ABSTRACT

CORRELATES OF LANGUAGE ATTITUDES
OF STUDENTS FROM INDIA

By Marvel June Allard

This dissertation is concerned with attitudes toward language. It is an attempt to examine attitudes by exploring methods for measuring such attitudes and by studying selected attitudinal and socio-cultural correlates of language attitudes.

The research was exploratory and correlational in nature. No specific theoretical framework guided the study. Sociological, psychological and linguistic literature were reviewed and language concepts selected for study. The major language concepts selected were prestige, affection, liberalism, specialization and interaction patterns. Questions and indices were devised to measure these language concepts.

Attitudinal and socio-cultural variables suggested in the literature and from informal sources were selected and questions and scales written to measure them. Attitudinal variables included change proneness, approval of current social change in India and attitudes concerning were government power should reside. Socio-cultural variables included rural-urban residence, travel, social class, family tradition of foreign study and North-South residence in India.

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Relationships between the language concepts and the attitudinal and socio-cultural variables were studied through a series of low order hypotheses.

The questions written as measures of the language, attitudinal and socio-cultural variables as well as a number of questions concerned with general language background were combined into a questionnaire. The questionnaire was administered to 96 students from India, studying in the United States at Michigan State University and the University of Michigan.

The results showed the language concepts : prestige, affection, liberalism, specialization and interaction, to be both useful and measureable.

All of the hypotheses received some degree of support. Socio-cultural correlates were found for language prestige, affection and liberalism. Travel and social class emerged as the primary socio-cultural correlates of the language measures.

The perceived language liberalism of the respondent's father, and to a lesser extent, the perceived language liberalism of his mother, subcaste, social class and region, were correlates of the respondent's own language liberalism. In addition, the perceived language liberalism of these reference groups was generally associated strongly with both the language specialization and interaction patterns of the respondent.

The respondent's change proneness, approval of India's current social change and attitudes concerning where political power should reside all related to his language liberalism. His change proneness and approval of India's social change related to his language specialization; his approval of India's social change and attitudes concerning where political power should reside related to his interaction patterns.

Finally, socio-cultural correlates were found for the attitudes concerned with change and government power. Travel was found to be the most important correlate of change proneness, approval of India's social change and attitudes concerning when political power should reside.

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CHAPTER I

INTRODUCTION

Language is an area of vital concern to developing countries today. In these countries, progress in unification and economic development is seriously hampered by language problems. The language problems stem from lack of education and absence of a dominant language. Sub-cultural groups, each with a language and culture of its own, fight for recognition of these languages and stoutly refuse to accept any other as a national language.

It is the purpose of this thesis to examine language attitudes at the individual level and to study the attitudinal and socio-cultural correlates of these language attitudes.

The subjects in the study are students from India, currently studying at Michigan State University and the University of Michigan. They are not a representative cross-section of Indian society; they are a highly select, highly educated group. Some of them will have leadership roles in their country and for this reason their language and social attitudes are important. Their attitudes are important, too, because observers have singled out the university students as exhibiting the most visible unrest in the culture conflict situation in India. Modern writers point out that the educated Hindu is no longer completely Hindu and certainly not completely Western.

The language and social attitudes of these students from India represent the balancing of Eastern and Western cultures on the individual level and suggest, on a broader level, the form of social thinking among the young educated generation in India.

To understand better the language attitudes of these Indian students, an understanding of the social situation in which the attitudes exist is necessary. An examination of general socio-cultural factors, language background factors, and personality characteristics is made in this research to suggest some of the social and personal factors associated with particular language attitudes.

Language and Culture

Many developing Asian and African countries have been overwhelmed by the problem of a multiplicity of indigenous languages compounded by the imposition of a Western tongue. The problem is more than a linguistic or educational one. It is a social and cultural matter as well. There is a widespread acknowledgement that language is a key to cultural identity and unity. It is a badge of group membership and has even been regarded as the "primary criterion for defining nationhood" (Spencer, 1963; Hayes, 1960). As such it acquires deep emotional significance for the members of its society, (Shenton, 1933).

At the same time it is apparent in developing African and Asian countries today that language is a divisive factor rather than a unifying one. The reason for this lies in the fact that nations are rarely homogeneous cultural groups. In India, as in other developing countries, many subcultures exist. Language serves to unite each subculture and distinguish it

from other subcultures. From a national perspective, however, language does not serve to unite. Subcultural languages separate and divide a nation into sub-nations.

The newly developing countries were not unified culturally or linguistically before independence. Local jealousies over language were usually so great that the language of the colonizer had to be used to unite the country enough to fight for independence.

The achievement of independence only complicated the language problem. The tidal wave of nationalistic sentiment that swept each country brought with it the strong desire to be rid of all vestiges of colonialism--including language. What language, then, should be used as the national language? Every indigenous language suggested antagonized the speakers of every other indigenous language. Using a non-indigenous language offended national pride. More than that, it meant the loss of an important means of unifying the country under the banner of its glorious cultural heritage. On the other hand, unification and glorification of cultural heritage were not enough. They were only the beginning. If the fetters of poverty and ignorance were to be removed, great and rapid economic and technological advances were necessary. For this it was necessary to have books, learning and technical knowledge, and such things were not to be found in indigenous languages. And so the problems multiplied . . .

India and Language

India has found just these problems. The multiplicity of Indian languages is astounding. According to the 1951 census a total of 845 languages or dialects exist. Fourteen of them are recognized by the Indian Constitution.

About 91 percent of the population speak one or more of these fourteen languages. The native speakers of each of these languages generally live in geographic proximity to each other and are considered to constitute linguistic-cultural regions. "Linguistic regionalism" sometimes called "linguistic communalism" is widely recognized as a divisive factor in Indian society. It is the disharmony among these linguistic cultural units and the assertion by each of its individuality and independence from the others which poses a major threat to Indian unity. (Husain, 1961; Nanavati and Vakil, 1951)

Superimposed upon this pattern of language diversity is English. English is not so widely known as other languages. It is, however, the language of the educated. It is the means by which the educated communicate among themselves and with the Western world and until recently it was the language of government.

The constitution adopted in 1949 named Hindi as the official language of the Union to replace English by 1965. The Hindi complex, (Urdu, Hindustani, and Hindi) is spoken by about 42 percent of the population. It was intended that Hindi become the language of all-Union matters such as courts, post offices, customs, communications between states, etc., with the

states free to make their own language choices for intra-state affairs.

The designation of Hindi for use in national activities engendered resentment from many quarters. There were many who saw it as an elevation which overshadowed and degraded their own native tongue. There were others who decried the selection of Hindi on the basis of its poverty in vocabulary and literature. They pointed to the rich literary traditions of other Indian languages and the poor showing of Hindi in comparison. Still others felt that if India were to move ahead economically, she must adopt English; neither Hindi nor the other Indian languages were suitable vehicles for Western technological knowledge or Western governmental structures. Whatever the criticism given, language battles seem to be the vehicles of expression for underlying fear and friction among dissenting subcultures.

> . . . the ever-present fissiparous tendencies that were bound to increase with the development of political consciousness among the masses began to manifest themselves after the First World War. They had been mainly religious before Partition, and had opposed Muslims to Sikhs and Hindus. In independent India, they became linguistic.
> (de Riencourt, 1960, p. 352).

Nearly every writer comments on the emotional involvement of Indians on the language issue. Murphy summarizes it very well:

> . . . and comparing various south Indian groups with one another, one realizes the enormous intensity and profound personal meaning of the language group as a mother group, a normative group, a center and axis of self-sufficient life.
> (Murphy, 1957, p. 339).

In terms of national unity the seriousness of the problem created by such strong involvement with linguistic regions became apparent to the Linguistic Provinces Commission. In 1948 they reported,

> "Some of the ablest men in the country came before us and confidently and emphatically stated that language in this country stood for and represented culture, race, history, individuality, and finally a sub-nation."
> (quoted in Harrison, 1955-56, p.621).

Language and Personality

It is apparent that language is a many-faceted variable. It is social; it is cultural; it is psychological. Language is not only a means of communicating and of binding groups together; it is the key to the individual's own definition of who he is. It is the means by which the individual establishes a sense of identity and security.

> The emotional importance of a language lies in the fact that it contains the voices of one's mother, father, brothers, and sisters, and one's dearest friends. Our deepest emotions and most intimate memories are tightly bound up with our native tongue.
> (Armstrong, 1963, p. 69).

Psychologists have long recognized the relationship between language and personality. The development of language goes hand in hand with the development of personality and disruption of the former often indicates disruption of the latter.

Attitudes seem to cause much of the language problem in India. It is the refusal to learn other indigenous languages, to learn English or Hindi and/or to accept Hindi as the official tongue which blocks progress on the problem. The

identification of the individual with his sub-cultural groups results in his adoption of their provincial language attitudes. A nation where identification is stronger at the sub-cultural level than at the national level is not a united nation.

The educated elite in India have been introduced to larger worlds than those known by the simple villager. Hopefully some have found their horizons broadened enough to become identified at larger levels--nationally and even internationally. Even more hopefully, this broadening of perspective is reflected in attitudes toward cultural problems such as language. It becomes of interest then to explore the personality domains associated with "enlightened" (or at least broadened) attitudes on issues such as language. In particular it is of interest to examine to what extent positive feelings about change at the individual and social level relate to "enlightened" language attitudes.

Culture and Personality

The young educated generation in developing countries is exposed to two cultures: a very modern culture and a traditional culture. To some extent this is true in every country, for no generation sees the world in exactly the same light as its parent generation. In the Asian and African countries, however, the difference between the two traditions is often startling. The young person in these cultures feels the pull of two different ways of life. On one hand is the modern Western culture and on the other is the traditional

Eastern or African culture. Individuals cope with this problem in several ways, ranging from outright rejection of the traditional culture on one hand, to outright rejection of the new culture on the other. As might be expected, most solutions seem to be part way between these two extremes. Some values from each tradition are accepted.

The results of cultural intersection, however, are not always pleasing.

> The system of education devised by Macaulay lacked in wisdom and provision. It has created young educated people out of harmony with their environment. It has created misfits, young men who aspire to live like Europeans but without working like Europeans.
> (Chand and Kapoor, 1957, p.43).

The results of cultural intersection may be examined in several ways. The extent to which an individual is willing to cast aside his provincialism and identify at national and international levels may well be reflected in his attitudes toward language and toward social change and toward government in general. The question becomes one of what personal attitudinal factors and what socio-cultural factors influence an individual to accomodate cultural intersection in one manner rather than another.

No picture of language attitudes is complete without a consideration of the psychological and sociological factors involved. By the same token the picture is more complete when the psychological and sociological factors are in turn related to each other.

Although language problems may be most clearly seen in developing countries such as India, they are by no means foreign to countries with a single accepted language. Perhaps the best illustration of the importance of considering psychological, sociological, and linguistic factors in combination is from Warner and Srole's The Social Systems of American Ethnic Groups:

> As the F^1 child's personality develops toward greater orientation to the external relations, a reaction sets in against the ethnic language, provoking antagonism in the parents.
> (Warner and Srole, 1945, p.221).

CHAPTER II

THE STUDY OF THE CORRELATES OF LANGUAGE ATTITUDES

From psychological literature, from sociological literature, from linguistic literature and from informal conversations, a number of ideas and concepts about language were gathered. Most of these ideas and concepts were vague and poorly defined. Few had been operationalized. Some, however, seemed particularly relevant to the study of individuals in language situations such as those existing in India.

It was decided to examine a few of these ideas and concepts in detail to determine their usefulness for studying language attitudes.

Language Attitudes

The first concept selected was prestige. Throughout the literature references are made to social status or prestige in connection with language. Sometimes it is bilingualism with which high or low prestige is associated. In some countries visiting aliens speaking many languages enjoy high prestige as do the native born citizens who have acquired foreign tongues as secondary languages. Sometimes it is with particular languages that high or low prestige is associated. In most countries some languages hold more status than others and in developing countries there are local dialects that

educated citizens are reluctant to admit they speak. Sometimes it is with the cultural group represented by a language that the high or low prestige is associated. Immigrant groups are said to experience embarrassment over accents and alien mother tongues. Whether the prestige associated with languages is high or low seems to depend on circumstances. In any event a dimension of prestige seems to be associated with languages.

Another theme in the literature is that of the significance of affect. Affect takes many forms. Immigrants teach the old country language to their children in order that it will not die out in the new country. Tribal and regional groups refuse to learn other languages and are jealous when the language of another group is chosen for government use. Nations rarely seriously consider giving up their native tongues in favor of the conveniences of a world language. Individuals, however, profess affectionate feelings for languages other than the native tongue. They express affection for languages for a variety of reasons. Sometimes it is an appreciation of the literary or tonal qualities of a language. Sometimes affect is the result of memories of happy or sad experiences associated with a language. The many feelings and informal experiences reported suggest that some sort of positive or negative affect exists for languages. In the research reported here, affect was examined in the form of affection felt for languages. The concern was not with a clinical diagnosis of affection or its bases. The concern was simply in determining if an individual could express the degree

of affection he felt for various languages and if socio-cultural factors were correlated with the affection expressed for a language.

The third language concept examined was a composite of ideas and attitudes grouped as evidence of language liberalism. A dimension of liberalism-conservatism seemed to pervade a number of specific opinions and attitudes. Liberalism was defined as a realization and acceptance of other viewpoints on language and an appreciation of the value of other languages. In one sense liberalism is a question of perspective. A perspective limited to the confines of a single language or regional group is a narrow perspective likely to be reflected in narrow attitudes. A broader perspective with an appreciation of where a region or language group fits into a larger picture seems more likely to be expressed in broader, more liberal attitudes. In another sense, liberalism concerning language attitudes can be viewed as an indication of identification. Strong identification at the regional or language group level will probably be reflected in appreciation of only one point of view--that of the region or language group. Conversely, when identification is strong at the national level and weaker at the regional, then the language attitudes resulting seem more likely to be liberal in so far as they are based on a genuine concern for what will be best for the nation rather than for a particular subgroup in the nation. From either approach, it seemed to make an intuitive kind of sense to view the language attitudes as liberal or non-liberal

indices of an individual's approach to the whole language question in India.

Another approach to language behavior was made via the language usage concept of specialization. This was the fourth language concept studied in this research.

Language specialization refers to differences in language behavior due to differences in social situation, e.g., topic, audience, occasion, place, etc. In one way, language specialization can be thought of as social sensitivity. It seemed reasonable to assume that some individuals would be more sensitive than others to such social situations. Individual differences might be expected, too, because not all individuals live in situations calling for the same amount of specialization. More homogenous situations do not require, or even give opportunity for, as much specialization as heterogeneous situations. Specialization appeared to be a useful concept for investigating language usage from both a personality and a situational perspective.

The fifth language concept investigated was also a language usage concept. This concept was interaction. In this research, two kinds of interaction were examined. The first kind concerned friendship and contact patterns among Indian students. Basically the concern was one of who interacted with whom within the Indian community. The second kind of interaction was one of amount of interaction in the American community relative to that in the Indian community. Language differences existed both within the Indian community and

between the American and Indian communities. It was felt that if language were extremely important to individuals, then it would be reflected in the interaction patterns of the individuals.

Correlates of Language Attitudes

An investigation of the correlates of these language concepts was made. Several different kinds of correlates seemed both relevant and interesting. First were the socio-cultural correlates. The socio-cultural variables examined were rural-urban residence, amount of travel, social class, family tradition of foreign study and North-South residence in India.

Second were the attitudes the respondents perceived their reference groups to hold. The reference groups selected for study were the family, subcaste, social class and region. The perceived attitudes included both measures of language liberalism and of language preferences.

Another class of correlates investigated concerned the relationships of the student to his reference groups. He was asked to indicate how important the groups were to him, both individually and in relationship to each other.

The fourth correlate was concerned with the Indian community on the Michigan State campus. The native tongue composition of the community was examined to determine the extent to which the student's interaction patterns followed native tongue lines in the Indian community.

The last set of correlates of language attitudes studied were attitudes toward change, broadly defined. These attitudes included general responses to change, attitudes toward social change in India and attitudes toward centralization of political control in India. These attitudes are labelled: attitudes toward change and political control.

A large amount of language background data was gathered through questions about languages known to the individual, languages known by his parents, English language background, language preferences and related data. Measures used for obtaining this information included:

LANGUAGE BACKGROUND DATA

Languages Known to the Individual

- Number of languages known
- Specific languages known
- Reading, writing, speaking and understanding of speech in each language known
- Specific languages learned from parents
- Reasons for learning other languages
- Knowledge of classical Indian languages
- Years of study of classical Indian languages

Languages Known to the Parents of the Individual

- Number of languages known
- Specific languages known
- Reading, writing, speaking and understanding of speech in each language known

English language Background

- Age at which study started
- Years of formal study
- Nationality of instructors
- Similarity of English learned in India and English used in U.S.A.

Language Preferences

Most comfortable language
Language most useful professionally
Language most useful socially

This information, loosely knitted together, formed a background against which the language concepts and their correlates might be examined. The language concepts and their correlates were studied through a series of hypotheses. These hypotheses were of low order. They were not deductions from any theory. Indeed, very little relevant theory seemed to exist. In like manner, these hypotheses were not the outgrowth of a large body of relevant research. Relevant research was sparse. The hypotheses were exploratory in nature; they came from informal observations and from observations in the literature. Many were quite frankly speculative in nature.

This chapter presents the hypotheses. When they were suggested by formal observation or research, the literature is cited. When they were not, the speculation is presented. They were arbitrarily grouped into three categories: language and culture, language and personality, and culture and personality. Hypotheses involving language attitudes and language usage on the part of the respondent were classified as "language" hypotheses. Hypotheses involving socio-cultural factors, perceived attitudes of reference groups, feelings about reference groups and the Indian community on the Michigan State campus were labelled "culture" hypotheses. Hypotheses involving attitudes toward change and political control were

titled "personality" hypotheses. The variables used for testing hypotheses in this research were:

LANGUAGE VARIABLES

Language Attitudes

- Prestige
- Affection
- Liberalism

Language Use

- Specialization
- Interaction

CORRELATES OF LANGUAGE VARIABLES

Socio-cultural Factors

- Rural-urban residence
- Amount of travel
- Social class
- Family tradition of foreign study
- North-South residence in India

Perceived Language Attitudes of Reference Groups

- Language liberalism
- Language preference

Reference Group Importance

- Importance of reference groups
- Relative importance of reference groups

Native Tongue Composition of Campus Indian Community

Attitudes toward Change and Political Control

- Change orientation
- Approval of social change in India
- Attitudes concerning where government power should reside

Language and Culture Hypotheses

Language and culture studies have been mainly the province of linguists. Probably the most famous and intriguing

of all hypotheses about language and culture is the Sapir-Whorf hypothesis. In very general terms, the Sapir-Whorf hypothesis sought to establish relationships between the way people of different cultures looked at the world and the languages they spoke.The hypothesis was not clearly stated, however, and numerous interpretations of it resulted (Walker, Jenkins, and Sebeok, 1954).

Sociologists assert that language and culture go hand in hand, yet they have been slow to deal with the two in combination:

> The sociological literature as a whole reveals but rudimentary concepts for the analysis of language as a social system, for comparative studies, and for study of the role of language in a total society. There seems to be fairly widespread recognition that language is important, but no one has been quite sure what to do about language as a general social pattern. (Useem, 1963, p. 30).

Recently, psychologists have been examining language and culture. Osgood and colleagues (1962) have been concerned with whether speakers of different languages use the same dimensions to describe the world. In some of this research nearly identical dimensions emerge when different languages are compared. In other studies the dimensions are not so similar.

Lambert and associates have been studying the effects of accents and languages on the perception of other people. Changes in the perception of an individual's personality as the individual changes accents or languages are interpreted as reflections of attitude toward the culture represented by the accent or language (Lambert, Anisfield, & Yeni-Komshian,

1963; Anisfield, Bogo, & Lambert, 1962; Lambert, Hodgson, Gardner & Fillenbaum, 1960).

It is from the linguists, however, that the impetus for the first hypotheses came. In addition to describing languages, linguists talk about the changes in languages and the influence of one language upon another in bilingual areas. When the discussion turns to the factors contributing to these influences and changes, sociological considerations enter the picture. It has been suggested that language might be used as an index of social change or acculturation. Samora and Deane (1955-56), for example, propose using language preference as an acculturation measure. Casagrande (1955) states that the English fluency of a Comanche is an index of "his relative acculturation to American culture patterns." In discussing linguistic borrowing, Gumperz (1961) notes that

> . . . studies on the spread of modern urban Hindi in rural areas, for example, might form a basis for scalar indices for the measurement of social change and of the relative integration of rural areas in modern Indian national life. (Gumperz, 1961, p. 984).

One of the factors involved in linguistic change and interference is prestige. Casagrande (1955) cites the "relative prestige of competing languages" as a variable affecting the rate of linguistic change. Weinreich (1961) lists prestige as an example of the stereotyped attitudes of bilingual groups which affect linguistic interference. Hodson (1936) suggested that social status of a mother tongue group is a determining factor in the rate of bilingualism. Diebold (1962) discusses the relative status of the two languages as one of the more

significant factors in language contact. Haugen (1953) notes that for immigrants to the United States, "Very little prestige has been attached to the having of bilingual capacities."

Another attitude of particular concern is affection. Although not directly suggested in the literature, affection appears as an undercurrent in discussions of attitudes and feelings about language in the scientific literature as well as in informal reports. Armstrong (1963) talks about the emotional importance of language to the individual. Shenton (1933) states that nations have "deep sentimental attachments to their own languages." Bossard (1945) talks about embarrassment over bilingual backgrounds. Haugen (1953) describes escape from bilingualism as a very common reaction of bilinguals in the United States. The emotional involvement of residents of India on the language issue has been noted many times.

It is theorized that a culture might well accord a language high prestige, but feel relatively little affection for it. English, in India, is said to be accorded high prestige--higher than many of the regional languages. Yet it is not advocated for the official language by everyone--it is not even listed in the Indian constitution as an official language. Many Indians are too emotionally involved with their own tongues to consider accepting any other Indian or non-Indian language as the official language. This same phenomenon occurs on an international level when, periodically, the issue of having a single international language is raised. Nationalistic sentiment is too strong--no country wants to

accept another's language at the expense of its own, no matter what the prestige of the other language.

There are many factors which might be expected to affect attitudes such as prestige and affection. One set of factors concerns the range of culture contact in one's background. The first such factor is rural-urban residence. The effect of residence should be clearly seen in India where the descriptions of rural areas with highly formalized and stable social-caste systems and descriptions of large cities with a fair degree of westernization and diverse cultural groups present a stark contrast. Singer (1959) describes the urban characteristics found in Madras as ". . . a heterogeneity of linguistic, religious and ethnic and social groups."

Another avenue of culture contact is travel. Individuals who have travelled widely inside and/or outside India will have come into contact with many other languages as well as other cultures. If indeed there is truth in the old adage, "travel is broadening", then the individual who has travelled might be expected to differ from his untravelled countrymen in the prestige and affection he attributes to various languages.

Social class is a third factor which may be expected to relate to language attitudes. Social class differences in language form and usage have been observed in many countries (Ferguson & Gumperz, 1960). For example, English usage and mastery in Hawaii (Smith, 1939), English prestige in the Sudan (Murray, 1963) and in Nigeria (Brosnahan, 1963), and English usage, pronunciation, lexicon choices in England (Bernstein, 1962)

and degree of bilingualism in the U.S. (Arsenian, 1937) were all found to relate to social class and/or education. In discussing immigrants to the U.S., Haugen (1953) notes that the highly educated visitors from Norway deplore the corruption of their native tongue by the borrowing of English words on the part of the Norwegian immigrants.

In the case of India, it is particularly interesting to consider the effects of social class on attitudes concerning English and Hindi. English and Hindi are the languages of the educated young; they are both "imposed" languages in many areas, and they are the disputed and controversial languages of government.

The effects of a family tradition of foreign study on attitudes toward languages have not been discussed in the literature to the author's knowledge. In India a family with a tradition of foreign education is a family with more education and a family where non-indigenous languages are known. One or both of these factors might well be expected to relate to feelings about languages.

Finally, a last and most obvious factor in feelings about language: North-South residence. The South's resentment of Northern dominance and the imposition of the Northern language, Hindi, as the official language are well known (Murphy, 1953).

It is expected that all of these socio-cultural factors--rural-urban background, amount of travel, social class, family tradition of foreign study and North or South residence will have some effect on the prestige an individual attaches to

various languages and on the affection he feels for them. Stated in hypothesis form these expectations read:

Hypothesis I

Language prestige and affection are related to socio-cultural factors:

a) Language prestige and affection are related to rural-urban residence.
b) Language prestige and affection are related to amount of travel.
c) Language prestige and affection are related to social class.
d) Language prestige and affection are related to family tradition of foreign study.
d) Language prestige and affection are related to North-South residence in India.

The third attitude considered in this research is language liberalism. Because it is an abstraction from a number of specific attitudes, there is little research to be cited in connection with it.

Two of the specific attitudes suggesting a dimension of liberalism on the individual level came from Weinreich's list (1961) of extra-linguistic group factors affecting linguistic interference. The attitudes were: "attitudes toward bilingualism as such" and "tolerance or intolerance with regard to mixing languages and to incorrect speech in each language." This last attitude has been noted on the part of educated Norwegian visitors toward the intermixing of Norwegian and English by Norwegian immigrants to the United States (Haugen, 1953). It has also been noted on the part of elder Comanches toward the contamination of their native tongue by their English-speaking children (Casagrande, 1955).

Other attitudes suggesting a general liberalism included acceptance of Hindi as India's official language and the degree to which other languages were rejected or used unwillingly.

It is expected that the range of culture contact experienced by the individual will affect his general liberalness regarding language just as it is expected that range of culture contact would affect the prestige and affection he associated with particular languages. Consistent with these expectations, the hypothesis is made that rural-urban residence, amount of travel, social class, family tradition of foreign study and North-South residence are correlates of language liberalism.

Hypothesis II

Language liberalism is related to socio-cultural factors.

a) Language liberalism is related to rural-urban residence.
b) Language liberalism is related to amount of travel.
c) Language liberalism is related to social class.
d) Language liberalism is related to family tradition of foreign study.
e) Language liberalism is related to North-South residence in India.

The socio-cultural factors listed above are not the only correlates of concern. Perhaps the single most important cultural factor affecting an Indian's attitudes are the attitudes of his reference groups. India is said to be a land of groups and a land in which every group is a minority group. (Smith, 1962). It is membership in these groups that is hypothesized to give the Indian his identity. In this research the language

attitudes of four groups have been selected for study. These groups are: family, subcaste, social class and region.

Every group is not a reference group on every issue or for every set of attitudes. If a group is a reference group for an individual for a set of attitudes or behavior, then the individual may be expected to exhibit a certain amount of conformity to the group norms concerned with this set of attitudes or behavior. The group approves of conforming behavior and group approval is rewarding when the group is important to the individual.

The first group to be examined is the family. Armstrong (1963) states that the emotional importance of a language is due to its holding the voices of one's parents. In a culture where family is as important as it is in India, family attitudes might certainly be expected to influence an individual's attitudes. On the other hand, however, in American immigrant and native Indian groups, the first or younger generation appears to have obtained a more external orientation with a reaction against the native tongue appearing (Casagrande, 1955; Warner & Srole, 1945). In the present study, newcomers to higher education are immigrants in a sense. Indians who, on the one hand, are from tradition-oriented families where education is low, but who, on the other hand, are Western-oriented enough to come as far as the U.S., may well reject the traditional language attitudes of their families.

The second group of interest is the subcaste or jati. In India today the jati is the basic unit of the caste system (Whiting, 1963). It is difficult to assess the influence of

the caste system. Modern educated Indians often deny their belief in it, yet the caste system pervades so much of their background, it is hard to believe that it could have little or no effect on their attitudes and behavior.

> . . . Second in the pyramid of cohesive structures is the caste, bound by lineage, by occupation, by customs and by the responsibility of mutual support, all interlocking in respect to the maintenance of the lineage, that is, through intermarriage.
> (Gardner Murphy, 1957, pp. 337-8).

The third group of interest is the social class. The literature concerning social class has already been cited in the discussion preceding Hypothesis I. In Hypotheses I and II, social class was treated as a socio-cultural factor and the intent was to measure the effects of differences in social class upon language attitudes.

In the present discussion, however, social class is examined as a reference group. Neither measurement of social class per se nor differences among classes are of interest. It is how the individual perceives his social class as well as how he perceives each of his other reference groups to feel about language that is of concern.

The fourth and last group is the linguistic region. The existence of linguistic regions in India is common knowledge. In connection with linguistic issues, Harrison states that, "The contest between the central power and the forces of regionalism will long remain the bedrock issue in India". (1955-6)

The relationship between linguistic region and caste is an interesting one. The linguistic boundary is essentially the caste boundary. In the words of Selig Harrison,

". . . the caste structure is regionally self-contained." (1955-56, p. 626). Caste and language are not identical, however.

> . . . the caste subdivision and the language subdivision are usually "at right angles," that is, that there are all castes present in a language group and all language groups of a certain region present within a certain caste, . . . (Gardner Murphy, 1953, p. 75).

It was not possible in this research to study the family, social class, subcaste and region of each Indian student directly. There was no way to collect information on the language attitudes of these groups from the groups themselves so that correspondence between each of them and the respondents could be independently determined.

Information about group norms had to come from the student. Comparing the students' attitudes to those he attributed to his groups produced an indication of the individual's perception of his conformity to his group norms. In such a situation, the question of whether or not the group in question actually holds the attitudes the student has attributed to it is not of primary concern. The concern is with how the individual sees his own attitudes in relation to those of the group.

It was the intent of this study to collect a large amount of descriptive material regarding the language background, attitudes, and usage of the Indian students and to assess change proneness and other social attitudes of the students. It was not feasible to ask the respondent to answer for his family, social class, subcaste and region,

every question asked of himself. It was decided to select a small core of questions concerning language liberalism and language preference and ask the individual to indicate how each of his four reference groups felt about them as well as how he personally felt. Correspondence between the language attitudes of the individual and his groups would be an indirect measure of conformity to group norms.

It was expected that the amount of influence of a reference group would depend on the importance of the group to the individual. The amount of influence of a group could be assessed by how far the individual deviated from the group in the liberalness of his attitudes. In hypothesis form these expectations read:

Hypothesis III

Language liberalism is related to the perceived language liberalism of reference groups and to feelings about the reference groups.

a) Language liberalism is related to the perceived language liberalism of family, subcaste, social class and region.

b) Deviation from the perceived language liberalism of the family, subcaste, social class and region is related to the importance of each of these groups to the individual.

Further consequences of the influence of reference groups may be explored. When reference groups are perceived to have strong language preferences and an individual attaches importance to these groups, he may be expected to honor their preferences by using the appropriate language(s) when dealing

with them. If all the reference groups have the same preferences the task is easy. When there is diversity among the groups regarding the language(s) in which they prefer to communicate, the individual must use different languages with different groups if he is to please them all. It would appear that the amount of specialization an individual employs would depend on how diverse his groups are in their preferences and how much importance he attaches to each of the groups.

In like manner, an individual whose groups are heterogeneous, i.e., some of the groups have liberal language attitudes and some have non-liberal language attitudes, would probably find it necessary to specialize if he is to please all his groups. Thus he may have to avoid using certain languages around certain groups while he is free to use those languages around others of his reference groups. Again it seems reasonable to predict that the importance of the groups may well relate to the amount of specialization practiced by the individual.

Hypothesis IV

Language specialization is related to the perceived attitudes of reference groups and to feelings about the reference groups.

a) Language specialization is related to the perceived diversity of language preference among family, subcaste, social class and region.

b) Language specialization is related to the perceived heterogeneity of language liberalism among family, subcaste, social class and region.

c) Language specialization is related to the importance of family, subcaste, social class and region.

Still another aspect of reference group influence in the language realm is the influence reference groups exercise over the individual when he lives in a situation where his culture and another intersect. Indian students on an American campus are in contact with two cultures, American and Indian. They may choose to interact entirely within the Indian community, entirely within the American community or within both. Lambert and Bressler (1956) have examined the life styles of Indian students studying in the U.S. They found, for Indian students who had been in the U.S. for one to two years, an "alternation between two opposing trends: the tendency to become more American than the Americans while simultaneously reaffirming ties with the home culture." This alternation was intensified in the behavior patterns of those who had been in the U.S. over two years. For most of the Indian students, however, (14 out of 19), the majority of associations were within the Indian community.

In the research described here the language attitudes Indian students ascribe to their reference groups at home are examined in relationship to the individuals with whom they choose to interact in the U.S. If language attitudes are related to interaction, then the attitudes of reference groups and the importance attached to reference groups would presumably have a bearing on the interaction patterns of the individual.

It was expected that in the case of Indian students whose groups all had liberal language attitudes, the students

would interact with Indians speaking other than their mother tongue and would interact with the American community as well as with Indians speaking their mother tongue. The same expectation held for Indians with heterogeneous reference groups, i.e., Indians who perceived some of their reference groups to be liberal and some to be conservative regarding language attitudes. For Indians perceiving all their reference groups to be conservative, the expectation was that most interaction within the Indian community would occur with speakers of the same native tongue. In addition, a comparison of interaction within the American community to that within the Indian community would show a high preponderance of the interaction to occur within the Indian community. These expectations are affected by the importance with which the individual regards his reference groups. Groups having much importance will affect interaction patterns more than groups having little importance for the individual, i.e., the expectations are stronger when the groups are important and weaker when they are unimportant.

Hypothesis V

Interaction is related to native tongue, perceived language liberalism of reference groups and to feelings about the reference groups.

a) Interaction is related to native tongue within the Indian community on the Michigan State campus.

b) Interaction is related to the heterogeneity of language liberalism among family, subcaste, social class and region.

c) Interaction is related to the importance of family, subcaste, social class and region.

Language and Personality Hypotheses

In general, the research on bilingualism and personality seems to have followed two lines. The first line of research has been concerned with learning a second language. Lambert and associates have conducted research which supports the position that an individual's attitudes toward a linguistic culture are related to his progress in learning that language (Anisfield and Lambert, 1961; Gardner and Lambert, 1959).

Another line of research has focused on describing the bilingual personality. Much study has revolved around the question of the relative intelligence of bilinguals and monolinguals (Peal and Lambert, 1962; Arsenian, 1937).

Some personality investigation has sought to characterize the bilingual in terms of his social adjustment. Bossard (1945) examined case histories of U.S. bilinguals to explore effects of having a minority group tongue on personality development. Social setting and attitudes toward language emerged as important factors. He found further that the child who rejected the parental language also rejected the parent who spoke it. Embarrassment over parental language and its resultant "foreign accent" in the child led the child to employ protective devices: a) restrained speech, b) inconspicuous behavior, c) home avoidance, and/or d) meticulous English.

When personality and social characterizations of bilinguals are made, the theme of embarrassment and shame runs through the writings on bilinguals in the U.S. Perhaps it is best stated by Haugen in his summary of years of observation of Norwegian immigrants in the U.S.:

> As for the bilinguals themselves, some have accepted their lot with enthusiasm, others with resignation, but many more have sought to evade it by becoming anglicized as soon as possible. However prominent bilingualism may be as a trait of American life, it is eclipsed by the continual flight of the bilinguals themselves from bilingualism . . .. (Hauger, 1953, p. 2).

The most recurrent theme through the studies of bilinguals done by psychologists, linguists and sociologists is that of attitude. The attitude of the individual toward language or the culture represented by the language relates to his language usage, progress in learning a language, personality and social adjustment. It is apparent, too, that the bilingual's social and cultural setting has some influence on these attitudes.

The situation in the developing countries does not allow for wholesale generalization from American observation and research. In most, if not all, developing countries, there is no dominant language. The language cleavages are generally so numerous and so large that every language is a minority language. It may be that in such a situation, social conditions and social pressures do not dictate inferiority feelings and negative language attitudes quite so strongly as in the U.S. In such a situation other personality factors may come into play more.

It is the complaint of the linguists that psychologists had done little work on the bilingual personality.

> . . . American psychologists so far have apparently refrained from formulating theories on bilingualism, as no experiments in this field seem to have been undertaken. (Weinreich, 1953, p. 72).

Although psychologists have begun to study bilingualism, the interest has not so much been on personality as on environmental factors relating to the development of one or more kinds of language systems in the bilingual (cf. Lambert, Havelka and Crosby, 1958; Ervin and Osgood, 1954).

Ervin and Osgood (1954) have made some theoretical interpretations of bilingualism. Their work was extended by Lambert, Havelka and Crosby (1958). Both sets of research are concerned with the effects of the context of acquiring the language on bilingualism. They examine the language systems of the bilingual and attempt to relate environmental factors to the development of these systems.

This research is not concerned with the degree or kind of bilingualism. The term bilingual has been defined variously in terms of degree of fluency in the languages of concern and in terms of the context of learning of the languages. The term bilingual in this research refers merely to the fact that the individuals involved have knowledge of more than one language. The concern is not with the kind or degree of bilingualism, but with the attitudes held by the bilingual. Relationships between language attitudes and background factors have already been posited. Relationships between

personality and language attitudes are also of concern.

The possession of a liberal outlook on India's language problems is suggestive of liberal attitudes in other areas. If an individual is able to reject the traditional language provincialism so dominant in India, it may mean that he is able to reject other traditional attitudes. On a broad level he may be positively oriented toward change, i.e., his personality may be such that he is inclined to look for new perspectives and new ways to doing things. On a more specific level, "modern" liberal language attitudes may be accompanied by a general approval of the social change occurring in India and by modern liberal attitudes about where political power should reside. In hypothesis form this is:

Hypothesis VI

Language liberalism is related to attitudes toward change and political control.

a) Language liberalism is related to change orientation.

b) Language liberalism is related to approval of social change in India.

c) Language liberalism is related to attitudes concerning where government power should reside.

If language attitudes are related to personality and other social attitudes, then language usage may also relate to personality and social attitudes. Language usage in this instance refers to specialization and interaction.

Several writers have suggested that many bilinguals have a specialization of language by topic or audience.

Ervin's observation is that no bilingual has exactly equivalent experiences in the two languages. There is a "specialization of functions" for each language for a given individual (ditto, no date). Language specialization would seem to be one method of adjustment in the personality realm since bilinguals report they change as social beings when they change languages (Haugen, 1961).

Hypothesis VII

Language specialization is related to attitudes toward change and political control.

a) Language specialization is related to change orientation.
b) Language specialization is related to approval of social change in India.
c) Language specialization is related to attitudes concerning where government power should reside.

If the language issue is as important in India as we are led to believe, then the Indian's interaction patterns should also be consistent with his socio-cultural attitudes. More explicitly, the Indian with conservative individual attitudes, i.e., negative change orientation, negative attitude toward India's social change and traditional attitudes concerning where government power should reside would be expected to have conservative language interaction behavior. His interaction would be primarily confined to the Indian community and he would be expected to have relatively little interest in interacting with non-Indians.

Hypothesis VIII

Interaction is related to attitudes toward change and political control.

a) Interaction is related to change orientation.
b) Interaction is related to approval of social change in India.
c) Interaction is related to attitudes concerning where government power should reside.

Culture and Personality Hypotheses

Culture and personality studies have traditionally been made by anthropologists.

The many attempts to describe national character and typical personality have been examined and reviewed rather critically recently (Singer, 1961; Duijker & Frijda, 1960; Inkeles and Levinson, 1954). Many theorists no longer feel that any national character can be defined for modern nations.

There have been numerous attempts to relate personality and culture change in terms of the effects of culture change upon personality.

Anthropologists usually engage in culture and personality studies involving the administration of projective techniques to members of non-literate societies which are in the process of adopting "characteristics of the dominant society in their immediate environment" (Kennedy, p. 419, 1961).

Psychologists have recently conducted personality and culture change research by means of student sojourn studies designed to measure attitude change resulting from

the cross-cultural experience. Selltiz and Cook (1962) discuss a number of these studies. Generally few significant personality or attitudinal changes appear (McGuigan, 1959, 1958; Smith, 1955). Psychologists have also examined individuals whose Western contact comes in their own countries. Such studies are usually attitude studies which find acceptance of some Western attitudes; the acceptance being accompanied by partial rejection of traditional values (Jahoda, 1961; Lystad, 1960; Doob, 1960).

Studies have been conducted on early adopters of new agricultural, family or community practices. Generally such studies have sought to characterize adopters in terms of reading habits, social status, education etc. (Putney and Putney, 1962; Rogers, 1962; Adams and Masuoka, 1961; Freeman, 1961; Lionberger, 1960; Back, 1958). Some of these studies, however, have begun to ask questions about the attitudes and personality characteristics of change prone people.

Examples of the attitudes and personality characteristics found to relate to adoption of different practices are a scientific and non-traditional outlook and a business attitude toward farming in India (Bose, 1959) and a proneness to change in general in Puerto Rico (Back, 1958).

Studying American students abroad, Smith found no relationship between attitude change and an introverted or extroverted personality but found that

> Knowledge of a person's preexisting attitudes appears to be a better predictor of his response to a heterogeneous inter-cultural experience than is information about the intercultural experience itself.
> (Smith, 1955, p. 477).

In general, one's personality and outlook on society, like one's language attitudes, may be expected to relate to socio-cultural factors reflecting the range of culture contact in one's background.

An individual's orientation toward change should be more positive if his residence is urban. At the same time, urban residents might also be expected to view the ongoing social change in India as not rapid enough or wide-spread enough while their rural counterparts find it threatening to the stable society they know. For rural residents, social change might well be viewed as proceeding at far too fast a pace. A third area in which rural and urban residents might well differ involves attitudes concerning power at various government levels. This appears to be particularly relevant for India where regional loyalties are often extreme and resentment of the national government not at all unusual. It would seem that to rural folks with a focus on themselves and their way of doing things, change would be rather frightening - a disturbance of the status quo. On the other hand, people from more Westernized urban areas are more likely to welcome change and to value a relatively strong central government to unite the diverse Indian population and hasten change.

Travel may also be expected to affect the individual's interest in change and his view of the current social change

in India. For the urbanite, travel to rural areas may underscore the need for change. For his rural counterpart, travel to urban areas may whet an appetite for changes in his own surrounds.

Another socio-cultural factor related to social attitudes is social class. In India, the upper classes were the primary agents of culture contact. Their contact with British administration and their education and travel opened doors to Western culture for them that other groups did not have. Singer (1959) raised the question of

> ... whether the Brahman literati in Madras are changing their social role, giving up their traditional role as cultivators of the Great Tradition (and agents of Sanskritization, as M.N. Srinivas would say) to become intelligentsia, i.e., agents of Westernization and modernization. (Singer, 1959, p. 144).

Lamb (1963) was in agreement with Singer's observations.

> In all imitation, there tends to be cultural time lag, and this is particularly significant in India today. While the lower castes have been imitating traditional Brahman customs, a considerable percentage of the Brahmans themselves have been imitating the customs of the West. ... This time lag helps to explain the existence among the great bulk of the middle and lower castes of India of a traditionalism often greatly underestimated in the West. (Lamb, 1963, p. 149).

The Useems (1955) found differences in readiness to change among classes and castes also. They felt, however, that it was the "lower castes and lower middle classes" which had a greater receptivity to change (p. 27). In view of the difference of opinion on who it is that changes, an examination of how social class is related to change orientation is in order.

