6 (March 1991). Quezon City: Social Weather Stations, Inc.

_____ (1991b). Education in Metro Manila: Sectoral sources, attainment levels, quality and related issues. *Social Weather Bulletin* 91-13 (July 1991). Quezon City: Social Weather Stations, Inc.

_____ (1991c). Patterns of optimism and pessimism. *Social Weather Bulletin* 91-10 (May 1991). Quezon City: Social Weather Stations, Inc.

_____ (1991d). What factors are correlated with happiness? *Social Weather Bulletin* 91-21 (November 1991). Quezon City: Social Weather Stations, Inc.

Atkinson, A.B. (1989). Poverty and social security. London: Harvester Wheatsheaf. Cited in M. G. Quibria (1991) Understanding poverty:

- An introduction to conceptual and measurement issues. *Asian Development Review* 9 (2): 90-112.
- Baird, Pryor** (1983). Assessing life events and physical health: Critique of the Holmes and Rahe scale. *Psychology* 20 (3/4):38-40.
- Balisacan, Arsenio** (1991). Anatomy of rural poverty in the Philippines. Paper presented at the Fifth Biennial Conference on US-Asia Economic Relations, Tokai University, Japan, June 20-22, 1991.
- Barrera, M.** (1981). Social support in the adjustment of pregnant adolescents: Assessment issues, in B.H. Gottlieb (ed.) *Social networks and social support*. Beverly Hills, CA: Sage. Cited in B. Compas (1987) Coping with stress during childhood and adolescence. *Psychological Bulletin* 101 (3):393-403.
- Baster, Nancy (ed.)** (1972). *Measuring development: The role and adequacy of development indicators*. London: Frank Cass.
- Beck, A.T. et al.** (1961). An inventory for measuring depression. *Archives of General Psychiatry* 4:561-571. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Ben-Porat, A.** (1981). Satisfaction from office environmental change. *Psychology* 18 (1):17-23.
- Berger, E.** (1959). *Money and emotional conflicts*. New York: International Universities Press. Cited in R. McClure (1984). The relationship between money attitudes and overall pathology. *Psychology* 21 (1): 4-6.
- Bernal, Norma et al.** (1991). Measures of poverty and inequality: Philippine estimates and policy options. Pasig: Development Planning and Research Project, National Planning and Policy Staff, National Economic and Development Authority.
- Blai, Boris Jr.** (1991). Freedom of choice and good health. *Psychology* 28 (2):46-47.

- Blau, Peter and Otis Duncan** (1967). American occupational structure: A study of social mobility in the US. Cited in K. Land (1975) *Social indicator models*. New York: Russel Sage Foundation.
- Bond, Michael H.** (1991). Chinese values and health: A cultural level examination. *Psychology and Health* 5 (2):137-152.
- Bortner, R.W. and D.F. Hultsch** (1970). A multivariate analysis of correlates of life satisfaction in adulthood. *Journal of Gerontology* 25: 41-47. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Boulding, Kenneth et. al** (eds.) (1984). *The economics of human betterment*. British Association for the Advancement of Science. London: MacMillan Press.
- Bower, G.H.** (1981). Mood and memory. *American Psychologist* 36:129-148. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Bradburn, N.M. and D. Caplovitz** (1965). *Reports on happiness*. Chicago: Aldine Publishing Co. Cited in S. Levy and L. Guttman (1975) On the multivariate structure of well-being. *Social Indicators Research* 2:361-368.
- Brady, Erika U. and Phillip Kendall** (1992). Comorbidity of anxiety and depression in children and adolescents. *Psychological Bulletin* 3 (2):244-255.
- Braun, P.N.** (1977). Psychological well-being and location in the social structure. (Doctoral disseration, University of Southern California). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Brickman, P., D. Coates and R. Janoff-Bulman** (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology* 36:917-927. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Broadhead, W.E. et al.** (1988). The Duke-UNC functional social support questionnaire: Measurement of social support in family medicine

