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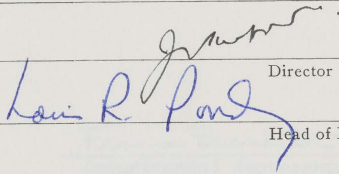
MIR-ABDOLREZA ESHGHI

ENTITLED   MODERN-TRADITIONAL DIFFERENCES

IN CONSUMPTION PATTERNS ACROSS CULTURES

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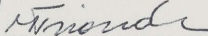
THE DEGREE OF   DOCTOR OF PHILOSOPHY

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O-517

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DEPARTMENTAL FORMAT APPROVAL

THIS IS TO CERTIFY THAT THE FORMAT AND QUALITY OF PRESENTATION OF THE

THESIS SUBMITTED BY   Mir-Abdolreza Eshghi   AS ONE OF

THE REQUIREMENTS FOR THE DEGREE OF   Ph.D. in Business Administration

IS ACCEPTABLE TO THE   Department of Business Administration   .
                       (Full Name of Department, Division or Unit)

_____March 6, 1984_____   _____Frances Buemenlor_____
Date of Approval   *Departmental Representative*

To the Memory of my late father
Mir-Nooredin Eshghi

And to my mother
Azadeh Eshghi

For their lifelong Commitment to
their children's education

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CHAPTER 1

INTRODUCTION

A. The Problem

The post-World War II era is marked by the emergence and phe-
nomenal growth of the multinational corporations (MNC's). Exporting,
which once characterized the nature of international activities of
domestic firms, no longer represents a true picture of the scope of
operations conducted by the MNC's. Foreign direct investment in
manufacturing operations has now gained a dominant position and an
ever-increasing importance in the activities of MNC's around the globe.

Expansion into foreign markets requires three major decisions on
the part of the international marketer: (a) which countries to enter,
(2) which target markets to select within the chosen countries, and (3)
what marketing strategies would be most appropriate for each target
market selected.

The first decision requires consideration of political, economic,
legal and cultural variables which may serve as a barrier or incentive
to entry. Information input at this level of decision making would
consist of such aggregate characteristics as gross national product,
population size, degree of urbanization, percent of population in agri-
culture versus industry, availability of transportation systems, and so
on. One may arbitrarily establish certain minimum criteria on each of
these aggregate variables and select countries that fall above the

established criteria. It is obvious that in using such aggregate measures, one always runs the risk of eliminating countries which may well contain certain attractive market segments. For instance, if a country is eliminated from further consideration due to unsatisfactory per capita income, it may contain a wealthy segment. (This is a real possibility in case of third world countries where distribution of income tends to be highly uneven). But this seems to be unavoidable, at least, in the initial screening stage.

The second decision involves selection of appropriate target markets within chosen countries. Information inputs at this level of analysis would also consist of aggregate measures of consumer behavior. For example, an important consideration at this level would be market potential of various market segments. Here, aggregate measures such as relative size of each segment, personal disposable income, etc. would be useful in estimating market potential.

The third decision, namely, formulating marketing strategies to market goods and services in selected target markets, requires a more detailed investigation of consumer behavior. Aggregate country characteristics would no longer be adequate for this purpose. One would have to shift the emphasis from aggregate level to an individual or micro level and systematically assess differences in the behavior of buyers not only between countries but also within countries and the causes that might account for such differences.

Borrowing heavily from the behavioral sciences, marketing academicians as well as the practitioners have developed concepts, theories and methodologies to study consumer behavior in the context of a single nation (primarily the U.S.). Many of the concepts and theories have provided better understanding of the complex consumer behavior and as a result, more effective marketing strategies have been formulated.

While consumption behavior across countries have been researched in terms of socio-economic-demographic variables, the full potential of the concepts and theories developed in the U.S. has not been realized in a cross-cultural setting. For example, the concept of life style has been used in innumerable studies in the U.S. (Wells, 1971, 1974, 1975; Tigert, 1969; Plummer, 1974; Pessemier and Bruno, 1971; to name just a few) as a means of understanding the dynamics of consumption patterns. The application of life style analysis to explain similarities and differences of consumption patterns across cultures, however, has been very limited.

B. Purpose

The purpose of this study is to investigate the impact of socio-economic-demographic variables versus life style on consumption patterns across cultures. The consumption patterns will be measured in terms of use and ownership of several product categories and life style will be measured in reference to the concept of individual modernity. Briefly, this refers, as Inkeles (1977) suggests, to the "process of

psychological change and adaptation in individuals as they come increas-
ingly into contact with modern institutions" (p. 137).

Individual modernity is just one aspect of a much broader con-
cept of modernization. There is considerable evidence in sociology,
psychology and social psychology which examines the differences
between modern and traditional societies and the individual members of
those societies as they move from being traditional to becoming modern
personalities. One of the major theoretical assumptions of the modernity
theory is that psychological modernity leads to modern behavior and
lifestyles (Lerner, 1965; Kahl, 1968; Inkeles, 1969, 1971, 1975; Peshkin
& Cohen, 1967).

The contention here is to integrate the less theoretical and more
empirically-based construct of life styles with the theoretical grounding
of the thesis of individual modernity from the literature of psychology
and social-psychology. The purpose of this study as described here is
significant for several reasons.

First, the concept of life style has sometimes been criticized as
"a disorderly, non-general, nonhierarchical, or atheoretical set of
vaguely related traits whose causal relationships to each other and to
anything else are unspecified (Felson, 1975, p. 37). By linking the
widely used concept of life style from the consumer behavior literature
to another widely used concept, i.e. the thesis of individual modernity,
from the fields of psychology and social psychology, this study is a
first attempt to organize the life style concept according to a set of

theoretically defined dimensions as defined by the thesis of individual modernity. And hence, this study provides a basis for the refinement of the concept of life style.

Second, and as a corollary to the above, by introducing the concept of individual modernity into the literature of consumer behavior, this study takes advantage of the existing literature in other areas of social sciences to suggest a concept which seems to be capable of identifying response commonalities across-cultures. Identification of such response patterns both within a country and across different countries or groups of countries is an important consideration in the evolving literature of cross-cultural consumer behavior (Wind and Douglas, 1974, p. 212).

Third, as Green and Langeard (1975) observe "most of the current information on the consumption patterns of people outside the United States is strictly observational and often emphasize colorful idiosyncrasies" (p. 34). Therefore, by linking life style concept to consumption pattern across culture, this study seeks to fill the gap in one of the most neglected areas in cross-cultural consumer behavior research.

Fourth, marketers have tended to look at world markets on a country-by-country basis or at most at a cluster of countries together. While this practice might have been appropriate in the past, it no longer represents a global view of marketing. A systematic assessment of consumers on a cross-cultural basis is likely to reveal that clustering

consumers both within and among countries may be more meaningful than clustering countries (Sheth, 1974a). The present study provides an empirical basis to assess the usefulness of this approach for market segmentation in an international setting.

Finally, from a conceptual and theoretical standpoint, Wind and Douglas (1974) argue that existing models of consumer behavior such as the ones developed by Howard and Sheth (1969), Engel, Kollat and Blackwell (1968), Nicosia (1966), and Andreasen (1965) are only of partial usefulness in the design of international consumer research because these models are based on the behavior of the U.S. consumer. To extend the scope of these models one would have to modify these models to include variables and constructs that are capable of describing, explaining and predicting consumer behavior in any foreign country. This study is a small step in this direction as it attempts to assess the usefulness of the concept of individual modernity to describe, explain and predict consumer behavior on a cross-cultural basis.

CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter is threefold: (1) To introduce the concept of individual modernity by reviewing the relevant literature from the fields of psychology and social psychology. This will be done by considering an historical perspective, theory of modernity and measurement of modernity. (2) To review and summarize the literature in the area of cross-cultural consumer research as it relates to the purpose of this dissertations. More specifically, the emphasis will be placed on cross-cultural consumer studies that have utilized either life style concept or demographic characteristics of consumer as means of understanding consumers in various countries. (3) To develop hypotheses to be tested in the analysis phase of the present study. This will be done by drawing upon both the literature on modernity as well as cross-cultural consumer studies conducted to date.

A. Individual Modernity

1. Historical Perspective

Abraham (1977) has stated, "Modernization is a new word for an old phenomenon: the many layered all embracing process of social change" (p. 421). In this sense modernization is as old as human societies. In fact some trace the origin of modernity to ancient Greece. "The distinction between Greek and barbarian comprehended many of the the ideas that help us discriminate between the modern and

something else, in particular, the idea of self-conscious pursuit of human ends" (Apter, 1965, p. 9). But, were ancient Greeks more modern than ancient Chinese? It is doubtful. Both the Greeks and the Chinese respected education which means that culture was for them a self-conscious concern. Apter states that concern with culture in itself is not necessarily modern. He suggests another possible view as to the origin of the complex meaning we call modern:

> Modernity began when men gained insight into their economies, with measurable units (money), they found ways to assess performances, controlling them within a context of rapidly changing technology. With such concerns, there emerged the desire to make explanations and predictions about social and political life. Certainly the late mercantilist economists and the early laissez-fair theorists, the physiocrats, and above all Adam Smith, abstracted the mechanism of choice and exchange from the range of activities of which daily life was composed. Thus, modernization as the process leading to the state of modernity, begins when man tries to solve the allocation problem, just as social science was born with the study of choice and performance . . . to be modern means to see life as alternatives, preferences, and choices . . . choice by an individual define his personality. (pp. 9-10).

Black (1966) concluded that the origin of "modern" as a term, denoting the quality of a contemporary era, however, can be traced back to the 6th century. The term was first used in Latin and later in other languages including English to distinguish between contemporary and ancient writers and themes, and by the 17th century "modernity," "modernizers," and "modernization" were used in a variety of contexts. Black found, for instance, Shakespeare used the term to denote commonplace and trite. The term "modernizers" was used to refer to French revolutionary leaders by English writers. When, in the 17th and 18th centuries historians abandoned the accepted periodization of

history on the <u>Christian era</u>, Black hypothesized they began to refer to ancient, medieval, and modern periods which is a more objective use of the term "modern."

The most original formulations of tradition and modernity is traced back to Sir Henry Main's (1861) distinction between <u>status</u> and <u>contrast</u> and in Weber's (1922) discussion of traditional and rational sources of authority. According to Huntington (1976), these formulations see the human society as moving in response to essentially economic causes through "identifiable sequence of ever more beneficient phases" (p. 33). What was happening was that social scientists in their attempt to apprehend processes leading to industrialism borrowed the concept of "development" from the biological sciences and applied it to continuous transformation of human societies in which societies continuously move to higher levels of societal complexity. Portes (1976) lists various theories of social evolution such as theories of Morgan, Comte, Hobhouse, Spencer, Kidd, and Ward in the 19th century and more recently of White (1959) and Steward (1955) that represent this "Social Darwinism" viewpoint.

Despite substantive and methodological criticism directed at these formulations, the various theories of social evolution dominated research on the subject of tradition and modernity for a long time and portrayed a picture of traditional and modern societies which long persisted in the social sciences. In this picture, Eisenstadt (1973) states that the traditional society is portrayed as static, with little differentiation or

specialization, a predominance of mechanical division of labor, a low level of urbanization and literacy, and a strong agrarian base as its main focus of population. In contrast, he found the modern society was characterized as a society with high level of differentiation, a high degree of organic division of labor, specialization, urbanization, literacy, and exposure to mass media.

This picture of tradition and modernity dominated sociological, anthropological and comparative historical studies even after the qualitative characteristics of modern societies became a less central focus of sociological inquiry and analysis as a result of development of social science research with separate traditions of theory, analytical concepts, tools and specialized fields of inquiry in the early 20th century.

According to Eisenstadt (1973), the nature and quality of modern life came into the forefront of social sciences accompanied by new analytical approaches and new methodological tools after World War II. He further states that a closely related development was the emergence of the so-called "Third World" countries and the great upsurge of interest in their "development." Inkeles (1977) suggests that the economists took the lead by studying development and growth in an attempt "to identify the common socioeconomic characteristics of the 'advanced' and to discover the common paths, if any, that had led to economic growth" (p. 136). Scholars from other disciplines of the social sciences such as political scientists, anthropologists and

psychologists each began to study one aspect of a larger process of social change. Since economists played a significant role in research in this field during the fifties, the concept of "economic development" became a term under which other aspects of the problem were categorized. But, as other dimensions of social change gained increasing importance and attention in other disciplines, the term "economic development" no longer reflected the range of institutions under study and diversity of perspectives involved. Therefore, there was a need for a more general term to designate the process of common interest for numerous social scientists.

In the period after World War II the term "modernization" has increasingly been used to denote this process and the term "modernity" has been used to describe the characteristics acquired by the individual members of the society as a result of the process of modernization (Black, 1966).

2. Theory of Modernity

The individual modernity thesis is one of the most popular and pervasive social psychological theories developed by Inkeles (1969) and Inkeles and Smith (1974) and others (Armer and Isaac, 1978). As noted earlier, the theory of modernity is concerned with the place of the individual in the process of modernization. An overview of the theory will be presented by examining: (a) the meaning of modernity, (b) causes of modernity, and (c) assumptions of the theory.

The Meaning of Modernity

A survey of the literature indicates that some students of modernity have used the term "modernization" and "Modernity" interchangeably. Therefore, it is important, at the outset, to make a distinction between the two concepts.

"Modernization," as defined by Gough (1977) is a term used to summarize the changes that take place in technology, modes of communication, normative sanctions, economic processes and world view as a society moves from a less to a more industrialized status, and from a lower to a higher level of material well-being. Viewed in this way, modernization refers to a process, whereas modernity is the "mentality," the state of mind individual members of the society acquire as the process of modernization gets underway. In Gough's terms, "individual modernity is the concomitant organization within persons of those habits of mind, expectations and preferences that accompany and presumably arise from modernization of a culture" (p. 49).

There is no consensus as to what the meaning of modernity is. Portes and Cobas (1976) found that there are almost as many definitions of modernity as there are students of modernity. For instance, Lerner (1966) emphasizes mental flexibility as the distinctive characteristic of modern individuals whose major manifestation is empathy. Others have defined the mental attitudes of modern individuals that develops once the modernization process gets underway, as creative rationality (O'Connell, 1976).

Smith and Inkeles (1966) have proposed a definition of modernity, one with which this author would basically agree:

> . . . modern means a national state characterized by a complex of traits including urbanization, high level of education, industrialization, extensive mechanization, high rates of social mobility, and the like. When applied to individuals, it refers to a set of attitudes and ways of feeling and acting, presumably of the sort either generated by or required for effective participation in a modern society. (p. 353)

The list of definitions of modernity is much longer, but despite this apparent diversity on the definitions of modernity, most students of modernity seem to agree on a set of values or attributes that characterize the modern man. The major attributes of modernity can be divided into economic, political, intellectual and social spheres. These categories have previously been used by Peshkin and Cohen (1967) and Black (1966). In what follows, major attributes of modernity, organized under the above-mentioned categories, and the researchers who have identified them will be presented.

Economic Values

Readiness for New Experiences and Openness to Innovations. A modern man is defined as someone who is a "risk taker," a quality which leads to accepting new ideas and innovations, new ways of feeling and doing things. The readiness for new experience may be manifested in a variety of contexts such as adopting a new drug or a new agricultural technique, accept a new means of transportation, investing in novel ways and so on (Inkeles, 1966, 1969, 1973, 1977; Inkeles & Smith, 1974; Lerner, 1958; Peshkin & Cohen, 1967; Portes, 1973).

Planning Habits. A modern man is oriented towards present and future and in this respect he is well organized, punctual, and sees schedules of time as a desirable way of handling life (Doob, 1967; Inkeles, 1966, 1969, 1977; Inkeles & Smith, 1974; Kahl, 1968; Peshkin & Cohen, 1967).

Political Values

Democratic Orientation. A modern man shows greater awareness of diversity of opinions around him, has respect for other people's opinions and in particular because women are required to play a secondary role in many societies, acknowledges and believes in equality of men and women in all respects (Inkeles, 1966; Inkeles & Smith, 1974; Peshkin & Cohen, 1967; Schnaiberg, 1970; Triandis, 1973).

Distributive Justice. A modern man believes that rewards should be according to contributions and not by whim or special properties unrelated to one's contribution (Inkeles, 1966; Inkeles & Smith, 1974; Lerner, 1958; Peshkin & Cohen, 1967; Triandis, 1973).

Intellectual Values

Belief in Human and Personal Efficacy. A modern man is the one who believes that man's condition is not fixed by inexorable forces and that he can learn and progress to control and dominate his environment rather than being dominated by the environment. A modern man not only believes that improvement in man's life conditions can occur, but he is convinced that improvement should and will occur (Armer &

Schnaiberg, 1972; Doob, 1967; Inkeles, 1966, 1977; Inkeles & Smith, 1974; Kahl, 1968; Peshkin & Cohen, 1967).

Faith in Science and Technology. Another important attribute of a modern man is his respect and faith in science and education. He believes in scientific methods and findings and views education as a means of improving his life and enlarging his horizon (Doob, 1967; Inkeles, 1966, 1969, 1977; Inkeles & Smith, 1974; Peshkin & Cohen, 1967).

Open Mindedness. A modern man has a different orientation toward solving problems, making decisions and judging events. He is most likely to base his decisions on evidence to support a given position. This type of a person is more receptive to economic, political, and social innovations (Peshkin & Cohen, 1967).

Social Values

Endorse Social Mobility. Just as modern man appraises his fellow men by their contribution and not by qualities unrelated to their contribution, so he believes that no one has occupied an automatic and permanent status in the society; rather, men come to occupy a place which they have earned through their performance. This method of evaluation is extended to all persons regardless of sex, color, tribe or religion (Inkeles, 1969; Inkeles & Smith, 1974; Lerner, 1958; Peshkin & Cohen, 1967; Triandis, 1973).

<u>Emphasis on Nuclear Family</u>. A modern man is the one who values a smaller family than a more traditional one and is more likely to adopt methods of birth control to achieve this end (Inkeles & Smith, 1974; Peshkin & Cohen, 1967; Triandis, 1973).

<u>Weakening of Family Ties</u>. For a traditional man family plays a central role in his life which is evidenced by paying due respect to elders, living close to home, accepting family's financial obligations and the like. Whereas, a modern man is characterized with physical, financial, and intellectual mobility (Peshkin & Cohen, 1967).

<u>Value for Urban Life</u>. Finally, because cities are the center of modernization throughout the world, a modern man is strongly attracted to living and working in a city as opposed to small towns and rural areas (Peshkin & Cohen, 1967).

Causes of Modernity

There is no consensus as to what makes people modern. In an attempt to provide an answer to this question, several theoretical perspectives have been developed (Inkeles, 1977). Of these perspectives, three seem to account for much of the variation of opinions on this issue. These are explained very briefly here.

Social Structural Perspective

This perspective is based on theories of social evolution developed in the 19th century. According to these theories, as Portes (1976) explains, development is seen as "gradual, qualitative passage

from less to more differentiated social forms" (p. 63) which takes place through processes of specialization and functional interdependence within the society. In other words, according to Armer and Isaac (1978), this perspective emphasizes the organizational and institutional determinants of development. Several major works on modernization (Eisenstadt, 1964; Lerner, 1965; Levy, 1966; Smelser, 1968) have been influenced by the social structural perspective.

So far as the place of the individual in this evolutionary process is concerned, proponents of this perspective believe that principles that govern the organizational practice of the institutions in which people live and work shape the individual's consciousness and the individual becomes modern by internalizing these principles. Several empirical works in individual modernity have adopted this point of view (Inkeles, 1960; Inkeles & Smith, 1974; Kahl, 1968). These studies demonstrated that, in Inkeles' (1977) terms, "as theory predicted, work in factories, in modern bureaucratic organizations, and in agricultural cooperatives all produced significant and substantial increases" (p. 157) in several modernity values.

Social Psychological Perspective

While social structural theorists emphasize the organizational and institutional aspects of modernization, social psychological theorists concentrate on motivation and values of the individual as forces of social change. As Weiner (1966) notes:

> . . . although there are differences among social scientists as to
> how values and attitudes can be changed, it is possible to speak
> of one school of thought that believes that attitudinal and value
> changes are prerequisites to creating a modern society, economy
> and political system. (p. 9)

Social psychological theorists further believe that attitudes and values

necessary for the process of modernization are acquired, through

learning, early in life "as a result of distinctive family constellations"

(Inkeles, 1977, p. 153) and that qualities learned in this process remain

fixed for the life of the individual. In sum, this approach is the

continuation of Weber's (1958) thesis in Protestant Ethics and the Spirit

of Capitalism. Several major works can be classified under this

perspective (Hagen, 1962; Lerner, 1965; McClelland, 1961, 1963;

Schnaiberg, 1970).

World System Perspective

World system perspective or what has been referred by some

scholars as "dependency theory" (Portes, 1976, p. 74) emphasizes

international structures and processes in explaining development and

underdevelopment of societies (Armer & Isaac, 1976, pp. 316-17).

Therefore, for scholars who follow this approach, world system is the

unit of analysis. Unlike the social structural and social psychological

perspectives which are based on Western sociological thoughts and

traditions, the theory of dependency originates from the "Third World."

As Portes notes, "the theory of dependency is the counterpart of

earlier theories of imperialism (Lenin, 1939; Hobson, 1965) seen from

the standpoint of the subordinate nations" (p. 74). Examples of works

in this category include Baran, 1957; Dos Santos, 1976; O'Brien, 1975; Prebisch, 1950; and Wallerstein, 1974.