In the Useem study of Western-educated Indians, the authors reported that one of the factors associated with change proneness was family tradition in Western education. They found that if the individual was the first in his family to study abroad, he was more apt to have a positive orientation toward change than if his family traditionally sent its young abroad. Apparently being the first in one's family to study abroad is a breaking of tradition. This poses an interesting problem.

Following a hypothesis of broad culture contact resulting in broad liberal attitudes, it is the individuals whose families have traditionally studied in the Western world who might be expected to have the positive orientation toward change, who might wish to see social change in India increase and who might wish to unite India under a strong central government. The Useems' finding contradicts the hypothesis about change orientation and raises the question about the individual who breaks family tradition to study abroad. Does this individual whom the Useems found to have a positive orientation toward change also view social change as not proceeding rapidly enough--at least more so than his fellow sojourners coming with a family tradition of foreign education? Does this same individual also go so far in breaking tradition as to wish to see the central government stronger than local or regional governments?

A final socio-cultural factor that may also be expected to influence an individual's outlook on life is

Northern versus Southern geographic residence. This factor is important because the central government in India is located in the North and the North-South conflict is strong. What does this mean in terms of change orientation, attitudes toward the current social change in India, and attitudes about the power various government levels should have? Much social change is being attempted by the central government and probably much that isn't is being attributed to the central government. Since the central government is located in the North, Northerners may feel a strong central government to be a decided advantage and may be more willing to accept social change, particularly as it appears to emanate from the government. On the other side is the South whose resentment of Northern domination is no secret. Southerners are likely to oppose a strong central government and social change for no other reason but that it comes from the North.

Five socio-cultural factors have been discussed as influences on personality and social attitudes. In hypothesis form, the discussion may be summarized as:

Hypothesis IX

Attitudes toward change and political control are related to socio-cultural factors.

a) Change orientation is related to rural-urban residence.
b) Change orientation is related to amount of travel.
c) Change orientation is related to social class.
d) Change orientation is related to family tradition of foreign study.
e) Change orientation is related to North-South residence in India.

f) Approval of social change in India is related to rural-urban residence.
g) Approval of social change in India is related to amount of travel.
h) Approval of social change in India is related to social class.
i) Approval of social change in India is related to family tradition of foreign study.
j) Approval of social change in India is related to North-South residence in India.
k) Attitudes concerning where government power should reside are related to rural-urban residence.
l) Attitudes concerning where government power should reside are related to amount of travel.
m) Attitudes concerning where government power should reside are related to social class.
n) Attitudes concerning where government power should reside are related to family tradition of foreign study.
o) Attitudes concerning where government power should reside are related to North-South residence in India.

As in the case of language liberalism and language usage, socio-cultural factors are not the only factors posited to be related to personality and attitudes toward social issues. A second group of factors to be considered is the individual's reference groups.

To assess the influence of reference groups on the individual's change orientation, attitudes toward social change in India, and attitudes concerning where government power should reside, it would have been best to have independent measures of these attitudes from each of the groups and from the individual. This was not possible. Because of the nature of the measures, it was not feasible to ask the respondent how each of his groups would have answered each of the measures, either. An indirect indication of the influence of reference groups on the student's attitudes toward change

and political control would be suggested, however, by demonstrating that a respondent's language attitudes and attitudes toward change and political control were related to each other and that both were related to the perceived language attitudes of the reference groups. If such relationships were found, then there would be reason to expect that the attitudes of the respondent and those of his reference groups were related. While such evidence would be indirect and inconclusive, it would be strengthened by taking into consideration the importance attached to the reference groups by the individual.

Hypothesis VI predicted that individuals with positive attitudes toward change and political control would also have liberal language attitudes. Hypothesis III predicted that the individual's language attitudes would be related to those of his reference groups. Hypothesis X predicts that individuals who perceive their reference groups to have liberal language attitudes would be expected to have a positive change orientation, to approve of social change in India and have attitudes favoring greater concentration of power at higher government levels. Conversely, the individual who perceived his reference groups to have non-liberal language attitudes would be expected to have conservative or negative attitudes toward change and political control. The individual whose groups have heterogeneous attitudes is caught in the middle. It is expected that he will probably take a middle position, i.e., have attitudes that are neither very positive nor very negative. These expectations regarding attitudes toward

change and political control and language attitudes on the part of the reference groups assume an attitude consistency within the individual and agreement between the individual and his reference groups.

Finally, it is expected that the importance the individual attaches to his groups and his own attitudes will be related. Individuals with positive attitudes toward change and political control will attach greater importance to reference groups with liberal language attitudes and lesser importance to those with non-liberal attitudes. The converse holds for individuals with relatively negative attitudes toward change and political control, i.e., lesser importance is associated with groups having liberal language attitudes and greater importance to those with non-liberal language attitudes.

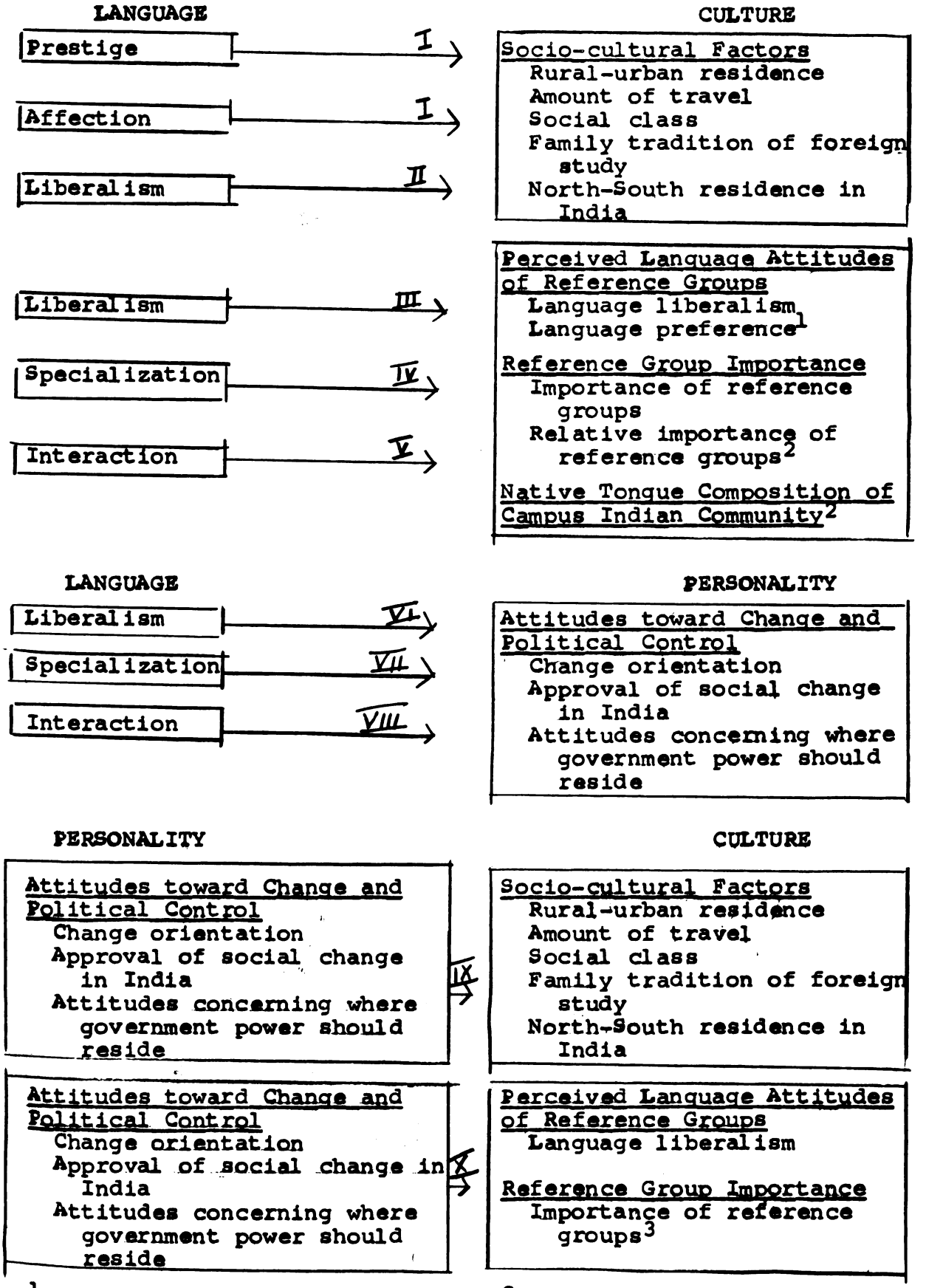
Hypothesis X

Attitudes toward change and political control are related to the perceived language liberalism of reference groups and to feelings about the reference groups.

a) Change orientation is related to the language liberalism of family, subcaste, social class and region.
b) Change orientation is related to the heterogeneity of language liberalism among family, subcaste, social class and region.
c) Change orientation is related to the importance and liberalism of family, subcaste, social class and region.
d) Approval of social change in India is related to the language liberalism of family, subcaste, social class and region.
e) Approval of social change in India is related to the heterogeneity of language liberalism among family, subcaste, social class and region.

f) Approval of social change in India is related to the importance and language liberalism of family, subcaste, social class and region.
g) Attitudes concerning where government power should reside are related to the language liberalism of family, subcaste, social class and region.
h) Attitudes concerning where government power should reside are related to the heterogeneity of language liberalism among family, subcaste, social class and region.

Overview. Ten hypotheses have been made in this chapter: five language and culture hypotheses, three language and personality hypotheses and two personality and culture hypotheses. These hypotheses are complex: they involve a number of language variables and a number of language correlate variables. A diagram is presented below to give an overview of the hypotheses and the variables with which they are concerned. The roman numerals indicate the hypothesis positing a relationship between the two sets of variables.



[1]Used only in Hypothesis IV

[2]Not used in Hypothesis V

[3]Not used with "Attitudes concerning where government power should reside"

CHAPTER III

DESCRIPTION OF THE SAMPLE

Population and Sample

The population selected for study was composed of the students from India studying at Michigan State University and the University of Michigan during the summer of 1964.

Participation of the approximately 180 Indians at the two universities was requested by letter followed by phone calls. The process of letters and phone calls was repeated several times at both universities. The sample finally obtained consisted of 96 Indians, 55 from Michigan State University and 41 from the University of Michigan.

Participants appeared in small groups, usually five or six at a time to fill out the questionnaire. (The questionnaire appears in Appendix A). The only other person present while the students completed the questionnaires was the author. Respondents signed their names to the questionnaire with the promise by the author that all information would be kept confidential.

Approximately one-half the population at each university participated in the study. There is no basis for speculating about the students who did not respond to the request for participation. No information was available on what native tongue they spoke and nothing was known about

their language attitudes. The data from Michigan State were collected during the summer at a time when many had gone on vacation and some had just graduated from the university and were already en route to India. The data from the University of Michigan were collected in September and October. The data from the two campuses were compared and found not to differ in any significant respect. The data were combined in the analyses and discussions which follow.

Ninety-two of the respondents were male, four were female. The range in age was from 19 to 46 years with a mean of 27.5 and a median of 26.4 years. The distribution of ages appears in Appendix B.

Most of the Indian visitors were studying at the universities for academic degrees. The heaviest concentration was at the graduate level with over half the sample (52 percent) studying for the doctoral degree and 27 percent for the master's degree. Seventeen percent were studying for a bachelor's degree and four percent gave miscellaneous academic objectives. The distribution of academic objectives is presented in Appendix C.

Engineering was given as the academic specialty of nearly 45 percent of the students. The only other fields of study for five or more students were biology, pharmacology and mathematics and statistics. The academic specialties are presented in Appendix D.

The sample included individuals who had been in the United States a few months and ranged all the way to those

who had been in residence well over four years. Approximately one-third of the students had been in the U.S. one year or less; another third had been here between 13 and 30 months, and the last third had been in residence over two-and-a-half years. The mean time spent in the U.S. was slightly over two years. Appendix E shows the distribution of time in the U.S.

The majority (some 61.5 percent) of the Indians were Hindus. Another 17.7 percent listed Jain, Islam, Sikh or Zoroastrian as their religion; ten percent gave a Christian religion, five percent claimed atheism or no religion, and another five percent declined to answer. The distribution of religions is found in Appendix F.

Two-thirds of the students had been working before they came to the U.S. Only one-third had definite jobs to go back to in India. See Appendix G.

The majority of the Indians had spent most of their lives in large towns or cities. Very few claimed a background that might be considered rural in nature. Table 1 shows the size of city where students had lived most of their lives. The lack of students from villages and small towns is unfortunate in that it renders investigation of rural-urban differences very difficult.

Most of the Indians come from Northern states although several Northern states are not represented in this sample: Assam, Himalch Pradesh, Jammu-Kashmir, and Madhya Pradesh. Table 2 shows the distribution of home states. The states

listed under Dravidian Language Areas are identified here as Southern states; those listed under Indo-Aryan Language Areas are considered to be Northern States.

TABLE 1

Size of City Where Most of Life Lived

	Number in Sample	Percent of Sample
Large city (300,000 or more population)	51	53.1
Large town (100,000 to 300,000 population)	14	14.6
Medium town (20,000 to 100,000 population)	14	14.6
Small town (1,000 to 20,000 population)	13	13.5
Village (1,000 or under population)	1	1.0
No response	3	3.1
Total	96	99.9

Travel

Eight different measures of travel were included on the questionnaire. Three dealt with travel in India, three with travel outside India and two with vicarious travel.

The three questions dealing with travel in India asked: a) the number of different states in which the respondent had lived for 6 months or more; b) the number of cities, towns or villages in which he had lived for over 6 months, and c) how much traveling he had done in India generally.

TABLE 2

Home State or Territory

	Number in Sample	Percent of Sample
Dravidian Language Areas		
Andhra Pradesh	5	5.2
Kerala	3	3.1
Madras	9	9.4
Mysore	2	2.1
Indo-Aryan Language Areas		
Bengal	3	3.1
Bihar	4	4.2
Delhi	6	6.3
Goa	1	1.0
Gujarat	9	9.4
Maharastra	29	30.2
Orissa	3	3.1
Punjab	7	7.3
Rajasthan	2	2.1
Uttar Pradesh	12	12.5
No response	1	1.0
Total	96	100.0

This last measure had five alternatives ranging from "very much" to "none".

The Indians appear to have been fairly mobile in India. All but 10 percent had lived in more than one city as shown in Table 3. On the average they had lived in four cities located in two states. They did not change state quite so readily as city; over 85 percent had lived in three or fewer states. Table 3 shows the number of states in which respondents had lived.

TABLE 3

Number of Places Lived in India

Number of Cities	Number in Sample	Percent of Sample	Number of States	Number in Sample	Percent of Sample
1	10	10.4	1	35	36.5
2	15	15.6	2	29	30.2
3	20	20.8	3	18	18.8
4	18	18.8	4	5	5.2
5	8	8.3	5	2	2.1
6	6	6.3	6	2	2.1
7	4	4.2	7	1	1.0
8	4	4.2	8	0	0.0
9	3	3.1	9	0	0.0
10	6	6.3	10	0	0.0
			11	0	0.0
			12	1	1.0
No response	2	2.1	No response	3	3.1
Total	96	100.1	Total	96	100.0
Mean Cities	4.2		Mean States	2.2	
Std.Dev.	2.5		Std.Dev.	1.6	

Over half the respondents indicates a background of "much" or "very much" travel in India. Table 4 presents the responses to the general question on travel in India. Only five people said they had travelled little or not at all in India.

The question of travel abroad yields rather different results. Nearly 80 percent (76 respondents) had not been outside of India before their trip to the United States. Eighteen respondents had travelled outside India. Table 5 shows the number of trips taken outside India exclusive of the sojourn to the U.S.

TABLE 4

Travel in India

General Amount of Travel	Number in Sample	Percent of Sample
Very much	22	22.9
Much	29	30.2
Some	39	40.6
Very little	4	4.2
None	1	1.0
No response	1	1.0
Total	96	99.9

TABLE 5

Travel Outside India

Trips Out of India			Countries Visited		
Number of Times	Number in Sample	Percent of Sample	Number of Countries	Number in Sample	Percent of Sample
0	76	79.2	0	72	75.0
1	14	14.6	1	7	7.3
2	1	1.0	2	3	3.1
3	0	0.0	3	1	1.0
4	1	1.0	4	1	1.0
5	1	1.0	5	0	0.0
6	1	1.0	6	1	1.0
No response	2	2.1	No response	11	11.5
Total	96	99.9	Total	96	99.9

Of the 18 respondents with foreign travel, thirteen indicated they had spent over a month in at least one foreign country: seven had lived in one country, three in two

countries, one in three countries, one in four and one in six countries. Table 5 shows the number of countries in which the respondents had visited for a month or longer.

Respondents were asked to indicate how many years they had spent outside India. Some confusion appears to have resulted from this question. The question asked respondents about travel outside India, not counting the U.S. trip. Forty-four individuals said they had been outside India one year or longer. Previously, however, only 18 students indicated they had ever made any trips outside India. (cf. Table 5) The discrepancy is probably due to some students counting the months spent in the United States when they answered the question. In view of the confusion about this question, it was not used in testing hypotheses about travel. The distribution of responses appears in Appendix H.

Vicarious contact with other countries was assessed by two questions. The first asked the respondent how much reading he had done about foreign countries. Table 6 shows the responses. Exactly half said they had done "some" reading. Over 37 percent had done "much" or "very much" and slightly over 10 percent had done "very little" or "none". In general the students indicated they had done quite a bit of reading about foreign countries.

Indian students do not generally come from families having extensive contact with non-Indians. See Table 6. Over 20 percent said their families had no such contact and 28 percent said there was "very little" contact. Only 15 percent came from families where there was "much" or "very much" of such contact.

TABLE 6

Vicarious Culture Contact

Reading About Foreign Countries			Family Contact with non-Indians		
	Number in Sample	Percent of Sample		Number in Sample	Percent of Sample
Very much	11	11.5	Very much	9	9.4
Much	25	26.0	Much	6	6.3
Some	48	50.0	Some	32	33.3
Very little	9	9.4	Very little	27	28.1
None	1	1.0	None	20	20.8
No Responses	2	2.1	No Responses	2	2.1
Total	96	100.0	Total	96	100.0

Family Tradition of Foreign Study

For relatively few Indians in the sample was there a family tradition of foreign study. Table 7 shows the number of generations in each family with education outside India. Sixty percent of the students were the first in their families to study abroad. Twenty-eight percent indicated that one or more family members from a single generation had such study. Nearly always these family members were from the respondents' own generation, e.g., brothers, sisters or cousins; sometimes they were from a different generation, e.g., father, uncles, or aunts.

Most of the students did not have brothers or sisters with past or current study abroad. Twenty-five had one or more brothers with foreign study and four had sisters with

TABLE 7

Generations of Family Members with Education Outside India

	Number in Sample	Percent of Sample
None	58	60.4
One generation	27	28.1
Two generations	6	6.3
Three generations	1	1.0
Four generations	1	1.0
Five generations	0	0.0
Six generations	1	1.0
No response	2	2.1
Total	96	99.9

such education. Sixteen students had one brother with foreign education, seven had two brothers, one had three brothers and one had four brothers. Two students had one sister with study abroad, one had two sisters and one had five sisters with such study. Table 8 shows the countries in which brothers and sisters had studied. The country in which brothers had most often studied was the United States. The U.S. was followed closely by England. For sisters the most frequent country named was the Sudan. This is because all five sisters of one student studied in the Sudan.

The foreign study of parents, grandparents, uncles and aunts is shown in Table 9. Six individuals had fathers with foreign study, three had grandfathers, 18 had uncles and six had aunts. For some of the individuals more than one uncle or aunt had studied abroad.

TABLE 8

Foreign Study of Brothers and Sisters

	Number in Sample	Percent of Sample	Total
Brothers:			34
United States	14	14.6	
England	11	11.5	
Germany and U.S.	4	4.2	
England and U.S.	1	1.0	
Germany	1	1.0	
Burma	1	1.0	
Sudan	1	1.0	
Aden	1	1.0	
Sisters:			9
Sudan	5	5.2	
England	2	2.1	
United States	1	1.0	
Aden	1	1.0	

The most frequent country of study was England. Twenty-five of the 43 sojourning relatives studied there. Thirteen studied in the U.S., three in Germany, two in Switzerland, one in Australia and one in Belgium.

TABLE 9

Foreign Study of Parents, Grandparents, Uncles and Aunts

	Number in Sample	Percent of Sample	Total
Father:			6
England	3	3.1	
United States	1	1.0	
England and U.S.	1	1.0	
England and Germany	1	1.0	
Grandfathers:			3
England	2	2.1	
Germany	1	1.0	
Uncles:			27
England	15	15.6	
United States	9	9.4	
Germany	1	1.0	
Australia	1	1.0	
Switzerland	1	1.0	
Aunts:			7
England	3	3.1	
Belgium	1	1.0	
United States	2	2.1	
Switzerland	1	1.0	

Summary

The students averaged 27 and a half years in age. About half were studying for the doctorate and the other half for lower degrees. Nearly half were majoring in engineering with the remainder scattered over other academic fields. On the average they had been in the U.S. two years. Over 60 per cent were Hindu. Two-thirds had worked before coming to the U.S.; one-third had jobs to go back to. Most had lived in large cities in India; almost none had spent the majority of

their lives in very rural areas. As defined by language area, about 20 percent were from the South and 80 percent from the North of India.

The students had lived in four cities and in two states in India on the average. They considered themselves to have done much general travel in India. Only one-firth of them had been outside India and only six of these individuals had lived in more than one other country for a month or longer. Vicarious contact with other cultures took place far more through reading than through family contact with non-Indians.

Over 60 percent of the individuals were the first in their family to study abroad. When there were other family members with foreign study they usually belonged to the individual's own generation. When the family members with foreign study were not from the same generation as the student they were generally his father, grandfather, uncles or aunts. Sojourning family members from all generations most often had travelled for study to England or to the United States.

CHAPTER IV

LANGUAGE BACKGROUND OF THE INDIAN STUDENTS

General Language Background

The respondents claimed knowledge of a large number of languages. When asked to list the languages, sub-languages, vernaculars and dialects they knew, the 96 students in this sample listed some 515 languages. This averaged out to 5.36 languages per person. Table 10 summarizes the languages listed by the Indians. It is interesting to note that 8 students forgot to list the language they were using -- English.

By far the best known Indian language was Hindi, listed by 88 of the respondents. Hindustani is given here as a language separate from Hindi because some of the respondents listed it that way. Hindustani is a combination of Hindi and Urdu. The next most frequently named languages were Sanskrit, Gujarati, Urdu and Marathi spoken by 40, 38, 38 and 37 individuals respectively.

Hindi was given as the native tongue of 20 of the respondents. Gujarati, Punjabi and Tamil were the only other languages given as the native tongue by ten or more respondents. The distribution of native tongues is given in Table 11.

TABLE 10

Languages Known

Language	Number in Sample	Percent of Sample
Assamese	1	1.0
Bengali	20	20.8
Gujarati	38	39.6
Hindi	88	91.7
Hindustani	4	4.2
Kannada	7	7.3
Kashmiri	0	0.0
Malayalam	11	11.5
Marathi	37	38.5
Oriya	4	4.2
Punjabi	28	29.2
Sanskrit	40	41.7
Tamil	18	18.8
Telugu	10	10.4
Urdu	38	39.6
English	88	91.7

Although India has states organized along language lines, a comparison of the home state and native tongue given by the students showed more than one language listed as the native tongue for residents of half the states. Table 12 shows the home state given by each student and his reported native tongue. The state of Maharastra had by far the greatest diversity of language. The explanation for this is not immediately apparent. Whether the multiple languages per state reflect the actual intermixture of language in the states or indicates a great deal of travel on the part of the students is not clear.

TABLE 11

Native Tongue

Native Tongue	Number in Sample	Percent of Sample
Hindi	20	20.8
Gujarati	15	15.6
Punjabi	11	11.5
Tamil	11	11.5
Marathi	7	7.3
Telugu	5	5.2
Bengali	4	4.2
Oriya	3	3.1
Konkani*	3	3.1
Kannada	3	3.1
Malayalam	3	3.1
English*	3	3.1
Hindustani	2	2.1
Sindhi*	2	2.1
Rajasthani*	1	1.0
Kannies*	1	1.0
Kutchi*	1	1.0
Marwari*	1	1.0
No response	1	1.0
Total	97+	

* Not an official language
+ Total is 97 instead of 96 because one student named two languages: (Kannada and Tamil).

A rather intriguing aspect of the language data is that several students listed as their native tongue a language other than that spoken with their families. Often a student listed two or three languages as being used with his family and then gave one of these as his native tongue. For ten students, however, there was no overlap between the languages used with the family and the language listed as the native tongue. Five of these ten individuals gave Hindi as

TABLE 12

Home State (or territory) and Corresponding Native Tongue

Native Tongue	Home State or Territory: Andhra Pradash	Kerala	Madras	Mysore	Bengal	Bihar	Delhi	Goa	Gojarat	Maharastra	Orissa	Punjab	Rajasthan	Uttar Pradash	Total
Hindi						3	2			3		1	1	10	20
Gujarati									8	7					15
Punjabi							2			3		6			11
Tamil			9							1					10
Marathi										6				1	7
Telugu	5														5
Bengali					3	1									4
Oriya											3				3
Konkani								1		2					3
Kannada				1			1								2
Malayalam		3													3
English										2					2
Hindustani										1				1	2
Sindhi										2					2
Rajasthani													1		1
Kutchi									1						1
Marwari										1					1
Kanries				1											1
TOTAL	5	3	9	2	3	4	5	1	9	28	3	7	2	12	93*

*Information incomplete for three respondents:
Home state not known for one respondent whose native tongue was English.
Home state not known for one respondent whose native tongues were Tamil and Kannada
Native tongue not known for one respondent whose home state was Maharastra.

their native tongue. One individual remarked to the author, "I am answering this question as an Indian, and even though I do not like Hindi or speak it well, as an Indian responding to an American, my native tongue is Hindi!"

Most of the Indians considered themselves to have good command of Hindi. On the average, two thirds of all the Hindi speakers rated themselves in the "excellent" or "good" categories. See Table 13. Mean fluency ratings were calculated by assigning "excellent" a value of 4, "good" a value of 3, "fair" a 2, and "poor" a 1. The means indicate that the best performance in Hindi was in understanding the speech of others. This was followed by reading fluency. Third was speaking fluency and last was writing fluency.

TABLE 13

Fluency in Hindi

	Excellent	Good	Fair	Poor	Total	Mean Fluency	Std. Dev.
Reading Fluency	38	30	13	7	88	3.13	.94
Writing Fluency	26	32	20	9	87	2.86	.86
Speaking Fluency	30	33	18	7	88	2.98	.93
Understanding Speech	38	36	7	5	86	3.24	.83

Half of the sample (48 respondents) claimed some knowledge of Sanskrit. Far fewer knew the other classical languages, Pali and Prakrit. Pali was known by only one person;

Prakrit by four. On the average Sanskrit was studied over three and a half years. Table 14 presents these figures.

TABLE 14

Knowledge of Classical Indian Languages

Language	Number in Sample	Percent of Sample	Mean Years of Study
Sanskrit	48	50.0	3.67
Pali	1	1.0	2.0
Prakrit	4	4.2	1.0

The figures in Table 14 conflict with those in Table 10 where only 40 Indians claimed knowledge of Sanskrit and no one claimed to know Pali or Prakrit. The figures in Table 10 came from the first item on the questionnaire requesting the individuals to list all the languages they knew. Apparently eight individuals forgot to list Sanskrit, one forgot Pali and four forgot to list Prakrit just as eight forgot to give the language they were using, English. Data for the table above, 14, came from the third item on the questionnaire which asked: "Can you read any of the following?" and then listed Sanskrit, Pali and Prakrit.

The Indian students in this sample claim knowledge of more languages and dialects for themselves than they claim for their parents. They listed an average of 5.4 languages known by themselves (Table 10), 3.9 known by their fathers and 2.8 by their mothers. Table 15 shows the languages reported to be spoken by parents.

TABLE 15

Number of Languages, Dialects, Sub-languages and Vernaculars Known by Parents

Number of Languages	Father		Mother		Both Parents*	
	Number	Percent	Number	Percent	Number	Percent
1	6	6.3	22	22.9	6	6.3
2	12	12.5	23	24.0	11	11.5
3	21	21.9	20	20.8	19	19.8
4	22	22.9	15	15.6	22	22.9
5	15	15.6	8	8.3	16	16.7
6	11	11.5	5	5.2	12	12.5
7	7	7.3	1	1.0	9	9.4
No Response	2	2.1	2	2.1	1	1.0
Total	96	100.1	96	99.9	96	100.1
Mean Languages	3.95		2.82		4.08	
Std. Dev.	1.62		1.52		1.70	

*Number of different languages known between the parents.

The discrepancy in number of languages known by the generations together with the finding that the majority of students learned only one or two languages from their parents suggests a somewhat broader and perhaps less provincial background on the part of the younger generation.

The reasons for learning languages beyond those learned from parents fell into two classes: compulsory school subjects (particularly English and Hindi) and speaking with friends. Occasionally parents or grandparents were lovers of English literature and this prompted the child to learn the language.

The majority of Indians learned only one language from their parents, although a few learned as many as four.

Table 16 shows the number of languages learned in this manner.

TABLE 16

Number of Languages Learned from Parents

Number of Languages	Number in Sample	Percent of Sample
1	60	62.5
2	23	24.0
3	9	9.4
4	2	2.1
No Response	2	2.1
Total	96	100.1
Mean Languages	1.50	
Std. Dev.	.76	

Prestige and Affection Associated with Languages

The students were asked to rate each of the fourteen official languages and English on how much prestige they accorded the language. Prestige categories used for the ratings were: 5 = High prestige, 4 = Fairly high prestige, 3 = Medium prestige, 2 = Fairly low prestige, 1 = Low prestige.

Table 17 shows the mean prestige rating given each language by the entire sample of students. The languages are listed in order by prestige with languages assigned the highest prestige ratings appearing at the top of the list. Sanskrit, English and Hindi lead the list in prestige. The small standard deviation indicates agreement among the students with regard to the high prestige accorded these languages.

TABLE 17

Prestige Accorded Languages by Entire Indian Group

Language	Number of Ratings	Mean Prestige Rating	Std. Dev.
Sanskrit	90	4.83	.37
English	84	4.62	.67
Hindi	83	4.39	.88
Hindustani	75	3.87	1.27
Bengali	79	3.56	1.12
Urdu	78	3.33	1.24
Gujarati	75	3.17	1.23
Marathi	73	2.97	1.23
Tamil	75	2.88	1.29
Punjabi	75	2.79	1.23
Telugu	72	2.79	1.25
Kannada	72	2.56	1.15
Malayalam	71	2.42	1.16
Kashmiri	71	2.38	1.08
Assamese	67	2.28	1.13
Oriya	69	2.26	1.18

The ordering of the list changes when the mean prestige rating for a language is calculated only from the ratings made by individuals listing that language as their native tongue. Table 18 shows the mean prestige rating for each language when it is rated only by speakers listing it as their native tongue.

As might be expected, the prestige ratings accorded a language by its native speakers were always higher than those given the same language by the Indian group as a whole. Table 19 shows the discrepancies between prestige ratings made by the entire group and those made by native speakers.

The languages for which the greatest discrepancy in ratings was noted are Telugu, Kannada, Bengali, Oriya and Punjabi. The languages where the least discrepancy was found

TABLE 18

Prestige Accorded Native Tongue

Native Tongue	Number of Ratings	Mean Prestige Rating	Std. Dev.
Bengali	4	5.00	.00
English	3	5.00	.00
Hindustani	2	5.00	.00
Hindi	20	4.80	.37
Telugu	5	4.60	.55
Gujarati	13	4.38	.77
Punjabi	7	4.14	.90
Tamil	7	4.14	.90
Kannada	2	4.00	1.41
Marathi	7	3.71	1.49
Oriya	3	3.67	2.31
Malayalam	3	2.67	1.16

are Malayalam, English and Hindi. Malayalam received rather low prestige ratings by its native speakers; no other language was lower. English and Hindi on the other hand, received very high ratings by their native speakers, an opinion shared by the group as a whole as indicated by the small standard deviations found for the Hindi and English ratings in Table 17.

Each respondent was asked how much affection he felt for each of the languages he knew. Affection was expressed in five categories: 5 = Very much affection, 4 = Much affection, 3 = Some affection, 2 = Little affection, 1 = No affection.

As expected, the affection expressed by an individual for his native tongue was generally very high. For seven languages, Bengali, Hindustani, Kannada, Oriya, English, Konkani, and Rajasthani, every native speaker expressed the very highest affection. No language received a mean affection

TABLE 19

Differences between Prestige Ratings Given Languages by Entire Indian Group and Native Tongue Speakers

Language*	Entire Indian Group: Mean Prestige Ratings	Native Tongue Speakers: Mean Prestige Ratings	Difference Between Mean Ratings
Telugu	2.79	4.60	-1.81
Kannada	2.56	4.00	-1.44
Bengali	3.56	5.00	-1.44
Oriya	2.26	3.67	-1.41
Punjabi	2.79	4.14	-1.35
Tamil	2.88	4.14	-1.26
Gujarati	3.17	4.38	-1.21
Hindustani	3.87	5.00	-1.13
Marathi	2.97	3.71	-.74
Hindi	4.39	4.80	-.41
English	4.62	5.00	-.38
Malayalam	2.42	2.67	-.25

*Urdu, Kashmiri and Assamese do not appear on the list because they were not given as a native tongue by any of the individuals in the sample.

rating less than 4.0 ("much" affection). Table 20 shows the mean affection ratings.

The affection expressed for Hindi and for English were examined in greater detail. Table 21 shows the affection felt for Hindi and English by all the speakers of these languages. The affection felt for Hindi was moderately high for the group as a whole. The affection expressed for English was even higher (the mean is 4.28 compared to 3.69 for Hindi). The difference between the two means is not significant, however. (t test).

TABLE 20

Affection Expressed for Native Tongue

Native Tongue	Number of Ratings	Mean Affection Rating	Std. Dev.
Bengali	4	5.0	.00
Gujarati	14	4.2	1.16
Hindi	17	4.3	1.31
Hindustani	1	5.0	.00
Kannada	1	5.0	.00
Malayalam	3	4.3	1.16
Marathi	6	4.3	.82
Oriya	2	5.0	.00
Punjabi	10	4.4	.70
Tamil	10	4.7	.67
Telugu	5	4.8	.45
English	3	5.0	.00
Konkani	3	5.0	.00
Kanries	1	4.0	.00
Sindhi	2	4.5	.00
Rajasthani	1	5.0	.00
Kutchi	1	4.0	.00

TABLE 21

Affection Expressed for Hindi and English by Entire Indian Group

	Hindi		English	
	Number in Sample	Percent of Sample	Number in Sample	Percent of Sample
5 Very much affection	23	24.0	39	40.6
4 Much affection	24	25.0	23	24.0
3 Some affection	25	26.0	5	5.2
2 Little affection	4	4.2	1	1.0
1 No affection	5	5.2	4	4.2
No Response	15	15.6	24	25.0
Total	96	100.0	96	100.0
Mean affection	3.69		4.28	
Std. Dev.	1.12		1.04	

Language Preferences

English was listed by over half the sample as the most comfortable language for them. Nearly everyone gave more than one response to this question which asked: "In which language are you most comfortable?" Table 22 shows that for 34 individuals English was the first choice although it was listed as a native tongue by only three individuals. Hindi, the native tongue of 20 people, was a comfortable language for 29 students.

TABLE 22

Most Comfortable Language

	Order in Which Language Listed				
Language	First	Second	Third	Fourth	Total
English	34	13	4	2	53
Hindi	18	8	2	1	29
Gujarati	9	2			11
Punjabi	5	4	1		10
Marathi	7	2			9
Urdu	4	2	1	1	8
Tamil	4	3			7
Bengali	3		1		4
Hindustani		1	2		3
Konkani	2	1			3
Oriya	3				3
Telugu	3				3
Sindhi	2				2
Malayalam	2				2
Kannada			1		1

English was by far the language considered most useful professionally. Table 23 shows the response to the question, "which language do you think will be most useful to you in your profession in India?" English alone was named by 65 of the 96 respondents with another 24 respondents

naming it in conjunction with another language. Altogether, 89 of the 96 individuals mentioned English as the most useful language professionally.

Hindi was the second most frequently named language. Twenty-six people listed it alone or jointly with another tongue. When Hindustani was lumped together with Hindi, this total rose to 28. Four other languages were named: Sanskrit, Gujarati, Malayalam, and Punjabi, with the latter given twice.

TABLE 23

Language(s) Most Useful Professionally

Language	Number in Sample	Percent of Sample
English	65	67.7
English and Hindi	18	18.8
Hindi	6	6.3
English, Hindi and Sanskrit	1	1.0
English and Punjabi	1	1.0
English and Gujarati	1	1.0
English, Hindi and Punjabi	1	1.0
English and Malayalam	1	1.0
English and Hindustani	1	1.0
Hindustani	1	1.0
Total	96	99.8

When the question was one of what language was most useful socially, Hindi and English traded places. The question read, "Which language will be the most useful socially in non-professional situations in India?" In answer to this question, Hindi was mentioned 54 times and Hindustani 5 while English was mentioned only 29 times. These two languages were far ahead of any others. Table 24 shows these figures.

TABLE 24

Language(s) Most Useful Socially

Language	Number in Sample	Percent of Sample
Hindi	35	36.5
English	16	16.7
English and Hindi	7	7.3
Gujarati	5	5.2
Hindustani	4	4.2
Punjabi	3	3.1
Hindi and Telugu	2	2.1
Bengali	1	1.0
Oriya	1	1.0
Malayalam	1	1.0
Hindi and Urdu	1	1.0
Punjabi and English	1	1.0
Hindi and Hindustani	1	1.0
Hindi and Punjabi	1	1.0
Gujarati, English and Greek	1	1.0
Marathi, Hindi and Gujarati	1	1.0
Hindi, Urdu and Punjabi	1	1.0
Hindi, Punjabi and English	1	1.0
Hindi, Gujarati and English	1	1.0
Regional language	5	5.2
Regional language and Hindi	2	2.1
Regional language and English	1	1.0
Metropolis: English and Hindi, otherwise state language	1	1.0
Unclear	1	1.0
None	1	1.0
No Response	1	1.0
Total	96	99.4

English and Hindi also led the list of preferred languages. Table 25 shows the responses to the question, "What language(s) do you prefer?" English dominated Hindi: slightly fewer than two-thirds of the respondents named English and slightly under one-half named Hindi.

Two of the three miscellaneous responses in Table 25 belonged to students who declined to name a specific language saying that it depended on the purpose for which the language was to be used. The third miscellaneous response was a "No preference" with the added note, ". . . but I certainly like my native tongue for sentimental reasons."

TABLE 25

Language(s) Preferred

	Order in which Language Listed				
Language	First	Second	Third	Fourth	Total
English	41	16	4		61
Hindi	28	11	4		43
Gujarati	3	5	3		11
Marathi	2	4	1		7
Tamil	1	5	1		7
Punjabi	2	4			6
Hindustani	3	2			5
Urdu	2		2	1	5
Bengali	2	1	1		4
Konkani	1	2			3
Sanskrit	1	1	1		3
Oriya	2				2
Telugu	1	1			2
No Response	4				4
Miscellaneous	3				3

The languages named with the next highest frequency on the list of preferences and the languages given in response to ". . . are there other languages that you like? (specify)" were primarily North Indian languages. Table 26 shows the languages listed in response to the question. This is not surprising in view of the fact that the sample consisted of approximately 80 percent North Indians and 20 percent South Indians.

TABLE 26

Language(s) Liked

Language	Order in which language listed				
	First	Second	Third	Fourth	Total
Bengali	11	2	1		14
Urdu	8	5	1		14
Hindi	9	4			13
Sanskrit	7	2	1	1	11
French	7	1	1		9
Gujarati	5	1	1		7
Marathi	3	1		1	5
German	3	1	1		5
Punjabi	1	1	1	1	4
Telugu	2	2			4
Tamil	1	3			4
Sindhi	1	1	1		3
Latin		1	1		2
English		2			2
Russian	1		1		2
Bhojpuri		1	1		2
Assamese	1				1
Kannada	1				1
Portuguese			1		1
Marthali				1	1
Konkani		1			1
Rajasthani	1				1
Porvi	1				1
Memoni			1		1
All languages					2
All languages in India					2
Many like Kashmiri and Sinohi					1

A question asking what languages were not appealing and one asking what languages were used unwillingly were also on the questionnaire. Tables 27 and 28 show the responses to these items.

English was never listed as a language which was not appealing, but three individuals said they used it unwillingly. Hindi led the list of the languages used unwillingly. Fifteen people gave this response. Hindi was listed only four times as not appealing, however.

The two languages most frequently considered as not appealing were Tamil and Telugu, both Southern languages. The third most frequently named as an unappealing language was Marathi, a Northern language. Part of the reason for Southern languages leading this negative list may be because of the Northern dominance in the sample. It is doubtful that this is the entire reason however, because it was North Indian languages which formed the largest share of languages used unwillingly.

Another reason for the little appeal of Tamil and Telugu is their harshness to Indian ears. When asked if there were any particular characteristics they associated with particular languages, most respondents answered in terms of sound, and in terms of literary achievements. Languages were described in feminine terms: sweet, soft, musical, sentimental, poetic and rich. The words "sweet" and "rich" appeared again and again in the descriptions. Both words were used to describe the sound of the language and to describe its literature. Rarely was a language described in negative terms. The languages most often described in unflattering terms however, were Tamil, Telugu and Marathi. The complaint against all three was one of harsh and jarring sounds. One individual went so far as to describe Marathi as "Like a horse talking". In the case of Telugu however, an equal number of people considered its sounds as sweet and melodic.

As already mentioned, Hindi was used unwillingly by more individuals than any other language. The reasons for this are probably partly political and social since no one said anything unflattering about Hindi. It was most often described as known by a large number of people, easy to learn, sweet-sounding and "the national language of the country". Although respondents were asked "when and why?" in connection with the languages they used unwillingly, only 40 responded. Very few made any reference to Hindi. Those that did said they didn't like to use it because they didn't know it well. One answer read: "Learnt because of compulsion, which is bad technique for learning languages."

TABLE 27

Language(s) Not Appealing

	Order in which Language Listed				
Language	First	Second	Third	Fourth	Total
Tamil	6	2	2		10
Telugu		5	3		8
Marathi	6		1		7
Sanskrit	4	3			7
Punjabi	4	1	1		6
Gujarati	2	1	1		4
Hindi	2	2			4
Bengali	1	1		1	3
Urdu	1	1			2
German	2				2
Kannada			1		1
Assamese		1			1
Rajasthani			1		1
Chinese	1				1
Dagri				2	2
French	1				1
Russian		1			1
Konkani	?				1

TABLE 28

Language(s) Used Unwillingly

Language	Number in Sample	Percent of Sample
Hindi	15	15.6
Marathi	8	8.3
Bengali	4	4.2
Gujarati	4	4.2
Urdu	4	4.2
English	3	3.1
Punjabi	2	2.1
Telugu	2	2.1
Konkani	2	2.1
French	2	2.1
Sanskrit	1	1.0
Kannada	1	1.0
Malayalam	1	1.0
Tamil	1	1.0
Miscellaneous*	7	7.3

*Six respondents said that all but two or three languages were used unwillingly. The seventh individual answered, "Regional languages."