- patients. *Medical Care* 26:709-723. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Campbell, Angus, P.E. Converse , and W.L. Rodgers** (1976). *The quality of American life: Perceptions, evaluations and satisfactions*. New York: Russell Sage Foundation.
- Cangemi, Joseph and W. Mitchell** (1975). A brief psychology of healthy and unhealthy organizations. *Psychology* 12 (2):46-50.
- Cangemi Joseph and George Guttschalk** (1986). What employees really want from their jobs. *Psychology* 23 (2/3):57-61.
- Caplan, R.D. et al.** (1975). Job demands and worker health: Main effects and occupational difference (DHEW-NIOSH Pub. No. 75-160, U.S. Dept. of Health, Education and Welfare). Washington, D.C.: U.S. Government Printing Office. Cited in W. Taylor and J. Cangemi (1988). The effect of occupational stress on health and illness: A model. *Psychology* 25 (3/4): 53-64.
- Carley, Michael** (1981). *Social measurement and social indicators: Issues of policy and theory*. London: Allen and Unwin.
- Carp, F.M. and A. Carp** (1982). Test of a model of domain satisfactions and well-being: Equity considerations. *Research on Aging* 4:503-522. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Carroll, James L.** (1990). The relationship between humor appreciation and perceived physical health. *Psychology* 27 (2):34-37.
- Caryer, Charles S. and Michael F. Scheier** (1982). Control theory: A useful conceptual framework for personality – social, clinical and health psychology. *Psychological Bulletin* 92 (1):111-135.
- Cassell, Russell N.** (1985a). Biofeedback for developing self-control of tension and stress in one's hierarchy of psychological states. *Psychology* 22 (2):50-57.
- _____ (1985b). Systematic self-regulation of the neural system essential for peak performance and well-being. *Psychology* 22 (3/4):51-56.

- Casell, Russell N.** (1987). Six increasingly higher levels of wellness based on holistic principles and risk factor science. *Psychology* 24 (1/2):46-54.
- _____ (1991). Biofeedback computerized clinical support system: Six levels of wellness with holistic health care. *Psychology* 28 (2):39-45.
- Cassell, Russell N. and Elmira Sumantardja** (1982). Type-A personality and stress reduction training based on transpersonal psychology with biofeedback and computers. *Psychology* 19 (4):1-6.
- Chambers, L.W. et al.** (1976). Development and application of an index of social function. *Health Service Research* 11:430-431. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Clemente, F. and W.J. Sauer** (1976). Life satisfaction in the United States. *Social Forces* 54:621-631. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Cohen, Sheldon** (1980). Aftereffects of stress on human performance and social behavior: A review of research and theory. *Psychological Bulletin* 88 (1):82-108.
- Cohen, Sheldon and Thomas Ashby Wills** (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin* 98 (2):310-357.
- Colasanto, Diane et al.** (1984). Two subjective definitions of poverty: Results from the Wisconsin basic needs study. *Journal of Human Resources* 14 (1):127-138.
- Compas, Bruce E.** (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin* 101 (3):393-403.
- Csikszentmihalyi, M.** (1975). *Beyond boredom and anxiety*. San Francisco: Josey-Bass. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Csikszentmihalyi, M. and T.J. Figurski** (1982). Self-awareness and aversive experience in everyday life. *Journal of Personality* 50:15-24. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Danziger, Sandra K.** (1981). Postprogram changes in the lives of AFDC supported work participants: A qualitative assessment. *Journal of Human Resources* 16 (4): 637-648.
- Deaton, Angus** (1980). *The measurement of welfare: Theory and practical guidelines*. Washington, D.C.: Development Research Center, World Bank.
- Department of Social Welfare and Development** (1992). *Manual of Social Welfare Indicator System* (SWIS) project. Manila: DSWD.
- Depue, Richard and Scott M. Monroe** (1986). Conceptualization and measurement of human disorder in life stress research: The problem of chronic disturbance. *Psychological Bulletin* 99 (1):36-51.
- Derman, William and Scott Whiteford (eds.)** (1985). *Social impact analysis and development planning in the third world*. Boulder, CO: Westview Press.
- Development Academy of the Philippines** (1975). *Measuring the quality of life: Philippine social indicators*. Makati: Development Academy of the Philippines.
- Diener, Ed** (1984). Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Dobson, Keith S.** (1985). Defining an interactional approach to anxiety and depression. *Psychological Record* 35 (4):471-490.
- Donald, C.A. and J. E. Ware** (1978). Conceptualization and measurement of health for adults in the health insurance study: Vol. IV social health. Rand: Pub. No. R-1987/4-HEW, Rand Corporation, Sta. Monica. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Downey, Geraldine and James C. Coyne** (1990). Children of depressed parents: An integrative review. *Psychological Bulletin* 108 (1):50-76.
- Drewnowski, Jan** (1974). *On measuring and planning the quality of life*. The Hague: Mouton.