The logic followed in the dependency theory is that the power of the advanced (colonial) system replaces indigenous culture patterns with that of foreign models. The underlying process is that of cultural imitation (i.e., "certain social classes in developing countries come directly into contact with the international bearers of this new culture" (Inkeles, 1977, p. 156) and simply imitate the new model. For those who do not have this direct contact, Inkeles (1977) claims that movies, TV, and other means of mass communication play the role of bearers of the new cultural model and diffuse "superficial forms of adherence to the same Western model" (p. 156).

It follows from the dependency theory that individual members of the society can become modern without the society itself being developed economically. In fact, followers of the dependency theory such as Portes (1976) do not view development and underdevelopment as two different stages in the history of mankind, but as an integral part of the same "word-economy" in which growth and development in the West could not have occurred without keeping other parts of the world--The Third World--underdeveloped (p. 74).

Assumptions of the Theory

The first assumption of modernity theory as stated by Tessler and Hawkins (1979) is that certain individual attitudes and values are

essential for development and that these attitudes and values emerge in response to development related stimuli such as demographic and social structural changes at the societal level. In other words, social changes at the societal level first change the life styles of individual members of the society and, consequently, their attitudes and values. Several studies have supported this claim (Inkeles, 1969; Kahl, 1968; Levine, 1967; Portes, 1973; Rogers, 1969).

These authors, by and large, believe that social change takes place in an integrated fashion. Schnaiberg (1970) sums it up by saying that they conceive of the modernizing process "as some single unilineal evolutionary development taking place across all behavioral and attitudinal spheres" (p. 420).

In recent years, a number of scholars have challenged this unidimensional view of modernity. For example, in his review of Inkeles and Smith's Becoming Modern (1974), Yogev (1976) criticized Inkeles and Smith for their insistence on unidimensionality of modernity syndrome and argued that their "unidimensional approach is based on rather weak empirical evidence" (p. 116).

Opponents of the unidimensional approach suggest that individuals who are affected by the process of modernization are more likely to change some patterns and commitments, but not others. Yogev (1976) best expresses this position:

> Are there many people ("even" in Western affluent countries) who are simultaneously aspiring, active public participants, oriented toward change, well-informed, positively oriented toward family size restriction and women's right, etc." And should people lacking some of the above and other mental qualities be considered "less modern" than others? (p. 116)

Yogev further argued that:

> Although incorporating positive attitude towards women rights into their "syndrome of modernity" . . . they [Inkeles & Smith] constantly refer to the "modern person" as "modern man." (p. 116)

The unidimensionality assumption has affected the measurement of the modernity syndrome. Various measures of individual modernity can be distinguished based on their unidimensional or multidimensional approach. More will be said about this issue in a later section on measurement of modernity.

The second assumption of the modernity theory as explained by Armer and Isaac (1978) suggest that the resultant new personal orientations (i.e., attitudes and values) are assumed to lead to modern behavior. Inkeles and Smith (1974) note, for example, that:

> . . . attitude and value change defining individual modernity are accompanied by changes in behavior precisely of the sort which we believe give meaning to, and support, those changes in political and economic institutions. (p. 312)

Other studies have supported this notion (Inkeles, 1969, 1971, 1975; Kahl, 1968; Lerner, 1959; Peshkin & Cohen, 1967; Portes, 1976; Portes & Cobas, 1976).

Implicit from the second assumption is that new personal orientations accompanied by modern behavior, in turn, intensifies modernization at the societal level. Thus, the "spirit" of modernity,

using Inkeles' (1966) term, is seen both as a precondition for societal modernization and as a consequence of the process of modernization. Inkeles notes:

> . . . indeed, in the end, the idea of development requires the very transformation of the nature of man--a transformation that is both the end of yet greater growth and at the same time one of the great ends itself of the development process. (p. 138)

This assumption is supported in the works of a number of scholars (Banfield, 1958; Hagen, 1962; McClelland, 1961).

3. Measures of Individual Modernity

Since the advent of the concept of individual modernity in the early 1960's, numerous authors have proposed and constructed a variety of scales to measure the individual modernity syndrome. The proposed scales are quite varied in their basic orientation and approach toward modernity. The intention here is not to review all these measures. But, rather, to examine a sample of scales that have attracted much attention and debate in the field and seem to encompass the varied approaches and methodologies that have been utilized.

Generally speaking, two aspects of the measurement approach stand out as distinguishing features of various scales of individual modernity. The first aspect is the much debated controversial assumption of unidimensionality. As pointed out earlier, a number of respectable measures of individual modernity such as Inkeles and Smith (1974) and Kahl (1968) have been constructed with a unidimensional approach. These scales have, among other things, one thing in common: the items and subscales included in the scale are assumed to

be intercorrelated. While most authors who have adopted this approach recognize the possibility of variations, overall, they believe that the items in the scale form a general value syndrome of modernism. In Kahl's (1968) words, "on the average, a man who is high on some will also be high on the others, although there is room for variation (p. 21).

In contrast to the unidimensional approach to measuring modernity, some scholars have adopted a multidimensional approach (Dawson, 1967; Portes, 1973; Schnaiberg, 1970). These authors, by and large, according to Triandis (1976), believe that a unidimensional approach is too simple to capture "the complexities that cultural and situational factors impose on the psychological states which can be described as modern" (p. 178).

While the question of unidimensionality/multidimensionality must be resolved through empirical work, there are convincing arguments in the literature which propose a middle ground position and call for a combination of both approaches simultaneously. Triandis (1976) states:

> The truth probably lies somewhere in the middle; namely, that there is a very powerful and significant first factor . . . which can be considered the most important, so that Inkeles and others who have dealt with only a simple factor have captured the most important aspect of modernization. Nevertheless if you want to do adequate work, and describe most of the variance, then you want to add factors and some of these factors are not going to be universal, but rather will be culture-specific; that is, they will be specific manifestations of the modernization syndrome which interact with cultural variables and produce unique solutions to the modernization of particular social groups. (p. 170)

The second aspect relates to the cultural orientation that has guided the process of scale construction. Some authors have adopted a culture-specific perspective in the construction of their scales. This means that various items in the scale have been developed from "local material" which are salient to the population under study. The set of culture-specific scales have commonly been constructed after extensive field research and with the aid of local "experts" who serve as judges in the process of item selection. Furthermore, the direction of modernity is also determined by what local people consider modern.

In contrast to a culture-specific approach, some authors have opted for a "portable" measure (i.e., a culture-general scale that would be applicable to any cultural setting). In this approach, items have been selected from the existing literature and the direction of modernity is determined by what modernity theory considers modern.

If we combine the two aspects (i.e., dimensionality and cultural orientation), we can classify most measures of individual modernity proposed so far in the literature. Figure 1 illustrates such a classification scheme.

In this section, a number of scales of individual modernity that fall in various cells of Figure 1 will be briefly reviewed. As mentioned previously, this is not intended to be an exhaustive review of existing measures of modernity. Rather, the purpose is to review one or two well-known scales in each cell in order to illustrate various approaches to measuring modernism. There are, obviously, many more scales that

CULTURAL ORIENTATION

	Specific	General
DIMENSIONALITY		
Unidimensional	Shiloh Scale Doob's Scale	Inkeles & Smith's OM Kahl's Scale
Multidimensional	Dawson's Scale	Schnaiberg's Scale

Figure 1. A taxonomy of measures of individual modernity.

can be classified in various cells of Figure 1. Furthermore, the classification scheme of Figure 1 does not result in clear-cut boundaries between various scales. There is some degree of overlap between them. For instance, a culture-general scale may well include some culture-specific items. But, if most items in a given scale were regarded as culture-general, the scale itself was classified as a culture-general scale. We now turn to a review of various scales.

Unidimensional/Culture-Specific Scales

The Shiloh Scale

Unlike Smith and Inkeles who assume that modernism is a universal phenomenon, meaning that all modern cultures share basically the same content and that modern individuals share the same traits, regardless of their past, Stephenson (1968) argues that "modernization is the movement of persons or groups along a cultural dimension from what is defined by the cultural norms as traditional toward what is defined by the same culture as modern" (p. 268). Therefore, he set

out to construct a measure of modernity from items that are regarded by the population under study as relevant to being modern or traditional. Based on extensive notes, interviews and observations in Shiloh, a small community in the southern Appalachian mountains, Stephenson developed over fifty statements that were later submitted to a panel of experts who were asked to sort them out on the basis of their traditional or modern content. This procedure resulted in a battery of fifteen value statements. He then constructed a Guttman scale based on six of the original fifteen traditional-modern items. From this, Stephenson concludes that "we are measuring something real 'out there' and that that something is what we thought it was" (p. 274), (i.e., modernism).

The Shiloh scale suffers from a number of shortcomings. First, the fact that only six of the original fifteen items met the requirement of the Guttman scale casts doubt on the adequacy of the scale. Second, as pointed out by Stephenson himself, the scale is only applicable to the population of Shiloh and that a similar study with any other population is likely to result in a different set of items. Finally, the use of the Guttman scale in psychological measurement has been heavily criticized on several accounts.[1]

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[1]For details of criticism directed at the Guttman scale see Nunnally (1978), pp. 73-75.

Doob's Scale

Doob's (1960) scale of psychological modernization is based on what Doob calls "norms of modernization."[1] Doob developed the scale from his studies in a number of East- African countries including Kenya, Uganda, Tanzania and Somalia. Each norm of modernization or subscale consists of ten items that have "evolved from discussion with various social scientists" (p. 415). Doob does not provide details on the reliability and validity of these scale, but indicates that the 'scales have been item-analyzed, most generally by means of a simple Likert-type technique" and suggests that they are valid because "they appear to be meaningful and intelligible to African respondents" and they happen "to be the philosophy of many (not all) African leaders and their followers for the moment" (p. 415).

Whether a response is regarded as modern or tradition, according to Doob (1967), "is based upon what African leaders appear to consider desirable as they define modernization" (p. 415). In this sense, then, Doob's scale constitutes a culture-specific rather than a culture-general scale. However, Doob suggests that his scale can be used with different samples elsewhere in Africa.

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[1]There are eight such norms in Doob's scale: (1) Emphasis upon the future; (2) positive attitude toward country's present government; (3) confidence and optimism; (4) patriotism; (5) positive attitude toward science; (6) non-paranoid; (7) approval of the country's leaders; and (8) a de-emphasis of traditional values.

Unidimensional/Culture-General Scales

Inkeles and Smith's OM

Based on a model of modern man (Inkeles, 1966, 1971) that states standard institutional environments of modern society induce standard patterns of response despite the countervailing randomizing effects of persisting traditional patterns of culture, Inkeles and Smith obtained data, through interviews with adult males, from six developing countries of Argentina, Chile, India, Israel, Nigeria, and Pakistan. Purely on theoretical grounds, Inkeles and Smith developed 166 items that they thought were relevant for measuring individual modernity.

Inkeles and Smith (1966, 1971) conceived that each item constituted a continuum running from the traditional to the modern. The traditional and modern end of the continuum was determined theoretically. Once the traditional and modern end of a continuum was decided for each item, the operational definition of tradition and modernity consisted of "that point in the distribution of answers to any question which came closest to putting half of the country sample on the modern side and half on the traditional side" (p. 87). Moreover, traditional responses were scored 1 and modern responses were scored 2. The overall score consisted of the average of "ones" and "twos" received by each individual. Using this method, Inkeles and Smith developed a number of different forms of OM (overall modernity) scales that were used throughout their analysis. The reliability of the various OM scales were measured using Spearman-Brown and Kuder-Richardson formulas. The reliability indices obtained were judged by Inkeles and

Smith to be "quite satisfactory by the standards usually applied to tests of individual attitudes and values" (1974, p. 91). To assess the validity of OM scales, Inkeles and Smith examined simple and multiple correlations of OM scales with eight "predictor variables" including education, factory experience, urban experience, etc., and concluded that various OM scales are valid indicators of individual modernity in all six countries under study.

From a methodological standpoint, OM Scales may be criticized on a number of accounts. First, while the criterion-group method used by Inkeles and Smith (1974) is a commonly used method when there are clearly identified test groups (Coughenour & Stephenson, 1972, p. 83), its desirability in this case is open to question. For one thing, In Inkeles and Smith's study, those with more years of schooling, factory work experience, and urban experience comprise the modern group. To what extent is one ready to accept the notion that the most educated are the most modern at all times and all places? From a historical point of view, as stated by Coughenour and Stephenson (1972), "the educated have often been allied with conservative economic and political elements" (p. 83), and I trust that this is more so in most developing societies. Secondly, the criterion-group method used by Inkeles and Smith confounds the relationship between the OM scales and three important variables (i.e., education, factory experience and urban experience).

Furthermore, their conception of tradition and modernity is one of polar opposites implying that a modern individual is modern in all respects of his/her life. This notion rests on shaky grounds as many studies reveal that a mixture of tradition and modernity is quite a possibility (Gusfield, 1976, pp. 445-446). Finally, the Inkeles and Smith's system of dichotomization at median results, as they acknowledge themselves, in grouping people who perhaps should logically be kept apart.

Kahl's Modernism Scale

Joseph Kahl's (1968) study of values in Brazil and Mexico was guided by the question: "To what degree does industrialism create a common way of life for all people?" This is essentially the same question raised by Inkeles and Smith in their investigation of individual modernity in six developing countries. But, Kahl's concern was primarily methodological (i.e., "to make an advance in the description and measurement of values" (p. 8)).

Kahl (1968) began his study of values in Brazil and Mexico with a series of qualitative interviews in 1970. Relying on social surveys and aided by the interview material, Kahl developed a large number of attitude items which seemed "to reflect the core values of a modern orientation toward life, and more specifically, toward work and career" (p. 132). The items that reflected a single basic value were subjected to a factor analytic technique in order to "purify" each value scale.

This procedure produced 14 scales. A respondent's score on a given scale consisted of the sum of his responses to all items in that scale.[1]

Kahl (1968) argues that his modernism scale is a valid one because first of all he feels that there is close correspondence between the theoretical constructs found in the literature and the items used in the construction of the modernism scale. Second, Kahl argues that the pattern of item and subscale intercorrelations found in both countries were highly similar.

Multidimensional/Culture-Specific Scales

Dawson's Scale

Dawson (1967) studied traditional versus Western attitudes in Sierra Leone in terms of indigenous culture. The procedure for scale construction can be summarized as follows: Eighteen social anthropological concepts ranging from the concept of gift to status of woman to authority system, etc., were chosen as being representative of traditional social organization among the tribal groups of Sierra Leone. Each of the eighteen concepts was defined by four statements, giving a number of opinions about the concept, ranging from a traditional attitude, to a semi-traditional attitude, to a semi-Western attitude, to a Western attitude. Thus, Dawson's traditional-Western scale consisted of

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[1] A response of "Disagree very much" was scored 1 and other answers were scored higher through "Agree very much" which was scored 4. Moreover, these numbers were weighted by the loading the item had in the factor analysis for that particular scale.

four major eighteen-item sub-scales, and eighteen minor four-item subscales.

The reliability of the four main subscales was assessed by Spearman-Brown Formula which revealed satisfactory reliability coefficients ranging from .76 to .85. Validation of the scale consisted of administering the scale to samples with known exposure to Western influences. The scale sufficiently discriminated between tradition-oriented samples and Western-oriented samples, an indication of the validity of the scale.

Multidimensional/Culture-General Scales

Schnaiberg's Scale

Unlike Inkeles and Smith's (1974) unidimensional approach to measuring individual modernity, Schnaiberg (1970) took a multidimensional approach in his study of married Turkish women in Ankara, Turkey and four Turkish villages. Specifically, he raised the question:

> Does the term "modernism' refer to some set of items which are both theoretically and empirically linked sufficiently to subsume them under the same term? Or are there sets or clusters or 'dimensions' of items referring to individual modernity that do not appear so closely linked to others? (p. 403)

Schnaiberg (1970) selected forty-six items "that were believed, a priori, to represent the various dimensions of modernism" (p. 405) as discussed in the literature. These items were categorized into six dimensions of modernism: (1) mass media, (2) extended family, (3) nuclear family, (4) religiosity, (5) environmental orientation, and (6)

production/consumption behavior. Each individual item was dichotomized at median giving modern responses a score of 1 and traditional responses a score of 0. In this way, each index value was simply the number of modern responses given by each individual respondent. The data were factor analyzed with a varimax rotation. The results revealed a four-dimensional structure of modernity. The first and the most important factor on which most items loaded heavily was labeled an "Emancipation Factor" since the items with highest loading on this factor related to "freeing of the woman from the constraints of familial and community proscription." The second factor was heavily loaded with production/consumption items and suggested modernization of family economic functioning. The third factor reflected an emphasis on nuclear family versus an extended family relationship. Finally, the fourth factor cannot be readily interpreted since items from various indices had high loadings on this factor.

Schnaiberg (1970) concludes that his analysis "cast some doubt about the unity of modernism" (p. 418).

B. Consumer Demographic and Life-style Studies Across Cultures

The first study to be reviewed here is by Vickers and Benson, Ltd. (1972). This is a report on the life style of French and English Canadian women that was prepared based on a larger syndicated survey conducted by Burke International Marketing Research in 1971. The purpose of the report was to characterize the life styles of French and

English Canadian females because it was believed that "the attitudes, values and desires of Quebec consumers often differ from those of their counterpart in the rest of the Canada" (p. 4). The female sample consisted of regionally stratified sample from a number of major urban centers. The questionnaire required responses to 300 activities, interests and opinions (AIO) items. The analysis of the data centered on the proportions of the French and English Canadian groups who had generally agreed on each scale. To partial out the effect of socio-economic-demographic variables, a set of weights was applied to the French responses to make the French group demographically identical to the English group. The AIO items that significantly differentiated the French and English respondents were factor analyzed using principle component with a varimax rotation to reveal underlying life-style dimensions. The analysis showed that the English and French Canadian women are different from each other on several life-style dimensions. For example, the study found that "the French woman sees herself strongly in the role of homemaker and feels more strongly that—woman's place is in the home—than does her English speaking counterpart" along a life style dimension labeled as Role of The Homemaker. Similarly, differences between the two groups were found along other life style dimensions. In sum, the study concluded that "the needs and priorities of the French Canadian woman are fundamentally different from those of her English speaking counterpart. The two have strikingly different outlooks on life." (p. 2)

In an empirical investigation of the relationship between culture, acculturations, and consumer behavior, Hair and Anderson (1972) considered three hypotheses: "(1) cultural heritage is related to acculturation in consumer behavior, (2) acculturations in consumer behavior, and (3) demographic variables are related to the consumer acculturations process." (p. 424) Acculturations defined as "the process of becoming more American-like, as manifested in one's behavior as a consumer" (p. 424) was measured by means of three acculturation scales concerning the extent to which one had acquired American perceptual modes, acculturations in consumer behavior patterns and acculturation in food habits. Respondents were 116 foreign students and 84 American students attending the University of Florida in the Spring of 1971. Foreign students came from several countries that were subsequently classified into two subsamples: those from "developed" countries and those from "developing" countries.

To test the hypotheses of the study a stepwise multiple regression was performed with individuals' acculturations score in consumer behavior as the dependent variables and a number of independent variables including acculturation scores in perceptual modes and food habits and demographic variables. All three hypotheses posed by study were supported by the analysis. The findings of particular interest here are:

1. Respondents from developed countries generally were more accultured both in their overall behavior and in their consumer behavior, relative to those from developing countries. One explanation for this is that the heritage life style of those from

developed countries were closely resembled that of the United States. . . Another possibility is that individuals from more progressive countries generally tend to accept changes more readily than those from less progressive, tradition-bound societies.

2. Individuals were most accultured in their consumer behavior, slightly less in their food habits and considerably less in their perceptual modes. This finding is consistent with acculturation theory which suggests that material objects generally are taken over earlier than abstract, non-material characteristics.

3. The age of respondents were negatively correlated with the extent of consumer acculturations. (pp. 426-427)

Green, Cunningham and Cunningham (1971) conducted a cross-cultural study to provide an empirical base concerning whether "differences exist in the characteristics of consumers of four products in four nations, and the type of characteristics which tend to distinguish the consumers of these products in the countries under investigation." (p. 136). The specific hypothesis posed by the study was that "there are no differences between the perceived image of consumers of the same products across four nations. That is, socio-cultural factors do not affect the perceptions of profiles of a typical user of a specific product." (p. 136)

To test the hypothesis of the study, four parallel samples of college students from United States, France, India and Brazil were selected. The samples were comparable in terms of age, marital status and consumption patterns of products under study. The respondents were asked to identify the consumers of four products (soft drinks, gasoline, toothpaste and ballpoint pens) according to thirteen socio-psychological attributes (classified on a five point semantic differential

scale). Discriminant analysis was used to determine if overall differences exist between the four countries based on the product attributes. The analysis of the data suggested that consumers in the four nations tend to be distinguished from each other along several dimension which led the authors to reject the null hypothesis. For example, "the Indian consumer of toothpaste was characterized as being more exciting, more modern, and younger than consumers in the other nations." (p. 141) This finding, according to the authors, suggest that toothpaste is in an earlier stage of the life cycle in India compared to other countries under study and hence these characteristics could represent the perceived characteristics of innovators in India. This provides some evidence that consumer characteristics across nations may vary according to the product's stage in the life cycle. A similar finding was noted with respect to consumers of the ballpoint pens in India. The authors did not report their findings with respect to consumers of the soft drinks and gasoline.

