

THE INVENTORY ANALYSIS OF MAJOR ADJUSTMENT/PROBLEMS OF INDIAN  
AND CHINESE STUDENTS /AT KANSAS STATE UNIVERSITY

by

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A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree


MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1971

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## PREFACE AND ACKNOWLEDGEMENT

I have often walked amidst the new physical, cultural, and academic environment of this campus and admired the careful planning that is evident in many segments of this community. Kansas State University is not only a source of pride to many Americans but also to many international students. It has always been included in the list of America's most promising and advancing institutions of higher learning. For years these institutions have encouraged students to come from different nations all over the world. Kansas State University has contributed a great deal in the direction of increasing better international understanding through its "exchange students program" with various developing countries, and by admitting many more international students seeking advancement in specialized fields.

As a foreign student from India, I was always anxious to meet more (and more) students from various other countries, in order to share their cultural, educational, and personal experiences. I made quite a number of friends from different countries. However, in my experience I succeeded less in developing a "true friendship" (I mean intimate) with Americans. On the other hand, I did create an intimate circle of friends including many Indians, Chinese, Iranians, Germans, Arabs, Egyptians, Pakistanies, and a few more from other European countries.

On several occasions I had an opportunity to listen to many foreign students talking about their difficulties in adjusting to a new setting of cultural and educational life in this country. Sometimes when I asked some of them the question, "What kinds of difficulties do you face, and in what areas?", in reply I used to receive an elaborate list of difficulties and diversified opinions about their solutions.

As a student of regional and community planning, naturally I became interested in the problems of foreign students. My curriculum itself offered me few occasions in which I had an opportunity to discuss these problems with the professors of my department and various authorities on the campus, especially the Dean of Students, Foreign Student Advisor, and the Director of Housing and Food Service.

I looked into these problems more carefully and critically, more from a viewpoint of a planner, to work out a possibility of conducting an organized study. My explorations of the past studies done at other institutions further enhanced my understanding of the problem, problem areas, and problem people.

My own inquisitiveness and enthusiasm along with the encouragement I received from my professors made this study possible. However, a joint decision was reached to limit the study only to the problems of Indian and Chinese students in favor of making it more meaningful.

A study that seemed simple to me and easy to carry out led us through a much more complicated and torturous process than had been anticipated. There were a couple of research windfalls we could not resist. Hence, for instance, the study does present some fascinating data comparing the problems of Indian and Chinese students and testing the influence of a few variables on problems' intensity. This may stimulate some to take a careful "second look" at some of the less manifest impact of such comparisons and testings.

During the entire period leading to completion of this report, Prof. Ray Weisenburger, then Major Advisor on my committee, provided steadfast encouragement and guidance. I am deeply grateful to him and will cherish our association. I am also greatly indebted to Dr. George Peters of the Department of Sociology and Anthropology, who served as the Special Advisor on my committee and provided essential guidance, help, and his knowledgeable experience in dealing

with the matters related to the "questionnaire methodology" and "statistical analysis", without which this study would not have been possible.

Thanks are also due to Professor Eugene McGraw who served as the Committee Chairman, and extended valuable suggestions during the course of this research project. I thankfully acknowledge the help provided by Kris Aarehart of the Computing Center in programming and data processing. Mrs. Nancy Habluetzel assisted me with the preparation of the final draft by reading through the original manuscript. My appreciations are due to her patience and skill with which the typed copy of this report resulted.

Finally, a major contribution was made by the Indian and Chinese students themselves. As foreign students, they have reason enough to suspect the motivations of persons who approach them "just to ask a few questions". The warmth and candor with which I was received speaks well of their enthusiasms and interest shown in this study. I am especially thankful to these students for telling us their problems and allowing me to enter their homes.

While many contributed to the execution of the study, the responsibility for errors both in judgment and fact is solely mine.

N.F.N.

## CHAPTER I

### INTRODUCTION AND STATEMENT OF THE PROBLEM

#### Problem Description: Statement and Objective

Basically, this research was an exploratory attempt made by the author "to examine and identify the major adjustment problems of Indian and Chinese students enrolled at Kansas State University during the academic year 1970-71. Further, it was intended for recording the intensity and magnitude of such adjustment problems and their resulting patterns that might be of typical character and structure on this campus. The results were also to be judged in the light of their overall implication for planning and administrative purposes."

Based on some of the recommendations incorporated in the past research studies carried out at various institutions on Foreign Students, the author had limited this study only to the two major nationalities. These were Indian and Chinese students. The fact that they constituted more than fifty percent of total population of foreign students on this campus was a major reason for their selection.

The findings reported in this research report were based on the study of forty Indian and thirty-three Chinese students. There was no specific attempt made to test any hypotheses or to make any evaluation of existing Foreign Student Programs on the campus.