On a more positive note, most Indian students indicated that there were languages they would like to learn. Table 29 shows there were only five people who said there were none. Most people indicated one or two languages, a few wanted to learn all languages.

What languages did they want to learn? Table 30 gives the answer to this. Four languages were named by 10 people or more. Three of the four were non-Indian languages: French, German and Russian. The reasons given for learning these languages were primarily those of: professional and scientific purposes, Ph.D. requirements, to be able to read the literature in the language, and to have better communication with the native speakers of these languages, For Bengali,

one reason predominated. Nearly everyone wanted to take advantage of its rich literature.

TABLE 29

Number of Languages Would Like to Learn

Number of Languages	Number in Sample	Percent of Sample
None	5	5.2
One	22	22.9
Two	23	24.0
Three	11	11.5
Four	7	7.3
Five	1	1.0
Miscellaneous	5	5.2
South Indian languages	1	1.0
Foreign languages	3	3.1
All or many languages	5	5.2
No Response	13	13.5
Total	96	99.9

The interest in foreign languages expressed by the desire to learn them was corroborated by the answers given to the question, "Is there any value in studying foreign languages. Why?" The responses to the first part of the question are tallied in Table 31. Nearly 90 percent of the respondents answered in the affirmative; eight percent in the negative and two percent did not respond.

The largest majority gave broadening of outlook and understanding of the culture of others as their principal reasons. For some the references to better communications and understanding of other cultures were presented in terms of India. Apparently foreign languages to them were other

TABLE 30

Languages Would Like to Learn

Language	Number in Sample	Percent of Sample
French	31	32.3
German	26	27.1
Bengali	22	22.9
Russian	17	17.7
Tamil	9	9.4
Urdu	7	7.3
Marathi	6	6.3
Telugu	5	5.2
Sanskrit	4	4.2
Hindi	4	4.2
Gujarati	3	3.1
Sindhi	3	3.1
Spanish	3	3.1
Chinese	2	2.1
Kannada	2	2.1
Malayalam	2	2.1
Arabic	2	2.1
Assamese	1	1.0
Greek	1	1.0
Italian	1	1.0
Latin	1	1.0
Swedish	1	1.0
Kanarise	1	1.0
Persian	1	1.0
Maharashtrian	1	1.0

Indian languages. A few people talked in terms of access to the literature in other languages and one said the value was in social advancement.

Most of the individuals who saw no value in learning foreign languages gave rather self-centered reasons. They felt they knew enough to get by and that they would only forget languages if they didn't have to use them. One individual replied that there was just "no end to languages."

TABLE 31

Value in Studying Foreign Languages

Is there any value in studying foreign languages?	Number in Sample	Percent of Sample
Yes	86	89.6
No	8	8.3
No Response	2	2.1
Total	96	100.0

English Language Background

Background in English was assessed by means of five questions. Responses to the first question are presented in Table 32. This table shows that the students began learning English between infancy and 14 years of age. The average age for beginning English study was about seven and one-half years.

TABLE 32

Age at which English Language Study Began

Age in Years	Number in Sample	Percent of Sample
1	2	2.1
2	2	2.1
3	4	4.2
4	8	8.3
5	17	17.7
6	9	9.4
7	5	5.2
8	10	10.4
9	11	11.5
10	12	12.5
11	3	3.1
12	9	9.4
13	3	3.1
14	1	1.0

The Indian students claimed everything from no formal study of English to twenty-two years of such study. See Table 33. It seems likely that individuals claiming more than 16 years of formal study misunderstood the question and interpreted formal years of study to mean years in which they studied via the medium of English. If their answers are assumed to be accurate, the mean years of formal English instruction was 10.2

TABLE 33

Years of English Language Study

Years of Study	Number in Sample	Percent of Sample
0	1	1.0
1	0	0.0
2	0	0.0
3	0	0.0
4	5	5.2
5	2	2.1
6	6	6.3
7	7	7.3
8	10	10.4
9	11	11.5
10	15	15.6
11	5	5.2
12	8	8.3
13	5	5.2
14	5	5.2
15	1	1.0
16	3	3.1
17	5	5.2
18	0	0.0
19	0	0.0
20	2	2.1
21	0	0.0
22	1	1.0
No Response	4	4.2
Total	96	99.9

Instruction in English was given primarily by teachers of Indian origin. This is shown in Table 34. A number of individuals studied under British and/or American teachers as well.

TABLE 34

Nationality of English Language Instructors

Nationality	Number in Sample	Percent of Sample
Indian	66	68.8
Indian and British	12	12.5
Indian, British and American	5	5.2
Indian and American	4	4.2
American	1	1.0
American and British	1	1.0
Indian and Anglo-Indian	1	1.0
Indian and Scotch	1	1.0
Indian and Spanish	1	1.0
Indian, British and Spanish	1	1.0
Indian, Spanish and Italian	1	1.0
Indian, Belgian and Australian	1	1.0
Indian, British, French, Irish and American	1	1.0
Total	96	99.7

Respondents were asked how similar they felt the spoken English in the U.S. was to the English they learned in India. Most individuals considered the English they learned at home to be somewhat or very similar to that used in the U.S. See Table 35. Only one person went so far as to pronounce it identical. Eight people considered it very dissimilar.

TABLE 35

Similarity of English Learned at Home to that Used in United States

Spoken English in the two countries is:	Number in Sample	Percent of Sample
Identical	1	1.0
Very Similar	37	38.5
Somewhat Similar	27	28.1
Somewhat Dissimilar	17	17.7
Very Dissimilar	8	8.3
Other	4	4.2
No Response	2	2.1
Total	96	99.9

Respondents were asked to indicate how adequate they felt their English instruction had been. Everyone labelled his English instruction as fairly or completely adequate. Table 36 shows that no one checked any of the inadequate alternatives.

TABLE 36

Adequacy of English Language Instruction

How adequate do you feel your English instruction was?	Number in Sample	Percent of Sample
Completely adequate	37	38.5
Fairly adequate	52	54.2
Somewhat inadequate	6	6.3
Fairly inadequate	0	0.0
Completely inadequate	0	0.0
No Response	1	1.0
Total	96	100.0

Attitudes about Bilingualism

Five questions were asked about bilingualism. In response to the first two, Indian students showed more inclination to endorse the necessity for individuals to use more than one language than for a nation to have to use more than one language. Table 37 shows the responses made to these two questions. The number to the left of each endorsement category represents the value assigned that category in calculating the mean endorsement. The means show that on the average there was a slight positive feeling for the necessity of an individual knowing more than one language and a slight negative feeling when it is necessary for a nation to do so.

TABLE 37

Desirability of Using More Than One Language

	For the Individual		For the Nation	
Using more than one language is a	Number in Sample	Percent of Sample	Number in Sample	Percent of Sample
5 Very good thing	21	21.9	14	14.6
4 Good thing	15	15.6	10	10.4
3 Neither good nor bad	35	36.5	17	17.7
2 Bad thing	21	21.9	43	44.8
1 Very bad thing	1	1.0	9	9.4
No Response	3	3.1	3	3.1
Total	96	100.0	96	100.0
Mean Desirability	3.37		2.75	
Std. Dev.	1.10		1.22	

Feelings about using more than one language were explored further by the question: "How much prestige do you attach to being bilingual?" The response categories were: 5 = Very much, 4 = Much, 3 = Some, 2 = Little, 1 = None. Responses to this question were rather evenly distributed over all categories. See Table 38. On the average, the response was "some" which tends to indicate a rather non-committal feeling. Yet it was with great pride that most Indians announced the number of languages they knew to the researcher collecting the data. Americans, who know few by comparison, are generally quite impressed when informed that such-and-such an individual speaks five languages. In dealing with Indian students on an informal level one finds them most anxious to impress their American hosts by a recital of the languages they speak. Why then so little prestige given bilingualism? One possible reason is a false modesty in answering the question, i.e., playing down an accomplishment which is known to impress Americans. Another possible explanation is that in India little prestige is attached to bilingualism because nearly everyone there speaks more than one language. Consequently the student really does not attach great prestige to this accomplishment even though he finds his host country impressed by it.

With the language issue such a burning one in India and on the campus the question arose as to how individuals felt about intermixing languages, i.e., using words and phrases from one language when communicating in another.

If everyone felt rather strongly that some one language should be the language of India, then strong opposition to the intermixing of languages might be expected.

TABLE 38

Prestige Attached to Bilingualism

Amount of Prestige Attached to Bilingualism	Number in Sample	Percent of Sample
5 Very much	17	17.7
4 Much	17	17.7
3 Some	26	27.1
2 Little	18	18.8
1 None	15	15.6
No Response	3	3.1
Total	96	100.0
Mean Prestige	3.03	
Std. Dev.	1.32	

Such was not the case, however. The attitudes were primarily those of indifference or approval. See Table 39. It would appear that part of the passion aroused over national language is a vying for the honor of having the title. Part, too, is probably a strong fear that if one's language is not recognized in this manner it will fall into disuse and eventually die out and with it will die the culture that it represents. In any event the students indicated by their answers that for them, at least, the issue was not one of "keeping the language pure."

In keeping with their approval of intermixing languages Indian students generally admitted to "some" actual

TABLE 39

Approval of Intermixing Languages

Approval of Intermixing Languages	Number in Sample	Percent of Sample
Approve highly	14	14.6
Approve somewhat	26	27.1
Indifferent or neutral	28	29.2
Disapprove somewhat	16	16.7
Disapprove highly	7	7.3
Other	3	3.1
No Response	2	2.1
Total	96	100.1

TABLE 40

Actual Intermixing of Languages

Actual Intermixing of Languages Practiced	Number in Sample	Percent of Sample
Very much	13	13.5
Much	14	14.6
Some	39	40.6
Little	21	21.9
None	3	3.1
Other	2	2.1
No Response	4	4.2
Total	96	100.0

intermixing of languages. Table 40 presents their ratings of how much intermixing they felt they actually practice.

Attitudes about India's Language Problems

The questionnaire contained a series of items pertaining to the issue of an official language for India. As expected the students expressed considerable concern about India's language problem. Only 7 felt little or no concern while well over half were "very" or "extremely" concerned. Table 41 summarizes the degree of concern expressed for the language problem.

Even at Michigan State University at the time Hindi became the official language of India, feelings of regionalism rose to the point where the students argued among themselves and some of the language groups in the India Student Association broke off and threatened to form small groups on the basis of language or region.

TABLE 41

Concern for India's Language Problem

Respondents were:	Number in Sample	Percent of Sample
Extremely concerned	25	26.0
Very concerned	28	29.2
Somewhat concerned	35	36.5
Not very concerned	4	4.2
Unconcerned	3	3.1
No Response	1	1.0
Total	96	100.0

Students expressed a high degree of willingness to accept Hindi as India's official language. See Table 42. Over 60 percent said they were "completely" or "somewhat" willing while 30 percent said, "completely" or "somewhat unwilling." The remaining 10 percent fall in the neutral and no response categories.

The willingness expressed by North Indians was compared to that of South Indians. The difference was significant at the .05 level (t test) with North Indians more willing to accept Hindi than South Indians.

TABLE 42

Willingness to Accept Hindi as India's Official Language

Respondents were:	Number in Sample	Percent of Sample
Completely willing	45	46.9
Somewhat willing	13	13.5
Neutral or indifferent	5	5.2
Somewhat unwilling	10	10.4
Completely unwilling	19	19.8
Other	2	2.1
No Response	2	2.1
Total	96	100.0

When asked what they would choose to be India's official language, it was Hindi and English which led the list. Over half wanted Hindi alone and about a third wanted English alone. Another five percent of the respondents wanted both Hindi and English and six percent wanted Hindustani.

Only one person named anything else -- Sanskrit. Table 43 shows these figures.

TABLE 43

First Choice for India's Official Language

Language	Number in Sample	Percent of Sample
Hindi	52	54.2
English	31	32.3
Hindustani	6	6.3
Hindi and English	5	5.2
Sanskrit	1	1.0
No Response	1	1.0
Total	96	100.0

Hindi and English were also the leading second choices for India's official language. Over one-third of the sample named one or the other of these two languages. Hindustani was given twice; Sanskrit, Tamil, and Punjabi were each mentioned once. Table 44 presents the second choices.

It is readily apparent that for this highly educated sample the choice of official language for India boils down to two alternatives: Hindi or English. Nearly everyone in the sample gave one as his first choice and the other as his second choice.

The questionnaire went one step further and asked each respondent to give reasons for his choices. For Hindi the reason was almost always that of communication; far more Indians understand it than any other language. Occasional references were made to preservation of cultural heritage

(Hindi is Sanskritic in origin) or to nationalism (an Indian language for Indians). There were five major reasons given for choosing English to be India's official language. First and most frequent was international understanding. To communicate and deal with the rest of the world, many respondents felt English to be the language. A second reason given for the choice of English was that of scientific and technical progress. Another reason concerned unification of India without favoring any one regional language. Still another reason was that of equal job opportunities for individuals from the North and South. The fifth reason was that of avoidance of the considerable disruption in government involved in changing from English (now in use) to a different language.

TABLE 44

Second Choice for India's Official Language

Language	Number in Sample	Percent of Sample
English	23	24.0
Hindi	11	11.5
Sanskrit	2	2.1
Hindustani	1	1.0
Punjabi	1	1.0
Hindi and Hindustani	1	1.0
English and Tamil	1	1.0
No Response	56	58.3
Total	96	99.9

The concern about the language problem mentioned earlier is further reflected in the strength of conviction about the respondent's choice for India's official language. Table 45 gives the distribution of responses.

The question asked was:

> How strongly do you feel about your answer to question 31 (a) above? (i.e., how strongly do you feel that the language you named should be the official language?)
>
> _____ As strongly as possible
> _____ Very strongly
> _____ Rather strongly
> _____ Somewhat strongly
> _____ Mildly

Only six percent felt mildly about the language problem. Everyone else expressed stronger feelings with half the sample saying they felt as strongly as possible. Feelings were intense even among the most highly educated.

TABLE 45

Strength of Conviction about Language Choice

Respondents felt:	Number in Sample	Percent of Sample
As strongly as possible	45	46.9
Very strongly	20	20.8
Rather strongly	18	18.8
Somewhat strongly	6	6.3
Mildly	6	6.3
No Response	1	1.0
Total	96	100.1

The last question directly concerned with the language issue asked how much the individual approved of the practice of drawing state lines according to language boundaries. As Table 46 shows, this item produced quite a range of responses.

Over 57 percent of the sample expressed disapproval. Most of these respondents did so because they felt such a practice worked against the unity of India. At least 43 of the 57 said that provincialism, communalism, prejudice, bigotry, etc. were the result of drawing state lines by language boundary and the one thing India needed most of all was unity.

While the disapprovers focused on the national scene, the approvers adjusted their sights to the state scene. The approvers were concerned with what would help a state function internally. In general they felt that drawing state lines by language boundary would greatly facilitate communication, education and government business within the state. A few said they approved because the cultural heritage, customs or interests of people in each language area are the same.

TABLE 46

Approval of Practice of Drawing State Lines According to Language Boundaries

Degree of Approval	Number in Sample	Percent of Sample
Approve highly	9	9.4
Approve somewhat	12	12.5
Indifferent or neutral	17	17.7
Disapprove somewhat	14	14.6
Disapprove highly	41	42.7
No Response	3	3.1
Total	96	100.0

Summary

General Language Background. Most individuals spoke an average of 5.36 languages. The best known language was English, followed by Hindi, Sanskrit, Gujarati and Marathi. The most frequently named as native tongues were Hindi, Gujarati, Punjabi and Tamil.

Most individuals considered themselves to have good command of Hindi. Half the sample had studied Sanskrit while very few had studied Pali or Prakrit.

The students claimed knowledge of more languages than their parents. Fathers were reported to know approximately three languages on the average. Students reported that they learned only one or two languages from their parents, generally.

Prestige and Affection Associated with Languages. Both the entire sample and native speakers alone assigned English and North Indian languages higher prestige than they did southern languages. North and South Indians alike accorded English the same high prestige. South Indians gave Hindi lower prestige than did North Indians.

Individuals expressed very high affection for their native tongues. Higher affection was expressed for English than for Hindi. The North and the South did not differ in the affection they felt for Hindi or for English.

Language Preferences. English was more often named as the most comfortable language. English was considered the most useful professional language; Hindi was the second choice. Hindi was the most useful social language; English was the second choice.

The most preferred language was English; Hindi was the second choice. North Indian languages were most frequently named as the "other languages liked." Southern languages led the list of unappealing languages. The sound of the language and the wealth of its literature appeared to be an important basis for making language evaluations. Hindi led the list of languages used unwillingly. Here the reasons appeared to be political and social since evaluation of Hindi's sound was positive as were all other evaluations.

The most frequently named languages the students said they would like to learn or wished they knew were French, German, Bengali and Russian. The reasons given for desiring to learn the three non-Indian languages were those of professional and scientific communication and for better personal communication with the native speakers of these languages. For Bengali the attraction was its rich literature. Nearly 90 percent of the Indians felt there was value in studying foreign languages. Broadening of horizons and understanding of other cultures were the values of such study. Often the "understanding of other cultures" referred to other Indian language groups. "Foreign" languages meant other Indian languages as well as, or rather than, non-Indian languages. Those who saw no value in the study of foreign languages responded in terms of immediate personal gain.

English Language Background. The Indian students started the study of English between the ages of one and 14. The average age was seven and one-half years. In general

they had 10 years of formal class-room study principally under Indian instructors. Most felt the English they learned in India to be somewhat similar to that spoken in the U.S. and they felt their English instruction to have been fairly or completely adequate.

Attitudes about Bilingualism. There was a slight tendency for the respondents to consider it desirable for an individual to have to use more than one language. There was a slight tendency to consider it undesirable for a nation to have to use more than one language.

In general respondents accorded bilingualism only "some" prestige although opinions were widely split on this. There was indifference or approval of the intermixing of languages and a fair amount of actual intermixing of languages done by the students.

Attitudes about India's Language Problems. A great deal of concern for India's language problem was expressed by the group. About 60 percent of the sample expressed some degree of willingness to accept Hindi as the official language and 30 percent expressed some or total unwillingness to accept it.

Hindi was the first choice for India's official language by 54 percent of the students. Thirty-two percent wanted English and five percent wanted both. Second choice was English for 24 percent and Hindi for 11.5 percent. The students felt quite strongly about their language choices with 47 percent saying they felt "as strongly as possible." Forty-three percent indicated strong disapproval of drawing state

lines according to language boundaries. The remainder of the answers were widely split ranging from some disapproval to indifference to strong approval.

If the present sample is any indication, Hindi is becoming as widely known among the educated classes as English. (Ninety-two percent of the sample claimed knowledge of it.)

Hindi received rather high prestige ratings from the students with only Sanskrit and English more highly rated. Hindi was also considered to be a comfortable language, second only to English in the number of times it was listed as the individual's most comfortable language. In spite of such votes of confidence, Hindi led the list of languages used unwillingly. Even among the most highly educated, Hindi seems to be an extremely controversial issue. Slightly fewer than one half of the students were completely willing to accept Hindi as India's official language. All degrees of acceptance were expressed ranging from complete willingness on the part of 47 percent of the sample to complete unwillingness on the part of 20 percent of the respondents.

The picture painted by the answers to the questions about choice for India's language is far too simple. The answers suggest that at least for educated groups like this one, the naming of both Hindi and English would please almost everyone. On an intellectual level perhaps this is true, but not on an emotional level. The same people who responded to these questions before Hindi became the official language,

bitterly argued with each other afterward and at last report had split into language factions on the Michigan State campus.

Answers to the question asking approval of the drawing of state lines by language region showed that at least 40 percent of this group did not disapprove and about 22 percent actually approved. The approvers may have selected Hindi and/or English as official languages, but their primary focus was still on the state or regional level.

CHAPTER V

Construction of Indices

Many of the language and correlate concepts explored in this thesis were being investigated quantitatively for the first time. There were few existing studies to guide the construction of data-producing instruments. Because of this, a number of questions were often used to produce evidence about a single concept. Sometimes these questions were analyzed singly, sometimes indices were formed from them. It is the purpose of this chapter to describe some of the more unusual measures used and to describe the construction of indices.

No assumptions about homogeneity or dimensionality of the concepts were made. When indices were formed, they were intended as explorations of the dimensionality of concepts and as aids in examining relationships among concepts. The indices are quite frankly first attempts. No effort was made to refine them. It is hoped that subsequent research will do this. The measures and indices are presented here to provide guides to defining the concepts and to improving operational procedures used in examining the concepts.

In this chapter measures of the following concepts will be described:

Language Liberalism. To assess the degree of liberalism-provincialism of language attitudes, Language Liberalism Indices were constructed. Six Language Liberalism Indices were made for each person (one for himself, and one each for his father, mother, subcaste, social class and region).

Language Specialization. To examine the amount and kind of specialized usage of languages in differing situations Language Specialization measures were used.

Interaction. Another concern of this research was with the interaction patterns of the respondents. One of the measurements of this was a Nehru Discussion Index which was intended to measure the amount of discussion an individual had within the Indian community (in the U.S.) relative to the amount of discussion he had with Americans.

Change Orientation. The fourth concept explored was change proneness. It was explored via a personality measure called an Orientation Toward Change Index. The Orientation Toward Change Index was composed of Confidence, Self-Percept and Motivation scales.

Approval of Social Change. Fifth is an Index of Social Change Approval. This index measured satisfaction with on-going social change in India.

Attitudes Concerning Where Government Power Should Reside. Sixth is a series of measures concerning attitudes about where government power should reside. The purpose of these measures was to determine to what extent the respondent felt power should be vested in local and/or regional governments and to what extent he felt it should be vested at the

national level in the Central government.

Social Class. The seventh and final measurement described in this chapter is the Social Class Index. This socio-economic measure was based on per capita income, books in family library, family servants, father's education, mother's education, father's occupation and brothers and sisters attending college.

Language Liberalism

Discussions in the literature of the Indian language problem and informal conversations with Indian students suggested a number of issues about which attitudes seemed to reflect a liberal or conservative position. Questions concerning these issues were combined to form a Language Liberalism Index.

First was the issue of tolerance regarding other languages. Presumably, the Indian with a liberal outlook is tolerant of other languages, i.e., his emotional involvement with his own tongue, and his fears for its prestige and survival are not so great as to blind him to the values of other tongues. The liberal Indian does not blindly dislike scores of other languages nor does he use other languages grudgingly.

A second issue was that of mixing words and phrases from one language into another or switching back and forth among languages. The liberal individual does not worry that his own language will be contaminated by switching back and forth among languages or by borrowing words and phrases from other languages.

Indeed, the Indian who is most liberal considers it an accomplishment to know more than one language. This seems to be another aspect of liberalness concerning language. The individual so completely tied up in his own language that he finds it difficult to see much value in other languages would not be expected to attach much prestige to being bilingual. Conversely, the liberal individual would be expected to recognize the merit in other languges and be proud to know more than one.

The last indication of liberalism is probably the most obvious one for India-attitudes toward Hindi. To the extent the individual is willing to put aside his own personal desires and, for the sake of Indian unity, accept Hindi as the official language-to that extent he is a very liberal man in India.

These attitudes of liberalism-conservatism were examined by means of six items on the questionnaire. The items were:

What languages are not appealing?

What languages do you use unwillingly?

When people know and use several languages, there is a possibility that they will use words and phrases from one language when using another language. How much do you approve of using words and phrases from one language when communicating in another language?
(5) Approve highly
(4) Approve somewhat
(3) Indifferent or neutral
(2) Disapprove somewhat
(1) Disapprove highly

How much do you think that you do use words and phrases from one language when communicating in another language?

(5) Very much
(4) Much
(3) Some
(2) Little
(1) None

How much prestige do you attach to being bilingual?
(5) Very much
(4) Much
(3) Some
(2) Little
(1) None

How willing are you to accept Hindi as the official language in India?
(5) Completely willing
(4) Somewhat willing
(3) Neutral or indifferent
(2) Somewhat unwilling
(1) Completely unwilling
____ Other (Specify) _____

The numbers in parentheses at the left of the response categories did not appear on the questionnaire but are given above to indicate the scoring of the responses to each item. Thus a response of "Approve highly" to item 27 was given a score of 5 while "Disapprove highly" was given a score of 1. The direction of scoring for the last four items above is such that the higher the score, the more liberal the language attitude is considered to be.

For the first two items, languages which are not appealing and languages used unwillingly, the scoring was reversed. Since a high score, i.e., many languages named, would not indicate a liberal attitude but an intolerant one instead, the items were scored by counting the number of languages listed and subtracting the total from 6. The result of this conversion was that these two items were then scored in the same manner as the last four; a high score indicated liberalness and a low score, non-liberalness.

Responses to all six items were summed to form a Language Liberalism Index for the respondent. In addition to the items asked about his own language attitudes, each respondent was asked the same six items about his parents, his subcaste, his social class and his region. Distributions of responses to all six items for each group appear in Appendix I. The items were scored in the same manner as for the respondent and summed to form indices. In all, six separate indices were calculated for each respondent; one for himself and one each for his father, mother, subcaste, social class and region.

Indices of language liberalism for individual Indians ("Self" indices) varied from 9 extremely conservative to 34 extremely liberal with a mean of 20.3. Indices for fathers varied from 9 to 29 with a mean of 19.6 and those for mothers from 15 to 22 with a mean of 17.9. Subcaste indices ranged from 11 to 25 (mean = 16.6), social class indices ranged from 9 to 23 (mean = 16.7) and regional indices ranged from 14 to 25 (mean = 18.4). Table 47 shows the distribution of indices for each group.

As Table 47 shows, there is very little difference among the groups in mean liberalness. There is quite a difference in the variability, however. This is evidenced by both the standard deviations and the range. Most noticeably different are the indices for the mothers which have an extremely restricted range. This is probably partly due to the small sample size. Data for all items in the Index were

TABLE 47

Language Liberalism Indices

Index	Self	Father	Mother	Subcaste	Social Class	Region
09	1	1			1	
10		1				
11				1	2	
12	2			2	1	
13				3	1	
14	4	1		2		3
15	6		2	2	1	1
16	4	2	2	1	1	3
17	7	2	2			2
18	7	2		2	1	3
19	7	4	1	2	3	1
20	3	2	3		2	2
21	9	1			2	5
22	7	3	1	1		1
23	5	1		1	1	
24	3	1		1		
25	2			1		1
26	3					
27	4					
28	2	2				
29	1	1				
30	2					
34	1					
Total	80	24	11	19	16	22
Mean Index	20.33	19.58	17.91	16.63	16.69	18.36
Std. Dev.	4.75	4.94	2.39	4.36	4.32	2.99

available for only 11 individuals. The response for mothers was often "don't know" or "she doesn't care". The impressions gained from the responses to questions concerning mother's attitudes is that Indian women have little taste for social and political issues or that sons discount any attitudes their mothers might have to the point of not being able even to recount what the attitudes are.

The indices for the individual, his father, mother, subcaste, social class and region were intercorrelated to see how much similarity individuals perceived among their groups. Table 48 shows these correlations. The numbers in parentheses are the sample sizes.

Only three of the fifteen correlations were significant. This indicates that some students did perceive these groups to have general attitudes about language which were definable and to some extent independent of each other. The attitudes attributed by the individual to his groups were not merely projections of his own or those of his family. In fairness it must be pointed out, however, that the correlations were based on very small samples. Except for correlations with Self, the sample was generally under 10. Correlations with Self were based on 11 to 22 observations. The samples were small because Language Liberalism Indices were calculated only on complete data. Nearly every person answered some questions about all his groups, but unless all questions about any one group were answered, no index was calculated for that group. Correlating further compounded the missing data problem because two complete indices are necessary for correlating.

The correlations that were significant were those between the individual and his father, between the subcaste and the social class, and between the social class and the region. The correlation between the liberalism of the student and his father is meaningful. Repeatedly in later analyses

the relationships found between an individual's attitudes and correlate measures were paralleled by relationships between the father's attitudes and the same correlate measures. The significant relationships between subcaste and social class and between region and social class suggested at first glance that the individual might have lumped all these groups into one and ascribed a single set of attitudes to them. There are reasons to reject this possibility, however. First, the correlation between subcaste and region was extremely low and insignificant (r=.08). Secondly, the large amount of missing data argue against that interpretation. Students who did not answer the series of questions about a group generally wrote, "Don't know." Sometimes this was followed by a lengthy explanation of why it was not possible to generalize about one or more of his particular groups.

TABLE 48

Correlations Among Language Liberalism Indices

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.60**(22)	--				
Mother	.16 (11)	.62 (7)	--			
Subcaste	.07 (17)	.11 (8)	.54 (6)	--		
Social Class	.46 (16)	-.24 (6)	-.35 (5)	.88**(7)	--	
Region	.04 (21)	-.42 (9)	.17 (6)	.08 (9)	.67*(11)	--

* Significant at the .05 level
** Significant at the .01 level.

The number of languages listed as unappealing to the Self was correlated in turn with the number of languages listed as unappealing to each of the reference groups. Responses to the same item were intercorrelated among reference groups. In like manner, the responses to each of the other five items forming the Language Liberalism Indices were intercorrelated across groups. The item by item intercorrelations for the groups appear in Tables 49 to 54. The number in parentheses by each correlation coefficient refers to the size of the sample on which it was computed. There were only four significant correlations out of 15 among the responses to the question concerning the number of languages not appealing. Positive and significant correlations were found between attitudes ascribed to: subcaste and self; subcaste and father; social class and father; and social class and subcaste.

When the item was the one concerning the number of languages used unwillingly, only three intercorrelations were significant. Perceived attitudes of social class and subcaste correlated significantly; and perceived attitudes of the region intercorrelated significantly with those of both the subcaste and social class.

There was high agreement perceived among the groups in terms of their approval of intermixing languages. Twelve of the fifteen relationships were significant. The only nonsignificant relationships were between subcaste and self; subcaste and father; and region and mother.

A fair number of relationships were found among the reference groups in terms of the actual intermixing perceived to be practiced. Eight of the 15 correlations were significant. Significant relationships were found between: Self and father; Self and social class; father and mother; father and social class; mother and subcaste; subcaste and social class; subcaste and region; and social class and region.

All the correlations for both the prestige attached to bilingualism and for the acceptance of Hindi were significant. On these two issues, students saw high correspondence among their reference groups and between themselves and their groups.

The intercorrelation of Language Liberalism Indices among reference groups indicated far less correspondence among their perceived language attitudes than did the item by item intercorrelations. How much of the correspondence reflects accurate perception of reference group attitudes by the student and how much reflects projection of the student's own attitudes is not clear. It is relevant to note, however, that the significant correlations between groups for individual items and between groups for the Language Liberalism Indices were not always the correlations between the Self and reference groups. Often they were between reference groups. In these cases, correspondence indicates either homogeneity of attitude (based on accurate perception) or a lack of clarity about the groups and the ascription of a general set of attitudes to them.

TABLE 49

Intergroup Correlations among "Languages Not Appealing" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.53 (8)	--				
Mother	.35 (7)	.33 (10)	--			
Subcaste	.71* (11)	.87* (7)	.32 (6)	--		
Social Class	.73 (7)	1.00* (3)	.00 (3)	.97* (4)	--	
Region	.20 (11)	.00 (4)	-.33 (4)	.43 (8)	.51 (7)	--

* Significant at the .05 level.

TABLE 50

Intergroup Correlations Among "Languages Used Unwillingly" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	-.29 (8)	--				
Mother	.00 (13)	.00 (10)	--			
Subcaste	.41 (11)	.00 (8)	-.29 (9)	--		
Social Class	.78 (6)	.00 (6)	-.35 (6)	.82** (11)	--	
Region	.61 (10)	.00 (7)	-.42 (7)	.70* (12)	.74**(12)	--

* Significant at the .05 level
** Significant at the .01 level

TABLE 51

Intergroup Correlations Among "Intermixing Approval" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.59**(77)	--				
Mother	.35**(76)	.71***(76)	--			
Subcaste	.03 (65)	.23 (61)	.37**(62)	--		
Social Class	.23* (74)	.47***(67)	.32**(68)	.64***(60)	--	
Region	.49***(77)	.30* (69)	.12 (70)	.25* (62)	.50***(73)	--

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

TABLE 52

Intergroup Correlations Among "Actual Intermixing" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.37***(82)	--				
Mother	.17 (83)	.66***(82)	--			
Subcaste	.08 (73)	.21 (69)	.31**(71)	--		
Social Class	.34** (79)	.28* (74)	.22 (75)	.54***(72)	--	
Region	.21 (84)	.08 (78)	.14 (80)	.48***(75)	.34**(81)	--

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

TABLE 53

Intergroup Correlations Among "Prestige Attached To Bilingualism" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.66***(76)	--				
Mother	.63***(76)	.74***(74)	--			
Subcaste	.60***(68)	.68***(61)	.58***(63)	--		
Social Class	.52***(79)	.68***(70)	.57***(71)	.66***(66)	--	
Region	.32** (82)	.46***(73)	.44***(74)	.45***(69)	.48***(80)	--

** Significant at the .01 level
***Significant at the .001 level

TABLE 54

Intergroup Correlations Among "Acceptance of Hindi" Measures

	Self	Father	Mother	Subcaste	Social Class	Region
Self	--					
Father	.78***(75)	--				
Mother	.80***(73)	.91***(71)	--			
Subcaste	.68***(71)	.68***(61)	.77***(61)	--		
Social Class	.72***(76)	.65***(67)	.73***(65)	.67***(67)	--	
Region	.57***(81)	.65***(71)	.67***(69)	.68***(70)	.58***(77)	--

***Significant at the .001 level

The Language Liberalism Indices were examined from one further point of view. Inter-item correlations were calculated within each group. The inter-item correlations for the individual as well as those for his father, mother, subcaste, social class and region are presented in Appendix J. Briefly these intercorrelations show the following. For the individual (Self), two significant inter-item correlations were found and all items correlated with his Index. For the father, two significant inter-item correlations were found and all but one item correlated with his Index. For the mother, two significant inter-item correlations were found and only two items correlated with her Index. For the subcaste five significant inter-item correlations were found and three items correlated with the Index. For the social class three significant inter-item correlations were found and two items correlated with the Index. For the region two significant inter-item correlations were found and two items correlated with the Index.

All in all, the inter-item correlations indicate very little homogeneity within the Indices. For every group there was a significant correlation between approval of intermixing words and phrases among languages and the actual intermixing of words and phrases practiced by the group. The prestige attached to bilingualism often correlated significantly with either approval or practice of intermixing.

Language Specialization

Another way of dealing with language behavior is to examine its usage by occasion and by audience. At the simplest level for a bilingual this involves using one language rather than another when communicating with certain groups of people or when communicating on certain topics. To measure such specialization of usage in India, three questions were asked:

"With what particular people in India do you use what languages? Please explain."

"In what particular places in India do you use what languages? Please explain."

"On what particular occasions in India do you use what languages? Please explain."

In response to the first question, some individuals listed different languages for different peoples, e.g., Hindi to servants, Marathi to family and English in school. Other respondents listed only a few languages, e.g., Hindi and English and followed each language with a detailed list of groups of people with whom it was used. Other Indians listed three or four groups of people and indicated they used two or three particular languages with each. Because of the diversity of response patterns the number of different languages listed by each individual was counted and in addition the number of particular people listed was counted.

Table 55 gives the frequency distribution of people and languages for question 10: "With what particular people in India do you use what languages?"

TABLE 55

Language Specialization by People

Number of Languages Mentioned	Number in Sample	Percent of Sample	Number of People Mentioned	Number in Sample	Percent of Sample
1	4	4.2	1	9	9.4
2	32	33.3	2	33	34.4
3	34	35.4	3	27	28.1
4	14	14.6	4	9	9.4
5	5	5.2	5	8	8.3
6	1	1.0	6	2	2.1
			7	1	1.0
			8	1	1.0
No Response	6	6.3	No Response	6	6.3
Total	96	100.0	Total	96	100.0

The second item used to measure specialization requested the places in India where one language rather than another was used. Here as in the preceding item some respondents gave the same number of languages as places, others gave many places with few languages and still others gave few places and many languages. As many as eight languages were given and as many as seven places. Both languages and places were tallied. Table 56 shows the distributions of languages and places given in answer to the question: "In what particular places in India do you use what languages?"

The third item concerning language specialization requested the languages used for certain occasions. As in the previous questions both the languages named and the occasions given were counted. Table 57 shows the number of

TABLE 56

Language Specialization by Place

Number of Languages Mentioned	Number in Sample	Percent of Sample	Number of Places Mentioned	Number in Sample	Percent of Sample
1	5	5.2	1	7	7.3
2	23	24.0	2	41	42.7
3	26	27.1	3	17	17.7
4	19	19.8	4	11	11.5
5	4	4.2	5	3	3.1
6	2	2.1	6	2	2.1
7	2	2.1	7	1	1.0
8	1	1.0			
No Response	14	14.6	No Response	14	14.6
Total	96	100.1	Total	96	100.0

languages and occasions given in answer to the question: "On what particular occasions in India do you use what languages?"

TABLE 57

Language Specialization by Occasion

Number of Languages Mentioned	Number in Sample	Percent of Sample	Number of Occasions Mentioned	Number in Sample	Percent of Sample
1	7	7.3	1	9	9.4
2	35	36.5	2	34	35.4
3	20	20.8	3	16	16.7
4	6	6.3	4	9	9.4
5	3	3.1	5	1	1.0
6			6	2	2.1
No Response	25	26.0	No Response	25	26.0
Total	96	100.0	Total	96	100.0

Interaction

Another aspect of behavior of concern in the research is interaction patterns. One of the measurements of interaction was an index constructed to measure the proportion of people with whom the student communicated who were in the Indian community and the proportion who were outside this community. This index was called the Nehru Discussion Index.

Jawaharial Nehru died shortly before this study was undertaken. The event was one of considerable concern to the students and was discussed by all of them. The situation provided an opportunity to obtain a specific measure of Indian-American interaction. With this in mind, the students were asked:

"With how many Indian friends did you discuss the event?"

"With how many American friends did you discuss the event?"

To construct the index, the number of Indians with whom the event was discussed was divided by the total number of individuals with whom discussion occurred. The resulting ratio varied from 0 to 1.00 with 0 indicating no discussion with Indians and 1.00 indicating discussion to be entirely with Indians. Table 58 shows the distribution of the Nehru Discussion Indices.

TABLE 58

Nehru Discussion Indices

Index	Number in Sample	Percent of Sample
.9000 - up	14	14.6
.7500 - .8999	8	8.3
.6000 - .7499	2	2.1
.4500 - .5999	6	6.3
.3000 - .4499	0	0.0
.1500 - .2999	11	11.5
.0000 - .1499	41	42.7
No Response	14	14.6

Change Orientation

An index of change proneness or change orientation was created by combining the: Confidence, Self Percept and Motivation scales. Since the scales as well as the index derived from them were used in the analyses of the data, each scale will be described in detail. A description of the Orientation Toward Change Index derived from them follows the description of the scales.

Confidence. One component of change proneness was theorized to be self confidence. The individual who lacks self confidence is not likely to venture into new fields and try new things. For him, failure is too costly to self esteem. He cannot afford to risk failure-especially since he is already convinced failure will come.

At the other extreme are the individuals possessing a high degree of self-confidence. More optimistic, they do not expect failure to occur constantly nor do they fear the consequences of failure should it come. It is not so damaging to self esteem.

The degree of self-confidence for each individual was measured by a Confidence scale previously used by the researcher on American students. The scale was composed of 18 items. Each item was followed by a continuum on which the respondent placed a check to indicate the extent to which he felt the item described his behavior. Sample items are:

> In your present business or school group, how much do you think others will look down on you if you express a deviant opinion on an important issue?
>
> Very much _____ not at all
>
> Do you usually mull over decisions you've made and worry about whether or not you've made the right decision?
>
> Always _____ never

The items concern the extent to which the individual is willing to express a deviant opinion, how much he enjoys interacting with others, the degree of confidence he feels he has, the amount of support he feels he gets from others and the extent to which he worries about the course of action he takes. The items comprising the scale appear in Appendix K.

Responses to the items were scored by use of an overlay which marked off the continuum for each item into seven equal intervals. Items worded in a negative manner and continua labelled in a negative direction were reversed so that

every item was scored in the same manner: the higher the score, the greater the self confidence indicated. Items were summed to form a Confidence score for each individual. Higher scores indicated higher self confidence.

Scores for the Indian sample ranged from 59 to 119. Actual possible range was from 18 to 126. The mean Confidence score obtained was 84.2 with a standard deviation of 13.7. Table 59 shows the distribution of Confidence scores. Split-half reliability for the sample was .69 (corrected by the Spearman-Brown formula).

TABLE 59

Confidence Scores

Confidence Scores	Number in Sample	Percent of Sample	Confidence Scores	Number in Sample	Percent of Sample
115 - 121	1	1.0	80 - 86	12	12.5
108 - 114	3	3.1	73 - 79	15	15.6
101 - 107	4	4.2	66 - 72	8	8.3
94 - 100	10	10.4	59 - 65	5	5.2
87 - 93	10	10.4			
			No Response	28	29.2

Self Percept. Another component of change proneness was hypothesized to be the individual's picture of himself in terms of how much he likes to explore new worlds. Does he see himself as an individual who likes to try new things or as someone who prefers the "tried and true." Even the individual with great self-confidence may be a great traditionalist.

He may not like modern ways. He may have made a very successful adjustment to the traditional world and be very confident and self assured in coping with it; he may see no reason to change his world by trying new things. At the other extreme are the individuals who see themselves as "young moderns." To be a "young modern" in a changing society implies that the individual must be ready to change with society or even to initiate change in the society. Such an individual should be change prone if his self image is accurate.

The degree to which an individual pictured himself as an adventurous person who liked to try new things was measured by the Kossoff Self Percept Scale. On this scale high scores indicate an openness and positive approach to experimenting with new ideas; low scores indicate a cautious approach and unwillingness to explore the novel, i.e., low scores indicate preference for old and accepted ways of doing things.

The scale consists of 16 statements to which the respondent indicates how strongly he agrees or disagrees by means of the following system: 5, agree very much; 4, agree somewhat; 3, neutral; 2, disagree somewhat; 1, disagree very much. The scale appears in Appendix L.

Scores for the Indian students on the Self Percept scale ranged from 37 to 74 with a mean of 52.5 and standard deviation of 6.3. Possible range on this scale was from 16 to 80. Scores for the sample were normally distributed as

can be seen from Table 60. Split-half reliability for this data was .65 (corrected by the Spearman-Brown formula.)

TABLE 60

Self Percept Scores

Self Percept Scores	Number in Sample	Percent of Sample	Self Percept Scores	Number in Sample	Percent of Sample
69 - 74	1	1.0	49 - 52	28	29.2
65 - 68	2	2.1	45 - 48	12	12.5
61 - 64	4	4.2	41 - 44	5	5.2
57 - 60	10	10.4	37 - 40	3	3.1
52 - 56	17	17.7			
			No Response	14	14.6

Motivation. The third and last scale in the Orientation Toward Change was a Motivation scale. The possession of great self-confidence and a willingness to try new things by themselves do not guarantee that one will bother to seek out new methods and ideas or adopt them or even advocate their adoption by others. Some impetus to behavior is needed. The true innovator must see the value of new ideas and processes and must see the need for their trial and adoption. He must be motivated to seek out, to try, and to accept advancements. Combining these three elements produces a description of innovators and highly change-prone people as individuals with great self confidence who see themselves as interested in new ideas and who are motivated to try out and adopt those new ideas.