- Duncan, Greg J. and James N. Morgan** (1981). Sense of efficacy and subsequent change in earnings – a replication. *Journal of Human Resources* 16 (4): 649-657.
- D’Zurilla, Thomas and Collette F. Sheedy** (1991). Relation between social problem-solving ability and subsequent level of psychological stress in college students. *Journal of Personality and Social Psychology* 61 (5):841-846.
- Easterlin, R.** (1973). Does economic growth improve the human lot? Some empirical evidence, in P. David and M. Reder (eds.) *Nations and households in economic growth*. Palo Alto, CA: Stanford University Press. Cited in B. Strumpel (1976) *Economic means for human needs: Social indicators of well-being and discontent*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.
- Emmons, R., R. Larsen, S.S. Levine and E. Diener** (1983). Factors predicting satisfaction in judgement. Paper presented at the E. Diener meeting of Midwestern Psychological Association Convention. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Everly, George Jr., et al.** (1986). The development of an instrument to measure stress in adults, in J. Humphrey (ed.) *Human Stress: Current Selected Research* Vol. 1. New York: AMS Press, Inc.
- Featherman, David and Robert Hauser** (1975). Design for a replicate study of social mobility in the US. Cited in K. Land (1975) *Social indicator models*. New York: Russel Sage Foundation.
- Fischer, Claude** (1982). Urbanism and psychological strain, in *To dwell among friends: Personal networks in town and city*. Chicago: University of Chicago Press.
- Fordyce, M.** (1977). Development of a program to increase personal happiness. *Journal of Counseling Psychology* 24:511-521. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
-
- _____ (1983). A program to increase happiness (further studies). *Journal of Counseling Psychology* 24:511-521. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Fox, Karl August** (1984). *Social indicators and social theory: Elements of an operational system*. New York: Wiley.
- Franklin, Billy J. and Phyllis A. Brown** (1977). Stress and illness behavior: An exploratory study using diary data. *Psychology* 14 (4):3-16.
- Freedman, J.** (1978). *Happy people: What happiness is, who has it and why*. New York: Harcourt Brace Jovanovich. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Freudiger, P.T.** (1980). Life satisfaction among American women. (Doctoral dissertation, North Texas State University). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Friedberg, Robert D.** (1991). Holidays and emotional distress: Not the villains they are perceived to be. *Psychology* 27 (4) and 28 (1): 59-61.
- Frischer, Martin et al.** (1991). Life events and psychological well-being in old age. *Psychology and Health* 5 (3):203-220.
- Ghai, Dharam et al.** (1988). *Some reflections on human and social indicators for development*. Geneva: United Nations Research Institute for Social Development.
- Gilley, William F. and George E. Uhlig** (1985). Validation of Cassell type-A personality assessment profile. *Psychology* 22 (2):4-10.
- Goedhart, T. , V. Halberstadt, A. Kapteyn and B.M.S. Van Praag.** (1977). The poverty line: Concept and measurement. *Journal of Human Resources* 12 (Fall of 1977): 503-520. Cited in D. Colasanto et al. (1984) Two subjective definitions of poverty: Results from the Wisconsin basic needs study. *Journal of Human Resources* 19 (1):127-138.
- Good, Lawrence R. and Katherine Good** (1976). A measure of moral anxiety. *Psychology* 13 (3):57-58.
- Good, Lawrence R. and Chester Parker** (1977). A fear of social rejection scale. *Psychology* 14 (1):69-70.
- Good, Lawrence R.** (1977). A measure of physical anxiety. *Psychology* 14 (4):57-58.

- Gray, Steven W.** (1986). The relationship between self-actualization and leisure satisfaction. *Psychology* 23 (1):6-12.
- Griffin, James** (1986). *Well-being*. Oxford: Clarendon Press.
- Gurin, P. et al.** (1960). *How Americans view their mental health*. New York: Basic Books, Inc. Cited in B. Strumpel (1976) *Economic means for human needs: Social indicators of well-being and discontent*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.
- Havenman, Robert H. and Barbara L. Wolfe** (1984). Schooling and economic well-being: The role of nonmarket effects. *Journal of Human Resources* 19 (3):377-407.
- Hobfoll, Stevan E.** (1991). Gender differences in stress reactions: Women filling the gaps. *Psychology and Health* 5 (2):95-110.
- Hosen, Ron** (1986). Chemical abuse as a quest for psychological well-being. *Psychology* 23 (4):32-47.
- _____ (1990). Strategies for enhancing psychological well-being. *Psychology* 27 (2):20-29.
- House, J.S. and J.A. Wells** (1978). Occupational stress, social support and health, in A. Mclean (ed.) *Reducing occupational stress*. (DHEW-NIOSH Pub. No. 78-140, U.S. Dept. of Health, Education and Welfare) Washington, D.C.: U.S. Government Printing Office. Cited in W. Taylor and J. Cangemi (1988) The effect of occupational stress on health and illness: A model. *Psychology* 25 (3/4): 53-64.
- Hunt, S.M. et al.** (1981). Reliability of a population survey tool for measuring perceived health problems: A study of patients of *osteoarthritis* Journal of Epidemiology and Community Health 35:297-300. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Iaffaldano, M. and P.M. Muchinsky** (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin* 97 (2):251-273.
- Jemelka, James and A. Chris Downs** (1991). The social support construct in an experimental context: A reexamination. *Psychology* 28 (3/4):35-46.