Cunningham, Moore and Cunningham (1974) studied shopping and consumption patterns of individuals in the various social classes of Sao Paulo, Brazil. The subjects in a stratified random sample of Sao Paulo metropolitan area were asked to respond to a number of questions tapping several areas of consumer behavior including type of retail outlet patronized, sources used to obtain information about specific products, means of transportation to markets, and the use of credit cards. These were investigated with regard to purchase of eighteen product categories (only nine were reported in the article) including

major appliances, small appliances, TV's, housewares, cosmetics and so on. The data were analyzed by means of contingency tables that classified the respondent's social class against the response categories on the respective questions. Significant differences were found among individuals of various social classes with regard to their shopping behavior.

In a cross cultural study of family buying decisions, Hempel (1974) investigated husband-wife interactions in family decisions and found that the extent of intrafamily consensus in families selected from seven towns of Northwest England and Hartford, Connecticut was related to a number of socio-economic variables. The findings indicated that family size, stage in life cycle, attitudes toward previous residence and life-styles (particularly physical mobility and membership in civic organizations) were related to the extent of husband-wife agreement in both cultures. Overall, Hempel (1974) found a high degree with cross cultural similarity in household decision making process.

The Linton and Broadbent (1975) study primarily dealt with research techniques that Leo Burnett uses to collect life style data in over a dozen countries. To show the usefulness of life style analysis in understanding consumers in different countries, Linton and Broadbent (1975) compared percentage of French and British respondents who agreed with a number of life style items in Burnett's life style data of 1973 in France and 1972 data in Great Britain. They found dissimilarities between the two cultures and attributed that to

genuine cultural differences. As an example, 70 percent of British women agreed with "shopping for clothes is fun", whereas only 54 percent of French women agreed with the statement. From this they concluded that "in France there is a more Latin view of the body, where clothes are a serious business. The English women may be physically more cool and correct, but lighthearted about shopping." (pp. 53-54)

In a cross-national study of samples of consumers in France and the U.S., Green and Langeard (1975) compared profiles of samples of French and U.S. consumers along several dimensions of consumption behavior and examined the profiles of the innovators identified in the two samples. In addition to purchase information on fifteen grocery products and the use of eight retail services, respondents were asked to provide information along several socio-economic demographic variables including age, income, education, employment status and family size. French and American respondents appeared to be different on a number of dimensions relating to consumption behavior including word-of-mouth communication, willingness to try new products and services, media habits and membership in formal organization. The study also sought to compare French and American innovators of grocery products and retail services along a number of socio-economic-demographic variables. The study found that the U.S. grocery products innovators could not be distinguished from the overall population on demographic variables. The U.S. service innovators, however, tended to have more children. Whereas, the French grocery

product innovator could be distinguished from the non-innovators on two of the demographic variables. They tended to be found in the 35 to 49 age group and in the middle income category. The French retail service innovators could not be distinguished from the noninnovators in terms of demographic variables measured in the study.

In an international comparative study of subscribers to and users of product test magazines in the U.S. and Germany, Engledow, Thorelli and Becker (1975) collected information about consumer information agencies and the consumers which make use of their information. The objectives of the survey were:

1. To characterize the subscribers of three major consumer information publications as to demographics and certain attitudes. . .

2. To compare and contrast the subscribers of the three organizations, so as to isolate similarities and differences in subscriber characteristics among the different organizations.

3. To test the broad hypothesis that there exists a new breed of affluent, information-intensive consumers with consistent demographic and attitudinal patterns across cultural boundaries--a group to which we refer as "The Information Seekers."

The research design called for comparisons to be made between subscribers and "average consumers" within countries and between groups of subscribers across countries. The subscribers were selected randomly from the subscription list of consumer information agencies in both countries. The "average consumers" were selected from Indianapolis and Frankfurt metropolitan areas using a stratified procedure.

The data has been analyzed from various perspectives and reported elsewhere. (Becker, 1976; Anderson and Engledow, 1977) The analysis reported in Engledow, Thorelli and Becker (1975) consisted of two-group comparisons between subscribers and average consumers within countries, and between subscriber groups between countries using tests for statistical significance (Mann-Whitney U Test for ordinal data and Chi-Square for nominal data). The findings of the study can be summarized as follows:

> ". . . subscribers are found to be of higher income, education, and social class than "average consumers" in their respective countries, and are much more critical and "rational" consumers--with a strong interest in consumer affairs. They also, however, are somewhat more conservative and much more discriminating in their criticism of business and advertising than would be supposed by the usual consumerist stereotype. (p. 141)

The finding of particular interest here is the striking similarity found between subscribers in both cultures in terms of demographic charac-teristics, attitude, and purchase behavior which led the authors to suggest that:

> ". . . there exists a rather homogeneous cross-cultural elite of affluent and information sensitive consumers which may be of strategic importance to consumerists, public policy makers, and marketing decision makers." (p. 141)

Similar findings are reported by Anderson and Engledow (1977) when the data analysis is extended from a univariate analysis of similarities to multivariate analysis examining basic patterns of attitudes and behavior across cultures.

Urban (1976) used the 1971 life style data collected by Leo Burnett Company Inc. in the U.S. and the U.K. to investigate similar-

ities and differences in consumer life style profiles. The study hypothesized that "greater similarities in life-style would be expected between individuals with similar life-chance profiles, and thus similarities across and differences within cultural (or national) groups would be seen" (p. v-9). The life style construct was measured in terms of 38 AIO variables from the total set of 200-300 items that were judged to be conceptually equivalent in both cultures. To be conceptually equivalent the items had to be either identical in wording or be equivalent in meaning as suggested by prior analysis.

The construct of life-chances, defined as the individual's probability of a supply of goods and living conditions, was measured by three demographic variables: age, education and income.

To test the hypothesis, the AIO items were factor analyzed by a principal component analysis to reveal underlying life style patterns and then discriminant analysis was used to predict the character and nature of differences between all groups. The analysis of the data showed that "only cultural group membership could be predicted by life style responses" and that "the demographic distinctions (life-chances) of individuals did not provide predictive measures of their stated life-styles" and hence the research hypothesis was rejected. Nevertheless, the study found that cross-cultural consumer similarities exist along life style dimensions. In sum, a number of conclusions were drawn from the analysis including:

1. It does seem realistic to empirically measure and "match" consumer groups across national boundaries.

2. Distinct similarities and differences between specified market groups can be drawn along various dimensions that define the life style space, rather than depending on demographic matching.

In another study by Douglas (1976) the life style patterns of working wives in the U.S. and France were analyzed. The French data was provided by Delta International and the U.S. data by Leo Burnett. As a result a different set of AIO items were analyzed in the two countries with only 10% to 15% of the items being similar. A principal component factor analysis was conducted separately on each country's data and then the overall factorial structure were compared. Five factors were extracted; the first four were highly similar in the two countries, although the relative importance and the specific character of these components differed. Briefly the similar factors were, (1) the Home Factor reflecting the degree of home orientations; (2) The Social Factor indicating involvement in social activities outside the home; (3) The Frustration Factor representing women's failure (or success) in coping with the dominant role model; (4) The Innovation Factor dealing with degree of interest in innovation. In addition to these, the U.S. data revealed a unique factor, The Intellectual Factor which covered interests in a variety of intellectual pursuits whereas The Role Factor representing traditional perceptions of male and female roles was extracted from the French data. The general life style analysis was followed by a life style study of two highly similar sub-groups in each country, "The Liberated" and "The Traditionalists". Further analysis

revealed that The Traditionalists in the U.S. showed an interest in fashion while their French counterpart did not. The U.S. Liberated group made less use of convenient food whereas The Liberated group in France were heavy users of convenience items. Douglas (1976) explains these differences by the different stages in the evolution of the feminist movement in the two countries suggesting that in the U.S. where liberated attitudes towards a women's role are becoming a norm and the use of convenience foods is widespread, the "avant-garde" in the feminist movement would tend to adopt advanced views in relation to important social trends such as concern for ecology and hence an interest in "natural" foods.

Similar to Urban (1976) study, Douglas (1976) was primarily concerned with patterning of life styles in the U.S. and France. Douglas (1976) claims that this is a study of grocery and fashion purchase behavior, but what she really means is attitudes and opinions toward grocery and fashion items rather than actual consumption behavior as exemplified in the use and ownership of these items.

In 1977 Urban studied the effect of standard socio-economic-demographic variables on the usage of media. More specifically the research hypotheses tested were (1) "usage of different classes of media, and preferences for types of media is expected to be significantly different for different socio-economic groups in the United States," and (2) "similar relative differences are expected to be evidenced in another post-industrial society, France". (Urban, 1977, p. 56).

To test the hypotheses of this study, Urban used Leo Burnett's female life style data in the U.S. and data from a French study supervised by Leo Burnett. Two sets of variables were utilized for the test of hypotheses. The first consisted of standard socio-economic-demographic variables of education, income and occupation. The second set of variables measured respondent's behavior toward the four major media: newspapers, magazines, television and radio. Group usage means on each of the four major media classes were compared for several demographic groups, (Demographic groups were formed by identifying the high and low ends of each sample distribution on demographic variables), using a t-test.

The analysis of the data supported the research hypotheses posed in this study. Significant differences in both media exposure and content preferences were found between socio-economic groups in the United States and France. As an example, the study found that "in both the United States and France, women with college-level education watch less television, and read more newspapers and maga-zines than do women with less education." The study concluded that:

1. . . . some underlying concepts--useful in domestic media planning are transferable to a cross-national setting.

2. To the extent that similar patterns of media usage reflect similarities in consumer life styles and time-budgeting, it seems likely, that future research would yield positive result.

3. Although there are unique characteristics in each national advertising environment, this study suggests that underlying consistencies exist in the way advertising works across national markets. (Urban, 1977, p. 60)

Douglas (1977) examined the impact of employment status as opposed to other socio-economic and demographic variables on the time spent reading magazines for a sample of American and French women. The data used for this study was a subset of a life style study (Douglas, 1976) that has been summarized in this literature review and, therefore, the details of data collection will not be repeated here.

For the purpose of the study reported in Douglas (1977) a matched sample of working and non-working wives in the U.S. and France were selected by a quota procedure in order to control for other socio-economic variables. Readership of a wide variety of magazines were factor analyzed in both countries using a principal component analysis with varimax rotation to identify the major groupings of magazines. Differences between working and non-working wives in readership of these magazines were thus examined by two group discriminant analysis using factor scores on major magazine types as discriminating variable.

The analysis showed that frequency of magazine readership across all magazines did not discriminate between the two groups. Some differences, however, were found in readership of magazine types. For example, the homemakers magazines were more frequently read by non-working wives, as might be expected. Similar findings were emerged from the French sample.

From these findings, Douglas (1977) concluded that:

"The similarity of findings in the French and the U.S. studies, suggests that the lack of differences observed in the U.S. is not

only a reflection of the widespread prevalence of progressive or liberated attitudes among non-working as well as working women in U.S. society, due to the development of the women's "lib" movement, but probably reflects a more fundamental lack of major differences in interests between the two groups. (Douglas, 1977, p. 43)

Furthermore, the author argues:

The similarity of the French findings provides further support on a more generalized basis for these conclusions, providing a validation in another social context. (Douglas, 1977, p. 43)

In an article emphasizing the need for consumer focus in cross-national research, plummer (1977) suggested three analytic models for cross-cultural analysis: shared cultural norms, segmentation within cultures, and correlates of usage. Using Leo Burnett's life style data, plummer (1977) showed how these analytic models can be used to aid multinational marketers in developing relevant strategies for foreign markets.

As for the analytic model of cultural norms, R-factor analysis was used to empirically define pattern of shared meaning for a given set of AIO statements for each country. To understand cultural norm differences between countries the agreement levels from each sample on the items comprising the underlying life style dimension were examined. For example a comparison of the percent of women in each country who agreed with the item "there is too much emphasis on sex today" which loaded significantly on each separate factor, plummer classified the U.K., Italy, France and English Canada and the U.S. as holding more traditional and conservative views on the subject of morality and Germany and Austria as being more liberal.

The second model, i.e. segmentation within cultures emphasizes differences within a culture based on the argument that "there is possibly as much variation in life styles and values within a culture as there is between cultures." (Plummer, 1977, p. 11). Utilizing this argument, each country's population was segmented based on their responses to AIO statement by performing a cluster analysis. The cluster analysis generated a number of homogeneous life style types. As an illustration, the cluster analysis in the U.S. and the U.K. generated nine female life style segments in each country separately whereas in Canada seven English speaking and five French speaking segments were found. The next step in this model involved an examination of demographic similarities across the four markets. Then segments were grouped on the basis of the best demographic matches among the thirty different segments.

In the final model, namely the correlates of usage, correlation analysis was used to identify those AIO statements which related significantly to the use of a common product. Only the significant life style items, were then used to profile the consumer of a given product. As an example the life style profile of a heavy beer drinker in the U.S. indicated that the heavy beer drinker was a risk taker and a pleasure seeker, at least in fantasy. For cross-cultural purposes, the life style profiles generated separately in each country can be compared to reveal cultural similarities and differences.

Chadraba and O'Keefe (1981) studied value perceptions in several foreign countries to determine if consumers can be clustered across national boundaries. The study utilized quota samples of college students in four countries: Austria, France, Switzerland and the United States. The respondents were similar in terms of age and education. The respondents were asked to indicate the price they would expect to pay for five products: pocket size camera, pocket size calculator, AM/FM digital clock radio, high intensity desk lamp and extension cord. In addition, the respondents were also asked to indicate what price they would expect to pay for the base product with one of several hypothetical features added. A formula was used to calculate perceived value as a percentage increase over the price of the base product.

The analysis of the data consisted of two phases. In the first phase the owners of the products were compared for similarity in value perceptions using the Mann-Whitney U Test. The second phase compared non-owners using the same procedure.

Results of the analysis suggested that there are similarities in value perceptions among students that hedge national boundaries. From this the authors concluded that:

1. A concept such as the perceptions of added value seems useful in cross-national pricing. . .

2. Innovations that improve upon well accepted products have a likelihood of being valued similarly across national boundaries . . ." (Chadraba and O'Keefe, 1981, p. 336)

C. Summary of Literature Review

A review of literature concerning the concept of individual modernity as presented in this chapter leads us to several important points. First, individual modernity is a universal phenomenon and not a distinctive property of any single cultural traditions. Several major studies of individual modernity have demonstrated that attitudes and values of modernity express one form of human potential which comes to prominence in certain historical times under certain types of social conditions.

Second, the literature review indicated that those who adopt the values and attitudes of modernity can be uniquely distinguished from the rest of the society in terms of their life style and orientations.

Third, those individual members of the society who come into contact with modern institutions of an industrialized or industrializing society and thus acquire the attitudes and values of modernity must become increasingly alike in their essential characteristics and behavior across cultures.

The literature review in the area of cross-cultural consumer behavior suggested that the life style concept has not been used as a predictor of consumption behavior across-cultures. Studies such as the one conducted by Linton and Broadbent (1975) lacked methodological rigor in that they do not even attempt to determine whether or not the differences observed amount to a statistically significant difference between cultures examined. Other studies such as Urban (1976) suffer from at least one limitation. While it is important to investigate simi-

larities and differences of consumer's life-style profile on a cross-cultural basis, an even more important aspect is whether these similarities and differences in life style patterns translate into significant differences in consumption patterns across cultures. This issue is not addressed by the cross-cultural life style studies that were reviewed here.

D. Hypotheses

The modernity literature reviewed in this chapter suggests that despite diversity of cultures observable around the globe there is a trend towards uniformity. This is to say, as Wilenski (1964) puts it "a widespread sharing of beliefs, values, and tastes, cross-cutting groups and categories" (p. 178). According to Wilenski (1964) forces such as "popular education and mass literacy; high rates of social and residential mobility; the emergence of national markets and a national politics, both making use of nationwide media of mass communication and entertainment" (p. 178) help create cultural standardizations through changing values, attitudes and life style of individual members of the society. But, it must be emphasized, that individual members of the society undergoing the process of modernization will not be affected in a similar way. This is to say that some people will be more receptive to change while some others may resist change (Sheth, 1979). The literature review also revealed that the individual modernity syndrome as characterized by a set of values and attitudes is a manifestation of the forces that tend toward cultural uniformity.

A review of the literature in the area of cross-cultural consumer behavior clearly indicated that "membership in a common culture or society does not necessarily imply similar response patterns" (Wind and Douglas, 1974, pp. 210-211). Within the context of a single nation, the works of Levy (1968), Martineau (1958), Nicosia (1966), and Engel and Blackwell (1982) show that different social classes within a given country tend to have different interests, life styles, and behavioral patterns. Furthermore, several cross-cultural life style studies demonstrated that life style as a consumer behavior construct transcend national and cultural boundaries. Therefore, despite observable differences of consumer behavior from one country to another, one can also identify similarities both within and between countries.

These premises have three significant implications for consumer behavior as an important category of human behavior that are worthy of further investigation. First, the consumption pattern of those who adopt a modern life style, i.e. a life style pattern that is shaped by values of modernity syndrome is expected to differ from the consumption pattern of those whose life style is characterized by traditional values. Second, consumption patterns shaped by modern life style is expected to be similar across countries. This is to say that national and cultural influences on consumption pattern is less significant when compared with influences exerted by a modern life style pattern. Hence, one would expect to observe a large between group differences of consumption patterns in a given country than what can be observed within groups across countries.

Third, modern life style as defined by modernity values is expected to exert greater influence in consumption of those products whose consumption is value-bound as apposed to demographically determined. These arguments can be formulated in the form of testable hypotheses as follows:

I. Moderns and traditionals will differ significantly with regard to their consumption patterns across several product categories.

II. The modern-traditional life style contrast will account for more variance in consumption behavior than the national contrast.

III. Life style variables better explain value-bound consumption patterns than demographic variables. Similarly, demographic variables better explain consumption patterns of products that are considered as necessities.

The methodology to be used to test these hypotheses will be discussed next.

CHAPTER 3

METHODOLOGY

The general research strategy that was used to fulfill the purpose of this dissertation consisted of three steps: (1) construction of a scale to measure modern life styles, (2) classification of respondents into two groups of modern and traditional life styles regardless of their national identity, and (3) examination of consumption differences of the modern and traditional groups with respect to a number of consumption variables. The present chapter primarily deals with step one and two while step three will be discussed in the following chapter on analysis. More specifically, following areas will be covered in this chapter:

A. Data

B. Components of a modern life style

C. Item analysis and Reliability

D. Dimensionality of modern life style

E. Modern/Traditional life style groups.

A. Data

The data for this study was provided by Leo Burnett Advertising Agency. According to Plummer (1977) Leo Burnett began development and use of lifestyles as a research tool in 1967. Plummer further notes that a model of lifestyles that has for the most part guided research in this area is comprised of four dimensions: (1) activities (how people spend their time at work and leisure), (2) interests (what is

important to them in their immediate surroundings, (3) opinions (how they feel about themselves and the larger world), and (4) basic characteristics (the demographic parameters which describe their environment). These dimensions are usually measured with AIO's (activities, interests, and opinions) using a Likert-type scale.

Each lifestyle study at Leo Burnett, according to Plummer (1977), has utilized large national samples "balanced to reflect the broad characteristics of the population" (p. 7). Plummer further points out that the use of lifestyle research outside the U.S. began with two pilot studies in U.K. and Germany in 1971 and that "based on positive experience from these two pilot studies and a commitment by Leo Burnett management" (p. 7), a number of large scale national lifestyle surveys were undertaken in a number of different countries. For details of fieldwork see appendix A.

An important question at this stage of the research was whether to include all countries listed in Appendix A or select only some of them. Ideally, of course, one would want to include all countries for which data is available. However, a careful examination of questionnaires used in various countries revealed, unfortunately, that this is not possible at this time. A number of considerations precluded the inclusion of some countries in the study.

First, and the most important from the standpoint of this study, was that the content of questionnaire used in some countries differed

from others. Second, inclusion of all countries in the study would have amounted to a sample size of well over 34,000 which, from a technical standpoint, would have limited severely the availability of computer time. Third, Germany could not be included because an English version of the questionnaire used in the country was not available. It was thought that a simple translation rather than using back translation method would have resulted in substantial loss of meaning and, therefore, it would have impaired comparability with the rest of the data.

Thus, based on the above considerations, four countries--United States, Japan, France, and Brazil--were selected to be included in the study. It is important to emphasize that the combination of these four countries maximized the number of identical and/or similar items across all four.

In all four countries, the population from which Leo Burnett's samples were drawn generally consisted of male adults of 18 to 65 years of age. The average sample size in the four countries included in this study is 1,321 ranging from 400 in the case of Brazilian males, to 1,899 for Japanese males. Total number of respondents amount to 5,285 which represent on the average 81 percent of those who were initially contacted. In most cases, incentives of some sort were provided to those returning completed questionnaires. In all four "representative national samples" were used (Plummer, 1977, p. 7).

The data collection procedures "varied by country due to the nature of the population and the availability of survey research

services" (Plummer, 1977, p. 8). According to Plummer, the procedure used in the countries selected in this study consisted of consumer mail panels in the U.S., personal interview and self-completion in France and Japan, and personal interview in Brazil. Separate questionnaires were used for each country and were, for the most part, originated by Leo Burnett with close cooperation of Leo Burnett researchers in each country. Questionnaires were originally developed in English, and later translated and retranslated to arrive at a "culturally equivalent" version to suit the spoken language in each country. Furthermore, questionnaires vary in length and content. On the average, each questionnaire consisted of about 250 activities, interests, and opinion (AIO's) items, 25 demographic measures, use and ownership data on about 50 product categories, and information on respondent's media habits, including TV, newspaper, magazine, radio, and cinema.