Although the research was exploratory in nature, it was quite well organized. While in the beginning there was no specific guiding hypotheses, there was a deliberate attempt to identify the present and preference status of both individual sub-groups, to define the specific problem areas and the problem statements under each one of them for the use of the questionnaire,

and finally to test some of the relevant variables that might have bearing on any of the specific problem areas of students' adjustment during their sojourn in the university situation. Beyond this, the study sought to explore data-gathering and analysis techniques particularly appropriate to the studies of foreign students, to discover some promising leads for further research, and to arrive at some tentative and restricted generalizations pertaining to the specific group under study.

### Review of Literature

Over the past three decades in the years following the World War II, an ever increasing number of foreign students have entered institutions of higher education throughout the United States. In 1939-40 there were 6100 students from abroad, by 1953-54 there were nearly 34,000.<sup>1</sup> During 1964 the number had already increased to 75,000. The current official reports on the population of foreign students in the United States accounted for a total of well over 110,000 on various campuses across the country.

In his address to the Opening Plenary Session of the Annual Conference of the National Association for Foreign Students Affairs, John C. Weaver had emphasized, "Nonetheless, 130,000 foreign students now study on our campuses, and if we are capable of making higher education in this country truly personalized and meaningful, we still have an enormous opportunity for world betterment in our hands."<sup>2</sup> In 'A Five-Year Study of Foreign Students-1959-64' carried out at the University of Iowa School of Journalism, Markham, Professor of International Communication, has noted, "The presence of foreign students on American campus is no longer a novelty and studies . . . have not been lacking. But more knowledge about the net effect of their American experience is needed . . . Because foreign students constitute a small minority . . . their

potential significance is often overlooked in the total university program!"<sup>3</sup>

In an attempt to achieve the high goals described by the foregoing authors, it would be far more meaningful for a researcher to make a scrutiny of the underlying problems of the community which is totally alien in its character and structure. However, this should serve as a mean and not an end in itself for further developing and dealing with more advance research.

The difficulties and the problems which foreign students encounter in adjusting to the campus communities in the United States have been manifold. Several studies have been made in the past at various academic institutions\* in order to recognize such adjustment problems, their intensity, and their adverse effect on students' educational progress, and their implication on the other aspects of social life. These studies have revealed various patterns of students' adjustment, and also the patterns of adjustment problems. As noted by Sewell and Davidsen,<sup>4</sup> the former type seemed to have emerged from the students' sojourn motivations, role perception, and return expectations; whereas the latter type seemed to have developed under the four major areas of students' involvement in the university situation, namely: physical, economical, social, and academic. It was the latter type on which this study was focused.

However, such patterns varied greatly depending on the exact profile of foreign students' population existing on particular campus, programs and facilities offered at such institution, intensity and magnitude with which such problems were experienced and felt by the students, and, of course, the areas under which such problems had developed. But then they were subject to several other unknown factors that might change their configurations. The

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\*Among these institutions the most prominent were: University of Wisconsin, University of Pennsylvania, Ohio State University, University of California, University of Iowa, Cornell University, and University of Minnesota.



very evidence of this was the fact noted by Lambert and Bresseler<sup>5</sup> in their research study. They discovered that the survey of the traits and special problems ascribed by foreign student advisers to various nationalities revealed a notable lack of consensus. In other words, the problems of foreign students differed from nationality to nationality.

Often, in the past, during their research projects many researchers had an opportunity to record the personal opinions of foreign students on the problems of adjustment. Although they had encountered many severe criticisms they felt it necessary to jot them down as empirical facts more meaningful in their research analysis. The following two examples of such personal opinions recorded by Peterson and Neumeyer during their study of foreign students' problems at the University of Southern California would give readers an opportunity to experience a kind of bold criticism:

1. I worked 10 years in China before I came out the first time and spent all in 3 years. Employment has been hard for me to find because as an alien I am automatically disqualified from any government contracts (i.e. aircraft). Furthermore, several California employers have lost customers because they have employed me, an alien, rather than some returned veteran and consequently have asked me to leave their employ.

This time I worked  $6\frac{1}{2}$  years in China and changed \$5,070,000\* Chinese currency to \$1,500 U.S. and can only last less than a year. I gave my whole life's savings to the U.S. but no one knows.

This country make us cold and bitter and cynical and impresses that all the talk about the equality, freedom, etc., and the entire 'American way of life' is a big farce; a mighty fake. Due to experiences both in and out of the campus, our impression of a liberal and tolerant U.S. has completely faded. Our experiences when we went room hunting were pitiable. The people looked at us as if we were not made of flesh and blood. One can not examine the position of the non-Caucasoid student in the United States without coming swiftly to the conclusion that the economic and social problems can not be treated systematically by themselves. A measure of relief can be achieved by increasing the contacts between foreign students and above-average Americans. Surely if there are

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\*Readers should note that this rate of exchange is no more in force.



any enlightened Americans they should be found in and around the Universities. We met too few of these few.