- Johnston, Denis F.** (1977). *Basic disaggregations of main social indicators*. Paris: OECD.
- Jones, John F.** (1978). *Human well-being: Challenges for the 1980s' social, economic and political action*. A regional synthesis for Asia and Western Pacific. Jerusalem: Regional Office for Asia and Western Pacific.
- Kabanoff, Boris** (1980). Work and nonwork: A review of models, methods and findings. *Psychological Bulletin* 88 (1):60-77.
- Kahn, Arnold and Helmut Lamm** (1977). Preferences for an equal or equitable allocator. *Journal of Personality and Social Psychology* 35 (11):837-844.
- Kamman, R., M. Farry and P. Herbison** (1982). The analysis and measurement of the sense of well-being (Manuscript submitted for publication). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Kanugo, Rabindra N.** (1979). The concepts of alienation and involvement revisited. *Psychological Bulletin* 86 (1): 119-138.
- Kapsalis, Constantine** (1981). Poverty lines: An alternative method of estimation. *Journal of Human Resources* XVI (3):477-480.
- Khan, Sarshar (ed.)** (1980). *Aspects of poverty in the Philippines: A review and assessment*. Washington, D.C.: World Bank.
- Kiechel, W.** (1986). Some good news about stress. *Fortune* 113-B:157-160. Cited in W. Taylor and J. Cangemi (1988) The effect of occupational stress on health and illness: A model. *Psychology* 25 (3/4): 53-64.
- Knox, Paul L.** (1975). *Social well-being: A spatial perspective*. London: Oxford University Press.
- Kobasa, Suzanne C.** (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology* 37 (1):1-11.
- Land, Kenneth and Seymour Spilerman** (1975). *Social indicator models*. New York: Russell Sage Foundation.

- Larson, R.** (1978). Thirty years of research on the subjective well-being of older Americans. *Journal of Gerontology* 33: 109-125. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Lawler, E.E.** (1971). *Psycho and organizational effectiveness: A psychological view*. New York: McGraw-Hill. Cited in C. Orpen and J. Bonnici (1990) The causes and consequences of pay satisfaction: A test of Lawler's model. *Psychology* 27 (1):27-29.
- Lawler, E. and J. Suttle** (1972). A causal correlational test of the need hierarchy concept. *Organizational Behavior and Human Performance* 7:265-278. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Le Grand, Julian** (1987). Equity, well-being and economic choice: A review of horizontal equity, uncertainty and economic well-being. *Journal of Human Resources* 22 (3): 429-440.
- Lepore, Stephen et al.** (1991). Dynamic role of social support in the link between chronic stress and psychological distress. *Journal of Personality and Social Psychology* 61 (6):899-910.
- Lester, David et al.** (1983). Maslow's hierarchy of needs and psychological health. *Journal of General Psychology* 109 (1):83-85.
- Levy, Shlomit and Louis Guttman** (1975). On the multivariate structure of well-being. *Social Indicators Research* 2 : 361-388.
- Lewinsohn, P.M. and C. Amenson** (1978). Some relations between pleasant and unpleasant events and depression. *Journal of Abnormal Psychology* 87:644-654. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Ley, David** (1983). The quality of urban life. *A social geography of the city*. Harper and Row Publishers, Inc.
- Liang, J., L. Kahana and E. Doherty** (1980). Financial well-being among the aged: A further elaboration. *Journal of Gerontology* 35:409-420. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Luna, Emmanuel M.** (1986). The quality of rental housing in the APD's of Sampaloc and its implication for rent control. (Unpublished thesis, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City).
- Luna, Emmanuel, M. R. G. Gazo, O. Triberrri, A. V. Bautista, G. M. Hosenia, L. G. Peñaflor and C. J. Villegas** (1981). Survey of UP Bliss residents under Pag-ibig project. (Graduate Research Paper, Institute of Environmental Planning, University of the Philippines, Diliman, Quezon City).
- Maloney, John** (1973). Social vulnerability index. Community Service Council of Metropolitan Indianapolis, Inc. Cited in D. Miller (1977) *Handbook of research design and social measurement*, 3rd edition. New York: Longman.
- Mancini, J.A. and D.K. Orthner** (1980). Situational influences on leisure satisfaction and morale in old age. *Journal of American Geriatrics Society* 28: 466-471. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Mangahas, Mahar (ed.)** (1976). *Measuring Philippine development: Report of the social indicators project*. Makati: Development Academy of the Philippines.
- Mangahas, Mahar** (1980). Social indicators for the Philippines, in K. Ohkawa (ed.) *Asian socioeconomic development: A national accounts approach*. Tokyo: University of Tokyo Press.
- _____ (1986). Dimensions of poverty. *SWS Occasional Paper*. Quezon City: Social Weather Stations, Inc.
- _____ (1988a). Philippine poverty measured by the self-rating approach: Review and analysis of 1981-1988 survey data and a proposal for research. *SWS Occasional Paper*. Quezon City: Social Weather Stations, Inc.
- _____ (1988b). The economic recovery, viewed from the bottom-up: A review of social weather station survey data. *SWS Occasional Paper* (January 1988). Quezon City: Social Weather Stations, Inc.