The Motivation scale was constructed from five questions. The questions used were:

As people grow older sometimes their level of drive and motivation changes. As for yourself, would you say that your drive and motivation is:
_____Much higher now than it used to be
_____Somewhat higher now than it used to be
_____About the same now as it used to be
_____Somewhat lower now than it used to be
_____Much lower now than it used to be

Some people are said to be strongly motivated and to have a lot of ambition and drive. Others are said to be less motivated and to have less ambition and drive. How much motivation would you say that you have?
_____Very much
_____Much
_____Some
_____Little
_____None

As compared with the rest of your family would you say that you are more or less ambitious than they are?
_____Much more ambitious
_____Somewhat more ambitious
_____About the same in ambition
_____Somewhat less ambitious
_____Much less ambitious

As far as you are concerned, how important would it be to have more drive and ambition than you now have?
_____Extremely important
_____Very important
_____Somewhat important
_____Not very important
_____Unimportant

Some people are always trying to get ahead and improve themselves and others seem to be satisfied with their present condition. As far as you yourself are concerned would you say that you are:
_____Much more ambitious than most people
_____Somewhat more ambitious than most people
_____About the same in ambition as most people
_____Somewhat less ambitious than most people
_____Much less ambitious than most people

The distributions of responses to each item are presented in Appendix M. The responses indicate that in general individuals felt they had much motivation and that they were more ambitious than most people. There was a slight tendency

to consider themselves more ambitious than their families. Overwhelmingly they felt their drive and motivation to be greater than in the past. There was considerable variation in how important it was to them to have more drive and ambition. In general, however, it was felt to be important to have greater drive and ambition.

When the students compared themselves to their families, about 59 percent rated themselves as having more ambition and a third saw little difference between themselves and their families. Explanations offered for responses to the family and Self comparison indicated that those who saw no difference between themselves and their families considered their families as very ambitious. Those who saw themselves as having greater ambition than their families saw travel as the key. Some used travel as the "proof", saying they were the only ones in their family to travel abroad for education and this was evidence of their higher motivation. Others saw travel as the motivation. In travelling they saw other cultures, other ways of doing things and this made them want to do something great for their own country or to achieve some personal goal.

Responses to the five questions about motivation were summed to form a Motivation score. High scores indicated a high degree of motivation, low scores a low degree.

The range of scores possible was from 5 to 25. Scores for the sample ranged from 12 to 25. The mean was 20.1 and the standard deviation, 2.7. Table 61 shows the distribution of Motivation scores.

TABLE 61

Motivation Scores

Motivation Scores	Number in Sample	Percent of Sample	Motivation Scores	Number in Sample	Percent of Sample
25 - 27	6	6.3	16 - 18	18	18.8
22 - 24	17	17.7	13 - 15	1	1.0
19 - 21	43	44.8	10 - 12	1	1.0
			No Response	10	10.4

It was not feasible to calculate odd-even or split-half reliability on the five items comprising the Motivation scale so the items were intercorrelated. Table 62 shows the intercorrelations among the items. The general motivation item seems to correlate best with the other items; the importance of having more motivation correlates the least well.

All items correlate significantly at the .001 level with the Motivation score. Not all items correlate with each other, however. Three items: general motivation, motivation compared to others, and motivation compared to family interrelate significantly. Two items: change in motivation and importance of having more motivation, related to only one other item. If the last item, importance of having more motivation, were eliminated from the Motivation score, then the general motivation item would intercorrelate significantly with all other items and might be used in place of the Motivation score.

TABLE 62

Intercorrelations Among Motivation Measures

	General Motivation	Compared to others	Compared to family	Change in Motivation	Importance of having more
General Motivation	--				
Compared to others	.51***(94)	--			
Compared to family	.51***(93)	.46***(92)	--		
Change in Motivation	.36**(90)	.14 (89)	.22 (88)	--	
Importance of having more	.06 (93)	.06 (92)	.23*(91)	.12 (89)	--
Motivation Score	.54***(86)	.47***(86)	.52***(86)	.43***(86)	.35***(86)

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

Orientation Toward Change. Scores on the Confidence, Self Percept and Motivation scales were combined to form the Orientation Toward Change Index. Data on all three component scales were complete for only 58 of the Indians. Orientation Toward Change Indices ranged from 123 to 187 with a mean of 156.0 and standard deviation of 15.0. Table 63 presents the distribution of Orientation Toward Change Indices.

TABLE 63

Orientation Toward Change Indices

Orientation Toward Change Index	Number in Sample	Percent of Sample
181 - 190	3	3.1
171 - 180	8	8.3
161 - 170	10	10.4
151 - 160	13	13.5
141 - 150	18	18.8
131 - 140	4	4.2
1 - 130	2	2.1
No Response	38	39.6

Table 64 presents the intercorrelations among the major components of the Orientation Toward Change Index. Confidence, Motivation and Self Percept correlate significantly with Orientation Toward Change, but not with each other. The low insignificant correlations among scales show that they do not overlap; each measures something different.

Approval of Social Change

The logical step beyond the assessment of an individual's language attitudes and the effect of change-proneness

TABLE 64

Intercorrelations Among Components of Orientation Toward Change

	Confidence	Motivation	Self Percept
Confidence			
Motivation	.18*(64)		
Self Percept	-.02 (61)	.08 (76)	
Orientation Toward Change Index	.88***(58)	.34**(58)	.40**(58)

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

on them is to examine how the individual feels about the change currently taking place in India. Language decisions are only one part of the change occurring as India attempts to unite and advance technically. It was theorized that the individual who was most progressive and most desirous of seeing India advance technically and economically would feel that change was occurring too slowly, or if not too slowly, at least not too quickly. While this individual might wish to hasten social change, he would in general approve of the direction of social change, but wish to see it occur on a broader plane. In line with these expectations, the following questions were used to assess the student's general approval of the changes occurring in his country.

> India is changing in many ways. How do you personally feel about the changes that are being made?
> The changes are being made:
> ____Much too quickly
> ____Somewhat too quickly
> ____About right

_____Somewhat too slowly
_____Much too slowly

Among the changes being made:
_____All are in the right direction
_____Most are in the right direction
_____About half are in the right direction and half in the wrong direction
_____Most are in the wrong direction
_____All are in the wrong direction

The changes being made are:
_____Much too large in scope (size)
_____Somewhat too large in scope (size)
_____About the right scope (size)
_____Somewhat too small in scope (size)
_____Much too small in scope (size)

Table 65 shows the distribution of responses to the first question which was concerned with the speed of social change in India. Responses were concentrated in two categories. The majority of individuals felt the changes were occurring somewhat too slowly or were about right in speed. No one felt they were taking place much too quickly.

TABLE 65

Approval of Social Change Speed

The changes are being made:	Number of Ratings	Percent of Sample
5 Much too quickly	0	0.0
4 Somewhat too quickly	6	6.3
3 About right	35	36.5
2 Somewhat too slowly	40	41.7
1 Much too slowly	8	8.3
No Response	7	7.3
Total	96	100.1

The direction of social change was pleasing to a majority of Indians in the sample. See Table 66. Nearly two-thirds of the respondents checked the alternative: "Most /changes/ are in the right direction" and another 24 percent replied that they liked about half the changes and didn't like the other half. No one felt that all the changes were in the wrong direction.

TABLE 66

Approval of Social Change Direction

Among the changes being made:	Number of Ratings	Percent of Sample
5 All are in the right direction	5	5.2
4 Most are in the right direction	61	63.5
3 About half are in the right direction and half are in the wrong direction	23	24.0
2 Most are in the wrong direction	4	4.2
1 All are in the wrong direction	0	0.0
No Response	3	3.1
Total	96	100.0

The distribution of responses for the question concerning the scope of India's social change is given in Table 67. The distribution was fairly normal with a majority of responses in the middle category -- social changes are about right in scope. Only one person went so far as to say that social changes were too small in scope.

Responses to the three preceding items were summed to create an Index of Social Change Approval. The scoring for the first item (speed of change) and the third item (scope of

TABLE 67

Approval of Social Change Scope

The changes being made are:	Number of Ratings	Percent of Sample
5 Much too large in scope (size)	7	7.3
4 Somewhat too large in scope(size)	12	12.5
3 About the right scope (size)	44	45.8
2 Somewhat too small in scope(size)	27	28.1
1 Much too small in scope (size)	1	1.0
No Response	5	5.2
Total	96	99.9

change) was reversed in creating the Index. The highest possible Index was 15 which could be achieved only by indicating that changes in India were occurring much too slowly and were too small in scope, but were in the right direction. The lowest possible Index, 3, would indicate attitudes that changes were much too rapid and too large in scope and were all in the wrong direction. Actual Indices found for the sample ranged from 7 to 13 with a mean of 9.1 and a standard deviation of 1.6. The Indices are shown in Table 68.

TABLE 68

Index of Social Change Approval

Index of Social Change Approval	Number in Sample	Percent of Sample	Index of Social Change Approval	Number in Sample	Percent of Sample
13	4	4.2	9	13	13.5
12	10	10.4	8	8	8.3
11	24	25.0	7	1	1.0
10	30	31.3			
			No Response	6	6.3

The approval of social change measures intercorrelated significantly with each other, but only two correlated significantly with the Index of Social Change Approval. See Table 69. Approval of social change speed and scope correlated significantly with the Index; approval of social change direction did not. The approval of direction of social change contributed little to the Index in its present form and might well be eliminated.

Attitudes Concerning Where Government Power Should Reside

Power measures. The tendency to feel that the region or state is the most important government unit or conversely the tendency to feel that the Central government must dominate state and local units was felt to be a reflection of the respondent's identification. If the primary identification is as an Indian, i.e., with the country as a whole, this should be reflected in feelings that the Central government must have more power than the state governments. If, of course, identification is primarily at the state level, e.g., "I am a Bengali", then this identification should appear in the form of a desire to accord the state government the most power.

Attitudes toward where political power should reside were assessed by questions concerning the power the student wished to accord various government levels and the importance he attached to specific groups.

The first question asked the individual how much power he felt the Central, state and local governments should

TABLE 69

Intercorrelations Among Approval of Social Change Measures

	Approval of Social Change Speed	Approval of Social Change Direction	Approval of Social Change Scope
Approval of Social Change Speed	--		
Approval of Social Change Direction	.30** (88)	--	
Approval of Social Change Scope	.28** (87)	.22* (90)	--
Index of Social Change Approval	.64***(87)	.13 (90)	.74***(88)

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

each be accorded. The response categories were: 5= Absolute power, 4 = Great power, 3 = Some power, 2 = Little power, and 1 = No power. Table 70 shows the responses to this question. The Indian students accorded the Central government more power than the state government and the state government more power than the local government.

Difference-Power Measures. In addition to using power ratings per se to test hypotheses, three derived measures were also used. The power accorded the state government was subtracted from that accorded the Central government to yield a difference-power measure. In like manner the power rating for the local government was subtracted from that for the state government to yield a second difference-power measure. The third difference-power measure was the difference between the power measures for the Central and local governments. These difference-power measures provided a measure of the extent to which the student wished to vest differing amounts of power in two government levels. The distribution of these difference-power measures are given in Table 71. A constant of 4 was added to each measure to eliminate negative signs. Thus a difference-power score above 4 indicates the individual gave the higher government level more power than the lower; a difference-power score of exactly 4 indicates the same amount of power given each level; and a difference-power score of less than 4 indicates that the lower government level was awarded greater power than the higher level. The mean difference-power shown in Table 71 indicates that there

TABLE 70

Power Accorded Central, State, and Local Governments

	Degree of Power	Central Government Number of Ratings	Central Government Percent of Sample	State Government Number of Ratings	State Government Percent of Sample	Local Government Number of Ratings	Local Government Percent of Sample
5	Absolute power	32	33.3	4	4.2	4	4.2
4	Great power	48	50.0	39	40.6	11	11.5
3	Some power	13	13.5	49	51.0	48	50.0
2	Little power	1	1.0	2	2.1	28	29.2
1	No power	0	0.0	0	0.0	1	1.0
No Response		2	2.1	2	2.1	4	4.2
Total		96	99.9	96	100.0	96	100.1
Mean Power			4.18		3.48		2.88
Std. Dev.			.70		.62		.80

was a slight tendency to favor the higher government level. This tendency was strongest when the difference in power was between the Central and local governments. Disagreement among respondents, as indicated by the variability of difference-power scores, was also strongest here.

Outcome measures. A second question was asked to determine the power awarded government levels relative to each other. The question asked was:

> When two of the governments are in disagreement, what do you feel the outcome should be? (Check one alternative for each column)

(A) Central vs. (B) State	(A) State vs. (B) Local	(A) Central vs. (B) Local	
_____	_____	_____	A should always prevail over B
_____	_____	_____	A should usually prevail over B
_____	_____	_____	A should prevail about half the time over B
_____	_____	_____	A should rarely prevail over B
_____	_____	_____	A should never prevail over B

Three scores resulted from this question: an Outcome score for when the Central and state governments were in disagreement, one for when it was the state and local governments disagreeing and a third one for disagreement between Central and local governments.

Table 72 shows the outcomes desired when two government levels disagree. It is readily apparent from the table that it was generally felt that the higher of the two government levels should usually prevail. This corresponds to the power ratings given the government levels in Table 70.

TABLE 71

Difference - Power Measures

Difference-Power Measures	Difference-Power Central minus State Government		Difference-Power State minus Local Government		Difference-Power Central minus Local Government	
	Number of Ratings	Percent of Sample	Number of Ratings	Percent of Sample	Number of Ratings	Percent of Sample
2	1	1.0			2	2.1
3	8	8.3	4	4.2	4	4.2
4	21	21.9	34	35.4	15	15.6
5	55	57.3	49	51.0	26	27.1
6	7	7.3	4	4.2	34	35.4
7	1	1.0	1	1.0	11	11.5
8	1	1.0				
No Response	2	2.1	4	4.2	4	4.2
Total	96	99.9	96	100.0	96	100.1
Mean Difference-Power	4.70		4.60		5.29	
Std. Dev.	.89		.43		1.14	

TABLE 72

Outcomes When Government Levels Disagre

Outcome measures	(A) Central vs. (B) State		(A) State vs. (B) Local		(A) Central vs. (B) Local	
	Number of Ratings	Percent of Sample	Number of Ratings	Percent of Sample	Number of Ratings	Percent of Sample
5 (A) should always prevail over ... (B)	37	38.5	27	28.1	37	38.5
4 (A) should usually prevail over (B)	38	39.6	40	41.7	24	25.0
3 (A) should prevail about half the time over (B)	10	10.4	13	13.5	9	9.4
2 (A) should rarely prevail over (B)	3	3.1	7	7.3	11	11.5
1 (A) should never prevail over (B)	0	0.0	0	0.0	6	6.3
No Response	8	8.3	9	9.4	9	9.4
Total	96	99.9	96	100.0	96	100.1
Mean Outcome		4.24		4.00		3.86
Std. Dev.		.79		.89		1.29

Power Index. A final measure of power was calculated. This was a single measure, calculated from the Outcome measures, indicating to what extent the student felt that the ultimate power should reside in the higher levels of government. Higher Outcome measures favored the higher of the government levels, and lower Outcome measures favored lower government levels. For the Power Index the three Outcome measures were summed. The resulting index was such that individuals with high scores favored the higher government levels in cases of disagreement between levels; individuals with lower scores favored the lower government level. Table 73 shows the Power Indices.

TABLE 73

Power Indices

Power Indices	Number in Sample	Percent of Sample	Power Indices	Number in Sample	Percent of Sample
15	20	20.8	10	5	5.2
14	4	4.2	9	8	8.3
13	12	12.5	8	3	3.1
12	20	20.8	7	2	2.1
11	11	11.5	6	1	1.0
			No Response	10	10.4

The four sets of measures: Power measures for each government level, Difference-Power measures, Outcome measures for when government levels disagree and the Power Index were intercorrelated. The intercorrelations appear in Table 74. Sample sizes were large, ranging from 84 to 94.

The correlations were as might be expected. The Difference-Power measures correlated with the government Power Measures from which they were created. The one exception to this is the correlation between the state government power measure and the Difference-Power measure for the state and local governments. The positive correlations found between the Difference-Power measures and the power accorded the Central government indicate that individuals according the Central government much power, tended to accord higher government levels relatively more power than lower levels. The negative correlations between power accorded the state or the local government and the Difference-Power measures indicate that individuals according high power to state and local levels tended to grant the higher government levels still more power than these levels.

The Outcome measures all interrelated significantly and all correlated highly with the Power Index created from them.

All of the measures of government power were derived from two items on the questionnaire. In the light of this, it is interesting to ask to what extent the measures of power overlap, i.e., to what extent they measure the same thing. Some, but not complete, overlap occurs. The Outcome measure for Central vs state governments related to both the Power measure for the Central and state government and to the Difference-Power measure for Central and state governments. The Outcome measure for state vs local governments related to the state government Power measure and to the Difference-Power

measure for state minus local government. It did not relate to the local government Power measure. The Outcome measure for Central vs local government did not relate to either the Central government or the local government Power measure. Neither did it relate to the Difference-Power measure calculated between the two government levels.

The Power Index related to Central government power and to Difference-Power measures calculated between state and local and between Central and local governments.

The general impression gained from studying the government Power ratings and their derivatives and the Outcome measures and their derivative is that the two kinds of measures related most when it is the Central government which was the topic and least when it was the local government.

Social Class

An index of social class was constructed similar to that of Mangalam et al (1960). As in Mangalam's research, seven items were used: par capita income, number of books in the family library, number of servants, father's education, mother's education, father's occupation and brothers and sisters with college education. In this research the last measure was modified and the proportion of brothers and sisters over 18 with college education was used in the index.

The first indicator of social class used was income. Most of the Indians fall in the upper income levels. It is misleading to assume the majority of the sample to be well-to-do based on yearly income figures, however, since some Indians

TABLE 74

Intercorrelations Among Measures Concerning Where Government Power Should Reside

Power measures	Central Gov't. Power	State Gov't. Power	Local Gov't. Power	Central minus State Gov't.	State minus Local Gov't.	Central minus Local Gov't.	Central vs. State Gov't.	State vs. Local Gov't.	Central vs. Local Gov't.
Central Government Power	--								
State Government Power	.17+ (94)	--							
Local Government Power	-.16 (92)	.54*** (92)	--						
Difference-Power Measures									
Central minus state Gov't.	.72*** (94)	-.53*** (94)	-.57*** (92)	--					
State minus Local Gov't.	.40*** (92)	.19 (92)	-.60*** (92)	.27** (92)	--				
Central minus Local Gov't.	.71*** (92)	-.27** (92)	-.75*** (92)	.81*** (92)	.67*** (92)	--			
Outcome Measures									
Central vs. State Gov't.	.32** (87)	.13++ (87)	-.13 (85)	.19++ (87)	.21 (85)	.26* (85)	--		
State vs. Local Gov't.	.16 (86)	.31** (86)	-.07 (85)	-.02 (86)	.40*** (85)	.16 (85)	.53*** (87)	--	
Central vs. Local Gov't.	.10 (86)	.01+ (86)	-.17 (84)	.09 (86)	.17 (84)	.16 (84)	.27* (87)	.37*** (86)	--
Power Index	.22* (83)	.13 (83)	-.21 (82)	.14 (83)	.33** (82)	.25* (82)	.69*** (84)	.71*** (84)	.80*** (84)

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

\+ Correlation not significant, but chi square significant at .05 level.
++ Correlation not significant, but chi square significant at .01 level.
+++Correlation not significant, but chi square significant at .001 level.

consider family income as that earned by "family" in the Western sense and others interpret family income as that of the entire extended family. To correct for differences in definition of family, the students were asked to indicate how many people shared the income. An average or per capita income was then calculated by dividing the number of individuals sharing the income into the median value of the income category checked. Table 75 shows the per capita incomes for the sample.

TABLE 75

Per Capita Income

Yearly Income in Rupees	Number in Sample	Percent of Sample
Under 1000	18	18.8
1001 - 2000	30	31.3
2001 - 3000	6	6.3
3001 - 4000	20	20.8
4001 - 5000	2	2.1
5001 - 6000	0	0.0
6001 - 7000	0	0.0
7001 - 8000	0	0.0
8001 - 9000	0	0.0
9001 -10000	1	1.0
No Response	19	19.8
Total	96	100.1

A second indication of social class employed was the number of books in the family library. The average number of books estimated was 528. This average had a standard deviation of 800.7. Table 76 shows the distribution to be very skewed with the heaviest concentration of responses in the smaller categories.

TABLE 76

Number of Books in Family Library

Number of books	Number in Sample	Percent of Sample
100 and under	27	28.1
101 - 200	17	17.7
201 - 300	8	8.3
301 - 400	1	1.0
401 - 500	7	7.3
501 - 600	1	1.0
601 - 700	0	0.0
701 - 800	0	0.0
801 - 900	0	0.0
901 - 1000	9	9.4
1001- 1100	1	1.0
1101- 1200	1	1.0
over 1200	7	7.3
No Response	17	17.7
Total	96	99.8

The third component of the Social Class Index was the number of household servants. Most Indians in the present sample reported one to three servants. See Table 77. Very few individuals reported more than four servants.

The fourth and fifth indices of social class were the educational level of the father and the educational level of the mother. Table 78 shows the educational levels of the parents. It is apparent that the educational level of the fathers exceeded that of the mothers. The mean educational levels show that, on the average, fathers had completed high school while mothers had about nine years of education. The distribution of mother's education is extremely skewed, however, and nearly two-thirds of the mothers had eight years or less education.

TABLE 77

Number of Servants in Family

Number of Servants	Number in Sample	Percent of Sample
0	9	9.4
1	27	28.1
2	23	24.0
3	17	17.7
4	7	7.3
5	2	2.1
6	0	0.0
7	1	1.0
8	1	1.0
9	0	0.0
10	1	1.0
No Response	8	8.3
Total	96	99.9

TABLE 78

Educational Level of Fathers and Mothers

Highest Educational Level Attained	Father Number in Sample	Father Percent of Sample	Mother Number in Sample	Mother Percent of Sample
6 Doctorate	6	6.3	0	0.0
5 Master's degree or equivalent	11	11.5	1	1.0
4 Bachelor's degree or equivalent	26	27.1	5	5.2
3 Intermediate (11 to 12 years)	13	13.5	2	2.1
2 Matriculation (10 years)	20	20.8	22	22.9
1 Below high school (8 years or less)	18	18.8	62	64.6
No Response	2	2.1	4	4.2
Total	96	100.1	96	100.0
Mean Educational Level	3.11		1.49	
Std. Dev.	1.52		.87	

The sixth component of socio-economic status was the occupation of the father. Table 79 shows the occupational distribution of the sample. The distribution was quite skewed with most fathers in the higher occupations. Only one student reported his father's occupation to fall in any of the bottom four categories. The values ranging from 0 to 8 appearing to the left of the occupational categories represent the values assigned each category. These values were used in the calculation of the Social Class Index.

TABLE 79

Father's Occupation

	Occupation	Number in Sample	Percent of Sample
8	Owner or manager of a large business; government official	23	24.0
7	Professional (lawyer, medical doctor, etc.)	23	24.0
6	Owner or manager of a large rural estate or of a small business	25	26.0
5	Office worker, government clerk, or business clerk	4	4.2
4	Owner of a small or average farm	11	11.5
3	Skilled craftsman (carpenter, tailor, etc.)	0	0.0
2	Agricultural worker renting land or share-cropping	1	1.0
1	Skilled urban worker	0	0.0
0	Unskilled urban worker; agricultural worker not owning land	0	0.0
	No Response	9	9.4
	Total	96	100.1

The final component of the Social Class Index concerned the number of brothers and sisters who had attended or were attending college. This component was constructed by making a ratio of the number of brothers and sisters attending (or having attended) college, to the number of brothers and sisters of college age or older. Table 80 shows these ratios. The higher the ratio, the higher the proportion of brothers and sisters who attended college.

TABLE 80

Ratio of Brothers and Sisters Attending College to Brothers and Sisters of College Age

Ratio	Number in Sample	Percent of Sample
.81 - 1.00	31	32.3
.61 - .80	21	21.9
.41 - .60	14	14.6
.21 - .40	9	9.4
.01 - .20	7	7.3
None	8	8.3
No Response	6	6.3
Total	96	100.1

To obtain his Social Class Index, the individual's responses to each of the components were transformed into z scores and summed. The resulting Social Class Indices ranged from 14.80 to -6.50 with a mean of 2.88 and a standard deviation of 2.56. Table 81 shows the distribution for the 56 students for whom data were complete.

TABLE 81

Social Class Indices

Social Class Index	Number in Sample	Percent of Sample	Social Class Index	Number in Sample	Percent of Sample
-6.00 to -6.99	1	1.0	0.00 to 0.99	7	7.3
-5.00 to -5.99	1	1.0	1.00 to 1.99	4	4.2
-4.00 to -4.99	1	1.0	2.00 to 2.99	4	4.2
-3.00 to -3.99	10	10.4	3.00 to 3.99	5	5.2
-2.00 to -2.99	4	4.2	4.00 to 4.99	1	1.0
-1.00 to -1.99	5	5.2	5.00 to 5.99	3	3.1
-0.00 to -0.99	7	7.3	6.00 and above	3	3.1
			No Response	40	41.7

The intercorrelations among the components of social class are presented in Table 82. In general the components did not interrelate well. The items interrelating most often with other items seem to be father's education and mother's education. All components, however, correlated significantly with the Social Class Index.

TABLE 82

Intercorrelations Among Social Class Measures

	Per Capita Income	Books in Family Library	Number of Servants	Father's Education	Mother's Education	Father's Occupation	Brothers and Sisters in College
Per Capita Income	--						
	(66)						
Books in Family Library	.16	--					
	(77)	(79)					
Number of Servants	.13	.27*	--				
	(77)	(78)	(94)				
Father's Education	.13	.00	-.05+	--			
	(75)	(76)	(92)	(92)			
Mother's Education	.23*	.32**	.05+++	.35***	--		
	(77)	(79)	(96)	(94)	(92)		
Father's Occupation	.05	-.01	-.15	.38***	.21*	--	
	(72)	(74)	(90)	(88)	(86)	(90)	
Brothers and Sisters in College	.16	.05	-.11	.07	.06	.12	--
	(56)	(56)	(56)	(56)	(56)	(56)	(56)
Social Class Index	.55***	.45***	.55***	.58***	.62***	.53***	.40**

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

+Correlation not significant, but chi square significant at .05 level.
+++Correlation not significant, but chi square significant at .001 level.

CHAPTER VI

RESULTS AND DISCUSSION

In this chapter, data relevant to the ten major hypotheses will be presented. Each of the major hypotheses is composed of sub-hypotheses, e.g., Hypothesis I is composed of sub-hypotheses Ia, Ib, Ic, Id and Ie. The statistical findings for each sub-hypothesis will be presented, followed by a discussion of the findings for the entire hypothesis. This pattern is repeated for each of the ten major hypotheses.

HYPOTHESIS I. LANGUAGE PRESTIGE AND AFFECTION ARE RELATED TO SOCIO-CULTURAL FACTORS

The prestige accorded languages was measured by means of the following instructions:

> Please rate <u>all</u> the languages below on how much prestige you accord them.
>
> 5 = High prestige
> 4 = Fairly high prestige
> 3 = Medium prestige
> 2 = Fairly low prestige
> 1 = Low prestige

The instructions were followed by a list of languages: Assamese, Bengali, Gujarati, Hindi, Hindustani, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Tamil, Telugu, Urdu, and English.

Affection was measured by asking the respondents to rate each of the languages they knew in terms of the affection they felt for it. The following categories of affection

were specified: 5 = Very much affection, 4 = Much affection, 3 = Some affection, 2 = Little affection, and 1 = No affection. Affection ratings were made by five or more respondents for each of the following languages: Bengali, Gujarati, Hindi, Malayalam, Marathi, Punjabi, Tamil, Telugu, Urdu, English and Sanskrit. Other languages such as Assamese, Hindustani, Kashmiri, Oriya and Kannada did not receive enough ratings to be included in analyses involving affection.

Hypothesis I

a) Language prestige and affection are related to rural-urban residence.

The measurement of rural-urban residence was made by asking the individual in what size town he had spent most of his life. Answers were confined to specified categories: large city (300,000 or more), large town (100,000 - 300,000), medium town (20,000 - 100,000), small town (1,000- 20,000) or village (1,000 and under). Unfortunately, very few people in the sample had spent a majority of their lives in rural areas. (see Table 1, Chapter III).

Prestige. Correlations were calculated between the prestige ratings and the rural-urban measure for each of the 14 official languages and for English and Hindustani. In addition, contingency tables were made and chi square computed between prestige and rural-urban residence. None of the statistics was significant.

Affection. Correlations and chi squares were calculated between the affection ratings and rural-urban residence for the 11 languages. Three of the correlations were

significant. Table 83 shows the significant results. In this table, as in all tables reporting significant relationships for data on which both correlations and chi squares were calculated, all significant correlations are reported. Significant chi squares are shown only in those instances where the corresponding correlation coefficient is not significant. Significant chi squares and insignificant corresponding correlations occur when two variables relate to each other in a non-linear manner.

Correlation coefficients were based on samples varying from 5 to 78. The negative correlation for Gujarati (calculated on a sample of 35) and the negative correlation for Telugu (calculated on a sample of 7) indicate that rural residents expressed higher affection for these languages than did urban residents.

The positive correlation for Urdu indicates the reverse. Rural residents expressed less affection for this language than did urban residents. The correlation was calculated on a sample of 33 ratings.

Hypothesis I

b) Language prestige and affection are related to amount of travel.

Prestige. Correlations and chi squares were calculated between prestige ratings and seven travel measures. Significant results are shown in Table 84. The first three travel measures concerned travel in India: a) number of cities, towns and villages lived in, b) number of states lived in, and c) general travel in India.

TABLE 83

Relationships between Affection Felt for Languages and Rural-Urban Residence

Language	Rural-urban Residence
Bengali	
Gujarati	r = -.42*
Hindi	
Malayalam	
Marathi	
Punjabi	
Tamil	
Telugu	r = -.85*
Urdu	r = .41*
English	
Sanskrit	

*Significant at the .05 level.

For Gujarati, there were two significant and negative correlations. Individuals who have lived in relatively few cities, towns, villages or states considered Gujarati to have higher prestige than did individuals who have moved around more. The correlations were calculated on samples of 74 and 73. The situation was much the same for Hindi and Hindustani. Indians who had lived in relatively few cities, towns, and villages considered Hindi and Hindustani to have higher prestige than Indians who had moved around more. These correlations were based on samples of 82 and 74 respectively.

The significant chi square found between the prestige accorded Urdu and the number of states lived in was computed on 76 individuals. The relationship appears to be curvilinear. The prestige of Urdu was high for those individuals who had

lived in either relatively few or relatively many states. The prestige of Urdu was lower for individuals who had lived in a moderate number of states.

No relationships were found between any of the prestige ratings and the amount of general travel in India.

Two questions dealt with travel outside India. The first question asked the individual how many trips he had taken outside India, and the second asked how many countries he had visited. Neither of these two travel measures showed any relationship to the language prestige ratings.

The last two measures of travel were concerned with vicarious culture contact. The first measure asked about the amount of reading the individual did regarding other cultures and the second measure concerned the amount of contact his family had with non-Indians. A number of significant results were found between language prestige ratings and the amount of reading done about other cultures.

A significant chi square was found between Assamese prestige and reading done about other cultures. Examination of the chi square table shows the relationship to be a positive one. The greater the amount of reading an individual had done about other cultures, the greater the prestige he attached to Assamese. Sample size for the chi square was 66.

The significant correlation between the prestige attached to Bengali and amount of reading about other cultures indicates that individuals who had read more about other cultures attached higher prestige to Bengali than did individuals who had read less. A sample of 78 was used in calculation of the correlation.

The relationship between Kashmiri prestige and reading was curvilinear. Indians who accorded Kashmiri the highest prestige had done a moderate amount of reading about other cultures. Those who accorded Kashmiri the least prestige read very much or very little about other cultures. The sample size was 70.

The relationships between reading about other cultures and Oriya prestige, Urdu prestige, and English prestige were the same as the relationship between Kashmiri prestige and reading. The greatest amount of prestige was attached to each of these languages by Indians who had done moderate reading. Very much or very little reading about other cultures was associated with lower prestige attached to the languages. The statistics were calculated on samples of 68, 77 and 83 respectively.

Affection. The measures of travel were also examined in relation to the affection expressed for languages. Correlations and chi squares were calculated. Table 85 shows the significant results.

Only one of the measures concerning travel inside India related to any of the affection ratings. There was a significant and positive correlation between affection expressed for Punjabi and number of states lived in. The sample size was 23. Individuals who had lived in relatively more states expressed more affection for Punjabi than did individuals who had lived in relatively fewer states.

A significant chi square was found between the affection

TABLE 84

Relationships between Prestige Attached to Languages and Travel

Language	Travel inside India: Cities, Towns and Villages Lived in	Travel inside India: States Lived in	Travel inside India: General Travel in India	Travel outside India: Trips Made Outside India	Travel outside India: Countries Visited	Vicarious Culture Contact: Reading About Other Cultures	Vicarious Culture Contact: Family Contact with non-Indians
Assamese						x^{2}*	
Bengali						r = .26*	
Gujarati	r = -.25*	r = -.24*					
Hindi	r = -.33**						
Hindustani	r = -.35**						
Kannada						x^{2}**	
Kashmiri							
Malayalam							
Marathi						x^{2}*	
Oriya							
Punjabi							
Tamil							
Telugu						x^{2}*	
Urdu		x^{2}*				x^{2}*	
English							
Sanskrit							

* Significant at the .05 level.
** Significant at the .01 level.

expressed for English and the number of states lived in. The chi square was based on a sample of 70. The relationship appeared to be curvilinear with individuals who had lived in either the fewest number or the greatest number of states expressing the least affection for English. Indians who had lived in a moderate number of states indicated the most affection for English.

There were two sets of significant results for chi squares and correlations calculated between affection ratings and the measures of travel outside India. Both measures of travel outside India related to affection for Malayalam and for Urdu. In the case of Malayalam, the relationship was negative. The greater the number of trips outside India and the greater the number of countries visited, the less the affection expressed for Malayalam. For Urdu the relationship was reversed. The greater the number of trips outside India and the greater the number of countries visited, the greater the affection for Urdu. The statistics for Malayalam were calculated on samples of 9; those for Urdu on samples of 34 and 35.

Correlations and chi squares calculated between the affection ratings for the languages and the two vicarious culture contact measures yielded no significant results.

Hypothesis I

c) Language prestige and affection are related to social class.

Prestige. The Social Class Index and its components (discussed in Chapter V) were correlated with the prestige

TABLE 85

Relationships between Affection Felt for Languages and Travel

Languages	Travel inside India: Cities, Towns and Villages Lived in	Travel inside India: States Lived in	Travel inside India: General Travel in in India	Travel outside India: Trips Made Outside India	Travel outside India: Countries Visited	Vicarious Culture Contact: Reading About other Cultures	Vicarious Culture Contact: Family Contact with non-Indians
Bengali							
Gujarati							
Hindi							
Malayalam				r = -.67*	r = -.67*		
Marathi							
Punjabi		r = .51*					
Tamil							
Telugu							
Urdu				r = .43*	r = .36*		
English		X^{2}**					
Sanskrit							

* Significant at the .05 level.
** Significant at the .01 level.

ratings given the languages. Chi squares were also calculated between social class and prestige. Table 86 shows the significant results.

The Social Class Index related to only one language - English. The correlation (based on 50 cases) was positive. The higher the Indian's social class, the greater the prestige he accorded the English language.

No significant relationships were found between per capita income and language prestige.

A significant correlation was found, however, between the size of the family library and the prestige attached to Bengali. For the 68 Indians on whom data were available, a relatively large family library was associated with greater prestige accorded Bengali.

No significant relationships were found between the number of servants in the family and the prestige attached to languages.

The education of the father correlated negatively with the prestige attached to Gujarati (N = 73). The higher the education of his father, the less the prestige assigned Gujarati by the respondent.

Mother's education related in opposite ways to Oriya and to English prestige ratings. The student whose mother was highly educated attached low prestige to Oriya and high prestige to English. Sample sizes were 65 and 80, respectively.

In like manner the occupation of the father related in opposite ways to the prestige of Punjabi and English. Respondents whose fathers had a relatively high education accorded low prestige to Punjabi and high prestige to English. Statistics were based on samples of 70 and 78.

Finally, the proportion of college-aged brothers and sisters attending college related positively to the prestige ratings given Hindi and Marathi. The more brothers and sisters the respondent had who were in college, the greater the prestige he attached to Hindi and Marathi. Samples were 78 and 68 in size.

Affection. The social class measures and affection ratings for languages were examined by means of correlations and chi squares. The significant results are shown in Table 87.

The Social Class Index related to affection felt for only one language - Hindi. For the sample of 46 students, the relationship was negative. The respondent whose social class was high tended to feel less affection for Hindi than did the respondent whose social class was not so high.

The measure of per capita income related to affection for three of the languages. For all three , Bengali, Hindi, and Marathi, the relationship was negative. Indian students from families with high per capita income felt little affection for these three languages. Sample sizes for the three relationships were 13, 64 and 26, respectively.

TABLE 86

Relationships between Prestige Attached to Languages and Social Class

	Social Class							
Language	Per Capita Income	Books in Family Library	Number of Servants	Father's Education	Mother's Education	Father's Occupation	Brothers and Sisters in College	Social Class Index
Assamese								
Bengali		r= .27*						
Gujarati				r=-.28*				
Hindi							r= .28*	
Hindustani								
Kannada								
Kashmiri								
Malayalam								
Marathi							r= .29*	
Oriya					r =-.25*			
Punjabi						r = -.24*		
Tamil								
Telugu								
Urdu								
English					r = .28*	r = .28*		r=.33*
Sanskrit								

* Significant at the .05 level.

The number of books in the family library also related negatively to the affection felt for Marathi. When the family library was large, affection felt for Marathi was low. The sample size was 29.

No significant relationships appeared between number of family servants and any of the language affection ratings.

The education of the respondent's father related significantly to the affection expressed for Punjabi. The higher the education of the father, the greater the affection the respondent felt for Punjabi. Twenty-four ratings were used in the statistical calculation.

Mother's education related in a negative manner to the affection expressed for Hindi. The more educated the mother, the less the affection felt by students for Hindi. Sample size was 78.

The occupation of the father related to feelings of affection for two of the languages. The relationships appear to be negative in both instances. Students whose fathers had relatively high occupations indicated they felt relatively little affection for Gujarati and Hindi. The sample sizes were 34 for Gujarati and 73 for Hindi.

No relationships were found between the proportion of college-age brothers and sisters attending college and language affection measures.

TABLE 87

Relationships between Affection Felt for Languages and Social Class

	Social Class							
Language	Per Capita Income	Books in Family Library	Number of Servants	Father's Education	Mother's Education	Father's Occupation	Brothers and Sisters in College	Social Class Index
Bengali	r =-.70**					r= -.34*		
Gujarati						x^2**		
Hindi	r =-.25*				r=-.24*			r=-.36*
Malayalam								
Marathi	r =-.47*	r= -.44*						
Punjabi				r= .53**				
Tamil								
Telugu								
Urdu								
English								
Sanskrit								

* Significant at the .05 level
**Significant at the .01 level

Hypothesis I

d) Language prestige and affection are related to family tradition of foreign study.

To test Hypothesis I d, the students were divided into two groups: those who were the first in their families to study abroad, and those from families where at least one member had studied outside India.

Prestige. The mean prestige attached to each language was calculated for students who were the first in their families to study abroad. Mean prestige ratings were also calculated for the group of students who were not the first in their families to study abroad. The two mean prestige ratings for each language were compared by t test. The dashed line in the t column indicates that the difference between the two mean prestige ratings for Sanskrit was not tested for significance because of the small number of ratings.

Table 88 shows the only significant difference in the prestige attached to the languages. This difference was for Hindustani. Individuals from families whose members had studied abroad attached higher prestige to Hindustani than did individuals who were the first in their families to study abroad.

Affection. The mean affection expressed for each language was calculated for the group of students who were the first in their families to study abroad and for the group of students who were not the first members of their families to study abroad. The two mean affection ratings for each language were compared by t test. Significance tests were

TABLE 88

Relationships between Prestige Attached to Languages and Family Tradition of Foreign Study

Language	Prestige Ratings: First to Study Abroad Mean	S.D.	N	Family Tradition of Study Abroad Mean	S.D.	N	t
Assamese	2.37	1.26	41	2.16	.94	25	
Bengali	3.50	1.24	48	3.63	.96	30	
Gujarati	3.19	1.29	42	3.16	1.19	32	
Hindi	4.40	.95	50	4.34	.79	32	
Hindustani	3.59	1.30	44	4.23	1.17	30	
Kannada	2.62	1.23	42	2.41	1.05	29	-2.21*
Kashmiri	2.48	1.23	42	2.21	.83	28	
Malayalam	2.56	1.22	43	2.22	1.09	27	
Marathi	2.90	1.32	42	3.07	1.14	30	
Oriya	2.40	1.33	42	2.04	.92	26	
Punjabi	3.00	1.30	46	2.46	1.07	28	
Tamil	3.04	1.32	46	2.57	1.23	28	
Telugu	2.93	1.30	43	2.57	1.20	28	
Urdu	3.35	1.23	46	3.26	1.26	31	
English	4.54	.73	50	4.73	.57	33	
Sanskrit	5.00	.00	2	4.75	.50	4	---

*Significant at the .05 level.

not made for Malayalam and Telugu because of the small sample sizes.

Only one significant difference was found between the mean affection ratings for the languages. Those who were the first in their families to study abroad felt more affection for Tamil than those from families with a tradition of foreign study. See Table 89.

Hypothesis I

e) Language prestige and affection are related to North-South residence in India.

Indian students were classified as to whether their residence was in a North or a South Indian state or territory according to the following system:

TABLE 89

Relationships between Affection Felt for Languages and Family Tradition of Foreign Study

Language	Affection Ratings: First to Study Abroad			Family Tradition of Study Abroad			
	Mean	S.D.	N	Mean	S.D.	N	t
Bengali	3.50	1.38	12	3.67	1.51	6	
Gujarati	3.67	1.35	15	3.05	1.31	19	
Hindi	3.79	1.18	48	3.55	1.06	31	
Malayalam	3.40	1.67	5	2.50	1.29	4	---
Marathi	3.06	1.51	18	3.00	1.56	15	
Punjabi	3.65	1.00	17	3.00	1.91	7	
Tamil	5.00	.00	6	3.50	1.60	8	2.65*
Telugu	4.25	1.50	4	3.33	2.08	3	---
Urdu	3.23	1.11	22	3.75	1.36	12	
English	4.31	.97	45	4.20	1.22	25	
Sanskrit	3.30	1.34	20	3.00	1.52	14	

*Significant at the .05 level.