2. The people here do not like foreigners. They may smile in their faces but they are not at all to be their friends. I tried hard to get some real friendship of some Americans, both on campus and outside, but failed.<sup>6</sup>

The causes and inception of such adjustment problems have been most of the time attributed by many researchers to the bare factors of socio-economic, physical and academic origin. However, many cross-cultural, environmental and social-psychological factors have always played a great role in the initial development of such problems.

A number of variables such as nationality; age; academic, social, financial and personal status; type of institution (campus or college); cultural background; etc., have been studied in relation to some of the dependent variables such as personality development, attitude change and formation, social change and interaction, personal interaction with Americans, communication skill and contact development, and pattern of adjustment. Of all these the last one 'pattern of adjustment' has remained very basic and important variable to be studied at any rate. Discussing the pattern of adjustment, Sewell and Davidsen have argued:

It is obvious that the particular ways of adjusting to a new and complex situation, such as that confronting foreign students in America, are many and varied and depend on a number of factors in the personal background, personality, and particular situation confronting a student . . . No two students follow an identical pattern; however, careful analysis . . . does suggest at least four fairly clear patterns into which most of the students can be placed without violence.<sup>7</sup>

The objective of this research report was also focused on the idea of working with some of the foregoing variables, and the most important of all the objects was the idea of recognizing the 'adjustment problems' of foreign students and the resulting pattern of adjustment thereof. However, this is discussed at length in the latter part of this report.

From the discussion carried out in the preceding paragraphs it would not be difficult for a reader to conceptualize the casual relationship between the 'problem people', the 'problem areas', and the 'patterns of adjustment'. A glance observation would lead to the fact that the adjustment problems in any area are the direct products of the very presence of 'problem people' (i.e. foreign students). However, they might as well occur in certain areas even in the presence of only American students. But the intensity and magnitude with which such problems occur, forming up various patterns of adjustment, would differ to somewhat lesser or greater degree from institution to institution.

Nevertheless, the intensity and the magnitude of such problems have scarcely been critically examined in the light of their resulting implication toward recognizing more innovative aspects of administrative, physical, and academic 'planning' on the campuses. Emphasizing the need of the kinds of research needed on foreign students, Barbara Walton, consultant on cross-cultural education, has clearly indicated in her presentation:

Foreign students are the part of the student sub-culture; they are more student than foreign . . . and they should be studied as such. Until we know more about the student problem in general, we can not tell which ones are unique to foreign students.<sup>8</sup>

Lambert and Bressler, in their studies on Indian students, have observed the following facts:

Their foreign students special problems and goals are not directly relevant to the major issues with which the policy makers in the American academic life are preoccupied. Like other students suddenly thrust into our academic life, they must adjust themselves to this unique and intricate social institutions, learn the ways of professors, deans, and secretaries, and acquire as best they can the symbols of success. The special nature of the problems of the students from abroad, the appeal of sharp cultural contrasts . . . have moved a very high percentage of our major colleges and universities to provide separate facilities for meeting the special needs of the foreign student group . . .<sup>9</sup>

However, some of the institutions have effectively dealt with their foreign student population and its adjustment problems. They have been very often sensitive to the needs and interests of this segment. Also noted for the work of excellence, by Lambert and Bressler,<sup>10</sup> were the organizations like the Institute for International Education, the International House (on big campuses), the Committee on Friendly Relations among Foreign Students, World Affairs Councils, the Federated Women's Club, the League of Women's Voters, and various fraternal and church organizations. They further argued that the work carried out by these organizations was ample testimony to the interest which foreign students excite in many circles in America.

The reason for their success and the desired achievement along these lines may be attributed to the fact that these institutions have carefully considered and studied, with greater emphasis and enthusiasm, the entire segment as an integral part of their unique formation.

But, on the other hand, many campuses still lack the real understanding and realization of such problems of foreign students either simply due to non-availability of sufficient funds to carry out effective research, or due to their lack of concern about the foreign student affairs, since they have developed a magnificently rehearsed 'smiling-in-face' attitude. Maybe they do not wish to direct their concern to such small matters which they may regard as the least significant and of no consequence whatsoever, especially when there are numerous other problems of greater saliency to be considered and dealt with on the burgeoning list of priorities. One more reason, the author thought, that could be attributed to this lack of understanding and realization of foreign students problems was the fact that there existed a very vague notion, or acceptance of a superficial assumption frequently expressed by many campus authorities, that such problems were myriad, involving great complexi-

ties, and hence could not be effectively dealt with.

But the author had a strong feeling that such campuses were, in fact, in need of obtaining a more detailed and varied information concerning the nature, intensity, and magnitude of such problems for proper analysis. This in turn would be followed by formulation of improved plans, policies, and programs and ultimately by their effective implementation.