- Mangahas, Mahar** (1990). Annual monitoring of poverty. A study jointly sponsored by ILO and UNICEF. Quezon City: Social Weather Stations, Inc.
- _____ (1991). The SWS July 1991 national survey: A social weather report. *Social Weather Bulletin 91-16* (August 1991). Quezon City: Social Weather Stations, Inc.
- _____ (1992a). Philippine economic and political conditions: November 1992 assessment. Quezon City: Social Weather Stations, Inc.
- _____ (1992b). Surveys of poverty and the quality of life in the Philippines. Paper presented at the 13th International EAROPH Congress, Kuala Lumpur, Malaysia, Sept. 14-18, 1992.
- Maslow, A.** (1954). *Motivation and personality*. New York: Harper.
- McClure, Robert F.** (1984). The relationship between money attitudes and overall pathology. *Psychology* 21 (1):4-6.
- McClure, Robert F. and Mary Loden** (1982). Religious activity, denomination membership and life satisfaction. *Psychology* 19 (1):12-17.
- McFarlane, A.H. et al.** (1981). Methodological issues in developing a scale to measure social support. *Schizophrenia Bulletin* 7:90-99. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- McGranahan, D.V. et al.** (1972). *Contents and measurement of socioeconomic development: A staff study*. New York: Praeger for UNRISD.
- McGranahan, Donald, Eduardo Pizarro and Richard Calude** (1985). *Measurement and analysis of socio-economic development*. Geneva: United Nations Research Institute for Social Development.
- Michalos, A.C.** (1980). Satisfaction and happiness. *Social Indicators Research* 8:385-422. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Mijares, Tito** (1977). Household surveys in the Philippines: Their uses for planning and policy formulation, in *Multi-purpose household surveys in developing countries*. Paris: Development Center of the OECD.

- Miller, Delbert** (1977). *Handbook of research design and social measurement*, 3rd ed. New York: Longman.
- Miranda, Felipe B.** (1992). Down, but certainly not out: The political sentiments of Filipinos. *Social Weather Bulletin* 92-1 (January 1992). Quezon City: Social Weather Stations, Inc.
- Montgomery, S.A. and M. Asberg** (1979). A new depression scale designed to be sensitive to change. *British Journal of Psychiatry* 134:382-389. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Morawetz, D.** (1977). Income distribution and self-rated happiness: Some empirical evidence. *The Economic Journal* 87:511-522. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Morris, M.** (1977). *The physical quality of life*. Overseas Development Council.
- Mukherjee, Ramkrishna** (1975). *Social indicators*. Delhi: Macmillan.
- Murray, Christopher J.** (1991). *Development data constraints and the human development index*. Geneva: United Nations Research Institute for Social Development.
- National Economic and Development Authority** (1992). Human development and people empowerment: A social policy framework for the medium-term Philippine development plan 1993-1998. Pasig: National Economic and Development Authority.
- Neugarten, B.L. and R. J. Havighurst** (1961). The measurement of life satisfaction. *Journal of Gerontology* 16:134-143. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Nezu, A.M., C.M. Nezu and S.E. Blissett** (1988). *Journal of Personality and Social Psychology* 54:520-525. Cited in J. Carroll (1990) The relationship between humor appreciation and perceived psychological health. *Psychology* 27 (2):34-37.