B. Components of a Modern Life Style

The first step in defining a modern life style was to identify a number of life style items that dealt with major themes or values of the modernity syndrome. It was necessary to define modern life style across the four countries in the study, and thus, an added constraint was to select items that were identical or at least similar across the four countries.

In order to select appropriate items, each country questionnaire was carefully screened and those items that represented a major value of modernity and at the same time were common across the four

countries were chosen to form the component of a modern life style profile. This resulted in an initial pool of 18 items shown in Appendix B.

The next step was to decide which end of the response continuum should be classified as modern and which end as traditional. This was determined theoretically with reference to modernity literature. In Appendix B this is indicated by a plus (+) sign which indicates that agreement with the statement is regarded as a modern response and a minus (-) sign which indicates that agreement with the statement would be classified as a traditional response. Having decided which end of the response continuum is modern and which traditional, a decision had to be made as to what the precise cutting point should be on each response continuum. Since responses to each lifestyle statement had been recorded using Likert-type scales in all four countries, but with varying scale points, it was decided to use standardized z scores of the raw responses.[1] Specifically, standardized z scores were computed separately for each country and then averaged to get a single score. This standardized score will be used throughout the analysis as a measure of modern life style.

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[1]U.S., 6-point scale; Japan, 4-point scale; France, 5-point scale; Brazil, 6-point scale.

C.   Item Analysis and Reliability

Once the items were selected and modern and traditional end of the response continuum determined, the main issue was which items should be retained in the final version of the scale.   Item analysis technique was used to decide on the inclusion of individual items in the scale.   Simply, in an item analysis technique, "items are chosen which correlate most highly with the other items in the scale" (Bohrnstedt, 1971, p. 90).   Clearly, items that are correlated highly with each other also will correlate highly with the total score obtained by summation of these items.   Therefore, the most straight forward method of item analysis is the item to total correlations technique.   This technique was used in this study.   Through successive iterations, 12 items from the original pool of 18 were retained to form the components of a modern life style.   These are shown in Table 1.

The next step was to establish the reliability of the constructed scale.   Defined broadly by Peter (1979) reliability refers to the degree which "measures are free from error and therefore yield consistent results" (p. 6).   There are a number of ways one can measure the reliability of a constructed measure.[1]   But the one method that is appropriate in the present study is Cronbach's (1951) alpha which is a generalization of Kuder-Richardson's KR20 (1937).   A reliability coefficient of .53 was obtained for the measure of modern life style when all subsamples were combined.   Table 2 presents selected characteristics of

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[1]For details see Bohrnstedt, 1970, pp. 80-99.

TABLE 1

VALUES OF MODERNITY AND CORRESPONDING ITEMS IN THE SCALE OF MODERN LIFE STYLES

Modernity Value	Lifestyle Items Included in the Scale
Readiness for New Experience	
U.S.:	(+) I like to buy new and different things.
Japan:	(+) I always buy newest products.
France:	(+) More novelties welcome.
Brazil:	(+) When I see a new product, I'll buy it.
U.S.:	(+) The new styles turn me on.
Japan:	(+) I am sensitive to fashion.
France:	(+) I am one of the first to adopt a new fashion.
Brazil:	(+) I like everything that is modern.
U.S.:	(−) I have old fashioned tastes and habits.
Japan:	(−) I hate men's long hair.
France:	(−) I have old fashioned tastes and habits.
Brazil:	(−) Men should wear short hair.
Weakening of Family Ties	
U.S.:	(−) I am a homebody.
Japan:	(−) My family is my life purpose.
France:	(−) I like to spend my time at home.
Brazil:	(−) I would rather spend my time at home.
Democratic Orientation	
U.S.:	(−) Movies should be censored.
Japan:	(+) If pornography was made legal, sex morals will not digress.
France:	(−) There should be censorship of press and TV.
Brazil:	(−) Movies that present nudes should be censored.
U.S.:	(+) ERA should be added to the constitution.
Japan:	(−) It would be a problem if women became stronger.
France:	(+) I am in sympathy with women's lib.
Brazil:	(−) It is silly for women to study too much.

Table 1 Continued

Modernity Value	Lifestyle Items Included in the Scale
U.S.:	(-) Women's place is at home.
Japan:	(-) Women should not have jobs outside.
France:	(-) Women's place is in the kitchen.
Brazil:	(-) Women's place is at home.
U.S.:	(+) Women are capable of combining their career with marriage and children.
Japan:	(-) It is impossible for women to combine work and marriage.
France:	(-) It is too hard when a mother works.
Brazil:	(-) It is difficult to have a successful marriage when the wife has a job.

Value for Urban Life

U.S.:	(-) A small town is the best place to live.
Japan:	(-) It is best to live in the province.
France:	(-) Life in the country is better.
Brazil:	(-) If I could, I'd live on a ranch.

Nuclear Family

U.S.	(-) All couples should have at least one child.
Japan:	(-) Marriage without children is incomplete.
France:	(-) It is scandalous to get married and not want a child.
Brazil:	(-) People who avoid children are right.

Personal Efficacy

U.S.	(+) I expect to be a top executive within the next 10 years.
Japan:	(+) I have a goal to accomplish within the next 5 years.
France:	(+) I hope to have a job with more responsibilities in the future.
Brazil:	(+) I have a splendid future.
U.S.	(-) My opinion on things does not count in today's world.
Japan:	(-) My attitude doesn't count in today's world.
France:	(-) People like me can't influence what is happening in today's world.
Brazil:	(-) My opinion on things doesn't count in today's world.

the scale along with the alpha coefficient computed separately for each country.

With regard to reliability coefficients presented in Table 2, an important question to ask is what level of reliability can be regarded as satisfactory. Nunnally (1967) provides us with a guideline (p. 226). He argues that acceptable level of reliability depends on how a measure is being used. In early stages of research (i.e., early development of a measure of a construct), modest reliability in the range of .5 to .6 will suffice.

Another way of evaluating the reliability of coefficients reported here is to investigate reliability assessment practices in the marketing research literature. In a survey of 400 empirical research studies in the area of consumer behavior reported in Journal of Consumer Research, Journal of Marketing Research, Journal of Marketing, Advances in Consumer Research, and American Marketing Association Proceedings, Peter (1979) found reliability coefficients in the range of .41 to .98 where a variety of techniques were used to assess reliability. In the same survey, for research studies which used Cronbach's alpha the range was .51 to 98. However, reliabilities reported for modernity studies are generally higher. For example, Inkeles and Smith (1974, p. 89) reported reliability estimates using Kuder and Richardson's formula in the range of .55 to .91 with the majority of estimates higher than .70 for various modernity scales they developed in their study of six developing countries.

TABLE 2

SELECTED CHARACTERISTICS OF THE MEASURE
OF MODERN LIFE STYLES

Characteristics	Combined Sample	U.S.	Japan	Brazil	France
Mean	.05	.09	0.00	0.00	.13
Variance	23.31	28.42	20.24	21.78	22.53
Standard Deviation	4.82	5.33	4.49	4.66	4.74
Average Item-To-Scale Correlations	.21	.28	.16	.21	.20
Cronbach's Alpha	.53	.63	.44	.49	.52

Some additional comments with regard to interpretation of Cronbach's alpha are in order. First, Carmines and Zeller (1979) have shown that, in general, coefficient alpha "is a lower bound estimate of the reliability of an unweighted scale of N items . . thus, the reliability of a scale can never be lower than alpha even if items depart substantially from being parallel measurements" (p. 45). In this sense, alpha provides a conservative estimate of the internal consistency of a measure. Second, the value of alpha, to a large extent, depends on the interitems correlations and the number of items in the scale. Specifically, Carmines and Zeller found that as the average correlations among items increases and as the number of items increase, the value of alpha increases.

Third, Armer and Schnaiberg (1972) stated that "the internal consistency reliability is an estimate of the extent to which a scale is free from random variations among items or measurement errors" (p. 308). That is to say that in internal consistency reliability, it is assumed that the scale is unidimensional and thus items should tend to covary. Armer and Schnaiberg state further that, "To the extent that the scale produces a high ratio of random variations (instead of covariations) to total variations, reliability estimates are lowered" (p. 308). The point is that if a given scale is intended to include various components of modernity rather than those items which measure the general concept, correlations among items in the scale will be low which reduces the reliability estimates. In sum, internal consistency reliability has limitations as an estimate of reliability for heterogenous scales.

Finally, Rau (1978) emphasized that in the modernity literature a crucial issue concerns the psychological integrity of overall modernity construct, namely, whether modernity can be represented by a single index. Both reliability coefficients and item analysis rely on the assumption that sample items included in a scale have been predetermined to be valid measures of the target domain. Therefore, without a prior knowledge of construct validity, item analysis and reliability produce reliable scales but it cannot establish unidimensionality or conceptual homogeneity. Hence, according to Cronbach (1951), reliability coefficients do not resolve the dimensionality issue since heterogeneous, factorially complex scales can still produce acceptable coefficients.

D. Dimensionality of Modern Life Style

To purify the measure of modern life style, 18 life style items which were thought to tap major values or dimensions of modernity syndrome were subjected to an item analysis procedure to determine the internal consistency of the items comprising the scale. Through successive iterations 6 items were eliminated and the remaining 12 were retained in the scale. The subsequent coefficient alpha computed for the 12 item scale could not be increased by further elimination of items. The coefficient alpha, as discussed earlier in the section on reliability, and as stated by Churchill (1979), indicates to what extent all the items in a measure are drawn from the domain of a single construct. However, it says very little about the dimensionality of the construct under investigation. Factor analysis was used to suggest the underlying dimensions of the modern life style. Kim and Mueller (1978) have said, "Factor analysis refers to a variety of statistical techniques whose common objective is to represent a set of variables in terms of a smaller number of hypothetical variables" (p. 9).

Before the results of factor analysis are presented, it must be pointed out that some researchers have a tendency to perform a factor analysis on the data before doing anything else in the hope of determining the number of dimensions underlying the construct. This seems to be perfectly appropriate. But, as Churchill (1979) suggests, if factor analysis is performed before a given scale is purified:

> There seems to be a tendency to produce many more dimensions than can be conceptually identified. This effect is partly due to the 'garbage items' which do not

have the common core but which do produce additional dimensions in the factor analysis. (p. 69)

Thus, Churchill argues that coefficient alpha "absolutely should be the first measure one calculates to assess the quality of the instrument" (p. 69). Only after a satisfactory coefficient is achieved through an iterative procedure, then, can factor analysis be used to verify the dimensions underlying the construct.

Following Churchill's (1979) suggestion, the "purified" 12-item scale was subjected to a principal-axes factor analysis. Computationally, principal axes factor analysis is very similar to principal-components analysis. In principal-components, the first principal-component accounts for the largest amount of total variance in the data. The second component is defined in a similar way so as to maximize the remaining variation and so on (Overall and Klett, 1972, p. 57).

The same principles hold true for a principal-axes factor analysis. However, the difference between the two is one of emphasis. Whereas, according to Overall and Klett (1972), principal-axes is frequently performed on a correlation matrix with estimates of communality in the principal diagonal, principal-components analysis requires total variations (i.e., the principal diagonal of the correlation matrix consist of unity). The relevance of this method of factoring to verify the dimensionality of the modern life style lies in the fact that, if indeed a single underlying dimension exists, this would be reflected in a powerful first factor. Specifically, according to Carmines and Zeller's (1979), tests for dimensionality are based on the following criteria:

1. The first factor should explain a large proportion of the variance in the data.

2. Subsequent factors should explain fairly equal proportions of the remaining variance except for a gradual decrease.

3. All or most of the items should have substantial loadings on the first factor.

4. All or most of the items should have higher loadings on the first factor than on subsequent components. (p. 60)

Two questions must be raised concerning the above criteria. First, what proportion of the variance is large enough to satisfy the criterion number one above? Second, what "high" loading can be regarded as substantial to meet the criterion number three. There seems to be no clear cut answers to these questions. It all depends on the topic and preference of the researcher. Carmines and Zeller (1979) suggest a minimum of 40 percent of the variance should be explained by the first component to conclude that criterion one is met. On the other hand, a review of modernity literature such as Portes (1973) indicates that a percentage as low as 22 percent has been regarded as a "sizable contribution" of the first component (p. 21). In fact, a major study of modernity values by Kahl (1968) in Mexico and Brazil reports proportion of the variance accounted for by the first factor to be 23 percent and 27 percent, respectively. There seems to be more agreement on the question of the size of the loading on the first component. Most researchers have adopted a cutting point of .3 with loadings above this figure regarded as acceptable (Carmines and Zeller, 1979; Portes, 1973).

The result of principal component with a varimax rotation is presented in Table 3. For the purpose of interpretation, a more stringent criterion for factor loadings was chosen. Namely, variables with loading of .40 and higher were regarded as having "substantial" loading on a given factor. This is believed by Kerlinger (1973) to result in exclusion of "weak" variables and therefore produce a clearer picture of the factor structure. In fact, many researchers do not bother with loadings less than .40 at all (p. 662).

Table 3 shows the rotated factor matrix for the combined sample. As can be seen from the table, the first factor is labeled Democratic Orientation since the item with the highest loading on this factor is negative attitude toward censorship of media (.53). Note also, that this dimension is closely linked with positive attitude toward outside women's work (.48) and negative attitude toward old-fashioned tastes and habits (.41).

The second factor is labeled Women Role Factor, since it is uniquely defined by three items: belief that women are capable of combining career with family (.62); positive attitude toward outside women's work (.51); and positive attitude toward women's liberation movement (.42).

The third factor is defined by two items: preference for new styles (.60), and occupational aspiration (.50). Taken together, these two items seem to reflect the individual's propensity to change and, therefore, is labeled as Change Factor. Finally, the last factor is defined by only one item: preference for urban living environment (.48) and so it is labeled as Urban Orientation.

TABLE 3

VARIMAX ROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
(COMBINED SAMPLE)

Variable	Demo-cratic Orien-tation I	Women Role Factor II	Change Factor III	Urban Orien-tation IV
Novelty	.29	.25	.04	.09
Urban Living	.06	.06	.01	.48[a]
Nuclear Family	.37	.16	.06	.14
Home Orientation	.36	.11	-.01	.32
Censorship of Media	.53[a]	.13	.18	.02
Women's Liberation	.14	.42[a]	.23	.13
Human Efficacy	.02	.08	.17	.22
Women's Ability	.16	.62[a]	.06	.14
Outside Women's Work	.48[a]	.51[a]	.02	-.01
Occupational Aspirations	.19	.00	.50[a]	-.03
Fashion Orientation	.07	.16	.60[a]	.14
Old-fashioned Taste	.41[a]	.07	.22	.01

[a]Factor defining items, loading greater than or equal to .40.

Each country data was also subject to a principal component with varimax rotations in order to compare the factorial structure of the modern life style in the four countries. These are not presented here due to space limitations (See Appendix C). But it is useful to compare the overall structure and relative importance of each factor in the overall life style pattern of each country as well as in the combined sample. This can be accomplished by examining Table 4.

In all four countries as well as the combined sample, the basic pattern of modern life style appears to center around attitude toward the women's role in society. The fundamental differentiating dimension among respondents seems to be rejection or acceptance of women's traditional role (i.e., home-centered activities). The two variables that consistently emerged with high loadings on this dimension were: (1) belief that women are capable of combining career and family, and (2) positive attitude toward outside women's work. This dimension is also linked with positive attitude toward the women's liberation movement, but the relationship does not appear to be as strong as the first two variables.

A second fundamental pattern that appears to be common across all four countries is the Change Factor. This dimension is closely linked with three variables: preference for novelty, occupational aspirations, and preference for new styles and fashions. A close examination of loadings reported in Appendix C reveal that propensity to change is manifested with slightly different emphasis placed in the above mentioned variables. For example, the change factor is closely

TABLE 4

THE MAJOR LIFE STYLE DIMENSIONS IDENTIFIED IN THE
FIVE PRINCIPAL AXES ANALYSES[a]

Factor	Combined Sample	U.S.	Japan	Brazil	France
Women's Role	2 (16%)	2 (23%)	1 (46%)	2 (16%)	1 (53%)
Change	3 (11%)	1 (61%)	2 (27%)	3 (14%)	3 (14%)
Democratic Orientation	1 (63%)	x[b]	x	1 (54%)	x
Nuclear Family	x	3 (15%)	x	x	2 (22%)
Home	x	x	3 (17%)	x	x
Fashion	x	x	x	x	3 (11%)
Efficacy	4 (10%)	x	x	4 (10%)	x
Urban Orientation	x	x	x	x	x

[a] Order of importance of factor in terms of % explained variance.
[b] Factor did not emerge in the factor structure.

linked to occupational aspiration and preference for new styles in the U.S., whereas in Japan this factor is mostly associated with a preference for novelty and for new styles and fashions. Overall, though, the women role factor coupled with the change factor constitute the most common pattern of the modern life styles in all four countries studied.

A less common dimension is the Nuclear Family Factor. As can be seen from Appendix C, this factor emerged only in France and the United States and is characterized by a close link with positive attitude toward nuclear family. The fact that Japanese and Brazilian respondents could not be differentiated on this dimension might be an indication that the extended notion of the family is still prevalent in these two countries.

Table 4 also shows that a number of unique dimensions emerged in individual country analyses. For example, the Democratic Orientation Factor emerged only in Brazil. This factor is characterized by a negative attitude toward censorship of media. It is also closely related to negative attitude toward home orientation and old-fashioned tastes and habits. It is tempting to argue that in most democratic societies censorship of media is rejected as a rule rather than the exception and thus in societies where censorship has been the rule, adherence to freedom of media from censorship becomes a strong differentiating element among individual members of the society. The case of Brazil might well be such a case.

Another unique dimension is the Home Factor in Japan. Again, one might argue that in Japan where home orientation still appears to

be strong and prevalent, rejection of home orientation becomes a distinguished dimension among Japanese.

Other unique factors that emerged are the Fashion Factor (France) and Human Efficacy (Brazil). These two dimensions exemplify the fact that modern life style appears to take varying emphasis and meaning in these two countries.

E.   Modern/Traditional Life Style Groups

In order to fulfill the purpose of this dissertation, the life style measure as constructed in this study was used to classify all respondents regardless of their national identity into modern and traditional groups.   More specifically, an average life style score was computed as follows: (a) each respondent's score on every item in the measure was standardized within a given country; (2) a total life style score was computed by summing respondent's scores on all items; (3) an average life style score was then computed by dividing the total score by the number of items in the measure.   In order to insure maximum variability it was decided that only those respondents who were most modern in their life style pattern (i.e., those who responded to all or most of the items in a modern way) should be classified as modern and those who responded to all or most of the items in a traditional way should be classified as traditionals.   This resulted in classifying the top 20 percent of respondents in the modern group and the bottom 20 percent in the traditional group.   These groups will be used as a basis to compare consumption patterns across modern-traditional dimensions in the following chapter on analysis.

CHAPTER 4

ANALYSIS

To present the result of the analysis, this chapter has been divided into two parts. In the first part, the demographic profile of modern and traditional groups will be presented. The second part consists of the tests of hypotheses.

A. Demographic Profile

In order to develop a demographic profile of the modern and traditional groups, frequencies and distributions were generated. The demographic variables involved are: education, age, occupation, and income. To insure comparability of results, these variables, with the exception of the occupation variable,[1] were transformed into dichotomous variables using median as the cutting point, separately for each country. Respondents falling below median received a score of zero and constituted the "low" group and those above median received a score of one and, thus, constituted the "high" group on a given demographic variable. This procedure takes into account difference in the level of economic development, partly reflected in differences along demographic variables, between the four countries in this study. Therefore, the low/high dichotomization is defined within a given country with respect to a point which puts half of the country sample

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[1]Occupation variable was originally dichotomous where a blue collar occupation received a score of zero and a white collar occupation a score of one.

on the low side and half on the high side. It is obvious that account-
ing for the level of economic development as reflected in the level
demographic variables reduces the strict comparability of demographic
variables scores from one country to another. Reviewing the profiles
generated (Table 5), it can be observed that more than two-thirds of
the moderns (67%) score "high" on education, whereas less than one-
fourth of the traditionals (23%) demonstrate "high" score on education.
Agewise, moderns are younger with only 14% scoring high on age
variables, while traditionals are considerably older with 72% scoring
"high" on age variable.

With regard to occupation, 77 percent of moderns claim to have
"white collar" occupations as opposed to 63 percent of traditions
claiming such occupations. Of those who are classified as modern by
our measure of modern life style 53 percent exhibit "high" incomes as
compared with 42 percent for the traditional group.

B. Tests of Hypotheses

A screening of questionnaires as described in the previous
chapter, revealed that there were 10 consumption variables common
across the four countries: (1) stereo equipment, (2) television set, (3)
soft drinks, (4) fruit juice, (5) alcoholic beverage, (6) washing
machine, (7) refrigerator, (8) car, (9) bank account, either checking
or saving, and (10) deodorant. These variables are dichotomous
variables where a zero indicates non-use/non-ownership and a score of
one means that a given item is used/owned by the respondent.

TABLE 5

DEMOGRAPHIC PROFILE OF MODERN AND TRADITIONAL
LIFE STYLE GROUPS

Demographic Variables	Moderns (percent)	Traditionals (percent)
INCOME		
High	53	42
Low	47	58
AGE		
High	14	72
Low	86	28
EDUCATION		
High	67	23
Low	23	67
OCCUPATION		
White Collar	77	63
Blue Collar	23	37

1. Hypothesis I

The first hypothesis to be tested stated that "moderns and traditionals will differ significantly with regard to their consumption pattern across several product categories." The T-test was used to test this hypothesis. The test of significance was based on the two-tailed probability. Only those consumption variables with a two-tailed probability equal to .000 were regarded as significant. The result of the T-test is presented in Table 6.