The same was felt true of Kansas State University. There were plans, policies, and programs adopted; but their implementation was less effective and the ends achieved were more unsatisfactory. This was simply because of the fact that the information concerning a detailed analysis of foreign students' problems at the disposal of campus authorities was either limited or based on some crude assumptions and on many occasions an obsolete bunch of papers.\*

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\*Here, while making such statements the author has taken the position strictly based on his own experience which he gained through making some efforts on his previous research papers. During the summer and fall of 1970 and later on in the Spring of 1971 (this was also initial research period for this research report), author had an opportunity to conduct a pilot research study on 'Foreign Students Housing' for one of his classes in the Department of Regional and Community Planning. In fact, an attempt was being made to explore the possibilities of having some kind of International House on this campus or at least to come up with some workable ideas in this direction. While exploring into such possibilities, the author had a chance to discuss some of the problems of foreign students (specifically housing problems) with various responsible officials on the campus. The list included: Dr. Eugene Casper, Dean of Students at Kansas State University; Assistant Dean Allen Bretell, Foreign Student Advisor on campus; Mr. Wendell R. Kerr, Assistant Director, Housing and Food Service on campus; Mr. Keith Sutterheim, Director of International Affairs for Student Government on campus; Mr. Rowan Conrad, part-time assistant in Dean of Students' Office, assisting in many foreign student programs on campus; Prof. V.P. Deines, Head of the Department of Regional and Community Planning; and, of course, the author's academic advisor on all these projects, Prof. Ray Weisenburger, Associate Professor in the Department of Regional and Community Planning.

### Significance of the Project

Although the study was exploratory in its nature, it had its own significance. First of all, a mere exploration into the profile of any group of foreign student population would reveal notable amounts of useful empirical facts. Not only these facts but also the information obtained through the questionnaire technique would be highly useful in measuring some of the practical difficulties of adjustment in a new setting of life and the important directions of inclination of the group under study. In other words, the latter aspect would provide a researcher with a fairly good idea about the needs and interests of such group. More or less, the same phenomenon of significance was observed to be a factor associated with this research, too.

Discussing about the profile study of foreign students and its significance, carried out at Kansas State University in the fall of 1968-69 by the Foreign Student Advisor, Mr. Allen Brettel, and the Assistant Dean of Students, Mr. Bruce Gildseth, both the authors had emphasized the following viewpoint:

There are number of reasons for writing a report of this nature. First, foreign students add a vital dimension to the University community. Too often we simply label a student as a "foreign student" without appreciating the diversity he brings to our campus. Respecting the differences portrayed in this report will help us recognize the degree to which foreign students add to all segments of the community.

Second, this type of report can serve as a catalyst for further research. An extensive survey of the needs and interests of foreign students in our community would contribute significantly to the strengths of existing programs. Assessing cultural differences and difficulties which foreign students encounter in adjusting to our communities would provide additional information from which helpful inferences could be made.

Third, the results of this type of research are useful to the degree that they are relevant to the reexamination and planning of programs and services. What is needed is the examination of the implications of this information for specific programs. This is particularly relevant in view of the recent University and community interest in an international house, a World Friendship

group for married student wives, a family host program and an Ecumenical International Center. Utilization of these types of information can serve not only as a stimulus but a solid base for developing effective programs of this nature.

. . . the report will not be viewed as a finished product, rather the beginning of a continual flow of information, which can serve as a stimulus to seek new ways to (1) better utilize the significant talents and resources foreign students bring to us and (2) help foreign students become a more integral part of our community.<sup>11</sup>

In his study of foreign students, Brewster Smith<sup>12</sup> had noted that there could be real value in studying such a slice of the empirical world from various perspectives. He further contended that it provided a common testing ground in which the interrelations of different theoretical approaches could be worked out.

Further, as a special critic on the overall articles of research by various authors on cross-cultural education published in the Journal of Social Issues,<sup>13</sup> David Mandelbaum had contended that the study of the foreign students' personal adjustment could give useful clues on the great social factors which would affect the outcome of their education. And, he said, the knowledge of such social factors could illuminate the understanding of their varying styles and strategies of adjustment.

Many works of the past authors were carefully and critically reviewed by the author in the realization of such factors that would help him in framing up this study more as a Social Planner rather than a Physical Planner.\* Many citations from these works would have further substantiated the author's arguments on the significance of this research. But then it was felt more reasonable to include a complete list of such works in the form of a bibliography in this report for a quick reference by readers.

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\*Refer to Appendix "F", page 155.