- Nissel, Muriel (1984). Indicators of human betterment, in K. Boulding (ed.) *The economics of human betterment*. London: MacMillan Press.
- Norbeck, J.S. *et al.* (1981). The development of an instrument to measure social support. *Nursing Research* 30:264-269. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Okun, Morris A. *et al.* (1990). A meta-analysis of subjective well-being in interventions among elders. *Psychological Bulletin* 108 (2):257-266.
- Okun, Morris, Robert Olding and Catherine Cohn (1987). Life satisfaction, in G.L. Maddoc (ed.) *Encyclopedia of Aging*. New York: Springer.
- O'Leary, Ann (1990). Stress, emotion and human immune function. *Psychological Bulletin* 108 (3):363-382.
- Organization for Economic Cooperation and Development (1973). *List of social concerns common to most OECD countries*. Paris: OECD.
- _____ (1976). *Measuring social well-being: A progress report on the development of social indicators*. Paris: OECD.
- Orpen, Christopher (1991). The effect of work stress on employee physical and psychological well-being: A study of Australian nurses. *Psychology* 27 (4) and 28 (1):48-51.
- Orpen, Christopher and Josef Bonnici (1990). The causes and consequences of pay satisfaction: A test of Lawler's model. *Psychology* 27 (1):27-29.
- Parducci, A. (1982). Toward a relational theory of happiness. Paper presented at the 90th Annual Convention of the American Psychologist Association. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Pierce, Gregory *et al.* (1991). General and relationship-based perceptions of social support: Are two constructs better than one? *Journal of Personality and Social Psychology* 61 (6):1028-1039.
- Porio, Emma and Mary Hollnsteiner (1975). Adaptation and renovation: Family adjustment to housing design, in *Marikina low-cost private subdivisions*. Cited in E. Luna (1986). The quality of rental housing in

- the APD's of Sampaloc and its implication for rent control. (Unpublished thesis, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City).
- Powers, Stephen** (1985). Student satisfaction with graduate education: Dimensionality and assessment in a college education. *Psychology* 22 (2):46-49.
- Quibria, M.G.** (1991). Understanding poverty: An introduction to conceptual and measurement issues. *Asian Development Review* 9 (2): 90-112.
- Rabkin, Judith G.** (1980). Stressful life events and schizophrenia: A review of the research literature. *Psychological Bulletin* 87 (2):408-425.
- Ramos, Ma. Lourdes** (1976). *Poverty in the Philippines*. Manila: Economic Planning and Research Staff, National Economic and Development Authority.
- Ramos, Josefina** (1986). The Punta multi-storey tenement project: An experiment in high rise public housing in the Philippines. Cited in E. Luna (1986) The quality of rental housing in the APD's of Sampaloc and its implication for rent control. (Unpublished thesis, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City).
- Ramos, Josefina and B. Hong** (1975). Public housing in the Philippines: Its design and development. Cited in E. Luna (1986) The quality of rental housing in the APD's of Sampaloc and its implication for rent control. (Unpublished thesis, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City).
- Ravallion, Martin and Monika Huppi** (1991). Measuring changes in poverty: A methodological case study of Indonesia during an adjustment period. *The World Bank Economic Review* 5 (1):57-82.
- Riddick, C.** (1980). The life satisfaction of retired and employed older women: A reexamination of the disengagement theory. (Doctoral dissertation, Pennsylvania State University). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Riffel, J.A.** (1975). *Quality of life in resort towns*. Ottawa: Ministry of State, Urban Affairs Canada.
- Robbins, Ann et al.** (1991). Psychological determinants of health and performance: The tangled web of desirable and undesirable characteristics. *Journal of Personality and Social Psychology* 61 (5):755-765.
- Rubenstein, C.** (1981). Money and self-esteem, relationships, secrecy, envy and satisfaction. *Psychology Today*, (May 1981) 29-44. Cited in R. McClure (1984) The relationship between money attitudes and overall pathology. *Psychology* 21 (1): 4-6.
- Sandvik, E. and E. Diener** (1983). An evaluation of an opponent process theory of happiness (Manuscript submitted for publication, University of Illinois). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Schmidt, Donald E. and John P. Keating** (1979). Human crowding and personal control: An integration of the research. *Psychological Bulletin* 86 (4):680-700.
- Schwarz, N. and G. G. Clore** (1983). Mood, misattribution and judgements of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology* 45: 513-523. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Scitovsky, Tiber** (1976). *The joyless economy: An inquiry into human satisfaction and consumer dissatisfaction*. New York: Oxford University Press. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Seashore, Stanley** (1977). Indicators of the quality of working life, in UNESCO (1977) *Indicators of environmental quality and quality of life: Reports and papers on the social sciences*. Paris: UNESCO.
- Seidman, E. and B. Rapkin.** (1983). *Economics and psychosocial dysfunction: Towards a conceptual framework and prevention strategies*. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Shin, D.C and D.M. Johnson** (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research* 5:475-492. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Social Weather Station** (1990). Philippine economic and social conditions, 1989-90: Findings from four surveys. Quezon City: Social Weather Stations, Inc.
- Solomon, R.L.** (1980). The opponent-process theory of acquired motivation: The costs of pleasure and the benefits of pain. *American Psychologist* 35:691-712. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Sorensen, Aage** (1975). Growth in occupational achievement: Social mobility or investment in human capital. Cited in K. Land (1975) *Social indicator models*. New York: Russel Sage Foundation.
- Spirito, Anthony et al.** (1991). Stress, coping and social support as mediators of the emotional status of women with gestational diabetes. *Psychology and Health* 5 (2):111-120.
- St. Mary, Sharon and Thomas J. Russo** (1991). A self-efficacy scale for chemical dependency in adolescence. *Psychology* 27 (4) and 28 (1):62-68.
- Stone, Arthur et al.** (1991). Self-report, situation-specific coping questionnaires: What are they measuring? *Journal of Personality and Social Psychology* 61 (4):648-658.
- Strumpel, Burkhard (ed.)** (1974). *Subjective elements of well-being*. Papers presented at a seminar of the Organization for Economic Cooperation and Development. Paris: OECD.
- _____ (1976). *Economic means for human needs: Social indicators of well-being and discontent*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.
- Svebak, Sven et al.** (1991). Back pain and the experience of stress, efforts and moods. *Psychology and Health* 5 (4):307-314.