North India		South India
Bengal	Maharastra	Andhra Pradesh
Bihar	Orissa	Kerala
Delhi	Punjab	Madras
Goa	Rajasthan	Mysore
Gujarat	Uttar Pradesh	

Prestige. The mean prestige rating attached to each language was calculated for North Indians and for South Indians. The two means for each language were compared by t test. Table 90 shows the mean ratings and the significant differences found. No significance test was made for Sanskrit because of the small number of South Indian ratings.

TABLE 90

Relationships between Prestige Attached to Languages and North-South Residence in India

Language	Prestige Ratings: North Indian Residence Mean	S.D.	N	South Indian Residence Mean	S.D.	N	t
Assamese	2.39	1.16	52	2.00	.96	13	
Bengali	3.68	1.03	62	3.20	1.28	15	
Gujarati	3.35	1.20	60	2.39	1.15	13	2.71**
Hindi	4.56	.72	66	3.67	1.08	15	3.04**
Hindustani	4.05	1.24	59	3.00	1.07	14	3.20**
Kannada	2.45	1.16	56	3.00	.93	14	
Kashmiri	2.39	1.13	56	2.31	.91	13	
Malayalam	2.46	1.25	55	2.43	.73	14	
Marathi	3.02	1.24	58	2.85	1.23	13	
Oriya	2.35	1.21	56	2.00	1.00	12	
Punjabi	2.92	1.24	60	2.39	1.00	13	
Tamil	2.72	1.27	58	3.53	1.09	15	-2.48*
Telugu	2.58	1.18	57	3.85	.95	13	-4.15**
Urdu	3.34	1.23	62	3.14	1.25	16	
English	4.61	.69	66	4.63	.60	16	
Sanskrit	4.80	.40	5	5.00	.00	1	

* Significant at the .05 level
** Significant at the .01 level

As might be expected, North Indians accorded higher prestige to North Indian languages (Gujarati, Hindi and Hindustani) and South Indians accorded higher prestige ratings to South Indian languages (Tamil and Telugu).

Affection. Mean affection ratings for each language were calculated separately for North Indians and South Indians. Differences between the North and South ratings for each language were tested for significance. The mean affection ratings for the languages and the significant differences found between Northern and Southern ratings appear in Table 91.

Many of the mean affection ratings were based on very small samples. An arbitrary criterion of five ratings was used to determine when significance tests would be made. Means calculated on a sample of less than five ratings for either Northern or Southern Indians were not used in testing for significant differences. The dashes in the t column of Table 91 indicate when one or both of the mean ratings for a language were based on samples so small that no t test was performed.

Unfortunately there were not enough ratings available to test differences between North and South affection for two languages: Hindi and English. The t tests for these two languages indicate that North Indians felt greater affection for Hindi and less affection for English than did South Indians.

TABLE 91

Relationships between Affection Felt for Languages and North-South Residence in India

	Affection Ratings						
	North Indian Residence			South Indian Residence			
Language	Mean	S.D.	N	Mean	S.D.	N	t
Bengali	3.71	1.23	17	1.00	.00	1	---
Gujarati	3.38	1.29	32	3.50	1.50	2	---
Hindi	3.81	1.11	67	3.08	1.04	12	2.22*
Malayalam	2.00	.00	1	3.13	1.65	8	---
Marathi	2.97	1.40	31	5.00	3.00	2	---
Punjabi	3.52	1.28	23	2.00	.00	1	---
Tamil	3.50	1.50	4	4.40	1.20	10	---
Telugu	1.00	.00	1	4.33	1.11	6	---
Urdu	3.43	1.26	30	3.33	.47	3	---
English	4.16	1.11	57	4.69	.61	13	-2.36*
Sanskrit	3.07	1.41	45	4.00	.71	4	---

* Significant at the .05 level
**Significant at the .01 level.

DISCUSSION: HYPOTHESES Ia, Ib, Ic, Id, Ie

The same prestige stereotypes about language seemed to prevail in moderately sized urban communities as in the largest urban centers. The lack of differences found may reflect the universality of the prestige stereotypes about languages in India. An alternative explanation rests on the composition of the sample. Few respondents had lived most of their lives in rural areas. It may be that the few who had lived in rural areas had also lived long enough in larger urban areas to adopt the prevailing stereotypes.

Rural-urban differences were found for the affection expressed for languages. The affection ratings differed for rural and urban residents for three of the 11 languages. Respondents from more rural areas felt less affection for Urdu and more for Gujarati and Telugu. It is easier to understand possible reasons for the Urdu differences than it is for Gujarati and Telugu. Urdu is considered a language rich in poetry. If the rural man is less well-educated and well-read than his urban counterpart, his affection for Urdu might be expected to be less than that of his urban counterpart. Why differences in affection occur for Gujarati and Telugu rather than for other languages is not clear.

The question arises as to why rural-urban differences should be found for affection and not for prestige. One answer is that there is a basic difference between the prestige and affection ratings. Every respondent made prestige ratings on each of the fourteen official languages and also on English and Hindustani. Respondents indicated their

affection, however, only for those languages which they were able to read, write, speak and/or understand. Another answer is that the prestige ratings probably depend more on stereotypes than the affection ratings. The affection ratings were intended to tap emotional involvement rather than stereotypes.

Amount of travel was a correlate of both prestige and affection. Relatively more travel inside India was associated with low prestige for Gujarati, Hindi and Hindustani and high prestige for Urdu. It was also associated with lower affection for English and higher affection for Punjabi. One explanation for the prestige findings is that respondents who have lived in many cities or states came into contact with many Indian languages. Comparisons among languages may have not favored Gujarati, Hindi and Hindustani. Urdu enjoyed high prestige among those who had lived in many or in few states, but low prestige among those having lived in a moderate number of states. One explanation is that in this sample, residents of a moderate number of states may have come into contact mainly with those languages overshadowing Urdu in prestige. Residents of many states may have had a broader sample of languages with which to compare Urdu. It may be too, that Urdu enjoyed high prestige among those who had lived in very many or very few states because these respondents were the Muslims or Urdu native tongue speakers in the sample. This possibility was not explored in this research.

Interestingly, the more states an individual had lived in, the greater his affection for Punjabi. The reasons for this are not clear.

Residence in a moderate number of states was associated with high affection for English. Residence in many or few states was associated with less English affection. One interpretation for this is in terms of amount of language use. Living in a small number of states may not have necessitated the use of English. The native tongue or regional language may have sufficed with the result that the individual's affections remained primarily with his native tongue or regional language. At the other extreme, for individuals living in a large number of states, English may have been only one of many languages necessary and as such it shared only moderately in the speakers' affections. It was the individuals who lived in a moderate number of states who felt the most affection for English. In this case English may have sufficed as the medium of communication in all these states, being used often and gaining in the affection of its speaker.

Travel outside India was not associated with prestige, but was associated with affection. More travel outside India was associated with greater affection for Urdu and less affection for Malayalam. It may be that travel made the individual aware that the literary prestige of Urdu extends beyond India's borders while Malayalam is not very well known outside India.

Vicarious culture contact related to prestige, but not to affection. Much reading about other cultures was associated with high prestige for Assamese and Bengali. Moderate reading about other cultures was paired with high prestige for Kashmiri, Oriya, Urdu and English. Why high prestige for a language was related to moderate reading in some instances and much reading in others is not readily apparent. In the same manner why relationships were found for these particular six languages and not for others is also not apparent. All that is clear is that reading more about other cultures was associated with attaching high prestige to languages--up to a point at least.

The absence of relationships between vicarious culture contact and affection is not surprising if affection reflects language usage in part. Prestige, on the other hand, may well involve a comparison of a language with others. Reading about other cultures and presumably about other languages might induce comparisons which cast particular languages in a good or bad comparative light.

Social class related to both prestige and affection. High social class was paired with high prestige accorded English, Bengali, Hindi and Marathi and low prestige accorded Gujarati, Oriya and Punjabi. The high prestige for English and Bengali is not surprising. English is the language of the educated and is informally acknowledged as a prestige symbol associated with high education and high social status. Bengali is famed for its rich literary tradition--a feature

most likely to be appreciated by the educated. This interpretation is reinforced in these data because the component of social class relating positively to the Bengali prestige ratings was the number of books in the family library. The high prestige for Hindi and Marathi was the result of positive relationships between prestige ratings for these languages and the proportion of college-aged brothers and sisters with college education. Since Hindi is now compulsory in schools, it has become a language of the educated. As such, it is a language not only of the individual but of those of his siblings with higher education.

Why the college education of the respondent's brothers and sisters should affect his own prestige ratings of Marathi is not clear except that Marathi and Hindi are closely related languages.

Social class was strongly related to language affection. High social class was generally paired with low affection for Hindi. Occasionally this was true for Marathi, Bengali and Gujarati. Only once was the relationship in reverse: high social class paired with high affection for Punjabi. If the language usage explanation for the affection relationships holds, then the high prestige, but low affection felt for Hindi by higher social classes is more understandable. English is the prestige language among those of high social class in India and is probably used as often as possible (if informal reports are true). Hindi reportedly is not regarded in this manner. Its use may not be so great

as evidenced by the frequency with which it was listed as a "language used unwillingly" (cf Table 28). The expected differences in affection for English did not materialize; Indians of higher social class did not feel greater affection for English than did Indians of lower social class. If language usage is the key to affection, then the constant required use of English by the students in the sample would explain the lack of social class influence on English affection for these individuals.

Family tradition of foreign study did not prove to be an important correlate of language prestige and affection. Individuals who were the first in their families to study abroad accorded Hindi rather low prestige and expressed rather high affection for Tamil. It may be that those who were the first to venture abroad for education were ready to reject Hindi while those from families where others had studied abroad had grown up in a tradition of appreciating Hindi for its merits--it does not seem to be a language that is normally discussed in the U.S. The affection expressed for Tamil by those whose families did not include other foreign scholars is puzzling. It may be related to the cohesiveness on campus noted among the students for whom Tamil was the native tongue.

The prestige and affection relationships found for North and South residence establish geographic residence as a significant correlate of language attitude. For the most part the relationships are self-explanatory. North Indians

conferred high prestige upon the North Indian languages of Gujarati, Hindi and Hindustani. South Indians accorded high prestige to the South Indian languages of Tamil and Telugu. In like manner, North Indians expressed higher affection for the North Indian language Hindi, and South Indians expressed higher affection for English. The last finding correlates well with observers' reports that the hue and cry of the South is "Equal status for English!"

HYPOTHESIS II. LANGUAGE LIBERALISM IS RELATED TO SOCIO-CULTURAL FACTORS

The language liberalism of each respondent was measured by means of a Language Liberalism Index. The construction of this index is described in Chapter V.

Hypothesis II
a) Language liberalism is related to rural-urban residence.

Correlations and chi squares were calculated between the rural-urban residence measure and the respondents' Language Liberalism Indices. No significant relationships were found for the 79 individuals on whom data for both measures were available.

Hypothesis II
b) Language liberalism is related to amount of travel.

Correlations and chi squares were computed between Language Liberalism Indices and each of the seven travel measures. Sample sizes for the calculations varied between 78 and 80. None of the correlations or chi squares calculated between language liberalism and travel inside India were significant. In like manner none of the statistics computed between language liberalism and travel outside India or between language liberalism and vicarious culture contact were significant.

Hypothesis II
c) Language liberalism is related to social class.

Language Liberal Indices were correlated with the Social Class Index and each of its components. Chi squares were also calculated between these measures. Table 92 shows

the relationships found.

The Social Class Index did not relate to the Language Liberalism Index. When items that were combined into the Social Class Index were examined separately, relationships with Language Liberalism were found. Negative correlations were found between Language Liberalism and the number of books in the family library. A negative correlation was also found between Language Liberalism and the education of the mother. This means that respondents whose family libraries were relatively large and whose mothers had relatively more education tended to have relatively conservative language attitudes. Sample sizes for the two relationships were 68 and 76 respectively. No other significant relationships between language liberalism and components of the Social Class Index were found.

TABLE 92

Relationships between Language Liberalism and Social Class

Social Class	Language Liberalism Index
Per capita income	
Books in family library	r = -.24*
Number of servants	
Father's education	
Mother's education	r = -.34**
Father's occupation	
Brothers and sisters in college	
Social Class Index	

* Significant at the .05 level.
** Significant at the .01 level.

Hypothesis II
d) Language liberalism is related to family tradition of foreign study.

A mean Language Liberalism Index was calculated for those Indian students who were the first in their families to study abroad. A mean Language Liberalism Index was also calculated for those from families where other members had foreign education. The difference between the two means was tested for significance by means of a t test. The difference between the two means was not significant, i.e., whether or not an individual was from a family with a tradition of foreign study had no relationship to the liberalness of his language attitudes.

Hypothesis II
e) Language liberalism is related to North-South residence in India.

A mean Language Liberalism Index was computed for Indians from the North. A mean Language Liberalism Index was also computed for Indians from the South. The difference between the two means was examined for significance by a t test and found not to be significant. That is, there was no difference between North Indians and South Indians in terms of liberalness of language attitudes.

DISCUSSION: HYPOTHESES IIa, IIb, IIc, IId, IIe

Neither rural-urban residence nor amount of travel were correlates of language liberalism. In like manner, family tradition of foreign study and North-South residence did not correlate with language liberalism. The only

socio-cultural variable related to language liberalism was social class. The two components of social class which correlated with language liberalism did so in a negative manner. More specifically, the higher the education of the mother and the greater the number of books in the family library, the less liberal the student's language attitudes. These relationships were opposite to those expected.

The most obvious interpretation of the insignificant findings is that range of culture contact simply does not relate to liberalness of language attitudes. Another possible interpretation is that the measures of culture contact used to test the hypothesis were not sensitive enough. This interpretation does not seem too likely, however, because all of these measures of culture contact related to the prestige and/or affection ratings examined in Hypothesis I. There is a third possibility, too, that the measures were not appropriate, i.e., they were not really measures of range of culture contact. The significant findings in Hypothesis I do not establish the validity of the measures.

Still another possibility is that language liberalism is a variable of a different order than prestige and affection. This is a rather strong possibility. Language liberalism was a composite of a number of specific attitudes; prestige and affection were each specific attitudes. It may also be that the measures of culture contact related significantly, but in different ways, to some or all of the components of the Language Liberalism Index. Present analyses did not explore this possibility.

The significant and negative findings for social class are puzzling. It is tempting to resort to the "upper classes are more conservative" explanation. This is a possibility, of course. Another possibility concerns the particular components of the Social Class Index: number of books in family library and mother's education. It may be that these two components measure something in addition to social class.

HYPOTHESIS III. LANGUAGE LIBERALISM IS RELATED TO THE PERCEIVED LANGUAGE LIBERALISM OF REFERENCE GROUPS AND TO FEELINGS ABOUT THE REFERENCE GROUPS

The measures of language liberalism used to test this hypothesis were the Language Liberalism Indices described in Chapter V.

Hypothesis III

a) Language liberalism is related to the perceived language liberalism of family, subcaste, social class and region.

This hypothesis was tested at two levels. At the broadest level, the Language Liberalism Index calculated for the student (i.e., "Self" Language Liberalism Index) was compared to those calculated for his father, mother, subcaste, social class, region. Comparisons were made by means of correlation coefficients. Table 93 shows the single significant result. The Self Language Liberalism Index correlated positively with the Language Liberalism Index of the father. The correlation was based on a sample of 79.

TABLE 93

Correlations between the Self Language Liberalism Index and the Language Liberalism Indices of the Father, Mother, Subcaste, Social Class and Region

	Language Liberalism Indices				
	Father	Mother	Subcaste	Social Class	Region
Self Language Liberalism Index	.60***				

***Significant at the .001 level.

The hypothesis was tested on a more specific level by interrelating each of the six items comprising the student's index with their counterparts in the indices of his father, his mother, his subcaste, his social class and his region. In all, 30 comparisons were made. Chi squares and correlation coefficients were used to make the comparisons. Eighteen of these comparisons were significant at the .05 level or beyond. Table 94 shows the significant relationships found.

Five of the six items comprising the student's (Self) index were related to their respective counterparts in the index of at least one of his reference groups. The only item in the student's index failing to relate to its counterpart in the indices of the reference groups was the second item: the number of languages used unwillingly. At the other extreme were the last two items: prestige attached to bilingualism and acceptance of Hindi as India's official language. These two items correlated in a positive manner at the .001 level with their counterparts in the index of every reference group. Statistics for most items were based on samples varying in size from 71 to 83. The two exceptions to this were: the correlation between Self and subcaste for "Languages Not Appealing" and the chi square between Self and region for "Intermixing Usage." The samples for these two statistics were 11 and 12 respectively.

Hypothesis III

b) <u>Deviation from the perceived language liberalism of the family, subcaste, social class and region is related to the importance of each of these groups to the individual.</u>

TABLE 94

Relationships between Items in the Self Language Liberalism Index and Corresponding Items in the Language Liberalism Indices of the Father, Mother, Subcaste, Social Class and Region

Items in the Self Language Liberalism Index	Corresponding Items in Language Liberalism Indices of: Father	Mother	Subcaste	Social Class	Region
Languages Not Appealing			r= .71*(11)		
Languages Used Unwillingly					
Intermixing Approval	(77) r= .59***	(76) r=.35**		r=.23*(74)	r=.49***(77)
Actual Intermixing	(82) r= .37**			r=.34**(79)	X^2** (84)
Bilingualism Prestige	(76) r= .66***	(76) r=.63***	(68) r= .60***	r=.52***(79)	r=.32**(82)
Acceptance of Hindi	(75) r= .78***	(73) r=.80***	(71) r= .68***	r=.72***(76)	r=.57***(81)

*Significant at the .05 level.
**Significant at the .01 level.
***Significant at the .001 level.

Five separate language deviation measures were used to test this hypothesis. Deviation from the language liberalism of the father was calculated by subtracting the Language Liberalism Index of the student from the Language Liberalism Index of his father. A similar procedure was followed in the calculation of the deviations of the student's Language Liberalism Index from the Language Liberalism Indices of the mother, subcaste, social class, and region. These differences or deviations were then correlated with the importance rating and with the relative importance rating the student gave each group.

The importance of each reference group to the individual was measured by means of a rating scale which ranged from 1 to 5. On this scale, 5 = extremely important, 4 = very important, 3 = somewhat important, 2 = not very important, and 1 = unimportant. Separate importance ratings were made for the region, social class, family, subcaste and country. In addition, relative importance ratings were made. The respondents were asked to rank in order the five references groups in terms of their importance to him. The most important group was assigned a value of 5 and the least important, a value of 1. The distributions of the importance and relative importance ratings appear in Appendix N.

Five correlations were made between the deviation scores and their respective importance ratings and five correlations were made between the deviation scores and their respective relative importance ratings. None of the 10 correlations was significant.

DISCUSSION: HYPOTHESES IIIa, IIIb

Hypothesis three predicted relationships between the individual's language attitudes and those of his father, mother, subcaste, social class and region.

Taken as a whole, i.e., the Language Liberalism Index, the student's attitudes corresponded only with those he saw his father as having. This finding suggests that the respondent saw his own attitudes in closer correspondence with those of his father than with any other group. Put another way, it was the father who was the referent for these language attitudes of the individual.

An examination of the components of the Language Liberalism Indices shows some of these specific attitudes (i.e., components) in the respondent's Index to relate significantly with many of their counterparts in one or more of the reference group Indices. Of particular note were the acceptance of Hindi as India's official language and the prestige attached to bilingualism - attitudes upon which the individual saw himself in agreement with every one of his groups. The respondent's attitudes related significantly with four of the perceived attitudes of the father, social class and region and three of the perceived attitudes of the mother and subcaste. In this more specific analysis, the individual's attitudes did not appear to be more closely related to the father's attitudes than to those of other reference groups. From the specific analysis, it would be difficult to select any one of the groups as being more of a

reference group than the others.

The lack of correspondence between the student's Language Liberalism Index and the indices of each of his reference groups would suggest that the student was not simply projecting all of his own attitudes to his reference groups. The specific analysis, however, did not indicate the same thing. Many components of the respondent's Language Liberalism Index corresponded with those of his reference groups. Here there is strong reason to question whether the respondent did project his attitudes to his reference groups.

The high degree of correspondence found between components of the Language Liberalism Indices was not consistent with the lack of correspondence between the overall Indices. Presumably this lack of consistency was due to the presence of components in the Indices which did not relate to those in the respondent's Index and to the component which related in a non-linear fashion (see chi square statistic in Table 94).

Feelings on language questions ran rather high among the students. An illustration of this is found in Table 45 where strength of conviction about personal choice for India's official language is presented. Feelings on issues such as this may have run so high as to have obscured any objective appraisal of the position of the reference groups. In consequence, the respondent's attitudes may have been projected to his reference groups. The possibility remains, however, that his reference groups may nearly always agree with the respondent on these issues and that the significant correlations

represent reality, i.e., accurate perceptions of reference group attitudes.

In general, the findings suggest that the parents, subcaste, social class and region may act as reference groups for the student on issues involving language. The validity of such an interpretation rests upon the accuracy of the student's perceptions of his reference groups.

Although no relationships were found between the over-all attitudes of the student and most of his groups, it was expected that such relationships might appear if the importance attached to the groups were taken into consideration. For example, if the region were very important to some students and not to others, the extent of a student's deviation from the attitudes of his region might reflect the importance of the region for him. Importance ratings had no effect, however, on the correspondence between attitudes of the student and any of his groups. This was true even in the case of fathers where a high positive relationship was found between student and father Language Liberalism Indices.

The explanations for this are several. First, the groups may really not be reference groups on language issues for the student. Some other group, such as college peers, may be the reference group. Second, the measures were gross. Either or both of the importance and language measures may have been inappropriate. Third, the importance measures were skewed. This restricted their range and made interpretation of the statistical computation difficult. Fourth, socially acceptable answers may have been given to the language

questions or importance ratings. This is especially likely in the case of importance ratings where almost everyone considered the family quite important and the social class and subcaste as more or less unimportant. The relative importance ratings reflected the same phenomenon: family ranked very high, region and social class were intermediate and subcaste very low.

HYPOTHESIS IV. LANGUAGE SPECIALIZATION IS RELATED TO THE PERCEIVED ATTITUDES OF REFERENCE GROUPS AND TO FEELINGS ABOUT THE REFERENCE GROUPS

Six language specialization measures were used to test this hypothesis: a) number of languages used with particular people, b) number of people with whom particular languages were used, c) number of languages used in particular places, d) number of places in which particular languages were used, e) number of languages used on particular occasions, and f) number of occasions on which particular languages were used.

Hypothesis IV

a) Language specialization is related to the perceived diversity of language preference among family, subcaste, social class and region.

The language preferences of the father, mother, subcaste, social class and region were listed for each student and a measure of diversity of language preference made. The diversity of language preference measure was the total number of languages an individual would have to know in order to converse with members of his family, subcaste, social class and region in at least one of the languages they preferred. Thus if three of an individual's groups preferred Hindi and the fourth group preferred Gujarati, it was considered that the individual would have to know two languages to please all groups. If three of the groups preferred Hindi and Gujarati while the fourth preferred Gujarati, then the individual would need to know only one language to please all groups.

The diversity of language preference measures were compared to the Language Specialization Indices by means of the chi square statistic. Table 95 shows the result.

A significant chi square between the diversity measure and number of people with whom particular languages were used was found. The relationship was positive. The greater the number of people with whom the individual used particular languages, the greater the number of different languages he perceived his groups as preferring. The sample size was 90.

TABLE 95

Relationships between Language Specialization and Diversity of Language Preference

Language Specialization Measures	Diversity of Language Preference Measures
Languages People	X^2*
Languages Places	
Languages Occasions	

*Significant at the .05 level

Hypothesis IV

b) Language specialization is related to the perceived heterogeneity of language liberalism among family, subcaste, social class and region.

The second part of Hypothesis IV was tested by dividing the respondents into two groups: a) individuals who saw their reference groups as homogeneous, i.e., all the reference groups had liberal language Indices or all had

non-liberal language Indices and b) individuals who saw some of their groups as liberal and some as non-liberal. Whether or not a group had a liberal language Index was determined in the following manner. The distributions of Language Liberalism Indices for the fathers, mothers, subcastes, social classes and regions were each dichotomized as close to their respective medians as feasible. Higher indices (indices above the median) indicated liberal attitudes; lower indices, non-liberal attitudes. The cut-off scores for liberal and non-liberal indices are given in Table 96.

TABLE 96

Cut-off Points for Dividing Language Liberalism Indices of Reference Groups into Liberal and Non-Liberal Categories

Reference Group	Liberal Indices		Non-Liberal Indices	
	Range	N	Range	N
Father	20-29	11	9-19	13
Mother	19-30	5	15-18	6
Subcaste	16-30	9	11-15	10
Social Class	19-23	8	9-18	8
Region	19-25	10	14-18	12

Mean specialization measures were calculated for the two groups of respondents whose reference groups were homogeneous : those whose reference groups were heterogeneous. The means were compared by t test. Four of the six comparisons yielded significant differences. Table 97 shows these comparisons.

It is apparent that all kinds of specialization, people, places and occasions, were related to how heterogeneous an individual's groups were seen as being. Specialization by place was especially related to heterogeneity of language attitude.

Far fewer individuals saw their groups as heterogeneous than as homogeneous. On all of the specialization measures, respondents with heterogeneous groups had higher means, i.e., Indians who saw their groups as heterogeneous said they practiced more specialization of language usage than did Indians who saw their groups as homogeneous.

Although the hypothesis made no prediction regarding differences in language specialization between those whose language groups were entirely liberal and those whose groups were entirely non-liberal it is interesting to compare the means for these groups with each other and with the mean for heterogeneous groups. Table 98 shows these means.

The table indicates that in general, the least language specialization was practiced by respondents whose reference groups all had non-liberal indices. Higher means were found where groups all had liberal indices and the highest means were found where the groups were heterogeneous. Four out of six times individuals who said their groups all had non-liberal attitudes claimed to practice the least specialization of language usage. Individuals who felt their groups all had liberal language attitudes professed more specialization of language usage and those who perceived

TABLE 97

Mean Language Specialization Measures
for Homogeneous and Heterogeneous Reference Groups

Reference Groups	Language Specialization Measures														
	Languages			People			Languages			Places			Languages			Occasions		
	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Homogeneous Reference Groups: All have Liberal Language Indices or all have non-Liberal Language Indices	2.60	.95	35	2.77	1.36	35	2.92	1.13	36	2.03	1.55	36	2.36	.97	28	2.61	1.29	28
Heterogeneous Reference Groups: Some have Liberal and some have non-Liberal Language Indices	3.42	1.24	12	3.08	1.00	12	4.22	1.79	9	3.78	1.09	9	3.11	.93	9	3.11	1.05	9
t	.05						.01			.01			.05					

TABLE 98

Mean Language Specialization Measures
for Non-Liberal, Liberal and Heterogeneous Reference Groups

Reference Groups	Language Specialization Measures: Languages Mean	People Mean	Languages Mean	Places Mean	Languages Mean	Occasions Mean
Homogeneous Reference Groups: All have non-Liberal Language Indices	2.83	2.56	3.00	2.00	2.20	2.40
Homogeneous Reference Groups: All have Liberal Language Indices	2.35	3.00	2.82	2.06	2.54	2.85
Heterogeneous Reference Groups: Some have Liberal and some have non-Liberal Language Indices.	3.42	3.08	4.22	3.78	3.11	3.11

some of their groups to be liberal and some to be non-liberal said they did the most specializing of all.

A second test of the hypothesis was made. For each respondent, a range of language liberalism was calculated by subtracting the lowest Language Liberalism Index from the highest Language Liberalism Index found among his groups. The ranges were then correlated with the Language Specialization measures. The correlations were based on a sample of 20. Table 99 shows the only significant correlation to be between the range of Language Liberalism Indices and number of languages used on particular occasions. The greater the range of language liberalism among an individual's groups, the greater the number of different languages he used on particular occasions.

TABLE 99

Correlations between Language Specialization and Range of Language Liberalism Among Reference Groups

Language Specialization Measures	Range of Language Liberalism Indices
Languages People	
Languages Places	
Languages Occasions	$r = .46^*$

*Significant at the .05 level.

Hypothesis IV

c) Language specialization is related to the importance of family, subcaste, social class, and region.

This part of the hypothesis proved difficult to test because of the skewness of the importance and the relative importance ratings given the family, subcaste, social class, and region.

Only three out of the possible 48 relationships were significant. The importance ratings for family were very high. Table 100 shows that no relationships were found between language specialization measures and the importance ratings of family. No relationships were found between language specialization and subcaste importance, either.

Two significant correlations appeared between social class and language specialization. The correlation of .29* (based on a sample of 47) indicates that the higher the relative importance of an individual's social class, the more language specialization he practiced in particular places. The negative coefficient of -.36* (sample size was 40) indicates that the higher the relative importance of one's social class, the fewer the languages used for particular occasions.

A significant relationship also appeared between the importance ratings given the region and a language specialization measure. In general, region received rather low importance ratings--generally in the one to three (somewhat important to unimportant) range. Most of the people named two or three people with whom particular languages were used.

Thus, there was a heavy clustering at the low end of both scales--many low importance ratings and few people. As might be expected, the significant chi square was for the number of different people named. The sample size for this chi square was 87. Visual examination of the chi square table indicated the relationship to be negative: the fewer the people with whom particular languages were used, the higher the importance rating given the region.

DISCUSSION: HYPOTHESES IV_a, IV_b, IV_c

This hypothesis which had predicted relationships between the perceived language attitudes of reference groups and the specialization of language usage practiced by students received much support.

Only one relationship between the specialization measures and diversity of language preference measures was found. It occurred for the "people" specialization measure. Diversity of language preference was a measure of what the individual thought that his groups liked. The "people" language specialization measure was a statement of what the individual said he did with different people. The positive relationship between the two measures indicates that the respondent said he did with people what he thought his groups liked.

The relationship found between diversity of group preference and the "people" specialization measure was not repeated for other specialization measures. The fact that

TABLE 100

Relationships between Language Specialization and Importance of Family, Subcaste, Social Class and Region

Language Specialization Measures	Family, Subcaste, Social Class and Region							
	Import-ance	Relative Importance	Import-ance	Relative Importance	Import-ance	Relative Importance	Import-ance	Relative Importance
Languages People							x^{2}*	
Languages Places						r=.29*		
Languages Occasions						r=-.36*		

*Significant at the .05 level.

the significant relationship occurred only with what appears to be the most appropriate of the specialization measures ("people", as compared with "places" or "occasions") suggests the division of specialization along these lines to be a meaningful one.

All three types of specialization measures (people, places and occasions) related to heterogeneity of Language Liberalism Indices among reference groups. The most specialization was done by those whose reference groups were heterogeneous with regard to liberalness of language attitude. It may be that these individuals pleased their conservative groups and then did what pleased themselves elsewhere. The second most specialization was practiced by respondents who perceived all of their groups to be liberal. A possible interpretation here is that if an individual's groups were all very liberal, then he was free to use whatever language(s) he chose all the time. The least specialization was practiced by those whose groups were seen as being entirely conservative. This result is understandable if one remembers that the reference groups were both conservative and homogeneous. In such a situation the language behavior appropriate for one was probably appropriate for all.

It was found that the greater the relative importance of social class, the greater the number of places in which particular languages were used and the fewer the number of languages used for particular occasions. Presumably, if social class were important to an individual in India, he would be

careful to use the proper languages in the proper places - with inferiors, with equals and with those who rank above him. For such an individual it would not be the occasion or ceremony which would determine the language to be used, but the place instead.

The greater the importance of region the fewer the people with whom particular languages were used. This finding makes a great deal of intuitive sense. If the region is important to the respondent, then he probably uses the regional language at every opportunity. This in turn means that there would be very few people for whom he would employ other languages.

HYPOTHESIS V. INTERACTION IS RELATED TO NATIVE TONGUE, PERCEIVED LANGUAGE LIBERALISM OF REFERENCE GROUPS AND TO FEELINGS ABOUT THE REFERENCE GROUPS

Hypothesis V
a) Interaction is related to native tongue within the Indian community on the Michigan State campus

Two measures of interaction were used to examine this hypothesis. The first was a measure of frequency of contact. The respondents at Michigan State University were presented with a list of Indians on campus and asked to indicate who they saw: a) occasionally, b) fairly often, and c) very often. The proportion of individuals within their own native tongue group they saw either occasionally, fairly often, or very often was calculated for each respondent. (Native tongue was determined from the item on the questionnaire asking what language the respondent considered to be his native tongue). The proportions were averaged for each native tongue group, i.e., a mean proportion of within-group contact was calculated for each language group. There were five languages listed as the native tongue by five or more Indians: Hindi, Gujarati, Punjabi, Tamil, and Telugu. Table 101 shows the mean proportion of contact in all categories within each of these native tongue groups.

The same procedure was followed in the calculation of two other mean proportions of contact. The proportion of individuals within the native tongue group seen fairly often or very often was calculated as was the proportion of individuals within the native tongue group seen very often. Table 101 also shows these mean proportions.

The table shows that except for Punjabi speakers,the speakers of these languages who had any interaction at all in the Indian community did so with more than half of their language group. The same is true when it was the "fairly often" and "very often" interaction category that was being considered or when it was the "very often" category. The exception was the Hindi group which was quite a bit larger than the others. Table 101 also shows the two South Indian languages, Tamil and Telugu, to have the highest within-group interaction rates. This substantiates informal reports from the South Indians that they "stick together" because they feel North Indian students didn't really like them.

TABLE 101

Mean Proportions of Contact in Native Tongue Groups

		Frequency of Contact in Native Tongue Group		
Native Tongue Group	Number in Native Tongue Group	Mean Proportion of Contact: Occasional, Fairly Often, and/or Very Often	Mean Proportion of Contact: Fairly Often and/or Very Often	Mean Proportion of Contact: Very Often
Hindi	14	.72	.44	.21
Gujarati	7	.82	.60	.57
Punjabi	5	.31	.20	.06
Tamil	6	.93	.95	.65
Telugu	5	.95	.95	.60

The second measure of interaction used was a measure of friendship choices. The students were asked to indicate

their casual and close friends on the roster of Indian students. The proportion of casual and/or close friends within the native tongue group was calculated for each respondent. A mean proportion of casual and/or close friends was calculated for each of the five language groups: Hindi, Gujarati, Punjabi, Tamil, and Telugu. The same procedure was followed to calculate a mean proportion of close friends for each of the five language groups. Table 102 shows these mean proportions. The friendship results parallel the interaction results. Except for the Punjabis, those Indians who listed any friends in the Indian community did so for more than half of their own language group. Again it was the Tamil and Telugu speakers who had the highest proportions for the "casual and close friend" category. For the"close friend" category the picture changed somewhat. It was the Tamil and Gujarati speakers who had the highest within-group ratio.

No statistical test was made for the hypothesis that interaction generally follows native tongue within the Indian community on the campus. It appears, however, from Tables 101 and 102 that there is support for the hypothesis.

Hypothesis V

b) Interaction is related to the heterogeneity of language liberalism among family, subcaste, social class and region.

The measure of interaction used to test this hypothesis was constructed to indicate how much of each student's discussion about Nehru's death took place in the Indian community. The measure used was the Nehru Discussion Index described in Chapter V.

Individuals were divided into categories according to whether their reference groups had: a) all non-liberal Language Indices, b) all Liberal Language Indices or c) some

TABLE 102

Mean Proportions of Friendships in Native Tongue Groups

		Closeness of Friendships in Native Tongue Group	
Native Tongue Group	Number in Native Tongue Group	Mean Proportion of Close and/or Casual Friends	Mean Proportion of close Friends
Hindi	14	.53	.22
Gujarati	7	.93	.57
Punjabi	5	.32	.10
Tamil	6	.95	.84
Telugu	5	1.00	.31

Liberal and some non-Liberal Indices. A mean Nehru Discussion Index was calculated for each of the three categories. Table 103 shows these means. Differences between pairs of means were tested for significance (t test) and found not to be significant.

Hypothesis V

c) Interaction is related to the importance of family, subcaste, social class and region.

The importance ratings an individual gave his family, subcaste, social class and region were summed and a mean calculated for the individual. This mean was an indication of how important the student considered his groups to be to him.

TABLE 103

Relationships between Heterogeneity of Language Liberals and Discussion about Nehru's Death

	Nehru Discussion Index		
Reference Groups	Mean	S.D.	N
Homogeneous Reference Groups: All have non-Liberal Language Indices	.45	.33	13
Homogeneous Reference Groups: All have Liberal Language Indices	.45	.37	9
Heterogeneous Reference Groups: Some have Liberal and some have non-Liberal Language Indices	.63	.43	7

To test Hypothesis Vc, the mean importance ratings were correlated with the measures of discussion concerning Nehru's death. The correlation was based on a sample of 42. Table 104 gives the result.

The significant correlation indicates that the more important the individual felt his reference groups to be to him, the less his discussion within the Indian community relative to his discussion on the American community about the death of Nehru.

TABLE 104

The Relationship between Discussion about Nehru Death and Importance of Reference Groups

	Mean Importance of Reference Groups
Nehru Discussion Index	$r = -.44^{**}$

**Significant at the .01 level.

DISCUSSION: HYPOTHESES V_a, V_b, V_c

There was some evidence (not tested for statistical significance) that native tongue was related to friendship and contact patterns within the Indian community. This may have been due to the influence of reference groups and/or it may have been a psychological factor--a relaxation from the strain of constantly speaking in a foreign tongue.

The heterogeneity of Language Liberalism Indices among reference groups was not related to the patterns of discussion concerning Nehru's death. Those whose reference groups were perceived to be homogeneous with regard to language attitudes talked to the same proportions of Indians and Americans as did those who saw their reference groups as heterogeneous. It may be that the reference groups in India were too remote to affect interaction patterns in the U.S. It may be, too, that the question of interaction with Indians vs. interaction with Americans was outside the usual concerns of the reference groups. That is, the reference groups may have had much to say about interaction with Indians, but little about interaction with non-Indians because the issue arose infrequently in India.

Interaction was related to the importance of the reference groups. The more important the individual felt his reference groups to be to him, the more discussion about Nehru's death he had within the American community relative to that within the Indian community. It is difficult to

interpret this finding. It may be that the available American and Indian audiences were of different kinds and that the respondent was searching in the American community for substitutes for his reference groups in India. The largest number of Indians present were students and it is a fair assumption that for most respondents the Indian audience was a student audience. The American audience could have been any audience--perhaps the same kind of audience as his reference groups in India--e.g., families, professors, etc. The data do not include any information about the American audience.

HYPOTHESIS VI. LANGUAGE LIBERALISM IS RELATED TO ATTITUDES TOWARD CHANGE AND POLITICAL CONTROL

Hypothesis VI

a) Language liberalism is related to change orientation.

The hypothesis was tested by relating the respondent's Orientation Toward Change Index, Confidence, Motivation and Self Percept scales to his Language Liberalism Index. Chi squares and product moment correlations were calculated. Table 105 displays the findings.

The only personality scale relating to Language Liberalism was Self Percept. The relationship was negative. Individuals who saw themselves as adventuresome and liking to try new things professed the most conservative language attitudes. Conversely, those students who were the most conservative about trying new things were the most liberal when it came to the question of language attitudes. The sample size for the correlation was 69.

TABLE 105

Relationships between Language Liberalism and Change Orientation

Change Orientation	Language Liberalism Index
Confidence Motivation Self Percept	$r = -.29^*$
Orientation Toward Change Index	

*Significant at the .05 level.

Hypothesis VI

b) Language liberalism is related to approval of social change in India.

The students' Language Liberalism Indices were compared to their Indices of Social Change Approval. Language Liberalism was also compared to the items comprising the Indices of Social Change Approval: Approval of Social Change Speed, Approval of Social Change Direction and Approval of Social Change Scope. The comparisons were made by means of chi squares and correlation coefficients. These findings are also displayed in Table 106.

The positive correlation coefficient between the approval of the direction of social change and the language liberalism of the students indicates that the more the individuals were inclined to approve of the direction of India's social change, the more liberal were their language attitudes. The correlation was based on a sample of 79.

The significant chi square between the approval of the scope of India's social change and language liberalism appears to reflect a curvilinear relationship. Indian students who expressed liberal attitudes about language tended to feel one of two ways about the scope of India's social change: they either approved very much or they disapproved very much. Students with conservative language attitudes expressed more moderate approval of the scope of changes. The sample size for the chi square statistic was 76.

TABLE 106

Relationships between Language Liberalism and Approval of Social Change in India

Approval of Social Change	Language Liberalism Index
Approval of Social Change Speed	
Approval of Social Change Direction	r = .24*
Approval of Social Change Scope	X2*
Index of Social Change Approval	

*Significant at the .05 level

Hypothesis VI

c) Language liberalism is related to attitudes concerning where government power should reside

Four sets of measures involving attitudes concerning where government power should reside were used to test this hypothesis. These sets of measures are described in Chapter V. Briefly they are:

i) Government Power measures: ratings of how much power the Central, state and local governments each should have.

ii) Difference-Power measures: differences between the power ratings for each pair of government levels.

iii) Outcome measures: ratings of how much, if at all, the higher government levels should prevail when two government levels conflict.

iv) Power Index: the sum of the three Outcome measures calculated in a manner such that the higher the Power Index, the stronger the higher government levels should be in comparison to the lower levels.

Language Liberalism scores were examined in relationship to the four sets of power measures. Correlation

coefficients and chi squares were used to test the hypothesis. The results are found in Table 107.

i) Government Power Measures: Significant and positive correlations were found between Language Liberalism and two of the three Government Power measures. Individuals with high Language Liberalism Indices accorded the state and local governments a high degree of power. The correlations were based on samples of 78 and 77 respectively.

ii) Difference-Power Measures: A significant and negative correlation was found between the Language Liberalism Index and the difference in power between the Central and state governments. This correlation indicates that the most liberal language attitudes belonged to individuals who accorded the Central government less power than the state government or who accorded the two government levels the same power. Conservative language attitudes were found for those who granted the Central government more power than the state government. The correlation was based on a sample of 78 power ratings.

iii) Outcome measures: The significant chi square between Language Liberalism and outcome in conflicts between Central and state governments reflects a curvilinear relationship. The most liberal language attitudes were held by those individuals who felt that the higher level of government should usually dominate the lower. Students with conservative language attitudes took extremes on the government conflict question. They chose either to minimize or maximize the

dominance of the Central government over the state government by indicating that the Central government should always prevail or it should prevail one half or less of the time. The sample size for the chi square statistic was 77.

iv) Power Index: Neither the chi square nor the correlation coefficient calculated between the Power Index and the Language Liberalism Index was significant.

TABLE 107

Relationships between Language Liberalism and Attitudes Concerning Where Government Power Should Reside

Attitudes Concerning Government Power	Language Liberalism Index
Power measures	
Central Government Power	
State Government Power	r = .24*
Local Government Power	r = .24*
Difference-Power measures	
Central minus State Government	r =-.23*
State minus Local Government	
Central minus Local Government	
Outcome measures	
Central vs. State Government	x^{2}*
State vs. Local Government	
Central vs. Local Government	
Power Index	

*Significant at the .05 level

DISCUSSION: HYPOTHESES VIa, VIb, VIc

Hypothesis VI predicted relationships between language attitides and attitudes toward change and political control.

Most of the findings were in the direction opposite to that expected.