As can be seen from Table 6, six consumption variables proved to be significant in differentiating between modern and traditional groups. Modern and traditional groups as measured by the scale of modern life style developed in this study are significantly different with regard to use/ownership of stereo equipment, soft drink, fruit juice, alcoholic beverage, car, and deodorant.

The result of the T-test reported in Table 6 is consistent with findings of past research in the area of consumer behavior. For instance, in a study of environmental impacts of modernizing consumption styles, Uusitalo (1982) suggested that one aspect of modernizing consumption is reflected in decreasing home production of products and services. Uusitalo specifically suggested that high household budget shares for items such as alcoholic beverages and preprocessed foods seem to differentiate modern households from traditional home production oriented households spending a high budget share for food items such as flour and grain used in the home production of food. As can be

TABLE 6

T-TEST, CONSUMPTION VARIABLES:
MODERN/TRADITIONAL

Consumption Variable	Groups	Mean	T-Value	2-Tail Proba- bility
1. Stereo Equipment*	Traditional Modern	.22 .42	-6.03	.000
2. TV	Traditional Modern	.84 .84	-.05	.960
3. Soft Drinks*	Traditional Modern	.66 .83	-5.90	.000
4. Fruit Juice*	Traditional Modern	.52 .69	-5.64	.000
5. Alcoholic Beverages*	Traditional Modern	.38 .49	-3.66	.000
6. Washing Machine	Traditional Modern	.70 .68	.62	.533
7. Refrigerator	Traditional Modern	.88 .86	.94	.347
8. Car*	Traditional Modern	.59 .74	-4.98	.000
9. Bank Account	Traditional Modern	.76 .77	-.49	.621
10. Deodorant*	Traditional Modern	.50 .68	-5.50	.000

*Item is significant in differentiating between modern and traditional groups.

seen in Table 6, three products (soft drink, fruit juice, and alcoholic beverages) seem to reflect a decreasing home production of products as suggested by Uusitalo (1982) and thus they significantly differentiate between modern and traditional groups.

A second aspect of modernizing consumption identified by Uusitalo (1982) represents a tendency to buy time-saving products and more frequent use of one's own car. The fact that modern and tradi- tional groups are significantly different with regard to car ownership in this study might well reflect this aspect of a modern consumption pattern. What appears to be inconsistent with this argument, however, is the ownership pattern of washing machine as a time-saving device and two additional items, TV and refrigerator. This inconsistency may be explained by noting that these products are highly diffused in the samples represented in this study as evident from means reported in Table 6 and hence they fail to differentiate between modern and tradi- tional groups. This is not unusual as these products represent the dominant consumption pattern, i.e., they are widely used, in indus- trialized countries. Therefore, consumers of these products came from both modern and traditional groups. Furthermore, a similar finding is reported in at least one study by Clarke and Soutar (1982) with regard to ownership patterns of refrigerators in Australia and the U.S.

Moderns and traditionals were also found to be significantly different with regard to deodorant use as reported in Table 6. This is somewhat consistent with findings of a study in the area of lifestyles.

Cosmas (1982) found a relationship between several lifestyle groups and consumption of personal care products. The description of these life style groups identified by Cosmas highly resembles the descriptions of the moderns in this study. For example, Cosmas suggests that Actives--those who place emphasis on meeting people, going places, and so on--and Sophisticates--those who emphasize social and external events in their environment--were characterized by consumption of personal care products. The qualities attributed to these lifestyle groups are highly similar to qualities defined for the modern group as discussed earlier. Finally, with regard to ownership and use patterns of stereo equipment and bank account, no parallel study was found in the literature of consumer behavior.

The first hypothesis is supported as modern and traditional groups tend to be significantly different in six out of ten consumption variables. Without further evidence, however, it is difficult to attribute the differences found to modern life style influences. Specifically, one might argue that these differences are partly due to cultural and national characteristics rather than life style influences per se. Therefore, we take the analysis one step further to test the second hypothesis.

2. Hypothesis II

The second hypothesis stated that "the modern-traditional life style contrast will account for more variance in consumption behavior than the national contrast." An appropriate method for performing this analysis is an analysis of variance design.

Dependent Variables

The dependent variables in this analysis consist of the six consumption variables that were significant in differentiating between modern and traditional groups as discussed above. Each of these variables were used as a dependent variable in separate analysis of variance designs with independent variables as described below.

Independent Variables

The first independent variable is the nominal level variable life style at two levels: modern versus traditional. The second independent variable is the country variable at four levels: United States, Japan, france, and Brazil. Although the data are in essence dichotomous (users versus non-users/owners versus non-owners), ANOVA is an adequate analytical technique. The work of Collier (1965) as discussed by Pressley and Tullar (1977, p. 109) suggest that the use of such data entails only a minimal loss of power in the analysis of variance.

The analysis consisted of six 4 x 2 factorial fixed-effect designs. This design resulted in unequal cell sizes which indicates that the two explanatory variables (i.e., modern life style and country) themselves are related. Under such conditions, Iversen and Norpoth (1976) suggest that it is more difficult to investigate the effects of independent variables on the dependent variable. This is because a given independent variable influences the dependent variable in two ways. First, it influences the dependent variable directly and second,

it influences the dependent variable indirectly through the other independent variable.

The number of observations in the various cells differ in this study as shown in Table 7. Since neither the cell entries nor the percentages for the two life style levels are equal in the four countries, the two explanatory variables may well be correlated. In order to determine whether the observed differences in cell sizes amount to a statistically significant difference, a Chi-square test was performed. The data in Table 7 gave a Chi- square value of 10.52, which is significant at .05 level with three degrees of freedom. Therefore, the two explanatory variables are correlated.

TABLE 7

NUMBER OF OBSERVATIONS IN EACH CELL
AND ROW PERCENTAGES

	U.S.	Japan	France	Brazil	Total
Traditional	193 (38.7%)	190 (36.1%)	105 (20.0%)	38 (7.2%)	526 (100%)
Modern	207 (41.3%)	134 (26.7%)	118 (23.6%)	42 (8.4%)	501 (100%)

One way to analyze this data, given the conditions of this study, is to perform the analysis in two steps as suggested by Iverson and Norpoth (1977, pp. 62-3). In the first step, one of the independent variables, life style, is introduced into the analysis and then the second independent variable, country, is entered after life style has been allowed to explain as much of the total sum of squares as it can. The sum of squares for interaction will be found after adjusting for the independent variables. In the second step, we turn the analysis around and let the country variable enter first and then allow the life style variable to explain as much as it can of the remaining variation. The sum of squares for interaction will be found as before.

Since country and life style are correlated, the results of the two steps are expected to be different. By entering the country variable after the life style variable, we get an estimate of the effect of national differences on the dependent variables (in this case, various consumption variables) which would be observable if the four countries were equal in life style. By the same logic, when the life style variable is introduced after the country variable, we get an estimate of the effect of life style on the dependent variable with country variable held constant. Furthermore, by examining various sums of squares obtained in the two steps discussed above, we get an estimate of the part of sum of square that is shared by the two independent variables. We now turn to the results obtained from this analysis.

Table 8 shows consumption patterns in various product categories by life style and country. The numbers included in Table 8 represent percentage of users in each group. As can be seen from the table, a fairly substantial difference exists between various groups both across countries and modern traditional groups. To determine if these differences are significant, we turn to analysis of variance tables for each product category.

Table 9 shows the result of the two-step analysis of variance for deodorant. As can be seen from the table, life style and country both have significant effects on the dependent variable. When life style is introduced first, the F-ratio is as large as 48.44 which is significant at the .001 level. But when the life style variable is left to pick up after the country variable, the sum of squares drops from 7.16 to 4.49 and the corresponding F-value drops to 30.39 which is still significant at the .001 level. Table 9 also shows that when the country variable is introduced first, its sum of squares amounts to 91.36, but when the country variable is entered after the life style variable, its sum of squares drops to 88.69 with a corresponding F-value of 199.80. As pointed out earlier, by entering the country variable after life style, one gets an estimate of the effect of national differences on use of deodorant which would be observable if the four countries were equal in their modern life style. When the levels of country variable is held constant, the direct effect of life style on the use of deodorant is reduced greatly, but it is not eliminated. In both cases, the reduction in the sum of squares from when the variable is entered first to when

TABLE 8

PERCENTAGE OF USERS IN EACH PRODUCT CATEGORY
BY MODERN LIFE STYLE AND COUNTRY

Category/ Country	Traditional	Modern	Means
	Deodorant		
U.S.	.89	.94	.91
Japan	.18	.39	.27
France	.23	.41	.33
Brazil	.71	.88	.80
Means	.50	.67	.58
	Stereo Equipment		
U.S.	.90	.83	.85
Japan	.16	.28	.21
France	.14	.25	.20
Brazil	.16	.50	.34
Means	.22	.42	.32
	Car		
U.S.	.57	.86	.72
Japan	.53	.53	.53
France	.81	.85	.83
Brazil	.37	.45	.41
Means	.59	.74	.66

Table 8 Continued

Category/ Country	Traditional	Modern	Means
	Soft Drinks		
U.S.	.76	.88	.82
Japan	.81	.90	.85
France	.21	.61	.42
Brazil	.74	.93	.84
Means	.67	.83	.75
	Fruit Juice		
U.S.	.41	.54	.48
Japan	.70	.88	.77
France	.48	.87	.68
Brazil	.29	.40	.35
Means	.52	.70	.61
	Alcoholic Beverages		
U.S.	.19	.33	.26
Japan	.55	.63	.59
France	.41	.63	.59
Brazil	.26	.45	.36
Means	.38	.49	.43

TABLE 9

ANALYSIS OF VARIANCE OF DEODORANT

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Significance
Modern Life Style	7.16	1	48.44	.001
Country After Modern Life Style	88.69	3	199.80	.001
Interaction	1.32	3	2.97	.031
Residual	147.08	994		
Total	244.27	1001		
Country	91.36	3	205.82	.001
Life Style After Country	4.49	1	30.39	.001
Interaction	1.32	3	2.97	.031
Residual	147.08	994		
Total	244.27	1001		

E^2 (Modern Life Style) = .03, E^2 (Country) = .37, R^2 = .39

it is entered second equals 2.67. This is the part of sum of squares that is shared by the country variable and life style variable.

Furthermore, Table 9 shows the interaction of country and life style to be significant at .031 level. This means that life style has greater influence on deodorant usage in some countries and less influence in some others. Specifically, the percentage of deodorant users in modern groups in Japan and France is substantially higher than traditional groups (almost double) in these countries; whereas, the difference between modern and traditional groups in terms of percentage of deodorant users in the U.S. and Brazil is not as great.

When all the effects are taken together, the overall R^2 amounts to .39 which indicates the percentage of variance accounted for by the independent variables. It is also obvious from Table 9 that most of the 39 percent variance explained is due to the country variable rather than the life style variable. The relationship between the country variable and deodorant usage is not only significant but also strong since E^2 (Country) = .37 as compared with E^2 (Life Style) = .03 which indicates a weak relationship between the life style variable and deodorant usage.

Table 10 presents the results of analysis of variance of stereo equipment. In this case, as can be seen from the table, both main effects are significant at the .001 level while the interaction effect is significant at the .013 level. As before when the life style variable is

TABLE 10

ANALYSIS OF VARIANCE OF STEREO EQUIPMENT

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Signif-icance
Modern Life Style	7.57	1	46.87	.001
Country After Modern Life Style	33.82	3	69.76	.001
Interaction	1.76	3	3.63	.013
Residual	118.29	732	.16	
Total	161.45	739	.21	
Country	38.91	3	80.27	.001
Modern Life Style After Country	2.48	1	15.35	.001
Interaction	1.76	3	3.63	.013
Residual	118.29	732	.16	
Total	161.45	739	.21	

E^2 (Modern Life Style) = .05, E^2 (Country) = .24, R^2 = .26

allowed to enter after the country variable, its sum of squares is reduced. The reduction in the life style sum of squares from when it is introduced first is more severe in this case than the deodorant case. As the numbers in Table 10 indicate, the life style sum of squares is reduced from 7.57 to 2.48, a two-thirds reduction. The difference between the two sum of squares, as discussed before, is the part of sum of squares that is shared by both independent variables. It appears that the life style syndrome has a far greater influence on ownership of stereo equipment in Brazil than in other countries. The independent variables taken together account for 26% of variation in the data. It is also obvious that the country variable explains much of the variations and is more strongly related to ownership of stereo equipment than the life style variable.

Table 11 presents the results of analysis of variance for automobile ownership. Again, life style and country variables influence car ownership significantly. The interaction of country and life style is also significant at .001 level. The life style variable is less affected when it is entered second after the country variable meaning that a smaller part of sum of squares is shared by the two independent variables compared to previous cases. The presence of a significant interaction effect indicates that life style has differential impact on car ownership depending on what country one lives in. Examining the means reported in Table 8 reveals that it makes a greater difference for car ownership when one belongs to traditional versus modern group in the United States than in other countries included in this study.

TABLE 11

ANALYSIS OF VARIANCE OF CAR

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Signif- icance
Modern Life Style	5.41	1	27.23	.001
Country After Modern Life Style	16.45	3	27.58	.001
Interaction	4.09	3	6.86	.001
Residual	195.58	984	.19	
Total	221.54	991	.22	
Country	17.57	3	29.48	.001
Modern Life Style After Country	4.28	1	21.55	.001
Interaction	4.09	3	6.86	.001
Residual	195.58	984	.19	
Total	221.54	991	.22	

E^2 (Modern Life Style) = .02, E^2 (Country) = .08, R^2 = .10

study. Apparently, the independent variables account for only 10 percent of the variation in the data. But, the country variable is still responsible for much of the variation explained.

The results of analysis of variance of soft drinks are reported in Table 12. As in the previous case, both main and interaction effects are significant at the .001 level. It appears that life style has greater influence on consumption of soft drinks in France (quite substantial) and Brazil than in the U.S. and Japan (see means reported in Table 12. The overall R^2 = .19. Again most of the 19 percent variance explained is due to the country variable rather than the life style variable.

When the fruit juice variable was analyzed, the results shown in Table 13 were obtained. This case is very similar to previous case where both main effects and the interaction effects are significant. Modern Life Style's influence is greatest in France than in Japan, U.S., and Brazil. The overall R^2 is .13 with the country variable explaining most of the variation in the data.

Finally, Table 14 reports the results of analysis of variance of alcoholic beverages. In this case, main effects are significant at the .001 level, while the interaction effect is not significant. The independent variables apparently do not account for much of the variance in the consumption of alcoholic beverages, as evidence by a relatively small R^2. But, again, most of the 10 percent variance

TABLE 12

ANALYSIS OF VARIANCE OF SOFT DRINKS

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Signif-icance
Modern Life Style	6.38	1	42.42	.001
Country After Modern Life Style	30.06	3	66.59	.001
Interaction	3.68	3	8.15	.001
Residual	148.53	987	.15	
Total	188.66	994	.19	
Country	28.85	3	63.91	.001
Modern Life Style After Country	7.59	1	50.48	.001
Interaction	3.68	3	8.15	.001
Residual	148.53	987	.15	
Total	188.66	994	.19	

E^2 (Modern Life Style) = .03, E^2 (Country) = .15, R^2 = .19

TABLE 13

ANALYSIS OF VARIANCE OF FRUIT JUICE

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Signif-icance
Modern Life Style	7.36	1	35.80	.001
Country After Modern Life Style	23.61	3	38.27	.001
Interaction	2.69	3	4.36	.005
Residual	199.70	971	.20	
Total	233.38	978	.23	
Country	20.94	3	33.94	.001
Modern Life Style After Country	10.03	1	48.80	.001
Interaction	2.69	3	4.36	.005
Residual	199.70	971	.20	
Total	233.38	978	.23	

E^2 (Modern Life Style) = .03, E^2 (Country) = .09, R^2 = .13

TABLE 14

ANALYSIS OF VARIANCE OF ALCOHOLIC BEVERAGES

Source of Variation	Sum of Squares	Degree of Freedom	F-Ratio	Significance
Modern Life Style	3.25	1	14.71	.001
Country After Modern Life Style	22.15	3	33.39	.001
Interaction	.63	3	.95	N.S.
Residual	218.26	987	.22	
Total	244.30	994	.24	
Country	20.44	3	30.82	.001
Modern Life Style After Country	4.96	1	22.43	.001
Interaction	.63	3	.95	N.S.
Residual	218.26	987	.22	
Total	244.30	994	.24	

E^2 (Modern Life Style) = .01, E^2 (Country) = .09, R^2 = .10

explained is due to the country variable rather than the life style variable.

Overall, it appears that the second hypothesis cannot be supported by the data. It is evident from the analysis just performed that the life style effect is significant, but the effect is not strong enough to wipe out the national and cultural influences which continue to exert a significant and strong influence on consumption patterns.

3. Hypothesis III

The fact that the modern life style measure accounts for a small percentage of explained variance could well be due to measurement error. But, even if we assume that the life style scale is free from measurement error, such a poor performance is not very unusual. Other widely used measures of consumer behavior such as personality measures have not really done much better. For example, in his review of buyer behavior, Sheth (1967) revealed that correlations of personality traits with consumption behavior tend to be fairly low. But this is quite natural as Sheth (1974b) suggests: "No single viewpoint is really enough to fully and adequately describe, explain and predict complex consumer behavior" (p. 8). While lifestyles have done slightly better, Sheth (1974c) argues that "the results are not worth bragging about" (p. 11).

The third hypothesis stated that "life style variables better explain value-bound consumption patterns than demographic variables. Similarly, demographic variables better explain consumption patterns of

<u>products that are considered as necessities</u>." Stepwise discriminant analysis was used to test this hypothesis. One common source of misinterpretation of discriminant analysis has to do with the way classification tables are constructed. Frank, Massy, and Morrison (1965); Morrison (1969); and Crask and Perreault (1977) have discussed in detail the potential sources of bias that can occur as a result of using all observations to derive the discriminant functions and then using these functions to classify the same observations. Therefore, to avoid this problem, the original sample was randomly split into two subsamples. One subsample was used to generate the coefficients and then these were used to predict group membership for each observations in the "holdout" subsample. Separate analyses were performed as follows: (1) life style variables as discriminating variables, and (2) demographic variables as discriminating variables. In what follows the results of each discriminant analysis will be discussed.

Life Style Variables

In the first analysis, the 12 items that were selected to compute a modern life style score were used in six stepwise discriminant analyses to explain and predict consumption patterns in the six product categories included in this study. Table 15 reveals that the three most consistent variables entering into each analysis were novelty, women's lib, and old-fashioned tastes and habits. Between these three variables, novelty has the highest coefficient in three out of six analyses (see Appendix D). In the deodorant analysis, the coefficient was as high as .78; in stereo equipment analysis as high as .74; and in

TABLE 15

STEPWISE DISCRIMINANT ANALYSIS: SIGNIFICANT
MODERN LIFE STYLE VARIABLES

Variables	Users/Non-Users Owners/Non-Owners					
	Stereo	Soft Drinks	Fruit Juice	Alcoholic Beverages	Car	Deodorant
Novelty	+	−	+	+	+	+
Urban Living	+	+	−	−	−	−
Home Orientation	+	+	−	+	+	+
Women's Lib	+	−	+	−	+	−
Human Efficacy	−	−	−	+	−	+
Women's Ability	−	+	−	−	−	−
Outside Women's Work	−	−	+	−	+	−
Fashion Orientation	−	+	−	+	+	+
Old-fashioned Tastes	−	+	+	+	+	+

+ Entered into the discriminant analysis.
− Not entered into the discriminant analysis.

alcoholic beverage analysis as high as .70. This indicates that novelty is the most discriminating variable among users and non-users of these product categories. In the soft drink analysis, the highest coefficient belongs to fashion orientation (.55) which suggests that this variable better discriminates between users and non-users of soft drinks than other variables included in the analysis. Likewise, in fruit juice and car analyses, women's lib and outside women's work had the highest coefficients, respectively.

In the six classification procedures of the discriminant analyses using life style variables as discriminating variables, the prediction rates went as high as 71 percent in the case of soft drinks and as low as 53 percent in the case of fruit juice (Figure 2). The generally moderate prediction rates reported in Figure 2 suggest that life style variables do not predict very accurately due to a weak explanatory power.

Demographic Variables

Four demographic variables (e.g., income, education, age, and occupation) served as discriminating variables in a second set of stepwise discriminant analyses. Reviewing Table 16 reveals that the most dominant discriminating variables in stereo equipment analysis were income and education with coefficients of .67 and .63, respectively (see Appendix E). In soft drink analysis, the most dominant variable is age with a coefficient as high as .80. Two other variables (e.g.,

STEREO

Actual	Predicted 1	2	
1[a]	384 73.7%	137 26.3%	521
2[b]	74 34.7%	139 65.3%	213
3[c]	51 18.9%	219 81.1%	270

71% Correctly Classified

ALCOHOLIC BEVERAGE

Actual	Predicted 1	2	
1	357 35.2%	290 44.8%	647
2	195 39.2%	303 60.8%	498
3	20 66.7%	10 33.3%	17

58% Correctly Classified

SOFT DRINKS

Actual	Predicted 1	2	
1	157 71.7%	62 28.3%	219
2	303 40.1%	442 59.3%	745
3	22 75.9%	7 24.1%	29

62% Correctly Classified

CAR

Actual	Predicted 1	2	
1	238 61.8%	147 38.2%	385
2	281 36.9%	480 63.1%	761
3	34 75.6%	11 24.4%	45

63% Correctly Classified

FRUIT JUICE

Actual	Predicted 1	2	
1	217 52.7%	195 47.3%	412
2	338 46.2%	393 53.8%	731
3	17 35.3%	31 64.7%	48

53% Correctly Classified

DEODORANT

Actual	Predicted 1	2	
1	291 70.3%	123 29.7%	414
2	169 30.2	391 69.8%	560
3	19 63.3%	11 30 36.7%	

70% Correctly Classified

[a] Non-users/Non-owners
[b] Users/Owners
[c] Ungrouped Cases

Figure 2. Life Style variables: classification results.