However, it was anticipated that the outcome of such study would effectively contribute to:

- 1) Recognizing the needs and interests of the population that constitutes the majority (53 percent) of the foreign students on the campus through analyzing the intensity and magnitude of their 'adjustment problems'.
- 2) Assessing valuable information on cultural differences and various difficulties which these students face in adjusting to the campus community.
- 3) Updating the information on hand with campus authorities for 'planning and administrative' purposes.
- 4) Designing and improving the physical, economic, academic, and social and cultural needs of Indians and Chinese students.
- 5) Reexamining and strengthening existing administrative and other related programs for these segments of the foreign student population on the campus as an integral part of the entire concept of 'Institutional Planning and Development'.
- 6) Acting as a catalyst for further research.

#### Scope and Limitation of the Project

Since the study was exploratory in nature its scope was also severely limited. First of all, it was designed with an intention of giving an impetus in the direction of research on foreign students at the resident campus.

Secondly, as the research dealt with the adjustment problems of only Indian and Chinese students, the outcome of the study was assumed to be of some important value to those institutions having Indian and Chinese students as the majority of the foreign student population. However, in the beginning

it was clearly noted by the author that not only Kansas State University had the major segment of foreign student population as of Indians and Chinese, but the numerous other campuses all over the United States had either Indian or Chinese as the first or the second biggest majority on the campus.

Thus, it was the expectation of the author that the other campuses could as well utilize outcome of the research as a source of an additional information or as basis of comparative study directly dealing with similar kinds of problems.

However, the patterns of adjustment could have differed in many places from campus to campus; still, the approach, method, and technique described in the study could very well be put to use and be developed further by any other researcher on any other campus apart from Kansas State University.

Some of the limitations of this study have already been stated. The initial goal was to contact the Indian and Chinese students on the campus to assess the problems and difficulties they encountered in the areas of 1) Physical, 2) Economic, 3) Social, and 4) Academic adjustment. In the process of achieving the goal stated here, the following difficulties were encountered by the author which in turn had limited the study in certain respects:

- 1) Although it was decided in the beginning to include the entire population of Indian and Chinese students in the sample to reduce the statistical errors, it was not possible in the later stage of actual data collection to get back the questionnaire from each and every student without an extreme hardship of almost impractical nature. However, this did not severely limit the study since almost 30 percent of Indian and Chinese were included in the sample. In other words, it was an adequate random sample for the purpose of inductive statistics, but on the other hand, the largest possible sample would have increased the significance of deductive statistics.



- 2) Although the sample was completely drawn on a random basis as discussed in the later part of this report, there might have been a possibility of few biased samples being uncontrollably included in the research.\*
- 3) The time factor involved in this research was a bit insufficient. Although the work was started by the author in the later part of Fall of 1970, the actual data gathering took place in the middle of Spring, 1971. It was experienced by the author that a full load of 12 to 15 graduate credit hours per semester did not allow him to devote more than just required time for this research. Hence, he would recommend that such research work should be taken independent of any other required course-work as far as possible and be given a reasonable amount of time.
- 4) Yet another limitation of the study was in the use of few statistical tools where the inductive statistics were used to draw the inferences. They were rather utilized for a less sophisticated type of analysis which was not altogether misleading. The methods used for computing the T-values and Chi-Square values were undoubtedly correct. The only things required were a few checks and re-checks on the initial runs for greater validity of the answers. Time did not permit this. However, in case of Chi-Square Tests, it was found that many cells were empty which further warranted a need for additional number of observations. Although the Spearman Rank Correlation Coefficient was manually computed, it did not suggest any kind of limitation.

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\*This might be due to some recent change in the policies of United States Government on Immigration Laws for Aliens, and also due to the rising amount of unemployment whereby aliens were extremely affected.

## CHAPTER II

## POPULATION SAMPLING AND QUESTIONNAIRE DESIGN

Profile of Foreign Students at Kansas State University

A general trend in the admission policies indicated that each year about 500 foreign students from 62 foreign countries were being admitted at Kansas State University. Almost 90 percent of them were found enrolled in the graduate school in the variety of curricula offered by the various departments on the campus. These students were carefully selected by the university authorities as part of the strict admission policies to continue their studies in the United States. Many were on deputations from the positions of importance in their native lands. They were either on the exchange program through Agency of International Development (AID) or privately sponsored by some other national organization. They were either seeking a higher education degree (mostly Ph.D.) or a specialized training in their practical field. The rest of the students, almost 75 percent of them, came on their private funds usually sponsored by the family head. They were relatively younger than the first group, were less conservative, and more enthusiastic in their pursuit of life. They generally possessed an undergraduate degree in their major field with almost no further practical experience of any kind.

A close examination of the cross section (profile) drawn through the segment of entire foreign students' population in the academic year 1968-69 would reveal many other characteristics of this typical group.