The individual who pictured himself as wanting to explore and liking to try new things had non-liberal or conservative language attitudes. This was contrary to expectation and is difficult to explain.

Indians who had liberal language attitudes approved of India's social change. This finding was consistent with the prediction. Presumably, liberalness in the realm of language was associated with the desire to see India modernized. The validity of this interpretation depends on the interpretation of "direction of social change". The respondents may or may not have viewed India's social change as directed toward modernization.

In conjunction with this was a second finding concerning social change. Respondents with liberal language attitudes took one of two extreme positions. They either approved very much or they disapproved very much of the scope of India's social change. Interpretation of this finding is difficult. More information about how social change was viewed is necessary. It may be that respondents with liberal language attitudes would have liked to see large scale social changes, but differed among themselves as to the scale the changes should be at that point in India's progress. That is, some may have felt changes should start in all areas at once while others felt that the scope should be smaller at the start and gradually increase. By the same token,

respondents with liberal language attitudes might all have agreed that the scopeof India's social change should be small (or any other degree of scope) yet differed among themselves as to how large they perceived the scope of change actually to be.

Indians with liberal language attitudes were found to accord high power to the state and to the local governments. They also minimized power differences between Central and state governments. The findings seem to reflect one of two things. Either the respondents with liberal language attitudes simply were liberal and wanted to give every government level much power or they were identified much more at the regional and somewhat more at the local level than were their fellow countrymen who possessed more conservative language attitudes.

HYPOTHESIS VII. LANGUAGE SPECIALIZATION IS RELATED TO ATTITUDES TOWARD CHANGE AND POLITICAL CONTROL

Hypothesis VII

a) Language specialization is related to change orientation.

To test this hypothesis, the six language specialization measures concerned with language usage in India were each related to the Orientation Toward Change Index and its scales. The statistical tests used were chi squares and correlation coefficients. Table 108 presents the findings. The only significant comparison out of the 24 made was between Self-Percept and number of places in which an individual said he used certain languages. The Self Percept data were fairly normally distributed. The number of places named was skewed with most people naming two or three. It is not clear what pattern exists between Self Percept and the number of places although it may well be a positive one with Self Percept increasing as the number of places increases. The chi square was based on 70 individuals.

TABLE 108

Relationships between Language Specialization and Change Orientation

Language Specialization Measures	Change Orientation			
	Confidence	Motivation	Self Percept	Orientation Toward Change Index
Languages People				
Languages Places			X^{2}*	
Languages Occasions				

Hypothesis VII

b) Language specialization is related to approval of social change in India.

Language specialization measures were examined in relation to the Indices of Social Change Approval and their components. The statistics used were correlation coefficients and chi squares. The 24 comparisons yielded four significant findings. Table 109 presents the findings.

A significant chi square was found between the Index of Social Change Approval and the number of different people with whom an individual used particular languages. The pattern of responses was not clear, but appeared to be curvilinear. Students who expressed little or great approval of social change also indicated that there were few people with whom they used particular languages. Conversely, individuals expressing moderate approval of the social change in India were the individuals who said that they used particular languages with a large number of people. The chi square was based on data from 76 respondents.

The number of languages used in particular places related to all three components of the Index of Social Change Approval. The relationship with Approval of Social Change Speed tended to be U shaped and the relationships with direction and scope were negative. In the first instance, feelings that India's changes were occurring either too slowly or too quickly were associated with greater language specialization while moderate approval of social change speed was associated with lesser language specialization. Approval of

the direction of India's changes and approval of the scope of India's changes were paired with a lesser amount of language specialization. The Indian student who said that he used a large number of languages in particular places tended to feel that India's social changes were occurring either too slowly or too quickly, that about half the changes were in the right direction and that these changes were somewhat too small in scope. The chi square calculated between Approval of Social Change Speed and language specialization by place was based on 77 respondents. The correlation coefficients for direction and scope were based on samples of 79 and 78 respectively.

TABLE 109

Relationships between Language Specialization and Approval of Social Change in India

Language Specialization Measures	Approval of Social Change Speed	Approval of Social Change Direction	Approval of Social Change Scope	Index of Social Change Approval
Languages People				X^2*
Languages Places	X^2*	r = -.26*	r = -.28*	
Languages Occasions				

*Significant at the .05 level.

Hypothesis VII

c) Language specialization is related to attitudes concerning where government power should reside.

Hypothesis VIIc was tested by examining the relationships between languge specialization measures and i) Government Power measures, ii) Difference-Power measures, iii) Outcome measures and iv) the Power Index. Correlations and chi squares were computed between each of the language specialization measures and each of the power measures. The significant results are displayed in Table 110.

i) Government Power measures: Two significant relationships were found between the power accorded the Central government and the language specialization measures concerning languages used in particular places. Both the correlation coefficient computed for the number of languages used and the coefficient computed for the number of different places in which languages were used were significant. The correlations were both computed on data for 80 respondents. The correlations were significant at the .05 level. Table 110 shows these relationships.

In both instances, the correlations are negative, indicating greater specialization (i.e. more languages named and more places cited) was associated with a desire to accord the Central government less power.

No relationships appeared between the language specialization measures and the power accorded the state government.

For the local government, two statistically significant relationships emerged from the six comparisons. Chi squares, calculated on samples of 80 and significant at the .001 level, were found between the power granted local governments and the number of languages used a) with particular people and b) in particular places. The exact pattern of relationships was not clear from the chi square tables.

ii) Difference-Power measures: Language specialization measures did not relate to any of the difference-Power measures.

iii) Outcome measures: No significant relationships were found between the language specialization measures and the questionnaire items asking what the outcome should be when pairs of government levels were in disagreement.

iv) Power Index: A positive and significant correlation was found between the number of languages used with particular people and the degree to which conflicts involving government levels should be resolved in favor of the higher government levels. The correlation was based on data from 79 respondents. It indicated that respondents who tended to resolve government conflicts in favor of the higher government levels also tended to use a relatively large number of languages when conversing with particular people.

DISCUSSION: HYPOTHESES VIIa, VIIb, VIIc

Hypothesis VII predicted relationships between language specialization and attitudes toward change and political control. Support for this hypothesis was found. Much language

specialization was practiced by students who saw themselves as adventuresome and interested in trying new things. There was nothing in the data to explain why this might be. A possible explanation is that an individual with such a personality might get himself into a variety of groups and social situations and such groups and situations might require greater specialization of language usage. Conversely, students who didn't like new experiences might have had more restricted ranges of social settings, i.e., homogeneous social settings which required the use of very few different languages.

Language specialization related to approval of India's social change in a rather bewildering manner. Great specialization was associated with feelings that social change was occurring too slowly. Little specialization was associated with feelings that social change was in the right direction, but that it was too small in scope.

Interpretation of such findings is difficult. It was assumed that the social change occurring in India was primarily Western and "modern" in nature. Indian students may not have viewed their social change in this light. They may have thought of it as occuring in some other manner. Unfortunately, no questions were asked to determine just how the changes were viewed. If the students did indeed view the change as Westernization, those who felt it was not occurring rapidly enough may have been sitting in the middle of the change, i.e., they may have lived in very heterogeneous worlds

TABLE 110

Relationships between Language Specialization and Attitudes Concerning Where Political Power Should Reside

Attitudes Concerning Government Power	Language Specialization Measures					
	Languages	People	Languages	Places	Languages	Occasions
Power measures						
Central Government Power State Government Power Local Government Power	X^{2***}		X^{2***}			
			r = -.28*	r=-.23*		
Difference-Power measures						
Central minus State Gov't. State minus Local Gov't. Central minus Local Gov't.						
Outcome measures						
Central vs. State Government State vs. Local Government Central vs. Local Government						
Power Index	r= .22*					

* Significant at the .05 level.
*** Significant at the .001 level.

which necessitated the use of many languages. Further, those who needed to practice little specialization might have been living to a large extent in the traditional India or to a large extent in the "Western" India. The result of either of these alternatives could have been social situations which were rather homogeneous in terms of their demands for particular languages.

Another interpretation of the findings about language specialization and social change approval concerns how tired the respondents were of the social rules regarding their language use. If the respondents were tired of following a multitude of such social rules, then the feelings of the great "language specializers" that social changes were too slow in coming are quite understandable. In like manner, feelings that social changes were in the right direction but too small in scope on the part of those practicing little language specialization are also understandable.

Language specialization related to where the student felt government power should reside. Those who generally favored the balance of power at higher government levels practiced much language specialization. Little specialization, however, was practiced by those according the Central government much power in general. The findings appear to be contradictory. This is not completely true because the measures used to test the hypotheses differed. The first government power measure discussed was based upon relative power, i.e., Central vs. state, state vs. local, and Central vs. local governments. The second power measure was not a

relative one. It was simply a rating of how much power the respondent felt the Central government should have. The specialization measures differed too. It was the number of languages used and the number of places in which they were used that correlated with the Central government power ratings and the number of languages used with particular people which related to the Power Index.

To summarize the somewhat confusing findings: A high degree of language specialization was practiced by those who generally accorded the Central government a low degree of power but who favored the upper government levels when there was conflict between levels.

HYPOTHESIS VIII. INTERACTION IS RELATED TO ATTITUDES TOWARD CHANGE AND POLITICAL CONTROL

Hypothesis VIII
a) Interaction is related to change orientation.

The Orientation Toward Change Index and its scales were correlated with the Nehru Discussion Index. Chi squares were also calculated between the personality measures and the Nehru Discussion Index. None of the relationships was significant. The personality measures were not related to the proportion of discussion occurring within the Indian community relative to that occurring within the American community.

Hypothesis VIII
b) Interaction is related to approval of social change in India.

Chi squares and correlation coefficients were calculated between the Nehru Discussion Index and i) the Index of Social Change Approval and ii) the items comprising the index of Social Change Approval. Table 111 presents the results. A positive correlation, significant at the .05 level, was found between the Nehru Discussion Index and approval of the direction of India's social change. This means that Indian students who approved of the direction of India's social change conversed mainly with other Indian students about Nehru's death. The sample size was 57.

Hypothesis VIII
c) Interaction is related to attitudes concerning where government power should reside.

To test this hypothesis the Nehru Discussion Index was paired with each of the 10 power measures. Both chi squares and correlations were calculated between the Nehru Discussion Index and the power measures. Table 112 shows the results.

TABLE 111

Relationships between Discussion about Nehru's Death and Approval of Social Change in India

Approval of Social Change	Nehru Discussion Index
Approval of Social Change Speed Approval of Social Change Direction Approval of Social Change Scope	r = .28*
Index of Social Change Approval	

*Significant at the .05 level.

i) Government Power measures: A significant chi square was found between the Nehru Discussion Index and the power accorded the local government. The relationship appeared to be curvilinear with the extremes of almost no interaction with Indians and almost all interaction with Indians associated with the least power for the local government. The middle range, where Indian-non-Indian interaction was about evenly balanced, was associated with the greatest amount of power for local government. The chi square was based on a sample of 56.

ii) Difference-Power measures: No significant relationships were found between Difference-Power measures and the Nehru Discussion Index.

iii) Outcome measures: When the power measure was one of who should prevail in a situation of clash between government levels, significance was found for the outcome concerning Central and state governments. Once again the relationship was curvilinear with the greatest and the least

proportions of interaction with Indians matched with the least power difference between the Central and state government. The middle-of-the-roaders whose interaction was about half Indian and half non-Indian gave the Central government level a greater edge over the state level. This chi square was calculated on 55 individuals.

iv) Power Index: A significant chi square was found between the Power Index and the Nehru Discussion Index. The chi square was based on 45 individuals. Visual inspection of the chi square table showed the relationship to be curvilinear. Very great and very little discussion in the Indian community were associated with a low Power Index. A moderate amount of discussion of Nehru's death within the Indian community relative to the amount of discussion within the American community was associated with a higher Power Index.

TABLE 112

Relationships between Discussion about Nehru's Death and Attitudes Concerning Where Government Power Should Reside

Attitudes Concerning Government Power	Nehru Discussion Index
Power measures	
Central Government Power State Government Power Local Government Power	x^{2}**
Difference-Power measures	
Central minus State Government State minus Local Government Central minus Local Government	
Outcome measures	
Central vs. State Government State vs. Local Government Central vs. Local Government	x^{2}*
Power Index	x^{2}*

*Significant at the .05 level.
**Significant at the .01 level.

DISCUSSION: HYPOTHESES VIIIa,VIIIb, VIIIc

Hypothesis VIII predicted a relationship between interaction and attitudes toward change and political control. No relationship was found between interaction and change orientation. It was expected that respondents with a positive change orientation would seek out Americans. The lack of support for this hypothesis may be a function of the interaction measure used to test the hypothesis. The interaction measure employed was not a general one. It was a very specific one about a very Indian event--the death of Nehru.

Relationships were found between interaction and approval of India's social change. Indian students who approved of the direction of India's social change discussed Nehru's death with Indians more than with Americans. Interpretation of such a finding requires more information about the discussion than was available in this study. Possible reasons for such a finding are that the "approvers" of India's social change credited Nehru with the change and as such may have wished to mourn India's loss together. Further, they may have been very concerned about India's future--who would direct India now and would these changes they liked be continued? The respondents at the other end of the continuum were not strong disapprovers--they thought that about half the changes were in the right direction and half in the wrong direction. Perhaps for them, the worry that the changes might not continue or continue in the same manner was not so great. Other kinds of changes might be just as welcome.

Interaction also related significantly to attitudes concerning where government power should reside. Indians who discussed Nehru's death in about the same proportion in the Indian and American communities gave the local government more power than did their compatriots, but tended to favor the Central government over the state government when the two conflicted. Indians whose interaction was primarily within the Indian community or primarily within the American community accorded the least power to the local government and desired the least power difference between the Central and local government in situations of conflict.

If discussion of Nehru's death can be taken as an indication of cultural identification, then it was the Indians who identified with both the American and Indian cultures who wished local governments to have a fair degree of power and who wished also to see the Central government dominate the state governments. Their compatriots who presumably identified primarily with either the American or Indian culture generally gave the local government little power and gave the Central and state governments the same power. They seemed to be interested in less power at both the local and Central levels. This may mean that their identification in India was mainly at the regional level.

HYPOTHESIS IX. ATTITUDES TOWARD CHANGE AND POLITICAL CONTROL ARE RELATED TO SOCIO-CULTURAL FACTORS

Hypothesis IX
a) Change orientation is related to rural-urban residence.

Contingency tables were made and a chi square and correlation coefficient calculated between the rural-urban measure and the Orientation Toward Change Index. The same procedure was followed between the rural-urban measure and each of the three major components of the Orientation Toward Change Index. The sample sizes for analyses of urban residence with the Orientation Toward Change Index and its components ranged between 57 and 84. None of the statistics was significant.

Hypothesis IX
b) Change orientation is related to amount of travel.

Correlation coefficients and chi squares were calculated between the Orientation Toward Change Index and seven travel measures. The seven travel measures were those used to test Hypotheses I and II. Three measures concerned travel inside India, two concerned travel outside India and two were measures of vicarious culture contact. Chi squares and correlations were also computed between the scales on the Orientation Toward Change Index and the travel measures. Table 113 shows the significant relationships found.

Sample sizes were 57 or 58 for statistics involving the Orientation Toward Change Index, 66 or 67 for Confidence, 84 or 85 for Motivation and 81 or 82 for Self Percept Scales.

The general measure regarding the amount of travel in India correlated significantly with the Orientation Toward Change Index. The higher the respondent's Orientation Toward Change Index, the more general travel he had done in India. No other measures of travel inside India related to the Orientation Toward Change Index or its scales.

One of the measures of travel outside India related to change orientation measures. The number of trips made outside India correlated in a significant and positive manner with the Orientation Toward Change Index and with the Self Percept scale. The higher the individual's Orientation Toward Change Index and the higher his Self Percept score, the greater the number of trips he had made outside India.

One of the measures of vicarious culture contact also related to the Orientation Toward Change Index and the Self Percept scale. The relationships were positive. The more reading about other cultures an individual had done, the higher his Orientation Toward Change Index and the higher his Self Percept score.

Hypothesis IX
c) Change orientation is related to social class.

An index of social class was created by summing z scores on seven variables: per capita family income, number of books in family library, number of servants in family, father's occupation, father's educational level, mother's educational level, and proportion of college-age brothers and sisters attending college. A fuller description of this index appears in Chapter V.

TABLE 113

Relationships between Change Orientation and Travel

Change Orientation	Travel inside India			Travel outside India		Vicarious Culture Conta	
	Cities, Towns and Villages Lived in	States Lived in	General Travel in India	Trips Made Outside India	Countries Visited	Reading About other Cultures	Family Contact with non-Indians
Confidence Motivation Self Percept				r=.26*		r=.28*	
Orientation Toward Change Index			r=.30*	r =.26*		r=.28*	

*Significant at the .05 level.

Chi squares and correlation coefficients were computed between the change orientation measures and the Social Class Index. The Social Class Index did not show any relationship to the Orientation Toward Change Index or to its components: Motivation, Confidence or Self-Percept.

Although the total measure of social class did not relate to change orientation, some of its components did. Table 114 shows these relationships.

The relationship between Self Percept and number of servants appears to be a positive one with fewer servants associated with less inclination to see oneself as liking to try new things.

A significant positive correlation was found between mother's education and the respondent's Self Percept score. The correlation indicates that the greater the education of the mother, the more the son saw himself as interested in experimenting with new things. Sample size for the correlation was 79. Although the sample was not small, there was a concentration of mothers in the low education categories. Beyond the level of moderate education the data were not sufficient to test the relationship between mother's education and other variables.

Hypothesis IX

d) Change orientation is related to family tradition of foreign study.

A mean Orientation Toward Change Index was calculated for students who were the first in their families to study abroad and a mean was calculated for those who were not the

TABLE 114

Relationships between Change Orientation and Social Class

	Change Orientation			
Social Class	Confidence	Motivation	Self Percept	Orientation Toward Change Index
Per Capita Income				
Books in Family Library				
Number of Servants			X^2*	
Father's Education				
Mother's Education			r=.23*	
Father's Occupation				
Brothers and Sisters in College				
Social Class Index				

*Significant at the .05 level

first in their families to study abroad. The means were compared by t test. The same procedure was repeated for the scales forming the Orientation Toward Change Index. Mean Confidence, Motivation, and Self Percept scores were calculated for both groups of students and compared by t test.

No significant differences were found. Whether or not an individual was the first in his family to study abroad bore no relationship to his Orientation Toward Change Index, Confidence score, Motivation score or Self Percept score.

Hypothesis IX

e) Change orientation is related to North-South residence in India.

The Orientation Toward Change Indices were examined separately for North Indians and for South Indians. A t test was calculated between the mean Orientation Toward Change Indices

for the two groups of students. The t test was not significant.

The same procedure was followed with the Confidence, Motivation, and Self Percept scales. North Indians and South Indians differed significantly on only one scale, Motivation. The t, significant at the .05 level, indicated that lower motivation was associated with residence in the South and higher motivation with residence in the North.

Hypothesis IX

f) Approval of social change in India is related to rural-urban residence.

Correlations and chi squares were calculated between rural-urban residence and the Index of Social Change Approval. It will be recalled from Chapter V that this Index is a composite of responses to three items concerning approval of the speed, direction and scope of India's social change. Correlations and chi squares were also calculated between rural-urban residence and each of the three items comprising the index. The calculations were based on samples of 88 and 89.

No significant relationship was found between rural-urban residence and the Index of Social Change Approval. One of the three components of the index related to urban residence. A negative correlation was found between approval of the speed at which change was progressing and rural residence. Individuals who felt that the changes were being made too quickly or at about the right speed most often came from small towns. Table 115 shows this relationship.

TABLE 115

Relationships between Approval of Social Change in India and Rural-Urban Residence

	Approval of Social Change			
	Approval of Social Change Speed	Approval of Social Change Direction	Approval of Social Change Scope	Index of Social Change Approval
Rural-Urban Residence	r=-.25*			

*Significant at the .05 level

Hypothesis IX

g) Approval of social change in India is related to amount of travel.

The travel measures were related to the social change measures by means of correlation coefficients and chi squares. The statistics were based on samples ranging in size from 88 to 92. Table 116 shows the significant results.

The number of states lived in by the student related negatively to his approval of the direction of social change in India. Indian sojourners who had lived in numerous states tended to feel changes were in the wrong direction.

The same relationship appeared when individuals were asked how much travelling they had done in India. Those who said they had done the most travelling tended to feel less approval for the direction of India's social changes than those who had travelled less.

Negative relationships were found between the number of trips an individual had made outside India and his Index of Social Change Approval and between the number of trips outside India and Approval of Social Change Speed. Indian students who had made the fewest trips outside India had high Indices of Social Change Approval and felt that India's social change was occurring too rapidly.

The Index of Social Change Approval did not relate to either of the vicarious culture contact measures, but the Approval of Social Change Speed did. Indians who had done much reading about other cultures felt social changes were occurring too slowly.

Hypothesis IX
h) Approval of social change in India is related to social class.

Chi squares and correlation coefficients were calculated between the Index of Social Change Approval and the social class indices. No significant relationships were found; approval of India's social change did not relate to social class.

Hypothesis IX
i) Approval of social change in India is related to family tradition of foreign study.

A mean Index of Social Change Approval was calculated for Indian students who were the first in their families to study abroad and a mean Index was calculated for the students who were not the first in their families to study abroad. The means were compared by t test and the difference between them found not to be significant. The same procedure was

TABLE 116

Relationships between Approval of Social Change in India and Travel

Approval of Social Change	Travel inside India			Travel Outside India		Vicarious Culture Contact	
	Cities, Towns and Villages Lived in	States Lived in	General Travel in India	Trips Made Outside India	Countries Visited	Reading About Other Cultures	Family Contact with non-Indians
Approval of Social Change Speed				r=-.26*		r=-.21*	
Approval of Social Change Direction		r=-.28**	X^2*				
Approval of Social Change Scope							
Index of Social Change Approval				r=-.24*			

* Significant at the .05 level
** Significant at the .01 level.

followed with each of the components of the Index of Social Change Approval. No differences were significant. The respondent's approval of India's social change did not relate to whether or not he was the first in his family to study abroad.

Hypothesis IX

j) Approval of social change in India is related to North-South residence in India.

A mean Index of Social Change Approval was calculated for North Indians as were means for each component of the Index. They were compared by t test to corresponding means for South Indians. The t tests were not significant. The approval of India's social change expressed by North Indians did not differ from that expressed by South Indians.

Hypothesis IX

k) Attitudes concerning where government power should reside are related to rural-urban residence.

The four sets of measures about power were related to rural-urban residence by means of chi squares and correlation coefficients.

The only significant relationship found between urban residence and any of the measures concerning power and government levels was with the power the Central Government should have. As might be expected, individuals from more urban locales favored a stronger Central government than did individuals from rural areas. The correlation was .31 (significant at the .05 level) and was based on a sample of 91.

Hypothesis IX

1) Attitudes concerning where government power should reside are related to amount of travel.

Correlation coefficients and chi square values were calculated between travel and the power accorded government levels measures. Table 117 shows the significant statistics. The statistics were based on samples ranging in size between 86 and 92.

i) Government Power measures: The relationship between number of states lived in and power accorded the Central government was highly significant and appeared to be curvilinear. The greatest and the least power was accorded the Central government by individuals having lived in more states and moderate power was accorded the Central government by individuals having lived in fewer states.

The amount of contact the respondent's family had with non-Indians was related to the power the individual accorded the state government. The chi square was calculated on a sample of 92. The chi square table indicated a negative relationship between the two variables. The greater the power accorded the state, the less the family contact with non-Indians.

A significant negative correlation was found between power accorded the local government and the amount of reading the individual did about foreign countries. The greater the power accorded the local government, the less the reading done about foreign countries.

ii) Difference-Power measures: The difference in power accorded state and local governments and the difference in power between the Central and local governments was related to the number of states in which the individual had lived. Individuals who accorded the state government considerably more power than the local governments had lived in relatively more states. Individuals who accorded the state government very little power more than the local government had also lived in more states. Individuals who accorded the state government a moderate amount of power more than the local government had lived in fewer states. Indians living in either very few or very many states accorded the Central and local governments a smaller difference in power than did Indians living in an intermediate number of states.

iii) Outcome measures: One significant relationship was found between the Outcome measures and the travel measures. The relationship was between the state vs. local government measure and the number of trips made outside India. The greater the number of times an individual had left India, the less often the outcome favored the state. This correlation coefficient was computed on data for 86 individuals.

iv) Power Index: No significant relationships between the Power Index and the travel measures were found.

TABLE 117

Relationships between Attitudes Concerning Where Government Power Should Reside and Travel

Attitudes Concerning Government Power	Travel inside India			Travel Outside India		Vicarious Culture Contact	
	Cities, Towns and Villages Lived in	States Lived in	General Travel in India	Trips Made Outside India	Countries Visited	Reading About Other Cultures	Family Contact with non-Indians
Power measures							
Central Government Power		X^2***					
State Government Power							X^2*
Local Government Power						r=-.22*	
Reference-Power measures							
Central minus State Government							
State minus Local Government		X^2***					
Central minus Local Government		X^2***					
Outcome measures							
Central vs. State Government							
State vs. Local Government				r=-.22**			
Central vs. Local Government							
Power Index							

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level.

Hypothesis IX

m) Attitudes concerning where government power should reside are related to social class.

The Social Class Index and each of its seven components were related to each of the 10 power measures by means of correlation coefficients and chi squares. The significant relationships are shown in Table 118.

i) Government Power measures: A significant chi square was found between father's education and power accorded the Central government. The chi square was calculated on a sample size of 92. The relationship appears to be curvilinear with both greater and lesser power accorded the Central government by individuals whose fathers had less education. Moderate power was accorded the Central government by individuals whose fathers had more education.

A significant negative correlation was found between per capita income measures and power accorded the local government. The higher the individual's per capita income, the less the power he accorded the local government. The sample size for this relationship was 74.

A significant negative correlation was also found between the number of family servants and power accorded the local government. The correlation indicated that the more servants a student's family had, the less power he was willing for the local government to have. The correlation was calculated for 92 Indians.

ii) Difference-Power measures: The per capita income measure related significantly to the state minus local

government measure. Visual inspection of the chi square table showed the relationship to be curvilinear. High and low per capita income were associated with small power differences between state and local governments. Calculations were based on a sample of 74.

The final significant relationship was a positive correlation between the number of family servants and the difference in power between Central and local governments. The larger the number of servants his family had, the greater the power the individual accorded the Central government relative to that accorded the local government. The sample size for this statistic was 90.

iii) Outcome measures: No significant relationships were found between the Outcome measures and any of the social class measures.

iv) Power Index: No significant relationships were found between the Power Index and any of the social class measures.

Hypothesis IX

n) Attitudes concerning where government power should reside are related to family tradition of foreign study.

For each of the ten power measures separate means were calculated for the students who were the first in their families to study abroad and for those who were from families where others had studied abroad. The differences between the pairs of means for each of the ten power measures were tested for significance by a t test. The tests were not significant. Whether or not the individual was from a

family where others had studied abroad did not relate to where he felt government power should reside.

Hypothesis IX

o) Attitudes concerning where government power should reside are related to North-South residence in India.

Means were calculated for the North Indians and for the South Indians for each of the ten power measures. The means for the North and for the South Indians for each power measure were compared by t test. The differences between the means were not significant.

DISCUSSION: HYPOTHESES IX_a, IX_b, IX_c, IX_d, IX_e, IX_f, IX_g, IX_h, IX_i, IX_j, IX_k, IX_l, IX_m, IX_n, IX_o.

Rural-urban residence was not a correlate of change proneness, but did show some relationship to approval of India's social change and attitudes concerning where government power should reside.

Relationships between rural-urban residence and change proneness had been expected. The failure to find relationships may be a function of the heavy concentration of the sample in the larger urban areas. The lack of relationships for the sample, too, may reflect an absence of any correlation between the personality and residence variables.

As expected, Indian students from the more rural areas were more likely to feel that India's social changes were occurring too rapidly, or at about the right speed. To these individuals, the changes must have appeared more drastic than they did to their more urban counterparts.

TABLE 118

Relationships between Attitudes Concerning Where Government Power Should Reside and Social Class

Attitudes Concerning Government Power	Social Class							
	Per Capita Income	Books in Family Library	Number of Servants	Father's Education	Mother's Education	Father's Occupation	Brothers and Sisters in College	Social Class Index
Power measures								
Central Government Power				X^{2}*				
State Government Power								
Local Government Power	r=-.28*		r=-.30**					
Difference-Power measures								
Central minus State Government.								
State minus Local Government.	X^{2}**							
Central minus Local Government			r=.23*					
Outcome measures								
Central vs. State Government								
State vs. Local Government								
Central vs. Local Government								
Power Index								

* Significant at the .05 level.
**Significant at the .01 level.

Also as predicted, urban dwellers accorded more power to the Central government than did their less urban counterparts. A possible interpretation is that the focus of rural folk was more often on local and/or regional affairs while that of the urbanite was broader. To the dweller in large cities, the need for a strong Central government might have seemed more obvious than to less metropolitan dwellers for whom the Central government may have seemed rather remote.

Travel related to the personality and attitude measures. Greater travel inside India, a greater number of trips made outside India, and greater reading done about other cultures were associated with a higher Orientation Toward Change Index for the individual. In like manner, the greater the number of trips he had made outside India and the greater the reading he had done about other cultures, the more likely the individual was to see himself as a person who liked to try new things. These results suggest rather clearly that the broader the range of culture contact, the more change prone the individual felt himself to be. This supported the hypothesis which was based on the theory that exposure to many ways of doing things and to many ideas broadened the individual's perspective and his interest in trying new things.

Travel also related to approval of India's social change. Respondents who had lived in many states or travelled a great deal in India seemed to feel that changes

were in the wrong direction. Again explanation of these relationships is hampered by lack of information on how the respondents viewed the changes. Indians who had made many trips outside India seemed to feel that India's change was too rapid and these Indians had low Indices of Social Change Approval. In contrast, respondents who had done much reading about other cultures felt that social change was too slow. The difference between these two sets of findings seems to be one of theory and practice. Reading about other cultures apparently imbued the student with the desire for faster change, but travelling inside and/or outside India resulted in dissatisfaction with the direction of change and in feelings that change was too rapid. Why travel resulted in these feelings was not apparent from the data collected in this study.

Travel related to attitudes concerning where government power should reside as well as to change proneness and approval of India's social change. Respondents who had lived in many states accorded either very much or very little power to the Central government, accorded the state government either much more or very little power relative to the local government, and accorded the Central and local governments nearly the same amount of power. (The last relationship was curvilinear with respondents who lived in few states also according Central and local governments nearly the same amount of power). The pattern of relationships seems to be fairly consistent. Individuals who have lived in relatively

more states either favored government power at the highest levels or favored it at the lowest levels. The intermediate position belonged to the residents of the fewest number of states. Residence in many states may have lead students to feel that India's subcultures were so diverse that India must have strong Central government in order to stay unified and progress. In contrast, it may also have resulted in feelings that no Central government could understand and administer to the multitude of subcultures and, therefore, these groups should be left alone to manage their own affairs.

Travel outside India was associated with a tendency to less often favor the state in state-local government disputes. The implications of this finding are not clear. Less power generally was accorded the state by respondents with the most non-Indian contact in India and less power generally was accorded the local government by respondents who read the most about other cultures. One interpretation of this is that vicarious culture contact resulted in a broader perspective which in turn was associated with less concern for state and local affairs.

Social class was related to some of the attitudes toward change and political control measures. The number of family servants and the amount of education of the mother were associated with Self Percept Scores. The greater the number of servants and the higher the mother's education, the more inclined the respondent was to perceive himself

as liking to try out new ideas. This result tends to support the observation in the literature that the upper classes actually do the changing. The results of this hypothesis indicate that it was the upper classes who more often saw themselves as liking to change.

There were no relationships between approval of India's social change and social class measures. If class differences in change proneness exist, they did not show up here in feelings about India's current change. Explanations for the absence of class differences start with the possibility that no such differences in fact, exist. Another possibility, however, is that individuals in the sample viewed the changes in different lights and this in turn was linked to their approval and disapproval of the speed, direction, and scope of the changes.

Social class differences were found for attitudes concerning where government power should reside. Respondents whose fathers had the highest education wished to confer moderate power on the Central government. The extremes (greatest and least) of power for the Central government were the desires of respondents whose fathers had low education. High family income was associated with less power for the local government and little difference in power between state and local governments. A larger staff of family servants was associated with less power for local governments and large differences in power between the Central and local governments. The picture emerging from

these findings is that respondents of higher social class wished to accord the Central government a moderate amount of power and wished the state and local governments to have considerably less power. Respondents from lower social classes desired relatively strong local governments and state governments. Respondents of lower social class were split on the power issue for the Central government: most wanted it to be relatively weak; a few wanted it to be extremely powerful.

The interpretation of the relationships found no doubt rests on a number of social and cultural factors not examined in this research. This research suggests that one such factor, however, may have been the realization of the need for Indian unity and with it a feeling that only a strong Central government could achieve this. It may be too, that North-South residence was a factor in conjunction with social class which affected feelings about government power. With the Central government located in the North of India and with the existence of North-South friction in India, geographic residence and social class may have operated together with regard to feelings about government power attitudes.

Whether or not the individual was the first from his family to seek education abroad more no relationship to any of the attitude toward change and political control measures. The hypothesis , made because of observations in the literature, received no support from the data.

The only difference found between North Indian residents and South Indian residents was in terms of motivation. North Indians said they had more motivation than South Indians. The motivation finding tends to substantiate the informal picture of the South Indian who doesn't feel he will be given a fair chance.

It had been expected that South Indians would want to accord the Central government less power than would North Indians. This was expected for two reasons: general resentment if the North by the South and the location of the Central government in the North of India. The failure to find North-South differences on the question of power for the Central government may have been a realization on the part of a majority of the students from the South as well as from the North that a strong national government is necessary to unify India. In addition, there may have been a number of North Indians who were "states' righters" who would not have wanted to see a strong Central government.

HYPOTHESIS X. ATTITUDES TOWARD CHANGE AND POLITICAL CONTROL ARE RELATED TO THE PERCEIVED LANGUAGE LIBERALISM OF REFERENCE GROUPS AND TO FEELINGS ABOUT THE REFERENCE GROUPS.

Hypothesis X

a) Change orientation is related to the language liberalism of family, subcaste, social class and region.

The Orientation Toward Change Index was correlated with the Language Liberalism Indices of each of the individual's groups. Confidence, Motivation, and Self Percept scores were also correlated with the language indices. Table 119 shows the significant relationships.

The statistics were based on rather small samples. A Language Liberalism Index was calculated only when responses for all six of its components were present. In like manner, Confidence, Motivation, and Self Percept scores were computed only when all items comprising the scale were answered. To have an Orientation Toward Change Index the student must have responded to every item in the Confidence, Motivation, and Self Percept scales. A missing response to any of the items in one of the indices or scales discussed above excluded the individual from consideration in any of the analyses involving that index or scale.

The result of this procedure was a severe reduction in sample size for many of the statistical comparisons. Sample sizes for statistics involving the Orientation Toward Change Index ranged from 8 to 18; those for Confidence from 8 to 19; Motivation, 11 to 23 and Self Percept, 11 to 22.

The Orientation Toward Change Index of the respondent related to the language liberalism of only one of his reference groups, his father. The negative correlation between the measures indicates that students with a positive orientation toward change considered their fathers to have conservative language attitudes. The correlation was based on a sample of 18.

A significant chi square was also found between Self Percept and the perceived liberalness of the father's language attitudes. Here also the relationship tended to be a negative one. Students who saw conservative or provincial attitudes on the part of their fathers saw themselves as people who liked to try new things. Confidence bore no relationship to the language attitude of the individual's membership groups nor did the motivation measure.

TABLE 119

Relationships between Language Liberalism of Reference Groups and Change Orientation

Change Orientation	Language Liberalism Indices				
	Father	Mother	Subcaste	Social Class	Region
Confidence Motivation Self Percept	X^2*				
Orientation Toward Change Index	r=-.51*				

* Significant at the .05 level.

Hypothesis X

b) Change orientation is related to the heterogeneity of language liberalism among family, subcaste, social class and region.

Individuals were divided into categories according to whether their reference groups had: a) all non-Liberal Language Indices, b) all Liberal Language Indices or c) some Liberal and some non-Liberal Indices. A mean Orientation Toward Change Index was calculated for respondents in each category. Mean Confidence, Motivation, and Self Percept scores were also calculated. Table 120 shows the means.

A significant difference (t test significant at the .05 level) was found between the mean Orientation Toward Change Index for respondents whose groups were all perceived to be liberal and respondents whose groups were heterogeneous. Respondents with heterogeneous reference groups had higher Orientation Toward Change Indices.

Hypothesis X

c) Change orientation is related to the Importance and liberalism of family, subcaste, social class and region.

The Orientation Toward Change Indices of the respondents were divided at the median. Scores in the "high" group ranged from 156 to 187. "Low" group scores ranged from 123 to 155. There were 29 scores in each group.

The mean importance attached to groups with liberal language attitudes by Indians with high Change Orientation Indices was calculated as was the mean importance attached to groups with liberal language attitudes by Indians with low Change Orientation Indices. The means were compared by t test.

TABLE 120

Mean Change Orientation Measures for Non-Liberal, Liberal and Heterogeneous Groups

	Change Orientation									Orientation Toward Change Index		
	Confidence			Motivation			Self Percept					
	Mean	S.D.	N	Mean	S.D.	N.	Mean	S.D.	N	Mean	S.D.	N
Reference Groups												
Homogeneous Reference Groups: All have non-Liberal Language Indices	85.01	12.47	13	20.56	2.65	17	51	4.45	15	154.13	15.75	10
Homogeneous Reference Groups: All have Liberal Language Indices	80.26	13.58	16	21.16	2.70	16	51	5.44	15	152.00	14.59	15
Heterogeneous Reference Groups: Some have Liberal Language Indices	91.03	13.52	8	19.11	5.26	11	56	8.45	12	170.17	11.42	8

The difference was not significant. The same procedure was followed for the importance ratings of groups with non-liberal language attitudes. This difference was also not significant. Table 121 shows all four mean importance ratings.

For individuals with a high Orientation Toward Change Index a t test was performed between the mean importance they attached to those of their reference groups with Liberal Language Indices and the mean importance they attached to those of their groups with non-Liberal Language Indices. The t was not significant. The same procedure was followed for individuals with a low Orientation Toward Change. This t test was not significant. Individuals with a high Orientation Toward Change Index did not consider their groups whose language attitudes were liberal as more important than their groups whose language attitudes were non-liberal. The same was true for individuals whose change orientation was low.

TABLE 121

Importance Attached to Liberal and Non-Liberal Reference Groups for Respondents with High and Low Orientation Toward Change Indices

Orientation Toward Change Index	Importance of groups with Liberal Language Indices			Importance of groups with Non-Liberal Language Indices		
	Mean	S.D.	N	Mean	S.D.	N
High	2.71	1.60	24	2.63	1.53	24
Low	3.50	1.06	8	3.50	1.64	6

Hypothesis X

d) Approval of social change in India is related to the language attitudes of family, subcaste, social class and region.

The indices of perceived language liberalism for the reference groups were correlated with the Index of Social Change Approval and the items composing the Index. Contingency tables were prepared and chi squares calculated. Table 122 shows the only significant relationship found.

The Index of Social Change Approval did not relate to any of the Language Liberalism Measures. One of the three components of the Index of Social Change Approval did relate, however. Approval of the direction of India's social changes related positively to the father's Language Liberalism Index. The greater the individual's approval of the direction of India's social change, the more liberal he considered his father's language attitudes to be. The correlation was based on data from 24 respondents.

TABLE 122

Relationships between the Language Liberalism of Reference Groups and Approval of Social Change in India

Approval of Social Change	Language Liberalism Indices				
	Father	Mother	Sub-caste	Social Class	Region
Approval of Social Change Speed					
Approval of Social Change Direction	r=.41*				
Approval of Social Change Scope					
Index of Social Change Approval					

*Significant at the .05 level.

Hypothesis X

e) Approval of social change in India is related to the heterogeneity of language liberalism among family, subcaste, social class and region.

To test this hypothesis individuals were divided into three groups: those whose membership groups were all perceived as having Liberal Language Indices, those whose membership groups were considered heterogeneous and those whose membership groups were felt to all have Non-Liberal Language Indices.

Chi squares were calculated between this measure of heterogeneity of language liberalism and i) Index of Social Change Approval, ii) Approval of the Speed of Social Change; iii) Approval of the Direction of Social Change and iv) Approval of the Scope of Social Change. None of the chi squares was significant. The perceived heterogeneity among reference groups regarding language attitudes bore no relationship to the approval felt for the current social change in India.

Hypothesis X

f) Approval of social change in India is related to the importance and language liberalism of family, subcaste, social class and region.

The Indices of Social Change Approval were divided into three groups: "high" (scores above 10), "medium" (scores of 10) and "low" (scores below 10).

For individuals in the "high" group, two means were calculated: the mean importance they attached to those reference groups whose language attitudes they saw as liberal, and the mean importance they attached to those

reference groups whose language attitudes they saw as non-liberal. Table 123 presents the means, A t test was calculated to test for significance between the two means. The t was not significant. The same procedure was followed for individuals in the "medium" and "low" groups. The t tests calculated for the "medium" and "low" groups also were not significant.

Individuals with varying degrees of approval for the current social change in India did not attach a different degree of importance to those reference groups whose attitudes they felt were liberal than they did to those groups whose attitudes they felt were not liberal.

TABLE 123

Importance Attached to Liberal and Non-Liberal Reference Groups for Respondents with High, Medium and Low Indices of Social Change Approval

Index of Social Change Approval	Importance of Groups with Liberal Language Indices			Importance of Groups with Non-Liberal Language Indices		
	Mean	S.D.	N	Mean	S.D.	N
High	3.15	1.5	20	3.20	1.5	17
Medium	2.80	1.6	6	3.20	1.6	13
Low	2.60	1.7	10	2.30	1.5	15

Hypothesis X

g) Attitudes concerning where government power should reside are related to the language liberalism of family, subcaste, social class and region.

Correlations and chi squares were calculated between the power measures and the Language Liberalism Indices for

the father, mother, subcaste, social class and region. Four relationships were significant. Table 124 shows these relationships.

i) Government Power measures: No significant relationships were found between the Government Power measures and the Language Liberalism Indices.

ii) Difference-Power measures: A significant negative correlation was found between the Language Liberalism Index for the father and the difference in power the respondent gave the Central and state governments. Sons whose fathers had liberal language attitudes granted the Central and state governments similar degrees of power. Sons who saw their father's attitudes as conservative wished to give the Central government more power than the state government. The sample size for the correlation was 22.

A significant relationship was also found for the liberalness of Mothers' attitudes and the Difference-Power measure calculated between the Central and state governments. The pattern of relationships was not clear in the chi square table, however. The sample size was too small (only 11 individuals) to determine anything conclusive about the relationship.

iii) Outcome measures: A significant chi square was found between the Language Liberalism Index of the father and the outcome in Central and state government conflict. The sample contained only 21 people. It was not clear from the chi square table what form the relationship between the two variables took.