TABLE 16

STEPWISE DISCRIMINANT ANALYSIS: SIGNIFICANT
DEMOGRAPHIC VARIABLES

| Variables | Users/Non-Users | | | | Owners/Non-Owners | |
	Stereo	Soft Drinks	Fruit Juice	Alcoholic Beverages	Car	Car Deodorant
Income	+	+	−	−	−	+
Education	+	−	−	+	+	−
Age	−	+	+	−	−	+
Occupation	−	−	+	+	+	+

+ Entered into the discriminant analysis.
− Not entered into the discriminant analysis.

occupation and income) contributed to the discriminant function but to a lesser extent as evidenced from their coefficients. While age is the most important discriminating variable in fruit juice analysis with a coefficient as high as .83, the occupation variable does enter into the analysis and has a coefficient of .55. Education and occupation variables are the most important demographic characteristic discriminating between users and non-users of alcoholic beverages. Their coefficients of .67 and .62 indicate that they make almost equal contributions to the discriminant function. Car owners are distinguished from non-owners by their educational background .74 and to a lesser extent by their occupation .55. Finally, users of deodorant are discriminated from non-users by their income (.73), age (.61) and to some extent by their occupation (.39). A review of Figure 3 indicates that when demographic variables were used as discriminating variables, prediction rates went as high as 63 percent in the case of soft drinks, but seemed to center around 55 on the average.

The last step in the analysis consisted of a comparison of classification results obtained from the two sets of discriminant analyses. These are shown in Table 17.

As can be seen from Table 17, in stereo equipment analysis, the highest prediction rate (71%) obtained is when life style variables are used as discriminating variables which is an improvement, though not substantial, over prediction rate of 59% when demographics are used as discriminating variables.

STEREO

Actual	Predicted 1	2	
1[a]	306 59.2%	211 40.8%	517
2[b]	90 41.1%	129 58.9%	219
3[c]	131 46.0%	154 54.0%	285

59% Correctly Classified

ALCOHOLIC BEVERAGE

Actual	Predicted 1	2	
1	171 39.0%	268 61.0%	439
2	146 37.2%	246 62.8%	392
3	12 70.6%	5 29.4%	17

50% Correctly Classified

SOFT DRINKS

Actual	Predicted 1	2	
1	123 60.0%	82 40.0%	205
2	221 35.4%	403 64.6%	624
3	14 73.7%	5 26.3%	19

63% Correctly Classified

CAR

Actual	Predicted 1	2	
1	241 65.8%	125 34.2%	306
2	427 55.1%	348 44.9%	775
3	38 84.4%	7 15.6%	45

52% Correctly Classified

FRUIT JUICE

Actual	Predicted 1	2	
1	126 46.0%	148 54.0%	274
2	183 33.8%	354 66.2%	542
3	20 62.5%	12 37.5%	32

59% Correctly Classified

DEODORANT

Actual	Predicted 1	2	
1	338 77.6%	96 22.4%	429
2	379 68.9	171 31.1%	550
3	22 84.6%	4 15.4%	26

51% Correctly Classified

[a] Non-users/Non-owners
[b] Users/Owners
[c] Ungrouped Cases

Figure 3. Demographic Variables: Classification Results.

TABLE 17

COMPARISON OF PREDICTION RATES OF
CLASSIFICATION PROCEDURES
(% Correctly Classified)

Product Category	Life Style Variables	Demographic Variables
Stereo	71	59
Soft Drink	62	63
Fruit Juice	53	59
Alcoholic Beverage	58	50
Car	63	52
Deodorant	70	51

In soft drink analysis, the predictive power of both life style and demographic variables is almost identical with 62% and 63%, respectively.

Demographic variables do slightly better than life style variables in prediction fruit juice consumption, but the difference between the prediction rates cannot be considered substantial. This argument can be applied to analysis of alcoholic beverages as evident from prediction rates shown in Table 17.

In car analysis, life style variables do better than demographics with 63% and 52%, respectively. A more noticeable difference is found when the prediction rates of deodorant analysis are observed. Life style variables more accurately discriminate between users and non-users of deodorant with a prediction rate of 70 percent. This is a major improvement over a prediction rate of 51 percent when demographic variables are used as discriminating variables.

In general, the prediction rates obtained from the discriminant analyses are low to moderate indicating that neither set of discriminating variables are able to accurately discriminate between users and non-users of various product categories. Life style variables do better than demographic variables in predicting consumption patterns with regard to stereo equipment, alcoholic beverages, car and deodorant whereas in soft drink and fruit juice analyses, life style variables seem to perform as well as demographics. These findings provide partial support for hypothesis III as they indicate that consumption of value-

bound products is influenced by life style patterns to a greater extent than the demographic variables. As an example, consumption of deodorant is believed to be heavily influenced by the notion of social desirability and acceptance rather than standard demographic variables.

Another product category in which life style variables exert greater influence than demographic variables is car ownership. As pointed out earlier, car as a time saving device represents a modernizing aspect of consumption behavior.

CHAPTER 5

DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

A. Discussion

The ever-increasing involvement of multinational corporations (NMCs) in overseas operations has stimulated an interest and a need for marketing research in foreign markets. The basic question faced by multinational marketers is what should be the nature of marketing research in overseas markets.

Generally speaking, expansion into foreign markets require decision making at three different levels in a hierarchical fashion. First, a decision would have to be made as to which countries to enter followed by a decision to select market segment(s) to serve within the chosen countries and finally a decision as to what marketing strategies would be most appropriate for the selected target markets.

It was argued that the nature of information input for the three major decisions discussed is different. While, macro level data would be quite appropriate for the first two decisions involved, one would have to shift to a micro level data to accommodate the information requirement for decision making at the third level. This means that if one wants to formulate effective marketing strategies to tap selected target markets in foreign countries, one would have to understand the dynamics of consumption behavior not only within the context of a single nation but

also in a cross-national setting. The focus should be on discovering commonalities of response behavior both within and across countries.

The idea advanced in this dissertation was to take advantage of existing knowledge in the area of social sciences to discover such response commonalities across cultures. More specifically, this dissertation sought to integrate the literature in the areas of social psychology and consumer behavior to develop a construct useful for cross-cultural consumer research. This was done by linking the widely used concept of individual modernity to that of life style concept to define what was called a modern life style.

In Chapter 2, the thesis of individual modernity was examined in some detail. Specifically, several aspects of the theory, namely the meaning of modernity, causes of modernity, assumptions of the theory, and measurement of modernity were discussed by drawing on the rele-vant literature in sociology and social psychology. The literature review revealed a great deal of disagreement among social psychologist with regard to important aspects of the theory mentioned above.

In particular, there seems to be no consensus as to how this concept should be precisely defined, conceptualized, and measured. However, the unifying theme in the literature reviewed seems to be in the basic utility of the concept. This seems to suggest that those who become modern through whatever processes and measured by whatever procedure tend to become increasingly alike in their essential charac-teristics and behavior.

The literature in the area of cross-cultural consumer research was also reviewed in Chapter 2 focusing particularly on cross-cultural life style and demographic studies. The literature review revealed that there is merit in analyzing consumers both within and across countries as there are similarities and differences of life style patterns and consumption behavior across countries. The literature review led to formulation of three hypotheses to be tested in this study.

Chapter 3 presented a detailed account of procedures and methods used in the construction of a scale of modern life style. In retrospect, it is highly desirable and necessary to critically evaluate the scale that was constructed for the purpose of this study. This examination, particularly in light of evidence presented concerning the reliability and validity of our modern life style scale will reveal the strengths and weaknesses of the scale and most likely will facilitate the interpretation of the results.

One common problem in cross-cultural research is an ethnocentrism bias. As defined by Van Raaij (1978), ethnocentrism bias arises "from blindness for the unique and different characteristic of another culture" (p. 699). The present study seems to suffer from this bias for the modernity concept and research, for the most part, have been developed by Western scientists. Therefore, when we are dealing with this concept in our attempt to measure and/or interpret its meaning, unless we take proper care to avoid it, we are likely to introduce a very strong Western bias into the analysis. In the context of this

study the components and direction of modern life style have been determined with reference to the theoretical literature on modernity rather than from the "local material." Therefore, it may be argued that perhaps what we are measuring is Westernism rather than modernity.

A second area of concern is the formal equivalence of the instruments that were used to collect the data. Van Raaij (1978) suggests that:

> formal equivalence of a questionnaire or a questionnaire item means that an identical questionnaire and respond-ent instruction are employed for all respondents involved in the study. (p. 695).

In the context of the present study, formal equivalence concerns how reliably does a given questionnaire item measure the components of modern life style in different cultural settings. Hence, formal equivalence is viewed as an instrument reliability problem. With regard to consumption variables used in this study, formal equivalence can be assumed because in this case we are dealing with behavioral measures such as possession of household appliances, use of deodorant, etc. But in the case of modern life style and its components, attaining formal equivalence is more difficult because we are dealing with hypothetical constructs. For instance, the statement, "ERA should be added to the Constitution," may be a good indicator of the hypothetical construct democratic orientation in one culture, but not in another. Formal equivalence of items such as this can be attained using the method of back translation. As pointed out earlier and indicated by Plummer (1977), most items in the data used in this study have been tailored to

suit each cultural setting, but identical interview procedures have not been used. Nevertheless, the somewhat moderate reliability coefficients reported for the scale of modern life style indicate that formal equivalence has been attained to some extent and more importantly the reliability coefficients are quite comparable to coefficients reported in similar research studies conducted on a cross-cultural basis.

In evaluating the modernity scale, the problem of conceptual or functional equivalence must also be considered. Van Raaij (1978) suggests that "an instrument is functionally equivalent across cultures if it measures the same construct" (p. 696, emphasis added). This is to say that questionnaire items may be different for different cultures but they must measure the same hypothetical construct. Hence, conceptual equivalence constitutes a validity problem. The validity of modern life style scale was examined through factor analysis. While a very strong case of unidimensionality can not be supported by the result of factor analysis, it is reasonable to conclude, however, that certain elements of similarity were found when the factorial structure of modern life style were compared across the four countries under study.

In order to complete the evaluation of the modern life style scale, one must also discuss some positive features of the scale. First, the life style scale as constructed in this study is composed of six major components. Whenever possible, multiple-indicators have been included to measure a given component. The importance of multiple-indicators has been emphasized by many authors (see for example

Carmines & Zeller, 1979; Kerlinger, 1973; Sullivan & Feldman, 1979; Tessler, 1973).

Second, the direction of the various items used in the scale are varied. This is important because "yay-saying" and "nay-saying" constitute a common type of response set in cross-cultural studies.

Finally, the items selected to measure the same component were distributed throughout the questionnaire minimizing the possibility that any response would be influenced by a conscious desire to be consistent and insured that each item would be evaluated independently.

In Chapter 4 the results of the analysis were presented. First, a demographic profile of modern and traditional groups revealed that the life style scale behaved in an expected direction as it assigned higher scores to those who were more educated and younger. This is consistent with the findings reported in modernity literature. Second, it was shown that modern and traditional groups are significantly different with regard to their consumption pattern in a number of product cate-gories. More specifically, moderns tend to consume more soft drinks, fruit juices and alcoholic beverages. It was pointed out earlier that such consumption items represent a life style pattern that tends toward decreasing home production of food items as suggested by Uusitalo (1982). This may reflect th fact that a modern individual has greater demand on his/her time schedule, and therefore any product offering that is perceived as time-saving is welcome. This has implication not only for the type of products targeted to modern groups but also the

kind of appeal used to approach them. For instance, moderns would be a primary target for marketing of preprocessed food items and that they may be approached by emphasizing the time-saving attribute rather than the nutritional qualities of the product.

Modern and traditional groups were also found to be significantly different with regard to their use of deodorant. Findings of the past research indicate that individuals who are modern in outlook and life style are generally heavy users of personal care products. This may reflect the fact that modern groups tend to be more involved with the world outside home and therefore they are more concerned about their physical appearance than the traditional groups. Such tendencies make the modern group susceptible to any personal care product that is per-ceived as enhancing their image in the community and the world around them.

This study also showed that moderns are characterized by more frequent use of a car. This finding is again consistent with findings of previous research as indicated earlier which represents a desire to be more mobile than the traditional groups.

The results of ANOVA indicated that life style influences are significant in explaining consumption behavior, but the effect is not very strong. The data suggest that national and cultural influences continue to determine the consumption patterns across the countries examined. But it must be emphasized that the inclusion of national identity as an independent variable in the analysis does not eliminate

the effect of modern life style. Therefore, one may argue that the effect of modern life style is there but it is not strong enough at this point in time.

But, not all the variance that was accounted for by national identity can be attributed to cultural and national differences either because a number of situational factors, unique to a given country environment, may influence the level of demand and availability of certain product categories. For example, government economic policy may encourage (discourage) consumption and production of specific product categories such as alcoholic beverages.

Legal constraints such as quality standards may influence availability of certain products in a given country. Furthermore, a number of market specific conditions may also affect the level of demand and availability of certain product categories. For instance, stage of product life cycle, degree of competition and the nature of market structure will affect consumers' response to alternative marketing strategies and hence the level of demand for certain products. Therefore, to isolate the effect of national and cultural differences, one should select product categories that are free from the impact of these confounding variables.

As to why life style influences did not show a strong influence on consumption choices in this study may be explained in at least two ways. First, it is possible that the measure of modern life style as constructed in this study was not well explicated. This is to say that may be certain important dimension of a modern life style was not

captured by the scale developed in this study. This implies that without further research on measurement, it would be difficult to rule out the effect of modern life style on consumption patterns. Second, it can be argued that individual differences within the modern group produced more within group variance than between group variance. This argument particularly makes sense because life style patterns transcend across many social groups in the society and hence the reason for large within-group variance.

Finally, the last step in the analysis consisted of determining the relative strength of life style variables versus demographics. The study results suggested that life style variables better explain consumption of several product categories. Among these, one product, i.e., deodorant, can be labeled as a value-bound product for reasons mentioned earlier. Other product categories such as home appliances seem to constitute essential items and hence they are in common use in the countries included in this study. Therefore, neither modern life style measure no demographic variables were able to explain consumption patterns along these product categories.

B. Limitations

Any research study has its limitations, and this one is not an exception. The major limitations of this study will now be discussed.

First, differences and similarities found might well be due to varied sampling methods and data collection procedures as explained earlier rather than true cross cultural differences and similarities.

Second, the range of products included in this study may not be broad enough to allow the measure of modern life style to be tested over a wide variety of products, particularly those that are seemingly susceptible to modern modern life style influences and represent varying consumption patterns and styles.

Third, it may be that countries included in this study were not diverse and varied enough with regard to consumption items examined to permit sufficient variation in the data and to broaden the scope of the study. Several products included in this study are highly diffused in the countries under study and thus represent typical consumption items.

Fourth, the data permits examination of modern life style influences at one point in time. A longitudinal study is perhaps preferred because such influences can be studied over time.

C.   Implications for Multinational Marketing

The result of this study indicates that a knowledge of life style patterns along modern-traditional dimensions has implications on all aspects of marketing programs of multinational companies. Some of the more promising areas for research and application include cross-cultural market segmentation, multinational product planning and promotion across countries. In what follows each aspect will be examined briefly.

The findings of this study indicated that modern-traditional groups differ in their consumption patterns with respect to several

product categories. This knowledge provides a basis for segmenting the markets along modern-traditional life style dimension both within and across countries. Since, modern life style groups are characterized with a set of value orientations that are fundamentally different from that of other groups in the society, the multinational marketer could consider these value orientations to expand their understanding of consumers beyond the standard socio-economic-demographic variables and hence design marketing programs with increased precision and effectiveness.

In the area of multinational marketing planning marketer will benefit from a knowledge of consumers along modern-traditional life style dimension. Willingness to try new products and ideas and receptiveness to change as unique attributes of the modern group makes this group particularly susceptible to new product introduction. The reaction and response of this group may well determine the fate of these innovations in the diffusion process.

The findings of this study suggested that modern-traditional groups may be attracted to product offerings for quite a different reasons. For instance, time-saving appeal as opposed to nutritional appeal may be more effective in marketing food items to the modern group. Thus, such a knowledge can help multinational marketer to develop promotional programs that are more effective in persuading various groups in the market.

Finally, it is appropriate to suggest a number of questions to be pursued in future research endeavor:

1. Are modern and traditional groups different in use and consumption of a wide variety of products and services? Inclusion of products that represent recent innovations such as microwave ovens would be particularly helpful in this area.

2. What consumption styles or patterns differentiates moderns from traditions?

3. Are within group differences with regard to tastes and preferences larger than between group differences?

4. Are moderns and traditionals different with regard to their media habits?

5. How stable are modern-traditional groups over time? Is there a transitional group that can be identified in various countries?

6. What other dimensions of modernity might be useful in description and prediction of consumption patterns?

7. Is the concept of modern life style better suited to identi-fication of consumer behavior differences and similarities in industrialized countries than less developed countries?

These questions and hopefully maybe others must be addressed in further theoretical and empirical cross-cultural studies to achieve a better understanding of the dynamics of consumer behavior across cultures. As Green and Langeard (1975) put it "international marketing at the level of sophistication currently practiced domestically in the United States will only be possible when more is known about the behavior of consumers outside of this country" (p. 41).

APPENDIX A
LEO BURNETT'S LIFE STYLE DATA

Country	Date of Fieldwork	Sample Size
U.S.		
male	1970	1,739
female	1970	1,882
Canada		
English male	1974	665
English female	1972	605
French male	9714	523
French female	1972	584
Germany		
male	1974	2,133
female	1974	2,264
Britain		
male and female	1972	8,481
South Africa		
male	1973	1,320
female	1973	1,405
Brazil		
male	1974	400
female	1974	300
Japan		
male	1978	1,027
female	1978	1,898
France		
male and female	1974	2,311
Denmark		
male	1978	1,274
female	1978	1,470
Italy		
female	1974	771
Puerto Rico		
male and female	9714	1,089
Mexico		
male	1974	2,500

APPENDICES

APPENDIX A
LEO BURNETT'S LIFE STYLE DATA

Country	Date of Fieldwork	Sample Size
U.S.		
male	1978	1,739
female	1978	1,852
Canada		
English male	1974	995
English female	1972	605
French male	9714	523
French female	1972	584
Germany		
male	1974	2,133
female	1974	2,294
Britain		
male and female	1972	6,483
South Africa		
male	1973	1,320
female	1973	1,405
Brazil		
male	1974	400
female	1974	200
Japan		
male	1978	1,927
female	1978	1,899
France		
male and female	1974	2,511
Denmark		
male	1978	1,274
female	1976	1,470
Italy		
female	1974	771
Puerto Rico		
male and female	9714	1,000
Mexico		
male	1974	2,900

APPENDIX B

VALUES OF MODERNITY AND CORRESPONDING
LIFESTYLE STATEMENTS

Modernity Value Lifestyle Statement

Readiness for New Experience

U.S.:	(+)	I like to try new and different things.
Japan:	(+)	I always buy the newest products.
France:	(+)	More novelties welcome.
Brazil:	(+)	When I see a new product, I'll buy it.

U.S.:	(+)	The new styles turn me on.
Japan:	(+)	I am sensitive to fashion.
France:	(+)	I am one of the first to adopt a new fashion.
Brazil:	(+)	I like everything that is modern.

U.S.:	(-)	I have old-fashioned tastes and habits.
Japan:	(-)	I hate men's long hair.
France:	(-)	I have old-fashioned tastes and habits.
Brazil:	(-)	Men should wear short hair.

Weakening of Family Ties

U.S.:	(-)	I am a homebody.
Japan:	(-)	My family is my life purpose.
France:	(-)	I like to spend my time at home.
Brazil:	(-)	I would rather spend my time at home.

Democratic Orientation

U.S.:	(-)	Movies should be censored.
Japan:	(+)	If pornography was made legal, sex and morals will not digress.
France:	(-)	There should be censorship of press and TV.
Brazil:	(-)	Movies that present nudity should be censored.

U.S.:	(+)	Era should be added to the Constitution.
Japan:	(-)	It would be a problem if women became stronger.
France:	(+)	I am in sympathy with women's lib.
Brazil:	(-)	It is silly for women to study too much.

U.S.:	(-)	Women's place is at home.
Japan:	(-)	Women should not have jobs outside the home.
France:	(-)	Women's place is in the kitchen.
Brazil:	(-)	Women's place is at home.

Appendix B Continued

Modernity Value Lifestyle Statement

Democratic Orientation continued
    U.S.:   (+) Women are capable of combining career
                    with marriage and children.
    Japan: (-) It is impossible for women to manage
                    work and marriage.
    France: (-) It is too hard when a mother works.
    Brazil: (-) It is difficult to have a successful
                    marriage when the wife has a job.