In their report prepared for the Office of the Dean of Students, Allan Brettell and Bruce Gildseth had stated in the beginning that:

Kansas State University is an International community. In our midst are foreign students representing nations from every corner of the world. They come to live and study and share the uniqueness of their

own culture with us. Individually each foreign student makes his own unique contribution. Collectively they add a significant dimension to the strength and diversity of our University.<sup>14</sup>

Their report was a profile of the 409 foreign students and the 44 permanent residents enrolled at Kansas State University, Fall Semester, 1968-69. It included a description of the total foreign student population and was based upon a number of variables such as country, curriculum, religion, marital status, and degree sought. The data were compiled from information available in the office of Advisor to Foreign Students and represented the responses of at least 95 percent of the total foreign student population.

In the summary of the findings their report had provided the following information:

An overview of the preceding profile suggests the following portrait of the model foreign student at Kansas State University. The student is a male (89%), age 27, who has come directly from his home country (84%) to Kansas State University. His native land most likely China or India (52%). He is a graduate student (85%) enrolled in the College of Engineering (39%), Arts and Sciences (27%), or Agriculture (23%) and is working toward a Master's Degree (57%). His previous education consists of a Bachelor's Degree (86%), which he earned in his home country (81%). The student is single (66%) and lives in off-campus housing (71%). His primary source of financial assistance is personal or family savings and income (48%). His religious preference is Hindu (20%) or Moslem (17%). Upon successful conclusion of his study, he intends to return to his home country.

It would be easire for the reader now to conceive an overall picture of foreign student population from the above profile on this campus. In fact, the sample selected for this study did represent very closely the overall profile drawn by Brettell and Gildseth from their study of entire foreign students' population described above.

It would be of great help to bear in mind from the foregoing citation some of the percentages shown there, especially those related to the Sex, Country of Origin, Academic Status, Marital Status, Financial Assistance, and Choice of Housing. Of course, the median age would also be worth noting.

Some of these factors were also found to be significant in the present study except for the fact that the information compiled included only two major nationalities, that of Indian and Chinese students. The further account of these latter groups would be worth studying.

### Characteristics of Sample Population

While it was evident from the past trends, the population of Indian and Chinese students had always exceeded in size as compared to the population of students from other countries at Kansas State University. In Table 1 given below, an Average Yearly Enrollment of Indian and Chinese Students for the last five years at Kansas State University has been shown:

TABLE 1  
AN AVERAGE YEARLY ENROLLMENT OF INDIAN AND CHINESE  
STUDENTS AT KANSAS STATE UNIVERSITY  
1966-71

Year of Enrollment	Foreign Students				
	Total	Indian	Chinese*	Sub-total	%
1966-67	425	84	131	215	50.5
1967-68	405	84	114	198	48.6
1968-69	399	100	110	210	52.5
1969-70	432	96	130	226	52.7
1970-71	443	110	125	235	53.0

\*A range of 5-8 students from Hong Kong were also included.

Obviously, such a high presence of any population sub-group within a distinctly recognized group of aliens would deserve somewhat greater attention than its other counterpart. Here, the author's point of view, however, did not imply any discriminatory attitude to be shown toward a particular group or groups. So far as possible each group should be treated as unique and still equal in all other respects. The point was to emphasize the degree of enormousness and the resulting diversity that were characteristically present in the group of Indian and Chinese than the rest.\*

In principle, the size itself was an important characteristic which deserved an attention worth focusing for the study purposes.

From the analysis presented above followed a statement of quite a general acceptance, however, based on a sound logical reasoning. The University involvement in the academic as well as non-academic life of any group of foreign students having a vast majority on the campus would be, for all practical purposes, much deeper and intense as compared to any other group\*\* in many respects. This was especially true when such group or groups would sojourn for the specific purposes more suited to their needs and interests, and with their limited resources on any of the campuses in the United States. However, substantiated to some extent by the past research work, the foregoing statements were regarded more as arguments than the facts seeking greater validity and further investigation.

Although it was not possible to study any of the population characteristics of the Indian and Chinese group as a whole, a sincere attempt was made to

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\* More than 50 other Nationalities were included in 'the rest'.

\*\*Author regarded each group as of separate Nationality, except Indian and Chinese who were treated under one single group.

study some of the important characteristics from a randomly selected sample of 73 respondents. Nevertheless, the sample which was closely representative of the entire foreign students' population studied by Brettell and Gildseth did permit extension of every generalization derived from this study to the population of Indian and Chinese students as a whole. This would be conceivable from the following analysis of characteristics of sample populations. The sample was selected from the average population of 235 Indian and Chinese students enrolled during the academic year 1970-71 when the total number of foreign students enrolled was 443.

As described later in this report, part I of the questionnaire\* was used for the purpose of collecting required information on seven different variables related to the population characteristics as specified below:

- 1) Major Field
- 2) Age Group
- 3) Marital Status
- 4) Sex
- 5) Degree Level
- 6) Financial Aid
- 7) Financial Source

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\*Presented in appendix A, pp. 88-95.