- Sweeney, P.D., D. Schaeffer and S. Golin** (1982). Pleasant events, unpleasant events and depression. *Journal of Personality and Social Psychology* 43:136-144. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- Taylor, William L. and Joseph Cangemi** (1988). The effect of occupational stress on health and illness: A model. *Psychology* 25 (3/4):53-64.
- Taylor, Charles L. and Michael Hudson** (1972). *World handbook of political and social indicators*, 2nd edition. New Haven: Yale University Press.
- Technical Working Group on Poverty** (1986). A monograph for the estimation of the 1985 poverty and subsistence thresholds and incidences. Pasig: National Economic and Development Authority.
- Todaro, Michael** (1977). Growth, poverty and income distribution: Theory and evidence.
- United Nations Ad Hoc Group of Experts on Social Indicators for Housing and Urban Development** (1971). *Social indicators for housing and urban development*. New York: United Nations.
- United Nations Ad Hoc Group on Indicators of the Quality of Urban Development** (1975). *Indicators of the quality of urban development: A report*. New York: United Nations.
- United Nations Children's Fund** (1991). *The state of the world's children, 1991*. New York: Oxford University Press.
- United Nations Department of International Economic and Social Affairs** (1991). Subject fields, topics and selected illustrative series for indicators from the United Nations handbook on social indicators, in *Compendium of social statistics and indicators 1988*. New York: United Nations.
- United Nations Development Programme** (1990). Technical notes, in *Human development report, 1990*. New York: Oxford University Press.
- _____ (1991). Measuring human development and freedom, in *Human development report, 1991*. New York: Oxford University Press.

- United Nations Development Programme** (1992). The concept and measurement of human development. *Human development report, 1992*. New York : Oxford University Press.
- United Nations Economic and Social Council** (1976). *The use of socioeconomic indicators in development planning*. Paris: UNESCO Press.
- United Nations Statistical Office** (1980). Towards more effective measurement of levels of living and review of work of the United Nations Statistical Office related to statistics of levels of living. *LSMS Working Paper No. 4*. Washington, D.C.: World Bank. Cited in D. Ghai, *et al.* (1988) *Some reflections on human and social indicators for development*. Geneva: United Nations Research Institute for Social Development.
- United States Office of Management and Budget, Statistical Policy Division** (1973). *Social indicators, selected statistics on social conditions and trends in the United States*. Washington, D.C.: U.S. Government Printing Office.
- Urbain, Eugene S. and Phillip Kendall** (1980). Review of social-cognitive problem-solving interventions with children. *Psychological Bulletin* 88 (1):109-143.
- Viloria, Esther and Angelina Almanzor** (1977). Special problems in confronting Asia, in *Social realities and the social work response*. New York: International Association of Schools of Social Work.
- Ware, J.E. et al.** (1979). *Conceptualization and measurement of health for adults in the health insurance study: Vol. III, mental health*. Rand: Publication No. R-1987/3 HEW, Santa Monica. Cited in D. Wilkin *et al.* (1992) *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Wenz, Friedrich V.** (1984). Household crowding, loneliness and suicide ideation. *Psychology* 21 (2):25-29.
- Whaba, M.A. and L.G. Bridwell** (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational Behavior and Human Performance* 15:212-240. Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.