Planning Habits
    U.S.:   (+) I am a very neat and organized person.
    Japan: (+) I take good care of my clothes.
    France: (+) France: I am a very neat and organized
                    person.

    Brazil:

    U.S.:   (-) It is important to live well now than
                    save for the future.
    Japan: (-) It is better to live well now than to
                    save for the future.
    France: (-) I would rather live well than save for
                    the future.
    Brazil: (-) It is better to make good use of money
                    now than in the future.

Value for Urban Life
    U.S.:   (-) A small town is the best place to live.
    Japan: (-) It is best to live in the province.
    France: (-) Life in the country is better.
    Brazil: (-) If I could, I'd live on a ranch.

Nuclear Family
    U.S.:   (-) All couples should have at least one
                    child.
    Japan: (-) Marriage without children is incomplete.
    France: (-) It is scandelous to get married and not
                    want a child.
    Brazil: (+) People who avoid children are right.

Respect for Manual Labor
    U.S.:   (+) I do a lot of repair work at home.
    Japan: (-) I am not clever with my hands.
    France: (+) I like to do manual labor.
    Brazil: (+) I know a lot about the mechanical
                    aspects of cars.

Appendix B Continued

Modernity Value Lifestyle Statement

Respect for Manual Labor
U.S.:	(+)	I am handy at fixing things.
Japan:	(+)	I am an expert in mechanisms.
France:	(+)	At home I do most installations and repairs.
Brazil:	(+)	I always try to repair things at home.

Faith in Science
U.S.:	(+)	I want my children to get a college education.
Japan:	(+)	I want my children to get a college education.
France:	(+)	I wish I had more schooling.
Brazil:	(+)	I would like my children to go to the university.

Open Mindedness
U.S.:	(-)	To a large extent, emotions influence my decisions.
Japan:	(-)	I am not a flexible person.
France:	(-)	I am a very emotional person.
Brazil:	(+)	I think a lot before making a decision.

Personal Efficacy
U.S.:	(+)	I expect to be a top executive within the next 10 years.
Japan:	(+)	I have a goal to accomplish within the next 5 years.
France:	(+)	I hope to have a job with more responsibilities in the future.
Brazil:	(+)	I have a splendid future.
U.S.:	(-)	My opinions on things doesn't count in today's world.
Japan:	(-)	My attitude doesn't count in today's world.
France:	(-)	People like me can't influence what is happening in today's world.
Brazil:	(-)	My opinion doesn't count anything in today's world.

APPENDIX C

FACTORIAL STRUCTURE OF MODERN LIFE STYLES

Factor analysis was used to examine the dimensionality of the scale of modern life style. The result of the prinicipal component on the combined sample are presented in Table C-1. The first factor explains 24 percent of total variance. While this is comparable to results obtained in modernity studies, it is lower than what Carmines and Zeller (1979) consider as a minimum, i.e. 40 percent. As can be seen, subsequent components explain fairly equal proportions of the remaining variance required by criterion two discussed in Chapter 3. All but two variables have loadings of more than .30 on the first component, satisfying criteria three and four. Results thus indicate that items included in the scale reflect a basic modernity dimension. This is, of course, no surprise since a hypothetical modernity syndrome has empirically been verified in Argentina, Pakistan, Chile, Israel, Nigeria, and Indian (Inkeles & Smith, 1974), Mexico and Brazil (Kahl, 1968), Turkey (Schnaiberg, 1970), Guatemala (Portes, 1973), and the Middle East (Lerner, 1965).

When the principal-components was performed separately in each country, comparable results were obtained with few exceptions. These results can be seen in Tables C-2 through C-5. In the United States data (Table C-2), the first component explained 21 percent of the total variance. Three items do not meet criterion three and one items does not meet criterion four, discussed in Chapter 3.

TABLE C-1

UNROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
ALL SAMPLES

Variable	Factor			
	I	II	III	IV
Novelty	.38	-.10	-.02	.008
Urban Living	.21[ab]	0.06	.31	.31
Nuclear Family	.40	-.07	-.07	.11
Home Orientation	.38	-.13	.02	.28
Censorship of Media	.51	.02	-.26	.10
Women's Liberation	.47	.02	-.26	.10
Human Efficacy	.19[a]	.10	.18	.08
Women's Ability	.53	-.21	.21	-.23
Outside Women's Work	.63	-.24	-.13	-.15
Occupational Aspirations	.316[b]	.42	-.10	-.02
Fashion Orientation	.416[b]	.45	.16	.06
Old-fashioned Taste	.40	.10	-.20	.08
Total Variance Explained	24%	10%	9%	8%

[a] Item does not meet criterion three.
[b] Item does not meet criterion four.

The results in Japan fall short of being similar to results obtained from the combined sample. As can be seen in Table C-3, the first component explains 16 percent of the total variance. About 50 percent of the items do not meet criterion three (seven items) and criterion four (six items).

Table C-4 presents results of principal-components in Brazil. As indicated, the first component explains 22 percent of the total variance with only six items passing the test set forth for dimensionality of the modern life style mentioned earlier. Finally, in France (Table C-5), the first component explained only 19 percent of the variation with only five items satisfying the test of dimensionality. The results of the factor analysis performed separately for each country departs from the results presented for the combined sample in a number of ways:

1. While most items have substantial loadings (.3 and higher) on the first component in the combined sample, only 5, 6, and 5 items have such loadings in Japan, Brazil, and France, respectively.

2. Most items have higher loadings on the first component than subsequent components, only 6, 7, and 7 items have such characteristics in Japan, Brazil, and France, respectively.

3. The initial factoring yielded four factors in the combined sample, where, in separate country

TABLE C-2

UNROTATED FACTOR MATRIX OF MODERN LIFE STYLE
ITEMS IN U.S.

Variable	Factor		
	I	II	III
Novelty	.25[a]	.16	.18
Urban Living	.34	.14	-.07
Nuclear Family	.38	.02	-.43
Home Orientation	.38	.20	.05
Censorship of Media	.48	.07	-.15
Women's Liberation	.27[a]	-.18	.04
Human Efficacy	.25[a]	.15	.06
Women's Ability	.32[b]	-.46	.27
Outside Women's Work	.59	-.43	-.09
Occupational Aspirations	.36	.24	.20
Fashion Orientation	.33	.13	.23
Old-fashioned Taste	.42	.16	-.02
Total Variance Explained	21%	11%	9%

[a]Item does not meet criterion three.
[b]Item does not meet criterion four.

TABLE C-3

UNROTATED FACTOR MATRIX OF MODERN LIFE STYLE
ITEMS IN JAPAN

Variable	Factor			
	I	II	III	IV
Novelty	-.02[a][b]	.35	.08	-.16
Urban Living	.18[a][b]	.02	-.07	.31
Nuclear Family	.28[a]	.01	-.12	-.08
Home Orientation	.36	.08	-.45	-.08
Censorship of Media	.09[a][b]	.25	.00	.01
Women's Liberation	.49	-.09	.01	.13
Human Efficacy	.09[a][b]	.04	.11	.24
Women's Ability	.53	-.18	.32	-.11
Outside Women's Work	.47	-.08	.13	-.09
Occupational Aspirations	-.04[a][b]	.26	.12	.07
Fashion Orientation	.07[a][b]	.55	.16	.01
Old-fashioned Taste	.36	.27	-.15	.01
Total Variance Explained	16%	12%	9%	9%

[a] Item does not meet criterion three.
[b] Item does not meet criterion four.

TABLE C-4

UNROTATED FACTOR MATRIX OF MODERN LIFE STYLE
ITEMS IN BRAZIL

Variable	Factor				
	I	II	III	IV	V
Novelty	-.29	.16	.31	.00	.06
Urban Living	.17[ab]	.13	.09	-.23	.19
Nuclear Family	-.01[ab]	.03	-.07	.05	.15
Home Orientation	.45	.25	-.13	-.10	-.14
Censorship of Media	.52	.19	.09	-.05	-.04
Women's Liberation	.38	-.32	.00	.14	.28
Human Efficacy	.34[b]	-.36	.36	-.32	-.06
Women's Ability	.55	-.15	.01	.11	-.03
Outside Women's Work	.62	-.04	.02	.30	-.09
Occupational Aspirations	-.11[ab]	.00	.38	.19	-.12
Fashion Orientation	.05[ab]	.34	.29	.16	.11
Old-fashioned Taste	.64	.23	-.05	-.10	.07
Total Variance Explained	22%	10%	9%	8%	8%

[a]Item does not meet criterion three.
[b]Item does not meet criterion four.

TABLE C-5

UNROTATED FACTOR MATRIX OF MODERN LIFE STYLE
ITEMS IN FRANCE

Variable	Factor			
	I	II	III	IV
Novelty	$.13^{ab}$	.48	.00	-.13
Urban Living	$.17^{ab}$	-.18	.21	.18
Nuclear Family	.53	-.06	.10	-.36
Home Orientation	.44	.03	.17	-.05
Censorship of Media	.40	-.10	-.10	-.14
Women's Liberation	$.02^{ab}$	.05	.20	-.03
Human Efficacy	$.25^{a}$	.01	.04	.12
Women's Ability	.51	-.10	.10	.13
Outside Women's Work	.62	-.09	-.22	.19
Occupational Aspirations	$-.21^{ab}$	.50	-.19	.11
Fashion Orientation	$.08^{ab}$	.23	.39	.10
Old-fashioned Taste	$.27^{a}$	.17	.06	.07
Total Variance Explained	19%	11%	9%	8%

[a] Item does not meet criterion three.
[b] Item does not meet criterion four.

analysis, the number of extracted factors ranged from three in the U.S. to five in Brazil.

4. A careful examination of the factor loadings reveals that loadings of the same variable varies from country to country.

From these considerations, one would tend to conclude that factorial structure of the modern life style varies from one country to another. But such a conclusion seems to be premature at best. The reason is that factors derived by principal-axes tend to be complex and difficult to interpret. This is due to the fact that principal-axes factors are calculated in such a way that the first factor accounts for a maximum amount of original variation, and each successive factor accounts for a maximum of the residual variation; therefore, no atten- tion is paid to meaningfulness of the initial, unrotated orthogonal factors. In other words, according to Overall and Klett (1972), "the principal-axes factors tend to be maximally complex with regard to the configuration of variables" (p. 118).

Furthermore, if rotated factors are orthogonal, from a statistical point of view, the rotated factors are "just as good" as the unrotated factors. Nunnally (1978) states that this is because: (1) the rotated factors explain the same amount of variance as the unrotated factors did, and (2) the same common variance is explained in both the rotated and unrotated matrices (p. 371).

Thus principal-axes factors were rotated using varimax orthogonal rotation procedures. According to Nunnally (1978), an orthogonal rotation was chosen because: (1) orthogonal rotation is simpler mathematically than oblique rotation; (2) it has been shown in numerous studies that the two approaches lead to essentially the same conclusion about the number and kinds of factors inherent in a particular matrix of correlation (p. 376).

Second, among various orthogonal rotation procedures, varimax was chosen by Nunnally (1978) because it is generally accepted as the best method (p. 385). Since the goal of any rotation is to achieve the properties of a "simple structure."[1] Therefore, this analysis should provide us with a factor structure that is simpler and more meaningful. Furthermore, it should shed some light on the question of whether it is possible to identify a set of meaningful subdimensions above and beyond a basic modern life style.

The result of the principal conponent with a varimax rotations for the combined sample were discussed in Chapter 3, therefore, they will not be repeated here. Instead, the result of separate country analyses will be presented here.

Rotated factor matrix of modern life style items for the U.S. sample is presented in Table C-6. The first factor is identified by two

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[1]The concept of "simple structure" was first advanced by Thurston (1947). For a discussion of the concept and various rotation methods see On-Kim and Mueller (1978).

items: occupational aspiration (.47) and preference for new styles and fashions (.40). Thus, it seems appropriate to label this dimension Change Factor. The second factor is obviously a Women Role Factor since the two items defining this factor are: positive attitude toward outside women's work (.63) and belief that women are capable of combining career and family (.62). The third factor reflects an orientation toward nuclear family and thus is labeled as such. Items defining this factor are: positive attitude toward nuclear family (.57), negative attitude toward censorship (.41).

The Japanese (Table C-7) clearly show that the first factor is a Women Role Factor with items: belief that women are capable of combining career and family (.66), positive attitude toward outside women's work (.48) and positive attitude toward women's lib (.38) loading high on this factor. The second factor, Fashion Orientation, is identified by preference for new styles and fashions (.57). The third factor can be identified by negative attitude toward home orientations (.59) and, therefore, it is labeled as Home Orientation.

The results of varimax rotation on Brazilian data (Table C-8) reveal a Democratic Orientation Factor defined by: negative attitude toward old-fashioned tastes and habits (.61), negative attitude toward home orientation (.55), negative attitude toward censorship (.51), and positive attitude toward outside women's work (.48). The second

factor with items: positive attitude toward women's lib (.58), positive attitude toward outside women's work (.47), and belief that women are capable of combining career and family (.44) is labeled as Women Role Factor. The third factor, Fashion Orientation, is defined by preference for new styles and fashions (.44). The fourth factor, labeled Efficacy Factor, is closely linked to a belief that one can influence his surroundings (.54).

Table C-9 shows the varimax rotated factor matrix for the French data. The first factor is labeled Women Role Factor since two items with "substantial" loading on this factor are: positive attitude toward outside women's work (.56) and belief that women are capable of combining career and family (.49). The second factor can be labeled Nuclear Family because it is heavily loaded with positive attitude toward nuclear family (.63). The third factor is identified with: occupational aspiration (.57), and preference for novelty (.48) and, therefore, it is labeled as Change Factor. Finally, the fourth factor is characterized by a close link to preference for new styles and fashions (.45) and so is labeled as Fashion Orientation.

TABLE C-6

VARIMAX ROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
(U.S.)

Variable	Change Factor I	Women Role Factor II	Nuclear Family III
Novelty	.34	.05	.01
Urban Living	.25	.04	.27
Nuclear Family	.02	.06	.57[a]
Home Orientation	.38	.04	.20
Censorship of Media	.25	.15	.41[a]
Women's Liberation	.08	.30	.10
Human Efficacy	.28	.02	.11
Women's Ability	.08	.62[a]	-.08
Outside Women's Work	.06	.63[a]	.37
Occupational Aspirations	.47[a]	.04	.07
Fashion Orientation	.40[a]	.12	.02
Old-fashioned Taste	.34	.08	.29

[a]Factor defining items, loading greater than or equal
to .40.

TABLE C-7

VARIMAX ROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
(JAPAN)

Variable	Women Role Factor I	Fashion Orientation II	Home Orientation III
Novelty	-.01	.37	.01
Urban Living	.02	.00	.12
Nuclear Family	.17	.00	.26
Home Orientation	.04	-.02	.59[a]
Censorship of Media	.00	.24	.10
Women's Liberation	.38	-.06	.22
Human Efficacy	.07	.06	-.06
Women's Ability	.66[a]	-.03	.01
Outside Women's Work	.48[a]	.00	.15
Occupational Aspirations	.-.03	.28	-.07
Fashion Orientation	.00	.57[a]	.02
Old-fashioned Taste	.13	.23	.37

[a]Factor defining items, loading greater than or equal
to .40.

TABLE C-8

VARIMAX ROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
(BRAZIL)

Variable	Demo-cratic Orien-tation I	Women Role Factor II	Fashion Orien-tation III	Effi-cacy Factor IV
Novelty	-.20	-.19	.35	.00
Urban Living	.14	.01	.03	-.01
Nuclear Family	-.02	.03	.00	-.17
Home Orientation	.55[a]	.00	-.10	.02
Censorship of Media	.51[a]	.15	.07	.09
Women's Liberation	.04	.58[a]	-.08	-.05
Human Efficacy	.03	.31	-.03	.54[a]
Women's Ability	.36	.44[a]	-.06	.11
Outside Women's Work	.48[a]	.47[a]	.05	.05
Occupational Aspirations	-.10	.02	.39	.17
Fashion Orientation	.15	-.02	.44[a]	-.12
Old-fashioned Taste	.61[a]	.19	-.05	-.03

[a]Factor defining items, loading greater than or equal to .40.

TABLE C-9

VARIMAX ROTATED FACTOR MATRIX OF MODERN LIFE STYLE ITEMS
(FRANCE)

Variable	Women Role Factor I	Nuclear Family II	Change Factor III	Fashion Orientation IV
Novelty	-.03	.11	.48[a]	.14
Urban Living	.30	.01	-.19	.12
Nuclear Family	-.17	.63[a]	.04	.03
Home Orientation	.30	.32	.08	.13
Censorship of Media	.20	.37	.03	-.16
Women's Liberation	.01	.05	.00	.21
Human Efficacy	.27	.06	.06	.01
Women's Ability	.49[a]	.24	.00	.01
Outside Women's Work	.56[a]	.23	.12	-.30
Occupational Aspirations	.13	-.04	.57[a]	-.05
Fashion Orientation	.02	-.13	.08	.45[a]
Old-fashioned Taste	.23	.09	.20	.09

[a]Factor defining items, loading greater than or equal to .40.

APPENDIX D

MODERN LIFE STYLE VARIABLES STEPWISE DISCRIMINANT ANALYSIS

Variables	Coefficients						MEANS											
	Stereo	Soft Drinks	Fruit Juice	Alc. Bev.	Car	Deo.	Stereo User-Nonuser		Soft Drinks User-Nonuser		Fruit Juice User-Nonuser		Alcoholic Beverage User-Nonuser		Car User-Nonuser		Deodorant User-Nonuser	
Novelty	.74	NE	.58	.70	.58	.78	3.5	2.4	3.3	3.0	3.1	3.4	3.0	3.4	3.5	2.9	3.8	2.4
Urban Living	.29	.39	NE	NE	NE	NE	2.5	2.0	2.3	1.8	2.2	2.2	2.2	2.3	2.2	2.2	2.4	2.0
Home Orientation	.26	.32	NE	-.37	NE	NE	2.8	2.2	2.6	2.1	2.5	2.5	2.5	2.4	2.5	2.4	2.7	2.2
Women's Lib	.17	ne	.73	.59	-.40	.16	3.6	3.0	3.0	2.8	3.0	2.8	2.8	3.1	3.0	3.0	3.3	2.5
Human Efficacy	NE	NE	NE	-.31	NE	NE	3.1	2.8	3.0	2.6	3.0	2.8	3.0	2.8	2.9	2.8	3.0	2.8
Women's Ability	NE	.38	NE	NE	NE	.23	3.3	2.7	3.2	2.7	3.0	3.1	3.0	3.2	3.2	3.0	3.4	2.6
Outside Women's Work	NE	NE	-.41	NE	.64	NE	3.6	2.9	3.2	3.0	3.2	3.1	3.1	3.2	3.4	2.8	3.5	2.8
Fashion Orientation	NE	.55	NE	NE	-.37	.33	2.7	2.2	2.5	1.9	2.3	2.4	2.3	2.4	2.3	2.4	2.6	2.0
Old-Fashioned Tastes	NE	-.43	-.56	-.30	.30	-.11	3.0	2.6	2.7	2.6	2.7	2.5	2.7	2.6	2.8	2.4	2.8	2.5

NE: not entered

APPENDIX D Continued

| Analysis | Group Means | | Eigen-value | Wilks Lamda | MEANS Chi-Square | DF | Signifi-cance |
	Users	Nonusers					
Stereo	.62	.28	.181	.846	250.80	4	0
Soft Drinks	.14	-.46	.069	.935	131.35	5	0
Fruit Juice	-.12	.22	.028	.972	54.52	4	0
Alcoholic Beverage	-.22	.17	.039	.962	76.02	5	0
Car	.18	-.38	.073	.931	138.71	5	0
Deodorant	.44	-.59	.262	.791	459.42	5	0

APPENDIX E

DEMOGRAPHIC VARIABLES STEPWISE
DISCRIMINANT ANALYSIS

Coefficients

Variables	Stereo	Soft Drinks	Fruit Juice	Alc. Bev.	Car	Deo.
Income	.67	-.42	NE	NE	NE	-.73
Education	.63	NE	NE	.67	.74	NE
Age	NE	.80	.83	NE	NE	.61
Occupation	NE	.52	.55	.62	.55	.39

MEANS

Variables	Stereo		Soft Drinks		Fruit Juice		Beverage		Alcoholic Car		Deodorant	
	User	Nonuser	User	Nonuser	User	Nonuser	User	Nonuser	User	Nonuser	User	Nonuser
Income	.58	.41	.53	.40	.49	.51	.51	.49	.52	.44	.57	.42
Education	.48	.32	.39	.39	.42	.32	.43	.35	.45	.30	.43	.35
Age	.34	.41	.33	.60	.34	.49	.37	.41	.37	.45	.33	.45
Occupation	.66	.72	.61	.86	.71	.57	.72	.62	.73	.56	.61	.73

NE: not entered

APPENDIX E Continued

| | Group Means | | ANALYSIS | | | | |
	Users	Nonusers	Eigen-value	Wilks Lamda	Chi-Squared	DF	Signifi-cance
Stereo	.31	-.12	.038	.962	36.07	2	.0000
Soft Drinks	-.17	.59	.103	.906	112.97	3	.0000
Fruit Juice	-.12	.25	.031	.969	35.36	2	.0000
Alcoholic Beverage	.10	-.08	.009	.991	10.39	2	.0000
Car	-.11	.24	.029	.971	32.79	2	.0000
Deodorant	-.19	.23	.046	.955	51.92	3	.0000

REFERENCES

Abraham, Francis M. Modernization or social change: A redefinition of concepts. Indian Journal of Social Works, 1977, 37, 431-432.