When disagreement exists between state and local government, the relationship between the desired outcome of this disagreement and the perceived liberalism of the father was clear. The student who felt both levels should prevail about half the time saw his father as having conservative language attitudes. The son who felt the state should usually or always prevail considered his father to have liberal attitudes about language. The correlation was calculated on a sample of 21.

iv) Power Index: No significant relationships were found between the Power Index and the Language Liberalism Indices of the reference groups.

Hypothesis X

h) Attitudes concerning where government power should reside are related to the heterogeneity of language liberalism among family, subcaste, social class and region.

There were two tests of this hypothesis. For the first test, heterogeneity among the Language Liberalism Indices of reference groups was correlated with the difference in power accorded the Central and state governments. The correlation was not significant.

A correlation was also computed between the Outcome measure for conflict between the Central and state government and the heterogeneity of language liberalism measure for the second test of the hypothesis. The correlation was not significant.

TABLE 124

Relationships between Attitudes Concerning Where Government Power Should Reside and the Language Liberalism of Reference Groups

Attitudes Concerning Government Power	Language Liberalism Indices				
	Father	Mother	Subcaste	Social Class	Region
Power measures					
Central Government Power					
State Government Power					
Local Government Power					
Difference-Power measures					
Central minus State Government	r=-.42*	X^{2}**			
State minus Local Government					
Central minus Local Government					
Outcome measures					
Central vs. State Government	X^{2}*				
State vs. Local Government	r=.47*				
Central vs. Local Government					
Power Index					

* Significant at the .05 level
**Significant at the .01 level

DISCUSSION: HYPOTHESES X_a, X_b, X_c, X_d, X_e, X_f, X_g, X_h, X_i, X_j, X_k, X_l, X_m, X_n, X_o.

The first parts of Hypothesis X predicted relationships between change proneness and the language attitudes of reference groups. It was found that the individual with a high degree of change proneness saw his father as having conservative (non-liberal) language attitudes. This was a finding opposite to that expected. It had been expected that individuals with positive change orientations would have reference groups with liberal language attitudes. The findings suggest that the change prone person may have considered himself to be breaking tradition. Instead of a liberal background fostering an interest in new things, it appears to have been a traditional conservative background which imparted to the individual a desire for change. It should be remembered that the findings were all based upon the respondent's perceptions of himself and of his reference groups. Whether or not the significant statistical relationships found reflect the actual state of affairs is not known.

A further finding was that respondents who saw their reference groups as heterogeneous, i.e., some reference groups possessing liberal and some possessing non-liberal language attitudes, were more change prone than were respondents who considered all of their reference groups to be liberal. Individuals with homogeneous non-liberal reference groups occupied an intermediate position in terms of change proneness. This finding mirrored the previous one. Again

it was the liberalness of reference groups which was associated with a low change orientation.

One interpretation of this result is that having a wide range of opinions on language attitudes available means that no matter what the respondent does, he deviates from one group. Deviation is easy, the pressure of all groups is not strong--the individual is freer to make his own choice. Another possibility is that having reference groups with divergent opinions is like having a buffet--an introduction to a wide variety of positions which might not have even been considered had all the reference groups been more or less homogeneous.

Change orientation did not relate to the importance and liberalness of reference groups. Individuals with a high degree of change proneness did not consider their groups whose language attitudes were liberal as more important than their non-liberal groups. Importance and liberalness were not related for respondents with low change proneness. This finding is not surprising for two reasons. First, it was only the father's language attitudes which were associated with the change proneness of the respondent (attitudes of the mother, subcaste, social class and region did not relate). The importance ratings given all the respondent's reference groups were averaged to test this hypothesis which probably obscured any relationships which might have been present for any particular reference group. Second is the problem of the distribution of the importance

ratings. As mentioned earlier, the importance ratings for some reference groups were rather skewed.

Approval of the direction of India's social change was paired with liberal language attitudes on the part of the father. This was a relationship in the direction expected. It supports the expectation that liberal language attitudes on the part of reference groups will be reflected in liberal attitudes on the part of the respondent. It is noteworthy that the significant relationship occurred for the approval of social change direction measure rather than for the approval of speed or approval of scope measures.

The heterogeneity perceived among reference groups in terms of language attitudes did not relate to approval of India's social change. Approval of social change in India measures were measures of attitudes toward certain phenomena. The heterogeneity of opinions of reference groups on another issue such as language would not necessarily relate to the respondent's feelings about social change. This is particularly likely when it is remembered that it was with only one of the reference groups (father) that the respondent's opinions on language agreed. The heterogeneity of reference group language liberalism was a correlate of change proneness. Change proneness, however, was a personality variable--a way of looking at situations in general, rather than an attitude toward specific phenomena such as attitudes toward India's social change.

Approval of social change in India did not relate to the importance and liberalness of reference group language attitudes. There are two reasons which might account for this finding. Social change approval did not relate to the liberalism of reference groups at all, so a consideration of the importance of the groups didn't sharpen any existing relationships. As mentioned several times earlier, some of the importance ratings were quite skewed, thereby restricting statistical manipulation.

A few relationships were found between the language attitudes of reference groups and the individual's attitudes concerning where government power should reside. Individuals who saw their fathers as having liberal language attitudes granted the Central and state governments similar degrees of power, but felt that the state should usually or always prevail when disagreement occurred between state and local governments. It would appear that this relationship, like the one between the individual's language attitudes and attitudes concerning where government power should reside, reflect a general liberalism of attitude about government power. A fair degree of government power was granted to all levels of government by respondents whose fathers had liberal language attitudes. For those respondents the upper level of government retained the edge over the lower in cases of dispute between them.

Attitudes concerning where government power should reside were not related to the heterogeneity of reference

group language attitudes. Again there is evidence that a variety of reference group attitudes on one issue (language) did not relate to the respondent's attitudes on another (delegation of government power). Again the attitudes of the respondent concerning language agreed with only one of his reference groups and so the positions of the other reference groups might or might not have had any effect on the individual.

CHAPTER VII

SUMMARY

In the preceding chapter, the findings from each part of every hypothesis were presented. In the discussion at the end of every hypothesis, an attempt was made to knit together the findings from the whole hypothesis.

In this chapter, there is a further attempt to summarize by taking an overview of several hypotheses at once. Summaries for the Language and Culture hypotheses, for the Language and Personality hypotheses, and for the Culture and Personality hypotheses are presented. The summaries are followed by brief comments on the common threads running through results of these hypotheses.

Following this is an overview of each of the five language variables and the three attitude toward change and political control variables in turn. The overview is presented in the form of characterizations of the respondents in terms of the correlates for each variable.

Language and Culture

The Language and Culture hypotheses examined correlates of the language attitude variables (prestige, affection and liberalism) and of the language usage variables (specialization and interaction.)

Socio-cultural correlates (rural-urban residence, travel, social class, family tradition of foreign study and North-South residence) were examined for the language attitude variables. Aspects of perceived reference group language attitudes and the respondent's feelings for these groups were examined for one language attitude variable (liberalism) and for the language usage variables.

Summaries of the findings from the Language and Culture hypotheses are presented below.

> In Hypothesis one it was found that travel, social class, North-South residence, and to a minor extent, family tradition of foreign study were correlates of the prestige ratings given languages. In addition, rural-urban residence, travel, social class, and to a minor extent, North-South residence and family tradition of foreign study were correlates of the affection felt for languages.
>
> In Hypothesis two, social class emerged as the only socio-cultural correlate of language liberalism. Rural-urban residence, travel, North-South residence and family tradition of foreign study and not relate to the language liberalism of the respondent.
>
> In Hypothesis three, the respondent's language liberalism was found to correspond with that of his father, on the whole. Specific parts of his Index correlated with those of each of his reference groups. Particularly noteworthy were the acceptance of Hindi for India's official language and the prestige attached to bilingualism issues on which the position of each reference group corresponded to that of the respondent. The importance of reference groups did not relate to the degree of the respondent's deviation from the language liberalism of the reference groups.
>
> In Hypothesis four, diversity of language preference among reference groups was found to be associated with the language specialization the respondent practiced with different people. Heterogeneity among the Language Liberalism Indices of the reference groups related to Language specialization of all kinds. The importance attached to the region and social class were related to specialization.

> In Hypothesis five, native tongue appeared to be related to friendship and contact patterns within the Indian community. The heterogeneity of Language Liberalism Indices among reference groups did not relate to the patterns of discussion about Nehru's death. The importance with which reference groups were regarded was related to the discussion patterns. When his reference groups in India were deemed important, the respondent's discussion about Nehru's death occurred mainly with Americans.

Socio-cultural correlates were found for all the language attitude variables (prestige, affection and liberalism) with travel and social class emerging as the primary correlates. Language liberalism also had another set of correlates. The overall perceived language liberalism of fathers correlated with the respondent's language liberalism. On specific language attitudes, all of the respondent's reference groups were often in agreement with the respondent. The importance of reference groups was not a factor in the correspondence between the language liberalism of the respondent and his reference groups.

Reference group attitudes were associated strongly with both language usage variables (specialization and interaction). Diversity of language preference and heterogeneity of Language Liberalism Indices among reference groups related to specialization. Native tongue related (non-statistically) to interaction. The importance of reference groups was a factor in both specialization and interaction.

Summary. It is apparent that socio-cultural factors were important in language attitudes. It is further apparent that perceived reference group attitudes related to both

language attitudes and language usage and that the importance of reference groups were associated with language usage.

Language and Personality

The Language and Personality hypotheses examined the attitude toward change and political control correlates of one language attitude variable, (liberalism) and both language usage variables (specialization and interaction). The attitude toward change and political control variables examined were change orientation, approval of social change in India and attitudes concerning where government power should reside.

Summaries of the findings from the Language and Personality hypotheses are presented below.

> In Hypothesis six, Language Liberalism was found to relate to personality and attitudes concerning social phenomena in India. Liberal language attitudes were associated with liking to try new things, high approval of the direction of India's social change and either very high or very low approval of the scope of social change in India. Liberal language attitudes were also associated with according a high degree of power to both state and local governments and to minimizing differences in power between Central and state governments.
>
> In Hypothesis seven, language specialization was found to relate to personality and attitudes toward social phenomena in India. Considerable language specialization in particular places was associated with liking to try new things. It was also associated with feelings that social change in India was occuring either too rapidly or too slowly, that social change was in the wrong direction, and too large in scope. Greater specialization was associated with according the Central government relatively less power but favoring the higher government level when conflict occurred between government levels.

> The results of Hypothesis eight showed interaction not to be related to the personality measures, but to relate to the attitudes concerning social phenomena in India. Discussion of Nehru's death occuring primarily within the Indian community was associated with approval of the direction of India's social change. Discussion occuring either primarily within the Indian community or primarily within the American community was associated with a desire to grant the local government little power, grant the Central and state governments about the same power and grant the higher government level the same or less power than the lower government level in cases of dispute between them.

Liberalism and specialization related to change orientation; interaction did not. The relationship between liberalism and change orientation was negative. The relationship between specialization and change orientation was positive.

Liberalism, specialization and interaction all related to approval of India's social change. In particular, approval of the direction of India's social change was a correlate of all three language variables.

Government power measures related to liberalism, specialization and interaction. Sometimes the relationships were with the simple Power measures, sometimes with the Difference-Power measures, sometimes with the Outcome measures and sometimes with the Power Index.

Summary. The attitude toward change and political control variable was a correlate of the language attitude (liberalism) measure. All of the attitude toward change and political control measures were correlates of one or both language usage (specialization and interaction) measures.

Culture and Personality

The Culture and Personality hypotheses examined relationships between the attitude toward change and political control measures and the socio-cultural factors and between the attitude toward change and political control measures and reference group attitudes. The attitudes toward change and political control were change orientation, approval of social change and attitudes concerning where government power should reside. The socio-cultural factors were rural-urban residence, travel, social class, family tradition of foreign study and North-South residence. Reference group attitudes were language liberalism attitudes. Summaries of the findings are presented below.

> Hypothesis nine found travel and social class to be correlates of change orientation. Urban residence and travel were correlates of the approval of social change speed. Travel was a correlate of approval of social change direction. There were no socio-cultural correlates of approval of social change scope.
>
> Urban residence, travel and social class were correlates of the power granted the Central government. Travel was the only socio-cultural correlate of power granted states. Travel and social class were the correlates of local government power.
>
> No socio-cultural correlates were found for the difference in power between Central and state governments. Travel and social class correlates were found for the difference in power granted the state and local governments and for the difference in power granted the Central and local governments.
>
> No socio-cultural correlates were found for the outcome in disputes between the Central and state governments or between the Central and local governments. Travel was a correlate for the

outcome in state and local government disputes. No socio-cultural correlates were found for the general tendency to favor the higher or lower government level in cases of dispute between government levels.

Hypothesis ten found a positive change orientation on the part of the respondent to be associated with conservative language attitudes on the part of fathers and with reference groups which were heterogeneous in the liberalism of their language attitudes. The importance of reference groups with liberal and with non-liberal attitudes was not associated with change orientation.

Approval of the direction of India's social change was associated with the perception of liberal language attitudes on the part of the father. Neither the heterogeneity of the liberalness of reference group language attitudes nor the importance of the reference groups to the respondent was related to approval of India's social change.

The difference in power between the Central and state governments and the outcome when state and local governments conflicted were also associated with the perceived liberalness of the father's attitudes. Heterogeneity of language liberalism among reference groups did not relate to attitudes concerning where government power should reside.

The correlates of change orientation were travel, social class, fathers language liberalism and heterogeneity of the language liberalism of reference groups.

Urban residence, travel and father's language liberalism were the correlates of approval of India's social change.

Urban residence, travel, social class and father's language liberalism were the correlates of attitudes concerning where government power should reside.

Summary. Socio-cultural correlates were found for all the attitude toward change and political control measures. Travel emerged as the most important socio-cultural factor.

A further kind of summary is offered here in the form of characterizations of individuals responding at the extreme of each language and attitude toward change and political control variable.

Language Prestige

The individual who accorded Hindi and/or Hindustani high prestige:

-had lived in few cities, towns or villages in India.

-had a high proportion of brothers and sisters in college.

-was not the first in his family to study abroad.

-lived in the North of India.

The individual who accorded English high prestige:

-had read a great deal about other cultures.

-had a high Social Class Index

The individual who accorded Urdu high prestige:

-had lived in many states or in few states in India.

-had read a great deal about other cultures.

The individual who accorded Bengali high prestige:

-had read a great deal about other cultures.

-came from a family with a large library.

There were other relationships between language prestige and socio-cultural factors. Some relationships were found for nearly every language in the analysis.

Travel and social class emerged as the important socio-cultural correlates of prestige. Travel and social class did not relate in the same manner to the prestige attributed to all languages, e.g., increased travel was not associated with increased appreciation of the merits of all languages--at least not if prestige ratings are any evidence of such appreciation. Travel might relate to prestige ratings differentially for two reasons. First, travel gives the rater a new perspective. Travel gives him a chance to stand back and look the situation over. It also gives him personal contact with more languages which widens his base for making comparisons. Second, it brings him into contact with a new set of stereotypes regarding the prestige of various languages. These stereotypes may reinforce those he has already acquired or they may conflict. Prestige appears to be a stereotype to a considerable extent. Social class differences in prestige attached to various languages increase support for this interpretation.

Language Affection

The individual who expressed high affection for Hindi:

-had low Social Class Index

-came from a family with a relatively low per capita income.

-came from a family where the mother had less education

-came from a family where the father had a relatively low occupation.

-lived in the North of India

The individual who expressed high affection for English:

-had lived in several states in India

-lived in the South of India

The individual who expressed high affection for Urdu:

-had lived in large urban areas most of his life

-had made trips outside India

-had visited other countries

The individual who expressed high affection for Bengali:

-came from a family with a relatively low per capita income

Many other relationships were found between language affection and socio-cultural factors. For example, individuals expressing strong affection for Gujarati came from the more rural areas in India and came from families where the father had a relatively low occupation. The affection expressed for a language was no doubt based on a complex set of factors. In studying the findings, it appeared that the amount of usage of a language might well be a factor in the affection felt for the language.

Language Liberalism:

The individual who had liberal language attitudes:

-came from a family where the mother had less education.

-came from a family with a smaller library

-perceived his father to have liberal language attitudes.

-perceived much correspondence between his own specific language attitudes and those of each of his reference groups.

-perceived himself as an individual who was not adventuresome and who did not like to try new things.

-approved of the direction of India's social change.

-either approved very much or was at the other extreme and disapproved very much of the scope of India's social change.

-accorded a high degree of power to the state governments.

-accorded a high degree of power to the local governments.

-minimized differences in power between the Central and state governments.

Language liberalism proved to be a concept related to a wide variety of variables. It had socio-cultural, reference group, personality and specific attitude correlates.

The relationships between the respondent's language liberalism, his Self Percept and the perceived language liberalism of his father were not always in the direction expected.

Language Specialization

Specialization by People. The individual who used a large number of languages with particular people or who listed many people with whom particular languages were used:

-considered his reference groups to be father disparate in the number of different (non-overlapping) languages preferred among them.

-saw his reference groups as having great heterogeneity in terms of liberalness of language attitudes.

-attached little importance to his region.

-considered social change in India in somewhat negative terms: disapproval of the direction of social change, approval of the speed and scope of social change.

-wished to see the higher government levels dominate the lower when conflict occurred.

Specialization by Place. The individual who used a large number of languages in particular places or who listed many places where particular languages were used:

-saw his reference groups as having great heterogeneity in terms of liberalness of language.

-attached great relative importance to his social class.

-saw himself as a person who liked to try new things.

-considered social change in India to occur either much too slowly or much too quickly.

-considered social change in India to be in the wrong direction.

-felt social change in India to be too large in scope.

-accorded a low degree of power to the Central government.

Specialization by Occasion. The individual who used a large number of languages on particular occasions or who listed many occasions for which he used particular languages:

-saw his reference groups as having great heterogeneity in terms of liberalness of language attitudes.

-saw his reference groups as having a great range in terms of liberalness of language attitudes.

-attached little relative importance to his social class.

Language specialization also turned out to be a useful concept. Reference group language attitudes were particularly important correlates although some relationships to personality and specific attitudes were found.

Interaction

The individual who interacted within the Indian community concerning Nehrus death far more than he interacted within the American community:

-attached little importance to his reference groups.

-approved of the direction of Indias social change.

-accorded the local government little power (as did his opposite who interacted mainly in the American community).

-accorded the Central government and the regional governments about the same power in situations of clash(as did his opposite who interacted mainly in the American community).

-accorded the higher government levels less power than the lower government levels in cases of conflict (as did his opposite who interacted mainly in the American community).

Of all the language concepts, interaction was the least useful. It related only marginally to reference group language attitudes, not at all to the personality measures and to a fair degree to attitudes toward India's social change and political control.

Change Orientation

Confidence.

- no relationships -

Motivation.

- no relationships -

Self Percdpt. The individual who perceived himself as adventuresome and liking to try new things:

- had conservative language attitudes.
- practiced much language specialization.
- had made trips outside India.
- had read a great deal about other cultures.
- came from a family with a relatively large number of servants.
- came from a family where the mother had more education.
- perceived his father to have conservative language attitudes.

Orientation Toward Change Index. The individual with a high degree of change proneness:

- had done some travelling inside India.
- had made trips outside India.
- had read a great deal about other cultures.
- perceived his father to have conservative language attitudes.
- perceived his reference groups to be heterogeneous in terms of language attitudes.

The findings show change orientation to be a fruitful concept. Change orientation related to the respondents language attitudes, to his language usage, to socio-cultural factors and to the perceived language attitudes of the reference group.

Approval of Social Change

Approval of Social Change Speed. The individual who felt the speed of India's social change to be much too slow:

-practiced great language specialization (as did individuals who felt social change to be too fast).

-had lived in large urban areas most of his life.

-had made trips outside India.

-had read a great deal about other cultures.

Approval of Social Change Direction. The individual who approved highly of the direction of India's social change:

-had liberal language attitudes.

-practiced little language specialization

-discussed Nehru's death with Indians more than with Americans.

-had lived in few states in India.

-had travelled little in India.

-perceived his father to have liberal language attitudes.

Approval of Social Change Scope. The individual who approved highly of the scope of India's social change:

-had liberal language attitudes (as did Indians who disapproved of the scope of India's social change).

-practiced moderate or little language specialization.

Index of Social Change Approval. The individual who expressed high approval of Indias social change:

-practiced little language specialization (as did individuals who expressed little approval of India's social change).

Approval of social change was a fairly useful concept. Correlates of social change approval were primarily socio-cultural variables and to a miner extent, language attitudes, language usage and reference group language attitudes.

Attitudes Concerning Government Power

Central Government Power. The individual who accorded the Central government high power:

-practiced little language specialization.

-had lived in large urban areas most of his life.

-had lived in many states (as did respondents according the Central government little power).

-came from a family where the father had less education (as did those wishing to accord little power to the Central governments.)

State Government Power. The individual who accorded the state government high power:

-had liberal language attitudes

-had little non-Indian contact in India.

Local Government Power. The individual who accorded the local government high power:

-had liberal language attitudes.

-had read little about other cultures.

-came from a family with a relatively low per capita income.

-came from a family with relatively few servants.

-discussed Nehru's death in about the same proportions in the Indian and American communities.

Difference-Power: Central minus State Government. The individual according the Central government much more power than the state governments:

-had conservative language attitudes.

-perceived his father to have conservative language attitudes.

Difference-Power: State minus Local Government. The individual according the state governments much more power than the local governments:

-came from a family with a relatively low per capita income.

-had lived in several states in India (as did respondents who accorded the two government levels about the same power).

Difference-Power: Central minus Local Government. The individual according the Central government much more power than the local governments:

-had lived in several states (as did respondents who accorded the two government levels about the same power).

-came from a family with a relatively large number of servants.

Outcome: Central vs. State Government. The individual who strongly favored the Central government in disputes between the Central and state governments:

-had conservative language attitudes (as did respondents who favored the state government).

-discussed Nehru's death in about the same proportion in Indian and American communities.

Outcome: State vs. Local Government. The individual who strongly favored the state government in disputes between the state and local governments:

-had not travelled outside India.

-perceived his father to have liberal language attitudes.

Outcome: Central vs. Local Government.

- no relationships

Power Index: The individual who favored the higher of two government levels when there was conflict between two of them:

- practiced much language specialization.

-discussed Nehru's death in about the same proportion in Indian and American communities.

Although there was a wide variety of correlates for the attitudes concerning where government power should reside, the patterns of relationship were not very clear.

Significant relationships were found among all three sets of variables: language, culture, and personality. In many cases, only a few of the many possible relationships tested were significant. Usually, the patterns of significance and non-significance were consistent.

In the case of Language Liberalism, it was the father with whom the respondents attitudes usually corresponded. It was also the perceived language liberalism of the father that related to the change orientation, approval of social change in India, and attitudes concerning where government power should reside.

In the case of the Orientation Toward Change Index, the pattern was also consistent. The relationships occurred with one component, the Self Percept Scale, or with the Index itself. No relationships occurred with the Confidence or Motivation scales.

Another case in point concerns the travel measures. The travel measures generally showed a number of relationships to other variables. One of the vicarious travel measures, family contact with non-Indians, never related to anything else, however.

The social class measures provide still another illustration. The Social Class Index rarely related to other

variables. The components of the Index were another matter. They all related occasionally to other variables. The relationships were sporadic for every component. This brings us to the point of suggestions for future research.

One of the most apparent of the suggestions is for refinement of the measures used in this research. The Social Class Index, for example, was not a very satisfactory one. The Orientation Toward Change Index needs further work. The Orientation Toward Change Index followed the rules for multi-dimensional indices--its components had very low intercorrelations and correlated well with the total Index. Unfortunately, only one part of the Index showed any relationship to other variables. Whether the theory involved in deciding upon the components needs revision or whether the non-relating components need better operationalizing, or both, are questions to be answered by further research.

The second suggestion for further research is also an obvious and rather general one: further exploration of the language concepts. The research reported in this thesis showed even the first crude measurements of the language concepts to relate to socio-cultural, reference group, and attitude toward change and political control variables. Further examination of relationships with these and other relevant variables would be useful in shedding light on the role of language in culture and personality.

The relationships observed in this thesis might also be examined in terms of length of time the student has been

in the United States and the age of the student. The length of time in the U.S. may be particularly relevant to the language attitude and usage variables since survival in this culture demands constant use of English. Age may be quite relevant to language and personality for different reasons. For language it may be relevant because so much has happened in India concerning the language issue in a short span of time. The youngest arrivals to the U.S. can barely remember, if at all, a time when Hindi was not the official language. Further, most of them have been schooled in Hindi. The oldest campus visitors can well remember the beginnings of the bitter struggle over official languages. They may not be schooled in Hindi at all.

The same kind of expectations may be anticipated for attitudes toward India's social change and attitudes concerning where government power should reside. In addition there is the question of what effect age in general has upon the personality variable of change orientation. Does the individual become more conservative and less interested in change as he grows older or does this aspect of personality remain rather stable?

Attitudes toward social change and government power were barely touched upon in this research. It was the lament of every discussion concerning the former that no information was available on <u>how</u> the individual actually viewed social change, i.e., what direction did he think it was taking, how large was it, and how fast was it proceeding.

In like manner, no information was available on how much power the respondent felt government levels actually had. Further research might not only explore these two areas independently, but also the overlap between them. For example, how much of the social change in India does the government foster? How much should it foster? What levels of government should foster it? etc.

Another avenue of exploration might be the North-South question. In this research, languages were arbitrarily divided into North and South in terms of whether they were Indo-Aryan or Dravidian. States were divided into North and South on the basis of language. The divisions were text-book divisions and there was some evidence that the respondents (especially near the North-South border) did not view themselves, their state or their language in the text-book manner. Further research might well consider how the respondent places himself geographically.

The list of implications for further research is endless and can only be touched upon here. One final suggestion for further research is offered. This thesis dealt with the perceived attitudes of reference groups. Further research should be done on the relationships among the respondents attitudes toward language, the respondent's perception of the attitudes of his reference groups, and an objective measure of the attitudes of the reference groups.

REFERENCES

Adams, I. & Masuoka, J. Emerging elites and culture changes. Soc. econ. Stud., 1961, 10, 86-92.

Anisfield, M., Bogo, N., & Lambert, W. Evaluational reactions to accented English speech. J. abnorm. soc. Psychol., 1962, 65, 223-231.

Anisfield, M. & Lambert, W. Social and psychological variables in learning Hebrew. J. abnorm. soc. Psychol., 1961, 63, 524-529.

Armstrong, R. Vernacular languages and cultures. In J. Spencer (Ed.), Language in Africa. Cambridge, Eng.: Cambridge Univer. Press, 1963.

Arsenian, S. Bilingualism and mental development. New York: Columbia Univer., 1937.

Back, K. The change-prone person in Puerto Rico. Publ. Opinion Quart. 1958, 22, 330-340.

Bernstein, B. Social class, linguistic codes and grammatical elements. Lang. Speech, 1962, 5, 221-240.

Bose, N. Some aspects of caste in Bengal. In M. Singer (Ed.), Traditional India: structure and change. Philadelphia: Amer. Folklore Society, 1959.

Bossard, J. The bilingual as a person--linguistic identification with status. Amer. Sociol. Rev., 1945, 10, 699-709.

Brosnahan, L. Some historical cases of language imposition In J. Spencer (Ed.), Language in Africa. Cambridge, Eng.: Cambridge Univer. Press, 1963.

Casagrande, J. Comanche linguistic acculturation III. Int. J. Amer. linguistics, 1955, 21, 8-25.

Chand, S. & Kapoor, A. People and population of India. Delhi: Metropolitan Book Co., Private Ltd., 1957.

de Riencourt, A. The soul of India. New York: Harper, 1960.

Diebold, A., Jr. A laboratory for language contact. Anthro linguistics, 1962, 4, 41-51.

Doob, L. Becoming more civilized. New Haven: Yale Univer. Press, 1960.

Duijker, H. & Frijda, N. National character and national stereotypes. Amsterdam: North-Holland Pub. Co., 1960.

Ervin, S. Identification and bilingualism. Harvard: mimeo, no date.

Ervin, S. The study of language learning in social contexts. Berkeley: Univer. of Calif., ditto, no date.

Ervin, S. & Osgood, C. Second language learning and bilingualism. J. abnorm. soc. Psychol., 1954, 49, 139-146.

Ferguson, C & Gumperz, J. Introduction: Int. J. Amer. linguistics, 1960, 26, 1-18.

Freeman, C. Economic status and adoption of new agricultural and home practices: a study of three villages. In R. Saksena (Ed.) Sociology, social research and social problems in India. New York: Asia Pub. House, 1961, 126-134.

Gardner, R. & Lambert, W. Motivational variables in second-language acquisition. Canad. J. Psychol., 1959, 13, 266-272.

Gumperz, J. Speech variation and the study of Indian civilization. Amer. Anthro., 1961, 63, 976-988.

Harrison, S. The challenge to Indian nationalism. Fore. Affairs, 1955-56, 34, 620-636.

Haugen, E. The Norwegian language in America. Philadelphia: Univer. of Pa. Press, 1953.

Haugen, E. The bilingual individual. In S. Saporta (Ed.), Psycholinguistics. New York: Holt, 1961.

Hayes, C. Bases of nationalism. In U. Whitaker, Jr. (Ed.), Nationalism and international progress. San Francisco: Chandler Pub. Co., 1960.

Hodson, T. Bilingualism in India. Trans. of the Philological Soc., 1936, 85-91.

Husain, S. The national culture of India. New York: Asia Publishing House, 1961.

Inkeles, A. & Levinson, D. National character, the study of modal personality and socio-cultural systems. In G. Lindzey (Ed.), Handbook of social psychology. Cambridge, Mass.: Addison-Wesley, 1954.

Jahoda, G. Aspects of westernization: a study of adult-class students in Ghana: I. Brit. J. Sociol., 1961, 12, 375-386.

Kennedy, D. Key issues in the cross-cultural study of mental disorders. In M. Singer (Ed.), Studying personality cross-culturally. New York: Row, Peterson & Co, 1961, 405-425.

Lamb, B. India, a world in transition. New York: Praeger, 1963.

Lambert, R. & Bressler, M. Indian students on an American campus. Minneapolis: Univer. of Minn. Press, 1956.

Lambert, W., Anisfield, M.& Yeni-Komshian, G. Evaluational reactions of Jewish and Arabic adolescents to dialect and language variations. McGill: ditto, 1963.

Lambert, W., Havelka, J., & Crosby, C. The influence of language-acquisition contexts on bilingualism. J. abnorm. soc. Psychol., 1958, 56, 239-244.

Lambert, W., Hodgson, R., Gardner, R., & Fillenbaum, S. Evaluational reactions to spoken languages. J. Abnorm. soc. Psychol., 1960, 60, 44-51.

Lionberger, H. Adoption of new ideas and practices. Ames, Iowa: Iowa State Univer. Press, 1960.

Lystad, M. Traditional values of Ghanaian children. Amer. Anthro., 1960, 62, 454-464.

McGuigan, F. Psychological changes related to intercultural experiences. Psychol. Rep., 1958, 4, 55-60.

McGuigan, F. Further study of psychological changes related to intercultural experience. Psychol. Rep., 1959, 5, 244-248.

Mangalam, J., Mangalam, S., Ahmad, S., Rizwani, A. & Wakil, P. Study of student mass failure: documents I & II. Lahore, W. Pakistan: Univer. of Panjab, Dept. of Sociology, 1960.

Murphy, G. In the minds of men: a study of human behavior and social tensions in India. New York: Basic Books, 1953.

Murphy, G. Group cleavage and integration: some parallels between India and the United States. In M. Sherif & M. Wilson (Eds.), Emerging problems in social psychology. Norman, Okla: Univer. Book Exchange Duplic. Service, 1957.

Murray, W. English in the Sudan: trends and policies: relations with Arabic. In J. Spencer (Ed.), Language in Africa. Cambridge, Eng.: Cambridge Univer. Press, 1963.

Nanavati, M. & Vakil, C. (Eds.) Group prejudices in India--a symposium. Bombay: Vora & Co. Pub., Ltd., 1951.

Osgood, C. Studies on the generality of affective meaning systems. Amer. Psychol., 1962, 17, 10-28.

Peal, E. & Lambert, W. The relation of bilingualism to intelligence. Psychol. Monogr., 1962, 76, No. 27.

Putney, S. & Putney, G. Radical innovation and prestige. Amer. Sociol. Rev., 1962, 27, 548-551.

Rogers, E. Diffusion of innovation. New York: Free Press, 1962.

Samora, J. & Deane, W. Language usage as a possible index of acculturation. Sociol. soc. Res., 1955-56, 40, 307-311.

Selltiz, C. & Cook, S. Factors influencing attitudes of foreign students toward the host country. J. soc. Issues, 1962, 18, 7-23.

Shenton, H. Cosmopolitan conversation. New York: Columbia Univer. Press, 1933.

Singer, M. The great tradition in a metropolitan center: Madras. In M. Singer (Ed.), Traditional India: structure and change. Philadelphia: Amer. Folklore Society, 1959.

Singer, M. A survey of culture and personality theory and research. In B. Kaplan (Ed.), Studying personality cross-culturally. Evanston, Ill.: Row, Peterson and Co., 1961, 9-90.

Smith, B. Portrait of India. Philadelphia, Lippincott Co., 1962.

Smith, H. Do intercultural experiences affect attitudes? J. abnorm. soc. Psychol., 1955, 51, 469-477.

Smith, M. Some light on the problem of bilingualism as found from a study of the progress in mastery of English among pre-school children of non-American ancestry in Hawaii. Genetic Psychol. Monogr., 1939, 21, 119-284.

Spencer, J. Language and independence. In J. Spencer (Ed.), Language in Africa, Cambridge, Eng.: Cambridge Univer. Press, 1963.

Useem, J. Notes on the sociological study of language. Items, 1963, 17, 365-373.

Useem, J. & Useem, R. The western-educated man in India. New York: The Dryden Press, 1955.

Walker, D., Jenkins, J. & Sebeok, T. Language, cognition and culture. In supplement to J. abnorm. soc. Psychol., 1954, 49, 192-203.

Warner, W. & Srole, L. The social systems of American ethnic groups. New Haven: Yale Univer. Press, 1945.

Weinreich, U. Languages in contact. Publications of the linguistic circle of New York, 1953, No. 1.

Weinreich, U. Languages in contact. In S. Saporta (Ed.), Psycholinguistics. New York: Holt, 1961, 376-381.

Whiting, B. Six cultures: studies of child rearing. New York: Wiley, 1963.

APPENDICES

QUESTIONNAIRE ON LANGUAGE

Language in India

This questionnaire deals with many aspects of language in India.

There are no right or wrong answers. We are only concerned with how you feel about language in general and India's language problems in particular.

Please answer all questions; analysis is very difficult when data are missing.

Please be frank. All information will be kept confidential.

Thank you for your cooperation.

Name _____

Local Address _____

Telephone _____

1. Some people use more than one language most of the time, but they also have knowledge of a number of other languages, dialects, sub-languages and vernaculars. For instance, residents of India know Hindi and Urdu most often, but they may also know German, Sanskrit, Sinhalese, Konkani, Malvi, etc.

   (a) Please list the languages, dialects, sub-languges and vernaculars that you know.

   (b) Indicate your knowledge of each by placing an X in the appropriate columns.

E = Excellent F = Fair
G = Good P = Poor

LANGUAGE	READING				WRITING				SPEAKING				UNDERSTANDING SPEECH			
	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																

   (c) Indicate how much affection you feel for each language on the line at the left of the language.
   5 = Very much affection
   4 = Much affection
   3 = Some affection
   2 = Little affection
   1 = No affection

2. (a) Which of these languages did you learn from your parents? _____

   (b) Why did you learn each of the other languages?

3. Can you read any of the following: (Check appropriate answer for each language).

	No	Yes	Number of Years of Study
Sanskrit:	___	___	_____
Pali:	___	___	_____
Prakrit:	___	___	_____

It is recognized that people use different languages in different ways. In the following questions (4-16) we are interested in the different languages you use in communicating with various kinds of people and in various kinds of situations.

4. In which language do you write home? _____

5. When you were home in India, which language did you speak with:

   (a) your family? _____

   (b) home town friends? _____

   (c) college friends? _____

6. In which language do you dream? _____

7. Have you ever heard yourself speaking in dreams?

   ____No

   ____Yes (in what language?) _____

8. Which language do you consider to be your native tongue? _____

9. In which language are you most comfortable? _____

10. With what particular people in India do you use what languages?
    (a) Please explain _____

    _____

    _____

    (b) _____I use only one language in India. (specify) _____

11. In what particular places in India do you use what languages?
    (a) Please explain _____

    _____

(b) _____I use only one language in India. (specify)
_____

12. On what particular occasions in India do you use what languages?
(a) Please explain _____
_____
_____
(b) _____I use only one language in India (Specify)
_____

13. Which language do you think will be most useful to you in your profession in India? _____

14. Which language will be the most useful socially in non-professional situations in India? _____

15. (a) What language(s) do you prefer?_____
(b)(in addition, are there other languages that you like? (specify) _____
_____
(c) What languages are not appealing? _____

16. (a) What languages do you use unwillingly? _____
(b) When and why? _____

17. Are there other languages you wish you knew or you would like to learn?
(a) Please specify: _____
(b) Why? _____

18. Do you feel that there is any value to studying other languages?
____Yes Why? _____
____No Why? _____

19. At what age did you first start learning English? (circle one)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

other _____

20. How many years of formal English classroom instruction have you had? _____

21. Were your English instructors:

_____Indian

_____British

_____Other European (specify)_____

_____American

_____Other (specify) _____

22. How similar do you feel the spoken English you learned is to the English used in America?

_____Identical

_____Very similar

_____Somewhat similar

_____Somewhat dissimilar

_____Very dissimilar

_____Other (specify) _____

23. How adequate do you feel your English instruction was?

_____Completely adequate

_____Fairly adequate

_____Somewhat inadequate

_____Fairly inadequate

_____Completely inadequate

24-25. In India, it is necessary for many people to use more than one language. In other countries this is not the case; only one language is necessary. How do you feel about the fact that it is necessary for people in India to use more than one language?

24. For the nation in general:

_____It is a very good thing

_____It is a good thing

_____It is neither a good nor a bad thing

_____It is a bad thing

_____It is a very bad thing

25. For me as an individual:

_____It is a very good thing

_____It is a good thing

_____It is neither a good nor a bad thing

_____It is a bad thing

_____It is a very bad thing

26. How much prestige do you attach to being bilingual?

____Very much

____Much

____Some

____Little

____None

27. When people know and use several languages, there is a possibility that they will use words and phrases from one language when using another language. How much do you approve of using words and phrases from one language when communicating in another language?

____Approve highly

____Approve somewhat

____Indifferent or neutral

____Disapprove somewhat

____Disapprove highly

____Other (specify) _____

28. How much do you think that you do use words and phrases from one language when communicating in another language?

____Very much

____Much

____Some

____Little

____None

29. How concerned are you personally about the language problem in India at the national level?

____Extremely concerned

____Very concerned

____Somewhat concerned

____Not very concerned

____Unconcerned

30. How willing are you to accept Hindi as the official language of India?

____Completely willing

____Somewhat willing

____Neutral or indifferent

____Somewhat unwilling

____Completely unwilling

____Other (specify) _____

31. (a) In your opinion, what language <u>should</u> be India's official language? _____

(b) Do you have a second choice? (if yes, specify) ____

(c) Please explain your answers to (a) and (b) above ___

_____

32. How strongly do you feel about your answer to question 31 (a) above? (i.e., how strongly do you feel that the language you named should be the official language?)

____As strongly as possible

____Very strongly

____Rather strongly

____Somewhat strongly

____Mildly

33. (a) How much do you approve of the practice of drawing state lines according to language boundaries?

____Approve highly

____Approve somewhat

____Indifferent or neutral

____Disapprove somewhat

____Disapprove highly

(b) Why? _____

34. Please rate <u>all</u> the language below on how much prestige you accord them. Add any others that you know which do not appear on this list.

5 = High prestige
4 = Fairly high prestige
3 = Medium prestige
2 = Fairly low prestige
1 = Low prestige

____Assamese
____Bengali
____Gujarati
____Hindi
____Oriya
____Punjabi
____Tamil
____Telugu

____Hindustani	____Urdu
____Kannada	____English
____Kashmiri	____
____Malayalam	____
____Marathi	____

35. In your opinion, is there anything that any of the languages is noted for, i.e., any particular characteristics that you associate with a language? Please specify.

Language	Characteristic
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

36. (a) Please list below the languages, dialects, sub-languages and vernaculars that your <u>father</u> knows.

(b) Indicate the extent of your fathers knowledge by putting an "X " in the appropriate columns.

E = Excellent F = Fair
G = Good P = Poor

LANGUAGE	READING				WRITING				SPEAKING				UNDERSTANDING SPEECH			
	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
1.																
2.																
3.																
4.																
5.																
6.																
7.																

37. (a) Please list below the languages, dialects, sub-languages and vernaculars that your mother knows.

(b) Indicate the extent of your mothers knowledge by putting an "X" in the appropriate columns.

E = Excellent F = Fair
G = Good P = Poor

LANGUAGE	READING				WRITING				SPEAKING				UNDERSTANDING SPEECH			
	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
1.																
2.																
3.																
4.																
5.																
6.																
7.																

38. (a) What language(s) is (are) preferred by your father?
_____

(b) In addition, are there other languages that your father likes? (specify) _____

(c) What languages are not appealing to your father?
_____

(d) What language(s) is (are) preferred by your mother?
_____

(e) In addition, are there other languages that your mother likes? (specify) _____

(f) What languages are not appealing to your mother?
_____

39. (a) Are there any languages that your father uses unwillingly? _____

(b) When and why? _____

(c) Are there any languages that your mother uses unwillingly? _____

(d) When and why? _____

40. How much do your parents approve of using words and phrases from one language when communicating in another language?

Father	Mother	
_____	_____	Approve highly
_____	_____	Approve somewhat
_____	_____	Indifferent or neutral
_____	_____	Disapprove somewhat
_____	_____	Disapprove highly
_____	_____	Other (specify) _____

41. How much do you think that they use words and phrases from one language when communicating in another?

Father	Mother	
_____	_____	Very much
_____	_____	Much

_____ _____ Some

_____ _____ Little

_____ _____ None

42. How much prestige do they attach to being bilingual?

Father Mother

_____ _____ Very much

_____ _____ Much

_____ _____ Some

_____ _____ Little

_____ _____ None

43. How concerned are your parents about the language problem in India at the national level?

Father Mother

_____ _____ Extremely concerned

_____ _____ Very concerned

_____ _____ Somewhat concerned

_____ _____ Not very concerned

_____ _____ Unconcerned

44. How willing are your parents to accept Hindi as the official language of India?

Father Mother

_____ _____ Completely willing

_____ _____ Somewhat willing

_____ _____ Neutral or indifferent

_____ _____ Somewhat unwilling

_____ _____ Completely unwilling

_____ _____ Other (specify) _____

45. What language do your parents feel should be the official language of India? _____

46-47. How do you think that your parents feel about the fact that it is necessary for people in India to use more than one language?

46. For the nation in general they feel:

Father	Mother	
_____	_____	It is a very good thing
_____	_____	It is a good thing
_____	_____	It is neither a good nor a bad thing
_____	_____	It is a bad thing
_____	_____	It is a very bad thing

47. For them as individuals they feel:

Father	Mother	
_____	_____	It is a very good thing
_____	_____	It is a good thing
_____	_____	It is neither a good nor a bad thing
_____	_____	It is a bad thing
_____	_____	It is a very bad thing

Every society is composed of systems of social units. In the following questions we are interested in how some of India's social units feel about language. The first social unit is subcaste (jati).