The seven variables described in the preceding captions were among those twenty-two forming the part I of the Questionnaire. Since these variables essentially described the important characteristics of the population under study, it was more appropriate to include them in this chapter. The remaining variables have been discussed in the chapter V of this report.

From the data that were collected on the seven variables from the 73 respondents, 40 of them Indians and 33 Chinese, the following characteristic-profile of this population was constructed:

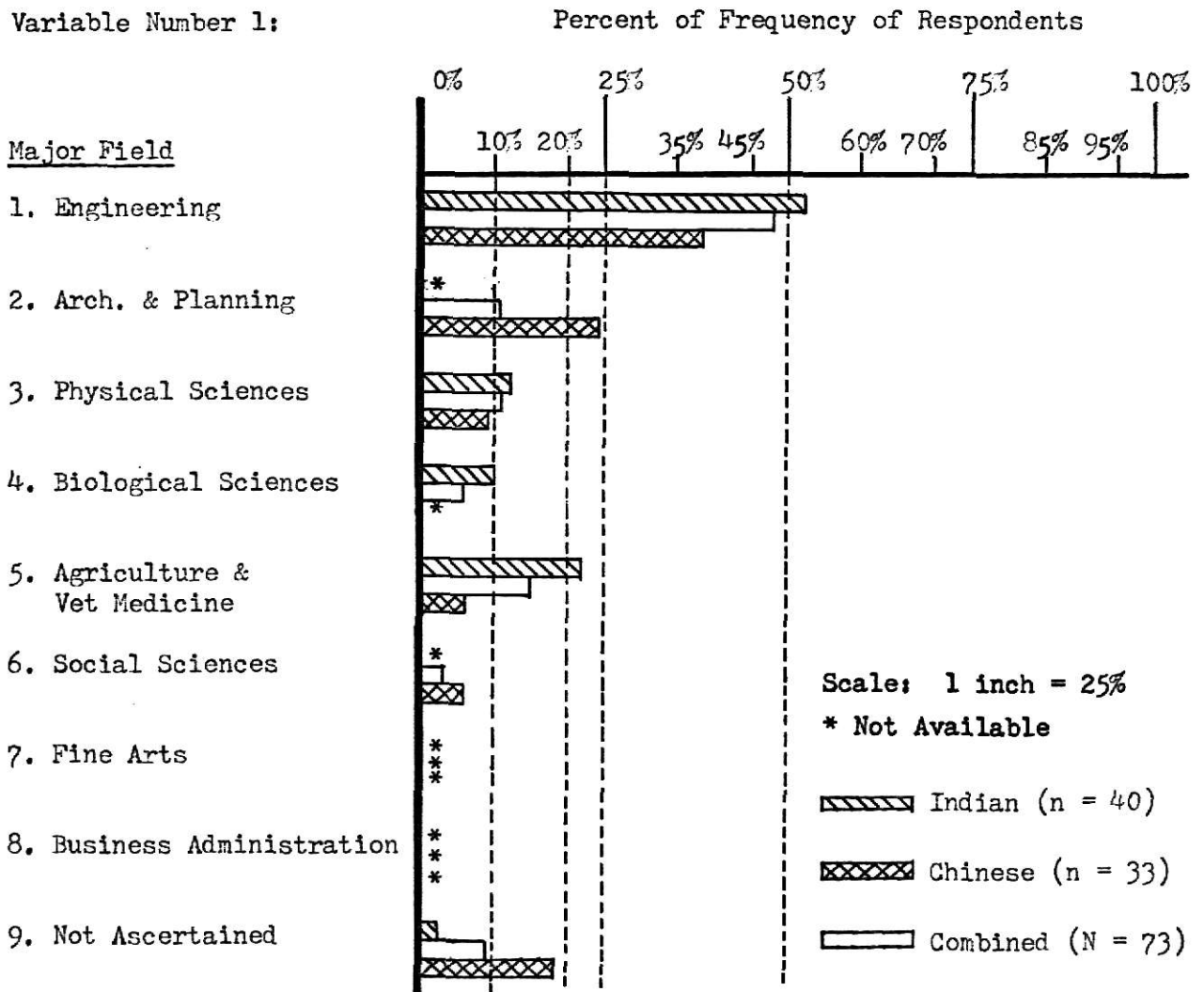


Fig. 1. Distribution of Indian & Chinese Student Sample According To Major Field at Kansas State University

TABLE 2  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
MAJOR FIELD AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
Engineering	33	21	12	45.21	52.50	36.36
Agriculture & Vet. Medicine	11	9	2	15.07	22.50	6.06
Architecture & Planning	8		8	10.96		24.24
Physical Sciences	8	5	3	10.96	12.50	9.09
N.A. (Not ascertained)	7	1	6	9.59	2.50	18.18
Biological Sciences	4	4		5.48	10.00	
Social Sciences	2		2	2.74		6.06
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