Anderson, Alan R. Attitudes and customer behavior: A decision model. In L.E. Preston (ed.) New research in marketing. Berkeley, CA: Institute of Business and Economic Research, University of California.

Anderson, Ronald & Engledow, Jack. A factor-analytic comparison of U.S. and German information seekers. Journal of Consumer Research, March 1977, 3, 185-196.

Apter, David E. The politics of modernization. Chicago: The University of Chicago Press, 1965.

Armer, M., & Isaac, Larry. Determinants and behavioral consequences of psychological modernity: Empirical evidence from Costa Rica. American Sociological Review, 1978, 43, 301-316.

Armer, M. and Schnaiberg, A. Measuring individual modernity: A near myth. American Sociological Review, 1972, 37, 301-316.

Banfield, E.C., & Banfield, L.F. The moral basis of a backward society. Glencoe, IL: Free Press, 1958.

Baran, Paul. The political economy of growth. New York: Monthly Review Press, 1957.

Becker, Helmut. Is there a cosmopolitan information seeker. Journal of International Business Studies, Spring 1976, 7, 77-89.

Benedict, Ruth. Patterns of Culture. New York: Houghton Mifflin Company, 1934.

Black, C.E. The dynamics of modernization: A study in comparative history. New York: Harper and Row Publishers, 1966.

Black, C.E. Comparative modernization: A reader. New York: The Free Press, 1976.

Bohrnstedt, George W. Reliability and validity assessment in attitude measurement. In Gene F. Summers (ed.) Attitude measurement. Chicago: Rand McNally & Company, 1971.

REFERENCES

Abraham, Francis M. Modernization or social change: A redefinition of concepts. Indian Journal of Social Works, 1977, 37, 421-433.

Anderson, Alan R. Attitudes and customer behavior: A decision model. In L.E. Preston (ed.) New research in marketing. Berkeley, CA: Institute of Business and Economic Research, University of California, 1965.

Anderson, Ronald & Engledow, Jack. A factor analytic comparison of U.S. and German information seekers. Journal of Consumer Research, March 1977, 3, 185-196.

Apter, David E. The politics of modernization. Chicago: The University of Chicago Press, 1965.

Armer, M., & Isaac, Larry. Determinants and behavioral consequences of psychological modernity: Empirical evidence from Costa Rica. American Sociological Review, 1978, 43, 301-316.

Armer, M. and Schnaiberg, A. Measuring individual modernity: A near myth. American Sociological Review, 1972, 37, 301-316.

Banfield, E.C., & Banfield, L.F. The moral basis of a backward society. Gelncoe, IL: Free Press, 1958.

Baran, Paul. The political economy of growth. New York: Monthly Review Press, 1957.

Becker, Helmut. Is there a cosmopolitan information seeker. Journal of International Business Studies, Spring 1976, 7, 77-89.

Benedict, Ruth. Patterns of Culture. New York: Houghton Mifflin Company, 1934.

Black, C.E. The dynamics of modernization: A study in comparative history. New York: Harper and Row Publishers, 1966.

Black. C.E. Comparative modernization: A reader. New York: The Free Press, 1976.

Bohrnstedt, George W. Reliability and validity assessment in attitude measurement. In Gene F. Summers (Ed.), Attitude measurement. Chicago: Rand McNally & Company, 1971.

Brislin, Richard W., Lonner, Walter J., & Thorndike, R.M. Cross-cultural research methods. New York: Wiley & Sons, 1973.

Carmines, Edward G., & Zeller, Richard A. Reliability and validity assessment. Beverly Hills, CA: Sage Publications, 1979.

Chadroba, Petr & O'Keefe, Robert. Cross-national product value perceptions. Journal of Business Research, 1981, 9, 329-337.

Churchill, Gilbert A., Jr. A paradigm for developing better measures of marketing constructs. Journal of Marketing Research, 1979, 16, 64-73.

Clarke, Yvonne & Soutar, Geoffrey N. Consumer acquisition patterns for durable goods: Australian evidence. Journal of Consumer Research, 1982, 8, 456-460.

Collier, Raymond O. Randomization procedures for the analysis of educational experiments. Minneapolis: MN: University of Minnesota Cooperative Research Project No. 2593, 1965.

Cosmas, Stephen C. Life styles and consumption pattern. Journal of Consumer Research, 1982, 8, 453-455.

Coughenour, Milton C., & Stephenson, John B. Measures of individual modernity: Review and commentary. International Journal of Comparative Sociology, 1972, 13, 81-98.

Cronbach, L.J. Coefficient alpha and the internal structure of tests. Psychometrika, September 1951, 16, 297-334.

Crask, Melvin R. and Perreault, William D., Jr. Validation of discriminant analysis in marketing research. Journal of Marketing Research, February 177, 14, 60-68.

Cronbach, L.J., & Meehl, P.E. Construct validity in psychological tests. Psychological Bulletin, 1955, 52, 281-302.

Cunningham, William H., Moore, Russell M., & Cunningham, Isabella. Urban markets in industrializing countries: The Sao Paulo experience. Journal of Marketing, April 1974, 38, 2-12.

Davidson, Andrew R. The etic-emic dilemma: Can methodology provide a solution in the absence of theory? In Y.H. Poortinga (Ed.), Basic problems in cross-cultural psychology. Amsterdam: Swets & Zeitlinger, 1977.

Dawson, J.L.M. Traditional versus Western attitudes in West Africa: The construction, validation, and application of a measuring device. British Journal of Social and Clinical Psychology, 1967, 6, 81-96.

Demby, Emanuel. Psychographics and from whence it came. In W.D. Wells (Ed.), Life Style and Psychographics. Chicago: American Marketing Association, 1974.

Dewey, Alice. Peasant marketing in Java. Glencoe, NY: The Free Press, 1962.

Doob, Leonard W. Becoming more civilized. New Haven: Yale University Press, 1960.

Doob, Leonard W. Scales for assaying psychological modernization in Africa. Public Opinion Quarterly, 1967, 30, 414-421.

Dos Santos, T. The structure of dependence. American Economic Review, 1970, 40, 231-36.

Douglas, Susan P. & Urban, Christine D. Life style analysis to profile women in international markets. Journal of Marketing, July 1977, 41, 46-54.

Douglas, Susan P. Cross-national comparisons: A case study of working and non-working wives in the U.S. and France. Journal of Consumer Research, June 1976, 3, 12-20.

Douglas, Susan P. Do working wives read different magazines from non-working wives? Journal of Advertising, Winter 1977, 17, 40-48.

Eagle, James F., Blackwell, Roger D., & Kollat, David T. Consumer behavior. New York: Holt, Rinehart and Winston, 1968.

Eisenstadt, S.N. Social change, differentiation, and evolution. American Sociological Review, 1964, 28, 375-386.

Eisenstadt, S.N. Tradition, Change and Modernity. New York: John Wiley & Sons, 1973.

Engel, James F., & Blackwell, Roger D. Consumer behavior. Chicago: The Dryden Press, 1982.

Engledow, Jack C., Thorelli, Hans B., & Becker, Helmut. The information seekers--A cross-cultural consumer elite. In Mary Jane Schlinger (ed.) Advances in Consumer Research, 1975 2, 141-155.

Erickson, Leo G. Analyzing Brazilian consumer markets. Business Topics, 1963, 11, 7-26.

Frank, Ronald E., Massy, William F., & Morrison, Donald G. Bias in Multiple Discriminant Analysis. Journal of Marketing Research, August 1965, 2, 250-258.

Felson, Marcus. A modern sociological approach to the stratification of material life styles. In Mary Jane Schlinger (ed.) Proceedings of the Association for Consumer Research, 1975, 2, 33-38.

Gough, Harrison G. A measure of individual modernity. Journal of Personality Assessment, 1976, 40, 3-9.

Gough, Harrison G. Further validation of a measure of individual modernity. Journal of Personality Assessment, 1977, 41, 49-57.

Green, Robert T., Cunningham, Isabella C.M., & Cunningham, William H. Cross-cultural consumer profile: An exploratory investigation. In Scott Word and Peter Wright (eds.), Advances in Consumer Research, 1973, 1, 136-144.

Green, Robert T. & Langeard, Eric. A cross-national comparison of consumer habits and innovator characteristics. Journal of Marketing, July 1975, 39, 34-41.

Gusfield, Joseph R. Review essay. American Journal of Sociology, 1976, 82, 443-448.

Hagen, Everett E. On the theory of social change: How economic growth begins. Homewood, IL: The Dorsey Press, Inc., 1962.

Hair, Joseph Franklin, & Anderson, Rolph E. Culture, aculturation and consumer behavior: An empirical study. Combined Proceedings of American Marketing Association, Spring and Fall Conference 1972, 423-428.

Haring, D.G. (Ed.). Personal character and cultural milieu. New York: Syracuse University Press, 1949.

Hempel, Donald J. Family buying decisions: A cross-cultural perspective. Journal of Marketing Research, August 1974, 11, 295-302.

Herskovits, M. Economic anthropology. New York: Alfred Knopf, 1952.

Hobson, J.A. Imperialism. Ann Arbor: University of Michigan Press, 1965.

Howard, John and Sheth, Jagdish N. The theory of buyer behavior. New York: Wiley, 1969.

Huntington, Samuel P. The change to change: Modernization, development and politics. In C.E. Black (Ed.), Comparative Modernization, 1976.

Inkeles, Alex. Industrial man: The relation of status to experience, perception and values. American Journal of Sociology, 1960, 46, 1-31.

Inkeles, Alex. The modernization of man. In M. Weiner (Ed.), Modernization: The dynamics of growth. New York: Basic Books, Inc., 1966.

Inkeles, Alex. Making men modern: On the causes and consequences of individual change in six developing countries. American Journal of Sociology, 1969, 75, 208-225.

Inkeles, Alex. A model of modern man. In W.A. Faunce & H. Garfinkel (Eds.), Cross-cultural research in developing areas. New York: The Free Press, 1971.

Inkeles, Alex. The school as a context for modernization. International Journal of Comparative Sociology, 1973, 14, 163-179.

Inkeles, Alex. Emerging social structures in the world. World Politics, 1975, 27, 467-495.

Inkeles, Alex. Understanding and misunderstanding individual modernity. Journal of Cross-Cultural Psychology, 1977, 8, 135-176.

Inkeles, A. & Smith, D.H. Becoming modern: Individual change in six developing countries. Cambridge: Harvard University Press, 1974.

Iversen, Gudmund R., & Norpoth, Helmut. Analysis of Variance. Beverly Hills: Sage Publications, 1976.

Kahl, Joseph. The measurement of modernism: A study of values in Brazil and Mexico. Austin: The University of Texas Press, 1968.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart & Winston, Inc., 1973.

Kerr, John, Dunlop, John T., Harbison, Frederick, and Myers, Charles A. Industrialism and industrial man: The problem of labor and management in economic growth. Cambridge: Harvard University Press, 1960.

Kim, Jae-on, & Mueller, Charles W. Factor analysis: Statistical methods and practical issues. Beverly Hils: Sage Publications, 1978.

Kluckhohn, C. Mirror for man: The relation of anthropology to modern life. New York: McGraw-Hill, 1948.

Kuder, G.F., & Richardson, M.W. The theory of the estimation of test reliability. Psychometrika, 1937, 2, 151-160.

Kumar, Krishna, & Waisnen, F.B. Education, adoption of innovation and individual modernity. International Journal of Comparative Sociology, 1979, 20, 3-4.

Lazer, William. Life style concept and marketing. In Stephen A. Greyser (Ed.), Toward Scientific Marketing. Chicago: American Marketing Association, 1963.

Lenin, Veladimir I. Imperialism: The highest stage of capitalism. New York: International, 1939.

Lerner, Daniel. The passing of traditional society, modernizing the Middle East. London: Collier-McMillan Limited, 1958.

Levine, N. Klien, & Owen, C. Father-child relationships and changing life styles in Ibadan, Nigeria. In H. Miner (Ed.), The city in modern Africa. New York: Praeger Publishers, 1967.

Levy, Marion J. Modernization and the structure of societies: A setting for international affairs. Princeton: Princeton University Press, 1966.

Levy, S. Social class and consumer behavior. In H.H. Kassarjian & T.S. Robertson (Eds.), Perspectives in consumer behavior. Glenview, IL: Scott, Foresman, 1968.

Linton, Anna, & Broadbent, Simon. International life style comparisons. European Research, March 1975, 1, 51-56, 84.

Main, Sir Henry. Ancient law: Its connections with the early history of society and its relation to modern ideas. London: J. Murray, 1906. Reprint ed. 1961.

Martineau, P. Social classes and spending behavior. Journal of Marketing, 1958, 22, 121-130.

McClelland, David. The achieving society. Princeton, NJ: Von Nostrand, 1961.

McClelland, David. Motivational patterns in Southeast Asia with special reference to Chinese case. Journal of Social Issues, 1963, 29, 17.

Morrison, Donald B. On the interpretation of discriminant analysis. Journal of Marketing Research, 1969, 6, 156-163.

Murata, S. The Japanese consumer: A profile. Journal of Retailing, 1964, 40, 6-9.

Murdock, George P. Culture and society. Pittsburgh, PA: University of Pittsburgh Press, 1965.

Nicosia, F.M. Consumer decision process. Englewood Cliffs, NJ: Prentice-Hall, 1966.

Nunnally, J. C. Psychometric theory. New York: McGraw- Hill, 1978.

Nunnally, J. C. Introduction to psychological measurement. New York: McGraw-Hill, 1970.

O'Brien, Philip J. A critique of Latin American theories of dependency. In Ivar Oxaal, Tony Barnett, & David Booth (Eds.), Beyond the sociology of development, economy and society in Latin America and Africa. London: Routledge & Kegan, pp. 7-27.

O'Connel, James. The concept of modernization. In C.E. Black (Ed.), Comparative Modernization. New York: The Free Press, 1976.

Overall, John E., & Klett, C. James. Applied multivariate analysis. New York: McGraw-Hill, 1972.

Peshkin, Alan, & Cohen, Ronald. The values of modernization. The Journal of Developing Areas, 1967, 2, 7-22.

Pessemier, E.A., & Bruno, A. An empirical investigation of the reaiability and stability of selected activity and attitude measure: Paper #316. Lafayette, IN: Purdue University, 1971.

Pessemier, E.A., & Tigert, D.J. Personality, activity, and attitude predictors of consumer behavior. In J.S. Wright & J.L. Goldstucker (Eds.), New ideas for successful marketing. Chicago: American Marketing Association, 1968.

Peter, J. Paul. Reliability: A review of psychometric basics and recent marketing practices. Journal of Marketing Research, 1979, 16, 6-17.

Plummer, J.T. Consumer focus in cross-national research. Journal of Advertising, 1977, 6, 5-15.

Plummer, J.T. The concept and application of life style segmentation. Journal of Marketing, 1974, 38, 33-38.

Portes, Alejandro. The factorial structure of modernity: Empirical replication and a critique. American Journal of Sociology, 1973, 79, 15-44.

Portes, Alejandro. Modernity and development: A critique. Studies in Comparative International Development, 1974, 9, 247-249.

Portes, Alejandro. On the sociology of national development: Theories and issues. American Journal of Sociology, 1976, 82, 55-85.

Portes, Alejandro & Cobas, Jose A. Modernism and behavior: The predictive value of subjective versus objective factors in a developing country. International Review of Modern Sociology, 1976, 6, 253-266.

Prebisch, Raul. The economic development of Latin America and its principal problems. New York: United Nations, 1950.

Pressley, Milton M., & Tullar, William L. A factor interactive investigation of mail response rates from a commercial population. Journal of Marketing Research, 1977, 14, 108-111.

Rau, William C. The tacit conventions of the modernity school: An analysis of key assumptions. American Sociological Review, 1978, 45, 244-260.

Rogers, Everett. Modernization among peasants. New York: Holt, Rinehart & Winston, 1969.

Sanders, B.H. The Canadian consumer. In Fox & Leighton (Eds.), Marketing in Canada. Homewood, IL: Richard D. Irvine, 1958.

Schnaiberg, A. Measuring modernism: Theoretical and empirical explorations. American Journal of Sociology, 1970, 76, 319-425.

Sheth, Jagdish N. A market oriented strategy of long range planning for multinational corporations. In S.P. Sethi & R.H. Holton (Eds.), Management of multinationals: Policies, operation and research. New York: Free Press, 1974a.

Sheth, Jagdish N. Psychology of innovation resistance: The less developed concept (LCS) in diffusion research. Faculty working paper #622, College of Commerce and Business Administration. Urbana, IL: University of ILlinois, 1979.

Sheth, Jagdish N. Role of motivation research in consumer psychology. Faculty working paper #153, College of Commerce and Business Administration. Urbana, IL: University of Illinois, February 6, 1974b.

Sheth, Jagdish N. Role of demographics in consumer behavior. Faculty working paper #218, College of Commerce and Business Administration. Urbana, IL: University of Illinois, November 20, 1974c.

Sheth, Jagdish N. A review of buyer behavior. Management Science, August 1967, 12, 719-756.

Sheth, Jagdish N., & Sethi, S.P. Theory of cross cultural buyer behavior. Faculty working paper #115, College of Commerce and Business Administration. Urbana, IL: University of Illinois, 1973.

Smelser, Nail J. Essays in sociological explanations. Englewood Cliffs, NJ: Prentice-Hall, 1968.

Smith, David H., & Inkeles, Alex. The OM scale: A comparative socio-pscyhological measure of individual modernity. Sociemetry 1966, 29, 353-357.

Smith, David H., & Inkeles, Alex. Individual modernizing experiences and psycho-social modernity: Validation of OM scales in six developing countries. International Journal of Comparative Sociology, 1975, 16, 155-173.

Stephenson, John B. Is everyone going modern? A critique and a suggestion for measuring modernism. American Journal of Sociology, 1968, 74, 265-275.

Steward, Julian. Theory of culture change: The methodology of multilinear evolution. Urbana, IL: University of Illinois Press, 1955.

Straus, Murray A. Phenomenal identity and conceptual equivalence of measurement in cross-national comparative research. Journal of Marriage and the Family, 1969, 31, 233-241.

Sullivan, John L., & Feldman, Stanley. Multiple indicators: An introduction. Beverly Hills: Sage Publications, 1979.

Tessler, Mark A. Problems of measurement in comparative research: Perspectives from an African survey. Social Science Information, 1973, 12, 29-43.

Tessler, Mark A., & Hawkins, Linda L. Acculturation socio-economic status and attitude change in Tunisia: Implication for modernization theory. Journal of Modern African Studies, 1979, 17, 473-495.

Tigert, Douglas J. Psychometric correlates of opinion leadership and innovations. Unpublished working paper, University of Chicago, 1969.

Triandis, Harry C. Subjective culture and economic development. International Journal of Psychology, 1973, 8, 163-180.

Triandis, Harry C., Malpass, Ray S., & Davidson, Andrew R. Psychology and culture. Annual Review of Psychology, 1973, 24, 355-378.

Urban, Christine D. Consumer segmentation for multinational product planning. In Multinational Product Management, Proceedings of AMA/MSI Research Workshop: 1976, V1-V20.

Uusitalo, Liisa. Environmental changes in consumption styles. Journal of Macromarketing, 1982, 2, 16-30.

Van Raaij, W. Fred. Cross-cultural research methodology as a case of construct validity. In H. Keith Hunt (Ed.), Advances in Consumer Research (vol. 5). Ann Arbor, MI: Association for Consumer Research, 1978.

Vickers & Benson. The Lifestyles of English and French Canadian women: How they differ and how these differences influence the effective marketing of products. Marketing Services Department, Vickers and Benson, LTD, January 1972.

Wallace, A.F.C. Culture and personality. New York: Random House, 1961.

Wallerstein, Immanuel. The modern world-system-capitalist agriculture and the origins of the European world- economy in the 16th century. New York: Academic Press, 1974.

Weber, Max. The Protestant ethic and the spirit of capitalism. T. Parsons, trans. New York: Charles Scribner's Sons, 1958.

Weber, Max. Wirtschaft und Gesellschaft: Part I. Tübingen, Germany: n.p.), 1922.

Weiner, Myron. Modernization: The dynamics of growth. New York: Basic Books, Inc. 1966.

Wells, William D. Life styles and psychographics: Definitions, uses and problems. In W.D. Wells (Ed.), Life styles and psychographics. Chicago: American Marketing Association, 1974.

Wells, William D., & Cosmos, S. Life styles. Paper presented at the Conference of Knowledge of Consumer Behavior. Washington, DC: National Science Foundation, 1975.

Wells, William D., & Tigert, D.J. Activities, interests and opinions. Journal of Advertising Research, 1973, 11, 27-35.

White, Leslie A. The evolution of culture: The development of civilization to the fall of Rome. New York: McGraw Hill Book Company, 1959.

Wilenski, Harold L. Mass society and mass culture: Interdependence or independence. American Sociological Review, 1964, 29, 173-197.

Wilson, Clark L. Homemaker living patterns and marketplace behavior: A psychometric approach. In J.S. Wright & J.L. Goldstucker (Eds.), New ideas for successful marketing, 1966.

Wind, Yoram, & Douglas, Susan. Some issues in international consumer research. European Journal of Marketing, 1974, 8, 209-217.

Yogev, A. Review symposia: Becoming modern. Contemporary Sociology: American Journal of Reviews, 1976, 5, 115-118.

Zaltman, Gerald, Pinson, Christian, R.A., & Angelmar, Reinhard. Methodology and consumer research. Hinsdale, IL: Dryden Press, 1973.

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