48. (a) Which language(s) is (are) preferred by the members of your subcaste (jati)?

_____

(b) In addition, are there other languages that they like? (specify) _____

(c) Which languages are not appealing to them? _____

49. (a) Are there any languages that the members of your subcaste use unwillingly? _____

(b) When and why? _____

50. How much do the members of your subcaste approve of using words and phrases from one language when communicating in another language?

____Approve highly

____Approve somewhat

____Indifferent or neutral

____Disapprove somewhat

____Disapprove highly

____Other (specify) _____

51. How much do you think that they do use words and phrases from one language when communicating in another?

____ Very much

____ Much

____ Some

____ Little

____ None

52. How much prestige do the members of your subcaste attach to being bilingual?

____ Very much

____ Much

____ Some

____ Little

____ None

53. How concerned are the members of your subcaste about the language problem in India at the national level?

____ Extremely concerned

____ Very concerned

____ Somewhat concerned

____ Not very concerned

____ Unconcerned

54. How willing are the members of your subcaste to accept Hindi as the official language of India?

____ Completely willing

____ Somewhat willing

____ Neutral or indifferent

____ Somewhat unwilling

____ Completely unwilling

____ Other (specify) _____

55. What language do the members of your subcaste feel should be the official language of India? _____

56-57. How do the members of your subcaste (jati) feel about the fact that it is necessary for people in India to use more than one language?

56. For the nation in general they feel:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

57. For them as individuals they feel:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

58. In India, as in all countries, there are several social classes. In your judgment what are the major social classes in India?

_____

_____

_____

59. Now, how would you place yourself in this scheme? What is your <u>own</u> social class as an individual? _____

60. (a) Which language(s) is (are) preferred by the members of your social class? _____

(b) In addition, are there other languages that they like? (specify) _____

(c) Which languages are not appealing to them? _____

61. (a) Are there any languages that the members of your social class use unwillingly? _____

(b) When and why? _____

62. How much do the members of your social class approve of using words and phrases from one language when communicating in another?

____ Approve highly

____ Approve somewhat

____ Indifferent or neutral

____ Disapprove somewhat

____ Disapprove highly

____ Other (specify) _____

63. How much do you think that they do use words and phrases from one language when communicating in another?

____ Very much

____ Much

____ Some

____ Little

____ None

64. How much prestige does your social class attach to being bilingual?

____ Very much

____ Much

____ Some

____ Little

____ None

65. How concerned are the members of your social class about the language problem in India at the national level?

____ Extremely concerned

____ Very concerned

____ Somewhat concerned

____ Not very concerned

____ Unconcerned

66. How willing are the members of your social class to accept Hindi as the official language of India?

____ Completely willing

____ Somewhat willing

____ Neutral or indifferent

____ Somewhat unwilling

____ Completely unwilling

____ Other (specify) _____

67. What language do the members of your social class feel should be the official language of India? _____

68-69. How do the members of your social class feel about the fact that it is necessary for people in India to use more than one language?

68. For the nation in general they feel:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

69. For them as individuals they feel:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

70. (a) Which language(s) is (are) preferred by the people in the region where you live? _____

(b) In addition, are there other languages that they like? (specify) _____

(c) Which languages are not appealing to them? _____

71. (a) Are there any languages that the members of your region use unwillingly?

_____

(b) When and why? _____

72. How much do the people in the region where you live approve of using words and phrases from one language when communicating in another?

____ Approve highly

____ Approve somewhat

____ Indifferent or neutral

____ Disapprove somewhat

____ Disapprove highly

73. How much do you think that they do use words and phrases from one language when communicating in another?

____ Very much

____ Much

____ Some

____ Little

____ None

74. How much prestige do the people of the region where you live attach to being bilingual?

____ Very much

____ Much

____ Some

____ Little

____ None

75. How concerned are the people in your region about the language problem in India at the national level?

____ Extremely concerned

____ Very concerned

____ Somewhat concerned

____ Not very concerned

____ Unconcerned

76. How willing are the people in the region where you live to accept Hindi as the official language of India?

____ Completely willing

____ Somewhat willing

____ Neutral or indifferent

____ Somewhat unwilling

____ Completely unwilling

____ Other (Specify) _____

77. What language do the people in the region where you live feel should be the official language of India?_____

78-79. How do the people in the region where you live feel about the fact that it is necessary for people in India to use more than one language?

78. For the nation in general:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

79. For them as individuals:

____ It is a very good thing

____ It is a good thing

____ It is neither a good nor a bad thing

____ It is a bad thing

____ It is a very bad thing

80-82. India is changing in many ways. How do you personally feel about the changes that are being made?

80. The changes are being made:

____ Much too quickly

____ Somewhat too quickly

____ About right

____ Somewhat too slowly

____ Much too slowly

81. Among the changes being made:

____ All are in the right direction

____ Most are in the right direction

____ About half are in the right direction and half in the wrong direction

____ Most are in the wrong direction

____ All are in the wrong direction

82. The changes being made are:

____ Much too large in scope (size)

____ Somewhat too large in scope (size)

____ About the right scope (size)

____ Somewhat too small in scope (size)

____ Much too small in scope (size)

83. How much power do you feel <u>each</u> of the following levels of government in India should have? (Check one alternative for each level of government)

Central Gov't	State Gov't	Local Gov't	
_____	_____	_____	Absolute power
_____	_____	_____	Great power
_____	_____	_____	Some power
_____	_____	_____	Little power
_____	_____	_____	No power

84. When two of the governments are in disagreement, what do you feel the outcome should be? (Check one alternative for each column)

(A) Central vs. (B) State	(A) State vs. (B) Local	(A) Central vs. (B) Local	
_____	_____	_____	A should always prevail over B
_____	_____	_____	A should usually prevail over B
_____	_____	_____	A should prevail about half the time over B
_____	_____	_____	A should rarely prevail over B
_____	_____	_____	A should never prevail over B

85. (a) Below are some major groups in India. Please indicate the importance of <u>each</u> group to you by placing an "X" in the appropriate column.

5 = Extremely important 2 = Not very important
4 = Very important 1 = Unimportant
3 = Somewhat important

	5	4	3	2	1
Region	___	___	___	___	___
Social Class	___	___	___	___	___
Family	___	___	___	___	___

	5	4	3	2	1
Subcaste (jati)	___	___	___	___	___
Country	___	___	___	___	___
Other (specify):	___	___	___	___	___

(b) Indicate the relative importance of each group to you by ranking them, using a 5 for the most important, a 4 for the next most important, and so on. Place these ranks on the line at the left of each group.

86. (a) As people grow older sometimes their level of drive and motivation changes. As for yourself, would you say that your drive and motivation is:

____ Much higher now than it used to be

____ Somewhat higher now than it used to be

____ About the same now as it used to be

____ Somewhat lower now than it used to be

____ Much lower now than it used to be

(b) Please explain your answer.

87. Some people are said to be strongly motivated and to have a lot of ambition and drive. Others are said to be less motivated and to have less ambition and drive. How much motivation would you say that you have?

____ Very much

____ Much

____ Some

____ Little

____ None

88. (a) As compared with the rest of your family would you say that you are more or less ambitious than they are?

____ Much more ambitious

____ Somewhat more ambitious

____ About the same in ambition

____ Somewhat less ambitious

____ Much less ambitious

(b) Please explain your answer.

89. As far as you are concerned, how important would it be to have more drive and ambition than you now have?

____ Extremely important

____ Very important

____ Somewhat important

____ Not very important

____ Unimportant

90. Some people are always trying to get ahead and improve themselves and others seem to be satisfied with their present condition. As far as you yourself are concerned would you say that you are:

____ Much more ambitous than most people

____ Somewhat more ambitious than most people

____ About the same in ambition as most people

____ Somewhat less ambitious than most people

____ Much less ambitious than most people

91-108. Please answer the following questions by placing a check (✓) on the continuum at whatever point you think best describes your feelings.

Sample: How much do you enjoy lectures?

very much ——————————✓—— not at all

91. Do you enjoy starting conversations with strangers?

very much ———————————— not at all

92. In your social group at home, how embarrassed does it make you to express a deviant opinion?

very little ———————————— very much

93. Do you like to take changes?

very much ———————————— very little

94. Do you seem to get flustered when the attention of a group turns to you?

always ——— never

95. Do you like to stand out in a crowd?

not at all ——— very much

96. Do you like to act on hunches?

very much ——— not at all

97. Are you often praised by other people?

never ——— very often

98. Do you usually mull over decisions you've made and worry about whether or not you've made the right decision?

always ——— never

99. Do you complain to the person in charge when food, service or merchandise is not as good as it should be?

never ——— always

100. Do you enjoy meeting new people?

very much ——— very little

101. In your present business or school group, how much do you think others will look down on you if you express a deviant opinion on an important issue?

very much ——— not at all

102. Do you feel self-conscious very often?

very often ——— not very often

103. Have you found that other people often praise you for your ingenuity?

very often ——— never

104. Do you find it very disturbing to make errors in public?

very much ——— not at all

105. How much confidence do you have that you will succeed in life?

complete confidence ——— no confidence

106. Would you describe yourself as the shy type?

very much ——— not at all

107. How much do you enjoy giving speeches or talks before groups of people?

very much ——— not at all

108. Do you ever wish you had more self confidence?

rarely ——— often

109-124. Please indicate how much you agree or disagree with each of the following statements according to the Agreement Code. Check (✓) the column which corresponds to the appropriate Agreement Code.

AGREEMENT CODE
1. Disagree very much
2. Disagree somewhat
3. Neutral
4. Agree somewhat
5. Agree very much

	1	2	3	4	5
109. I usually know where to go to find out about important things.					
110. Unless there is a good reason for changing, I think we should continue to do things the way they are being done now.					
111. Youth is usually too impatient and too much in a hurry.					
112. When new ideas are going around, I am usually among the first to accept them.					

	1	2	3	4	5
113. I watch my expenses very carefully and know where my money goes.	___	___	___	___	___
114. It is not particularly important to me to know all the answers to things people are talking about.	___	___	___	___	___
115. A penny saved is a penny earned.	___	___	___	___	___
116. Among my friends, people usually take me to be younger than I am.	___	___	___	___	___
117. I am a little bit suspicious about people who always want to have the latest in everything.	___	___	___	___	___
118. Among my friends, I am considered to be a free spender and liberal in the use of money.	___	___	___	___	___
119. The enthusiasms of younger people are hard for me to understand.	___	___	___	___	___
120. Others seem to be better than I am at knowing about everyday affairs.	___	___	___	___	___
121. In general, modern ways of living are much superior to older ways.	___	___	___	___	___
122. My interests seem to be more with those people younger than I am than with older people.	___	___	___	___	___
123. I seem to understand about the way in which the world is developing better than many people.	___	___	___	___	___
124. Money is made to be spent.	___	___	___	___	___

General Demographic Information

125. Age _____

126. Sex: (circle) M F

127. Religious affiliation: _____

128. Caste: _____

129. Subcaste: (jati): _____

130. For the purpose of our survey we need a rough indication of the income of your family. Please indicate in which of these ranges your family's income falls.

Yearly Income in Rupees

____ 1200 and under Rs.

____ 1201 to 2400 Rs.

____ 2401 to 3000 Rs.

____ 3001 to 4000 Rs.

____ 4001 to 6000 Rs.

____ 6001 to 10000 Rs.

____ 10001 to 16000 Rs.

____ 16001 and up Rs.

131. In many families, the family income is used for the support of a number of people. How many adults and children use the income that you have indicated as your family income in the question above? _____

132. (a) Place an "X"by the category which best describes your father's education.

(b) Place an "X"by the category which best describes your mother's education.

Father	Mother	
_____	_____	Below high school (8 years or less)
_____	_____	Matriculation (10 years)
_____	_____	Intermediate (11 to 12 years)
_____	_____	Bachelor's degree or equivalent
_____	_____	Master's degree or equivalent
_____	_____	Doctorate

GENERAL INFORMATION
(Please Print)

NAME _____

1. How many months have you been in the United States?_____

2. For which degree, if any, are you now working?

   ____ B.A. or B.S.

   ____ M.A. or M.S.

   ____ Ph.D.

   ____ Other (explain) _____

   ____ None (explain) _____

3. What is your major? _____

4. Where did you attend intermediate school (high school)?

   Town or City _____

   Country _____

5. What were your major subjects in intermediate school (high school)?

   _____

6. What schools above intermediate level did you attend before coming to Michigan State University?

Name of School	Place	Major Subject	Degree	Year
_____	_____	_____	_____	____
_____	_____	_____	_____	____
_____	_____	_____	_____	____
_____	_____	_____	_____	____

7. Please list any academic honors you have received. _____

   _____

8. Were you working, i.e., did you have a job, before you came to the U.S.?

   ____Yes (specify) _____
   ____No

9. Do you have a definite job to go back to in India?

___Yes (specify) _____

___No

10. Where have you lived most of your life? (check one)

____ in a large city (300,000 or more population)

____ in a large town (100,000 to 300,000 population)

____ in a medium town (20,000 to 100,000 population)

____ in a small town (1,000 to 20,000 population)

____ in a village (1,000 or under population)

11. Place an "X" on the map (opposite page) where your home is.

State: _____

City or Town: _____

12. In how many cities, towns or villages have you lived for over six months in your country? (Circle one)

1 2 3 4 5 6 7 8 9 10 or more

13. Place numbers on the map to indicate each place you have lived, starting with a "1" for the first place, a "2" for the second place and so on.

14. How much traveling to different places have you done <u>in India</u>?

____ Very much

____ Much

____ Some

____ Very little

____ None

15. How many times have you been out of your country? (circle)

1 2 3 4 5 6 7 8 9 10 or more

16. (a) In how many countries have you stayed for longer than one month? (Do not count India or the United States)

_____

(b) Names of countries: _____

(c) Total time outside of India in years: _____

17. How much reading about foreign countries have you done?

____ Very much

____ Much

____ Some

____ Very little

____ None

18. How much contact with non-Indians would you say that your family has?

____ Very much

____ Much

____ Some

____ Very little

____ None

19. Are you the first in your family to seek education outside India?

____ Yes

____ No (please explain) _____

20. How many brothers and sisters do you have?

____ Brothers (specify how many are over 18 years ofage)

_____

____ Sisters (specify how many are over 18 years of age)

_____

21. How many of your brothers and sisters are in college or have completed college?

____ Brothers

____ Sisters

22. How many of your brothers or sisters are studying or have studied abroad?

____ Brothers (place of study): _____

____ Sisters (place of study): _____

23. Did any of your parents, grandparents or uncles and aunts study abroad?

Father: ____No ____Yes (Where?) _____

Mother: ____No ____Yes (Where?)_____

Grandfathers: ____No ____Yes (How many and where?)____

Grandmothers: ____No ____Yes (How many and where?)___

Uncles: ____No ____Yes (How many and where?)___

Aunts: ____No ____Yes (How many and where?)___

24. About how many books, excluding school and college text books and help books, would you estimate are in your family's home library?_____

25. How many household servants does your family in India have? _____

26. Which of the following best describes the occupation of your father? (Check one) If father is deceased, check what his occupation was.

____ Professional (lawyer, medical doctor, university professor, etc.)
____ Owner or manager of a large business

____ Government official (specify)_____

____ Owner or manager of a large rural estate

____ Owner or manager of a small business

____ Office worker (other than above) or clerk in government
____ Office worker (other than above) or clerk in business

____ Skilled craftsman (carpenter, tailor, etc.) or foreman

____ Owner of a small or average farm

____ Unskilled urban worker

____ Agricultural worker not owning land

____ Agricultural worker renting land or sharecropping

____ Semi-skilled urban worker (truck drivers, waiters, machine operators, etc.)

____ Other (specify) _____

On Wednesday, May 27, Jawaharlal Nehru died. We are interested in reconstructing the patterns of communication about this event. Please think back very carefully as you answer the following questions.

27. At approximately what time (day and hour) did you first hear about it? _____

28. How did you first hear about it?

____ Radio

____ Television

____ Newspaper

____ Telephone (from whom?)_____

____ Word of mouth (from whom?)_____

____ Other (specify) _____

29. With how many Indian friends did you discuss the event? _____ Specify names:_____

30. With how many American friends did you discuss the event? _____

31. Did you attend the commemoration service?

___Yes

___No

32. Did you discuss the event when you wrote home?

___Yes

___No

33. How important to India do you feel Nehru was?

____ Extremely important

____ Very important

____ Somewhat important

____ Not very important

____ Unimportant

34. In your opinion what was Nehru's single most important contribution to India?_____

35. How well did you like Nehru as a political figure?

____ Very well

____ Well

____ Somewhat

____ Not well

____ Not very well

36. How well did your parents like Nehru as a political figure?

____ Very well

____ Well

____ Somewhat

____ Not well

____ Not very well

37. Three men whose names were mentioned as possible candidates for prime minister were Shastri, Nanda and Desai. In your judgment what does each of these three men represent in Indian political life?

Shastri: _____

Nanda: _____

Desai: _____

38. How well do you think each of these three men would serve India as prime minister?

Shastri	Nanda	Desai	
_____	_____	_____	would do an outstanding job
_____	_____	_____	would do a good job
_____	_____	_____	would do a mediocre job

_____ _____ _____ would not do a good job

_____ _____ _____ would do a very poor job

39. In your judgment, is there someone other than Shastri, Nanda and Desai who should have been considered as a candidate?

____ No

____ Yes (specify) _____

APPENDIX B

Age

Years	Number in Sample	Percent of Sample
19-21	5	5.2
22-24	25	26.0
25-27	28	29.2
28-30	16	16.7
31-33	8	8.3
34-36	7	7.3
37-39	1	1.0
40-42	1	1.0
43-45	1	1.0
46-48	2	2.1
No Response	2	2.1
Total	96	99.9
Mean Age	27.5	
Std. Dev.	5.6	
Median Age	26.4	

APPENDIX C

ACADEMIC OBJECTIVES

	Number in Sample	Percent of Sample
Bachelor of Arts or Bachelor of Science	16	16.7
Master of Arts or Master of Science	26	27.1
Doctor of Philosophy	50	52.1
Other:		
Diploma in school administration	1	1.0
General Experience in field	1	1.0
Post doctoral research	1	1.0
Research Associateship	1	1.0
Total	96	99.9

APPENDIX D

ACADEMIC SPECIALTIES

	Number in Sample	Percent of Sample
Engineering	43	44.8
Marketing and Transportation	1	1.0
Industrial Administration	1	1.0
Agriculture	1	1.0
Horticulture	2	2.1
Fisheries and Wildlife	1	1.0
Dairying	1	1.0
Food Science	3	3.1
Biochemistry	2	2.1
Biophysics	2	2.1
Biology	5	5.2
Chemistry	1	1.0
Pharmacology	6	6.3
Veterinary Medicine	1	1.0
Geology	1	1.0
Physical Science	3	3.1
Mathematics and Statistics	6	6.3
Anthropology	1	1.0
Communications	1	1.0
Economics	2	2.1
Education	2	2.1
Psychology	2	2.1
Social Science	2	2.1
Sociology	4	4.2
English	1	1.0
History	1	1.0
No Response	1	1.0
Total*	97	100.7

*One person listed two majors.

APPENDIX E

NUMBER OF MONTHS SPENT IN THE U.S.

Months	Number in Sample	Percent of Sample
1 - 6	9	9.4
7 -12	23	24.0
13-18	7	7.3
19-24	15	15.6
25-30	8	8.3
31-36	10	10.4
37-42	10	10.4
43-48	8	8.3
over 48	6	6.3
Total	96	100.0
Mean Months in U.S.	24.7	
Std. Dev.	16.3	

APPENDIX F

RELIGIOUS AFFILIATION

	Number in Sample	Percent of Sample
Hindu	59	61.5
Islam	3	3.1
Jain	7	7.3
Sikh	4	4.2
Zoroastrian	3	3.1
Christian		
Unspecified	4	4.2
Catholic	3	3.1
Methodist	1	1.0
Presbyterian	1	1.0
Seventh Day Adventist	1	1.0
Atheist and no religion	5	5.2
No Response	5	5.2
Total	96	99.9

APPENDIX G

Two items on the questionnaire were concerned with the employment of the respondents before and after their sojourn to the U.S. The items and the responses to them appear below.

17. Were you working, i.e., did you have job, before you came to the U.S.?
    ____ Yes
    ____ No

18. Do you have a definite job to go back to in India?
    ____ Yes
    ____ No

EMPLOYMENT BEFORE AND AFTER SOJOURN

	Had Job before U.S. Sojourn		Had Job to Return to in India	
	Number in Sample	Percent of Sample	Number in Sample	Percent of Sample
Yes	66	68.8	30	31.3
No	30	31.3	66	68.8
Total	96	100.1	96	100.1

APPENDIX H

Item 16c on the General Information part of the questionnaire resulted in considerable confusion. Many respondents appear to have included the number of years they had lived in the U.S. in their response to the item. (See page 55). Item 16 in its entirety is given below. Also given below are the responses to part c of item 16. Data from 16c were not included in further analyses.

16. (a) In how many countries other than India and the U.S. have you stayed for longer than one month? _____

(b) Names of countries: _____

(c) Total time outside of India in years: _____

NUMBER OF YEARS SPENT OUTSIDE INDIA

Number of Years	Number in Sample	Percent of Sample
1	9	9.4
2	11	11.5
3	15	15.6
4	4	4.2
5	1	1.0
6	0	0.0
7	2	2.1
8	0	0.0
9	1	1.0
10	0	0.0
11	1	1.0
No Response	52	54.2
Total	96	100.0

APPENDIX I

Distributions of Responses to Items Comprising the Language Liberalism Indices
(Discussion of the Indices appears in Chapter V, pages 104 to 119

LANGUAGES NOT APPEALING

Number of Languages	Self	Father	Mother	Subcaste	Social Class	Region
0	36	12	11	10	8	8
1	15	8	6	11	7	8
2	7	3	5	4	2	6
3	7	2	1	3		2
4	2	1			1	
5	1		1	1		
Miscellaneous	6			4	9	7
South Indian Languages	8	6	2	5	5	9
Many Languages	3	1	1	1	1	1
All but . . . languages	4	3	4	12	8	13

LANGUAGES USED UNWILLINGLY

Number of Languages	Self	Father	Mother	Subcaste	Social Class	Region
0	52	55	53	15	17	11
1	19	13	16	11	8	14
2	10	2	1	4	5	7
3	1			3		1
4	2				1	
Miscellaneous				5	4	1
South Indian Languages	1				1	
Many Languages	1			2	1	
All but ... Languages	5	1	1	2	4	1

The intermixing of languages was greeted with indifference or slight approval by the students and they saw their groups as reacting the same way. In general the respondent saw himself as approving the most and his mother, the least, although the mean approval ratings among the groups did not differ greatly. Variability of ratings within groups was not high.

According to the Indian students the most intermixing of languages was carried on by social classes. The least was done by mothers and fathers.

INTERMIXING APPROVAL

Degree of Approval	Percent Responses for Reference Groups					
	Self	Father	Mother	Subcaste	Social Class	Region
5 Approve highly	14.6	7.3	3.1	6.3	5.2	0.0
4 Approve somewhat	27.1	22.9	17.7	18.8	30.2	33.3
3 Indifferent or neutral	29.2	31.3	43.8	33.3	35.4	41.7
2 Disapprove somewhat	16.7	8.3	10.4	6.3	4.2	7.3
1 Disapprove highly	7.3	11.5	7.3	4.2	5.2	3.1
Other	3.1	3.1	3.1	3.1	1.0	0.0
No Response	2.1	15.6	14.6	28.1	18.8	14.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean Approval	3.26	3.08	2.99	3.24	3.23	3.23
Std. Dev.	1.85	1.15	.93	.96	.92	.75

ACTUAL INTERMIXING

	Intermixing Practiced	Percent Responses for Reference Groups					
		Self	Father	Mother	Subcaste	Social Class	Region
5	Very much	13.5	6.3	6.3	7.3	13.5	5.2
4	Much	14.6	14.6	6.3	11.5	21.9	21.9
3	Some	40.6	26.0	27.1	39.6	34.4	44.8
2	Little	21.9	19.8	25.0	18.8	14.6	16.7
1	None	3.1	21.9	25.0	1.0	3.1	3.1
Other		2.1	0.0	0.0	0.0	0.0	0.0
No Response		4.2	11.5	10.4	21.9	12.5	8.3
Total		100.0	100.1	100.1	100.1	100.0	100.0
Mean Intermixing		3.14	2.59	2.37	3.07	3.32	3.10
Std. Dev.		1.04	1.22	1.16	.90	1.04	.88

The moderate prestige associated with bilingualism on the part of the students was echoed in the prestige ratings they claimed their groups attached to bilingualism. The tables show the prestige ratings. The mean prestige ratings of all the groups clustered around 3.00 indicating that on the average respondents felt all groups to consider bilingualism to have "some" prestige. There was considerable spread of opinion in all groups, however.

A comparison of the individual and his groups on willingness to accept Hindi as the official language showed even the lowest group to be part way between indifference and some willingness. The most willing to accept Hindi were the respondents themselves. The students saw their region and social class as almost as willing as they were. The least in perceived willingness were the subcastes, fathers and mothers. Over 20 per cent of each group, however, was seen as at least somewhat unwilling to accept Hindi and at least half of these were viewed as completely unwilling to accept it. The variability within the groups was large.

PRESTIGE ATTACHED TO BILINGUALISM

Degree of Prestige	Percent Responses for Reference Groups					
	Self	Father	Mother	Subcaste	Social Class	Region
5 Very Much	17.7	15.6	10.4	7.3	13.5	7.3
4 Much	17.7	16.7	9.4	11.5	11.5	13.5
3 Some	27.1	18.8	24.0	30.2	35.4	40.6
2 Little	18.8	16.7	21.9	20.8	18.8	19.8
1 None	15.6	11.5	14.6	3.1	5.2	6.3
Other	0.0	0.0	0.0	1.0	0.0	0.0
No Response	3.1	20.8	19.8	26.0	15.6	12.5
Total	100.0	100.1	100.1	99.9	100.0	100.0
Mean Prestige	3.03	3.11	2.74	2.65	3.11	2.95
Std. Dev.	1.32	1.33	1.25	1.35	1.11	1.00

ACCEPTANCE OF HINDI

Degree of Willingness	Percent Responses for Reference Groups					
	Self	Father	Mother	Subcaste	Social Class	Region
5 Completely willing	46.9	28.1	29.2	26.0	26.0	32.3
4 Somewhat willing	13.5	15.6	7.3	14.6	26.0	19.8
3 Neutral or indifferent	5.2	12.5	19.8	8.3	9.4	16.7
2 Somewhat unwilling	10.4	7.3	6.3	15.6	7.3	8.3
1 Completely unwilling	19.8	17.7	16.7	11.5	14.6	12.5
Other	2.1	3.1	7.3	2.1	2.1	0.0
No Response	2.1	15.6	13.5	21.9	14.6	10.4
Total	100.0	99.9	100.1	100.0	100.0	100.0
Mean Willingness	3.60	3.36	3.23	3.37	3.50	3.57
Std. Dev.	1.64	1.56	1.55	1.50	1.45	1.41

Summary. The majority of respondents named one or more languages which they felt were not appealing. These respondents who answered the same question for their reference groups most often said there were languages which each reference group did not find appealing.

A majority of respondents said there were no languages they used unwillingly. Further, a majority of them felt there were no languages their fathers or mothers used unwillingly. The situation was reversed for the subcaste, social class and region. For these reference groups far fewer respondents said they used no languages than named such languages.

All the groups were felt to be indifferent to the intermixing of languages. Mothers were viewed as least approving and the respondents themselves as most approving. All groups were seen as doing some intermixing in practice, but fathers and mothers were viewed as doing the least.

All groups were considered to accord bilingualism some prestige. There was a slight tendency for all the groups to be perceived as willing to accept Hindi as India's official language. The majority of individuals in each group were perceived to favor Hindi for the official language of India.

APPENDIX J

The items on which the intercorrelations are based are found on pages 105 and 106. Discussion of the intercorrelations is found on pages 109 and 110.

Intercorrelations Among Items in Respondent's Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	.47 (16)	---				
Intermixing Approval	.32 (32)	.34 (31)	---			
Actual Intermixing	.29 (31)	.32 (31)	.47***(88)	---		
Bilingualism Prestige	.14 (32)	.41*(32)	.14 (89)	.17 (89)	---	
Acceptance of Hindi	.21 (32)	.19 (30)	.16 (87)	.17 (87)	.09 (89)	---
Language Liberalism Index	.45***(63)	.34***(74)	.43***(78)	.45***(78)	.44***(80)	.55***(78)

* Significant at the .05 level
***Significant at the .001 level

Intercorrelations Among Items in Father's Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	.00 (6)	---				
Intermixing Approval	.53 (14)	-.05 (15)	---			
Actual Intermixing	.44 (14)	-.29 (15)	.75***(77)	---		
Bilingualism Prestige	-.33(14)	-.22 (12)	.19 (71)	.26* (74)	---	
Acceptance of Hindi	-.41(14)	-.50(11)	.07 (69)	.02 (72)	.05 (69)	---
Language Liberalism Index	.51* (18)	.09 (23)	.45*(24)	.44*(24)	.42*(24)	.57**(24)

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

Intercorrelations Among Items in Mother's Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	.00 (6)	---				
Intermixing Approval	.33 (13)	.00 (17)	---			
Actual Intermixing	.66*(13)	.13 (17)	.44***(77)	---		
Bilingualism Prestige	-.23(12)	-.34(16)	.05 (72)	.20 (74)	---	
Acceptance of Hindi	-.08(12)	-.03(14)	.10 (66)	.01 (69)	-.01 (68)	---
Language Liberalism Index	.62 (9)	.26 (11)	-.11 (11)	-.58*(11)	.25 (11)	.65* (11)

* Significant at the .05 level
***Significant at the .001 level

Intercorrelations Among Items in Subcaste's Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	.77* (8)	---				
Intermixing Approval	.04 (19)	-.16 (18)	---			
Actual Intermixing	.10 (19)	-.39 (18)	.61***(66)	---		
Bilingualism Prestige	-.10 (19)	.09 (16)	.32* (63)	.27* (67)	---	
Acceptance of Hindi	-.52*(19)	-.25(18)	-.07 (62)	-.08(69)	-.02 (64)	---
Language Liberalism Index	.75* (9)	.63* (14)	.48* (19)	.19 (19)	.23 (19)	.37 (19)

* Significant at the .05 level
***Significant at the .001 level

Intercorrelations Among Items in Social Class' Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	.41 (5)	---				
Intermixing Approval	.36 (10)	-.27 (11)	---			
Actual Intermixing	-.16 (10)	.12 (14)	.58***(77)	---		
Bilingualism Prestige	.33 (10)	.33 (13)	.33**(77)	.61***(81)	---	
Acceptance of Hindi	-.38 (10)	-.15 (13)	.15 (74)	.12 (79)	.07 (77)	---
Language Liberalism Index	-.32 (6)	.63 (9)	.60* (16)	.59* (16)	.32 (16)	.18 (16)

* Significant at the .05 level
** Significant at the .01 level
***Significant at the .001 level

Intercorrelations Among Items in Regions Language Liberalism Index

	Languages Not Appealing	Languages Used Unwillingly	Intermixing Approval	Actual Intermixing	Bilingualism Prestige	Acceptance of Hindi
Languages Not Appealing	---					
Languages Used Unwillingly	-.28 (8)	---				
Intermixing Approval	.20 (16)	-.02 (20)	---			
Actual Intermixing	.42 (17)	-.01 (22)	.49*** (79)	---		
Bilingualism Prestige	.11 (16)	.14 (20)	.00 (79)	.23* (82)	---	
Acceptance of Hindi	-.14 (17)	.18 (21)	.06 (79)	-.10 (83)	-.02 (80)	---
Language Liberalism Index	-.07 (12)	.34 (20)	.43*(22)	.49*(22)	.22 (22)	.02(22)

* Significant at the .05 level
***Significant at the .001 level

APPENDIX K

CONFIDENCE SCALE

(Discussion of Confidence Scale appears on pages 124-126).

91-108. Please answer the following questions by placing a check (✓) on the continuum at whatever point you think best describes your feelings.

Sample: How much do you enjoy lectures?

very much ——————————✓—— not at all

91. Do you enjoy starting conversations with strangers?

very much ———————————— not at all

92. In your social group at home, how embarrassed does it make you to express a deviant opinion?

very little ———————————— very much

93. Do you like to take chances?

very much ———————————— very little

94. Do you seem to get flustered when the attention of a group turns to you?

always ———————————— never

95. Do you like to stand out in a crowd?

not at all ———————————— very much

96. Do you like to act on hunches?

very much ———————————— not at all

97. Are you often praised by other people?

never very often

98. Do you usually mull over decisions you've made and worry about whether or not you've made the right decision?

always never

99. Do you complain to the person in charge when food, service or merchandise is not as good as it should be?

never always

100. Do you enjoy meeting new people?

very much very little

101. In your present business or school group, how much do you think others will look down on you if you express a deviant opinion on an important issue?

very much not at all

102. Do you feel self-conscious very often?

very often not very often

103. Have you found that other people often praise you for your ingenuity?

very often never

104. Do you find it very disturbing to make errors in public?

very much not at all

105. How much confidence do you have that you will succeed in life?

complete confidence no confidence

106. Would you describe yourself as the shy type?

very much not at all

107. How much do you enjoy giving speeches or talks before groups of people?

very much ——— not at all

108. Do you ever wish you had more self confidence?

rarely ——— often

APPENDIX L

KOSSOFF SELF PERCEPT SCALE

(Discussion of Self Percept scale appears on pages 126-128)

109-124. Please indicate how much you agree or disagree with each of the following statements according to the Agreement Code. Check (√) the column which corresponds to the appropriate Agreement Code.

AGREEMENT CODE
1. Disagree very much
2. Disagree somewhat
3. Neutral
4. Agree somewhat
5. Agree very much

	1	2	3	4	5
109. I usually know where to go to find out about important things.	___	___	___	___	___
110. Unless there is a good reason for changing, I think we should continue to do things the way they are being done now.	___	___	___	___	___
111. Youth is usually too impatient and too much in a hurry.	___	___	___	___	___
112. When new ideas are going around, I am usually among the first to accept them.	___	___	___	___	___
113. I watch my expenses very carefully and know where my money goes.	___	___	___	___	___
114. It is not particularly important to me to know all the answers to things people are talking about.	___	___	___	___	___
115. A penny saved is a penny earned	___	___	___	___	___
116. Among my friends, people usually take me to be younger than I am.	___	___	___	___	___

	1	2	3	4	5
117. I am a little bit suspicious about people who always want to have the latest in everything.	___	___	___	___	___
118. Among my friends, I am considered to be a free spender and liberal in the use of money.	___	___	___	___	___
119. The enthusiasms of younger people are hard for me to understand.	___	___	___	___	___
120. Others seem to be better than I am at knowing about everyday affairs.	___	___	___	___	___
121. In general, modern ways of living are much superior to older ways.	___	___	___	___	___
122. My interests seem to be more with those people younger than I am than with older people .	___	___	___	___	___
123. I seem to understand about the way in which the world is developing better than many people.	___	___	___	___	___
124. Money is made to be spent.	___	___	___	___	___

APPENDIX M

DISTRIBUTIONS OF RESPONSES TO ITEMS COMPRISING MOTIVATION SCALE

(Discussion of Motivation scale appears on pages 128-132)

Changes in Drive and Motivation. The largest percentage of Indians rated their motivation and drive as much higher than it had been in the past. Nearly one-half the sample checked the highest category. "Much higher now than it used to be." The question and the responses to it appear below.

Explanation for the response categories checked were not always informative. Many respondents, however, credited travel, increased education and/or contact with many more people as primarily responsible for the increase in motivation.

86. (a) As people grow older sometimes their level of drive and motivation changes. As for yourself, would you say that your drive and motivation is:

____ Much higher now than it used to be

____ Somewhat higher now than it used to be

____ About the same now as it used to be

____ Somewhat lower now than it used to be

____ Much lower now than it used to be

(b) Please explain your answer.

Changes in Individual's Drive and Motivation

Motivation now is:	Number of Responses	Percent of Sample
5 Much higher now than it used to be	47	49.0
4 Somewhat higher now than it used to be	32	33.3
3 About the same now as it used to be	9	9.4
2 Somewhat lower now than it used to be	2	2.1
1 Much lower now than it used to be	1	1.0
No Response	5	5.2
Total	96	100.0
Mean Change in Motivation	4.34	
Std. Dev.	.83	

Motivation Level. The second question asked concerning motivation appears below. Following the question is the distribution of responses to it. Estimates of motivation were very high. One half the individuals felt they had "much" and another third felt they had "very much" motivation in general.

87. Some people are said to be strongly motivated and to have a lot of ambition and drive. Others are said to be less motivated and to have less ambition and drive. How much motivation would you say that you have?

____ Very much

____ Much

____ Some

____ Little

____ None

MOTIVATION LEVEL

Amount of Motivation	Number of Responses	Percent of Sample
5 Very much	32	33.3
4 Much	49	51.0
3 Some	13	13.5
2 Little	1	1.0
1 None	0	0.0
No Response	1	1.0
Total	96	99.8
Mean Motivation	4.18	
Std. Dev.	.70	

Ambition Relative to that of Family. The third motivation item asked the respondent how he felt his ambition compared to that of his family. The item appears below followed by a distribution of responses to the item.

When the students compared themselves to their families, about 58 percent rated themselves as having more ambition and a third saw little difference between themselves and their families.

Explanations offered for responses to the family and self comparison indicate that those who saw no difference between themselves and their families considered their families as very ambitious. Those who saw themselves as having greater ambition than their families saw travel as the key. Some used travel as the "proof", saying they were the only ones in their family to travel abroad for education and this was evidence of their higher motivation. Others saw travel as the motivation. In traveling they saw other cultures, other

ways of doing things and this made them want to do something great for their country or achieve some personal goal.

88. (a) As compared with the rest of your family would you say that you are more or less ambitious than they are?

____ Much more ambitious

____ Somewhat more ambitious

____ About the same in ambition

____ Somewhat less ambitious

____ Much less ambitious

(b) Please explain your answer

Ambition Relative to that of Family

Ambition Compared to Family	Number of Responses	Percent of Sample
5 Much more	22	22.9
4 Somewhat more	34	35.4
3 About the same	33	34.4
2 Somewhat less	4	4.2
1 Much less	0	0.0
No Response	3	3.1
Total	96	100.0
Mean Ambition	3.80	
Std. Dev.	.86	

Importance of Increasing Drive and Ambition. Agreement on motivation was not nearly so high when the question was one of how desirable increased drive and ambition was. Most respondents felt it to be of some importance, but they did not agree on just how much. The responses average about half-way between somewhat important and very important.

The question concerning the importance of increasing motivation and the responses to it appear below.

89. As far as you are concerned, how important would it be to have more drive and ambition than you now have?

____ Extremely important

____ Very important

____ Somewhat important

____ Not very important

____ Unimportant

Importance of Increasing Drive and Ambition

Importance of Increasing Drive	Number of Responses	Percent of Sample
5 Extremely important	23	24.0
4 Very important	33	34.4
3 Somewhat important	21	21.9
2 Not very important	12	12.5
1 Unimportant	4	4.2
No Response	3	3.1
Total	96	100.1
Mean Importance	3.63	
Std. Dev.	1.12	

Ambition Relative to That of Others. The last item in the Motivation scale asked the individual how he felt his motivation compared to that of others. The item and the distribution of responses to it appear below.

Only one person in the entire sample considered himself to have less motivation than most people. Over 75 percent considered themselves to have more ambition than most people.

A comparison of the individual's ambition relative to that of his family with his ambition relative to that of others suggests a tendency for the respondents to view their families as more ambitious than most people.

90. Some people are always trying to get ahead and improve themselves and others seem to be satisfied with their present condition. As far as you yourself are concerned would you say that you are:

____ Much more ambitious than most people

____ Somewhat more ambitious than most people

____ About the same in ambition as most people

____ Somewhat less ambitious than most people

____ Much less ambitious than most people

Ambition Relative to that of Others

Ambition Compared to Others	Number of Responses	Percent of Sample
5 Much more ambitious than most people	28	29.2
4 Somewhat more ambitious than most people	45	46.9
3 About the same in ambition as most people	20	20.8
2 Somewhat less ambitious than most people	0	0.0
1 Much less ambitious than most people	1	1.0
No Response	2	2.1
Total	96	100.0
Mean Ambition	4.05	
Std. Dev.	.78	

APPENDIX N

IMPORTANCE AND RELATIVE IMPORTANCE RATINGS

(Importance and relative importance ratings are discussed on page 190)

Importance and relative importance ratings were obtained by means of the following question:

85. (a) Below are some major groups in India. Please indicate the importance of <u>each</u> group to you by placing an "X" in the appropriate column.
5 = Extremely important 2 = Not very important
4 = Very important 1 = Unimportant
3 = Somewhat important

	5	4	3	2	1
Region					
Social Class					
Family					
Subcaste (jati)					
Country					
Other (specify):					

(b) Indicate the relative importance of each group to you by ranking them, using a 5 for the most important, a 4 for the next most important, and so on. Place these ranks on the line at the left of each group.

Importance of Major Social Groups

	5 Extremely Important		4 Very Important		3 Somewhat Important		2 Not Very Important		1 Unimportant		No Response		Importance	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	Mean	S.D.
Region	10	(10.4)	9	(9.4)	28	(29.2)	16	(16.7)	29	(30.2)	4	(4.2)	2.51	1.32
Social Class	6	(6.3)	8	(8.3)	33	(34.4)	19	(19.8)	25	(26.0)	5	(5.2)	2.46	1.17
Family	47	(49.0)	23	(24.0)	11	(11.5)	4	(4.2)	7	(7.3)	4	(4.2)	4.08	1.22
Subcaste (jati)	2	(22.1)	6	(6.3)	11	(11.5)	9	(9.4)	60	(62.5)	8	(8.3)	1.65	1.08
Country	64	(66.7)	12	(12.5)	5	(5.2)	3	(3.1)	7	(7.3)	5	(5.2)	4.35	1.21

Relative Importance of Major Social Groups

	5 Most Important		4 Second Most Important		3 Third Most Important		2 Fourth Most Important		1 Least Important		No Response		Relative Importance	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	Mean	S.D.
Region	2	(2.1)	11	(11.5)	17	(17.7)	16	(16.7)	9	(9.4)	41	(42.7)	2.66	1.08
Social Class	3	(3.1)	10	(10.4)	17	(17.7)	14	(14.6)	10	(10.4)	42	(43.8)	2.67	1.14
Family	16	(16.7)	19	(19.8)	9	(9.4)	4	(4.2)	5	(5.2)	42	(43.8)	3.74	1.27
Subcaste	1	(1.0)	2	(2.1)	4	(4.2)	9	(9.4)	37	(38.5)	43	(44.8)	1.51	.92
Country(jati)	32	(33.3)	9	(9.4)	1	(1.0)	6	(6.3)	7	(7.3)	41	(42.7)	3.96	1.48