- Wilkin, David, Lesley Hallam and Marie-Anne Doggett** (1992). *Measures of need and outcome for primary health care*. New York: Oxford University Press.
- Williams, Robert et al.** (1991). Development of views of life scale. *Psychology and Health* 5 (3):165-182.
- Wilson, John** (1969). *Quality of life in the United States: An excursion into the new frontier of socioeconomic indicators*. Kansas, MO: Midwest Research Institute. Cited in D. Miller (1977) *Handbook of research design and social measurement*, 3rd ed. New York: Longman.
- Wilson, W.R.** (1960). An attempt to determine some correlates and dimensions of hedonic tone. (Doctoral dissertation, Northwestern University). Cited in E. Diener (1984) Subjective well-being. *Psychological Bulletin* 95 (3):542-575.
- World Bank** (1987). *Social indicators of development*. Washington, D.C.: Socioeconomic Data Division, International Economics Dept., World Bank.
- World Health Organization Expert Committee on the Public Aspects of Housing** (1961). Appraisal of the hygienic quality of housing and its environment. *World Health Organization Technical Report Series* No. 353. Geneva: World Health Organization.
- _____ (1990). *Social indicators of development*. Baltimore: Published for the World Bank by the Johns Hopkins University Press.
- Zautra, Alex J. and Amy B. Wrabetz** (1991). Coping success and its relationship to psychological distress for older adults. *Journal of Personality and Social Psychology* 61 (5):801-810.
- Zigmond, A.S. and R.P. Snaith** (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavia* 67:361-370. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Longman.
- Zung, W.W.** (1960). A self-rating depression scale. *Archives of General Psychiatry* 12:63-70. Cited in D. Wilkin et al. (1992) *Measures of need and outcome for primary health care*. New York: Longman.

U.P. ASSESSMENTS ON THE STATE OF THE NATION

Monograph Series

Presidential Leadership and Cory Aquino

Edited by Belinda A. Aquino, 1990

The Failed December Coup

Edited by Belinda A. Aquino, March 1990

*A Distant Peace: Human Rights and People's Participation
in Conflict Resolution*

Ed Garcia, 1991 (co-published with National Book Store)

Philippine Education: Promise and Performance

Josefina R. Cortes and Nestor R. Balmores, January 1992

National Identity and Social Change

Maria Luisa Canieso-Doronila, May 1992

*Where Food and Population Meet: The Filipino Household
Among Other Households*

Gelia T. Castillo, April 1993

U.P. Public Lectures on the Aquino Administration and the Post-EDSA Government (1986-1992)

Vol. I *The Aquino Administration: Record and Legacy
(1986-1992)* June 1992

Vol. II *The Aquino Presidency and Administration
(1986-1992): Contemporary Assessments and "The
Judgment of History?"* (forthcoming)

Vol. III *The Post-EDSA Vice-Presidency, the Senate and House
of Representatives, the Judiciary, and Ombudsman
(1986-1992): Self-Assessments and External Views and
Assessments* (forthcoming)

Vol. IV *The Post-EDSA Civil Service Commission,
Commission on Elections, Commission on Audit,
Commission on Human Rights, and the Presidential
Commission on Good Government (1986-1992):
Self-Assessments and External Views and Assessments*
(forthcoming)

Int'l. Ed. *Corazon C. Aquino: Early Assessments of Her
Presidential Leadership and Administration and Her
Place in History*

*The Senate That Said No: A Four-Year Record of the
First Post-EDSA Senate* (forthcoming)

By Dr. Jovito R. Salonga

U.P. ASSESSMENTS ON THE STATE OF THE NATION

State of the Nation Reports

- No. 1 *Saving the Present for the Future*
Percy Sajise, et al., May 1992
- No. 2 *The Politicization of the Military*
Felipe B. Miranda, May 1992
- No. 3 *Primary Health Care in the Philippines*
Arturo Pesigan, Ruben Caragay,
Marilyn Lorenzo, May 1992
- No. 4 *The Record of a Non-Confrontational Debt Management Approach*
A.M. Mendoza, Jr., May 1992
- No. 5 *Ending the Armed Conflict:
Peace Negotiations in the Philippines*
Jose V. Abueva, et al., August 1992
- No. 6 *State of Philippine Education: The Tension between
Equity and Quality*
Josefina R. Cortes and Nestor R. Balmores, Sept. 1992
- No. 7 *Devolution and Empowerment: The Local Government Code
of 1991 and Local Autonomy in the Philippines*
Proserpina D. Tapales, April 1993
- No. 8 *The Philippine Congress: Executive-Legislative Relations
and the Restoration of Democracy*
Olivia C. Caoili, June 1993

Occasional Paper Series

- 93-001 *Reconceptualizing Giftedness in the Philippines*
Erlinda F. Camara, 1993