Figure 1 showed the percentage breakdown of Indians and Chinese separately, and combined according to the Major Field of enrollment. The detail percentage figures have been given in Table 2. The graph indicated a very high enrollment (45%) of the combined population in the field of Engineering. Separately the enrollment of Indians was much higher (52%) than that of Chinese (36%). There was no Indian recorded in Architecture and Planning, whereas the percentage of Chinese was quite large (24%). However, together the percentage of enrollment in Agriculture and Vet. Medicine ranked the second highest. The combined percentage in the Physical Sciences remained equal to that of Architecture and Planning but separately the Indians and Chinese were almost equally distributed in the former. Only about 8 percent of Indians and Chinese were enrolled in the Biological and Social Sciences. None was reported in Fine Arts and Business Administration. Eighteen percent of Chinese whereas only 2.5 percent of Indians did not ascertain; the combined figure for this was 9.5 percent.

From the above analysis followed a conclusion that the field of Engineering was the most demanded field of study both by Indians and Chinese.



Variable Number 2:

Percent of Frequency of Respondents

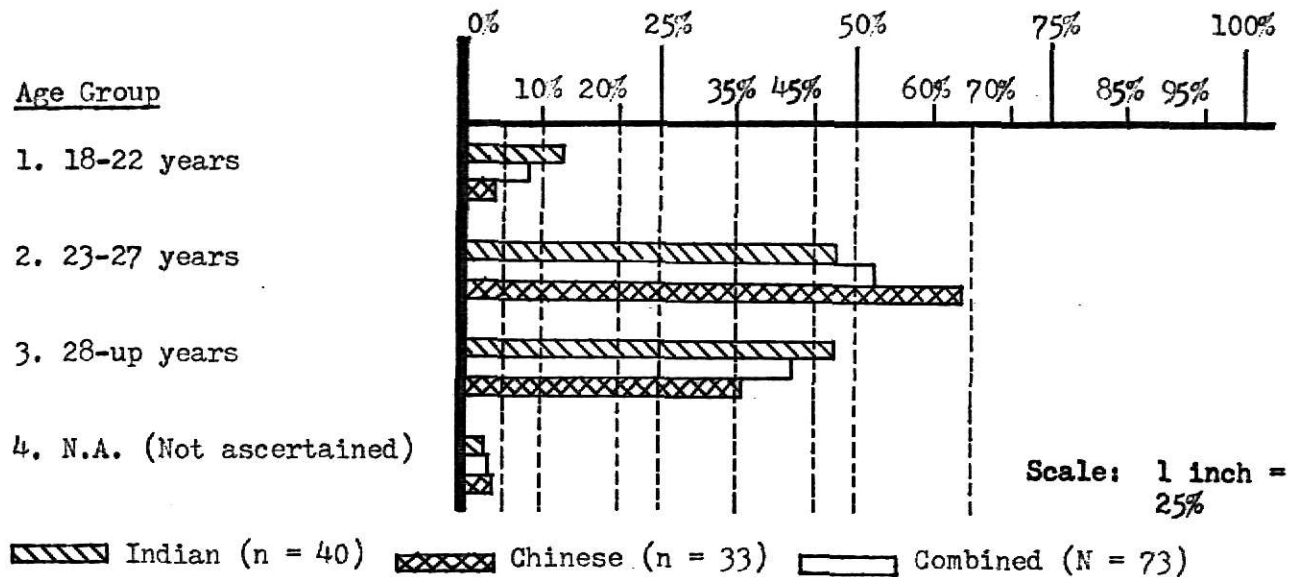


Fig. 2. Distribution of Indian & Chinese Student Sample According to Age Group at Kansas State University

TABLE 3  
DISTRIBUTION OF INDIAN AND CHINESE STUDENT SAMPLE ACCORDING TO AGE GROUP AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
23-27 years	38	17	21	52.05	42.50	63.64
28-up years	27	17	10	36.99	42.50	30.30
18-22 years	6	5	1	8.22	12.50	3.03
N.A. (Not ascertained)	2	1	1	2.74	2.50	3.03
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

The percentage breakdown of Indian-Chinese, Indian, and Chinese by age groups has been shown in Fig. 2, Table 3. Combinely, more than 52 percent of Indian and Chinese were within the age group of 23-27. Separately, more Chinese (63%) were recorded in this group than Indians (42%). The next larger group (28-up years) accounted for 37 percent of the combined population. Only two

respondents did not ascertain. The "Median Age" of the combined group was 26.4 years.

From this it was concluded that an average Indian or Chinese was a young matured student, age 26.

Variable Number 3:

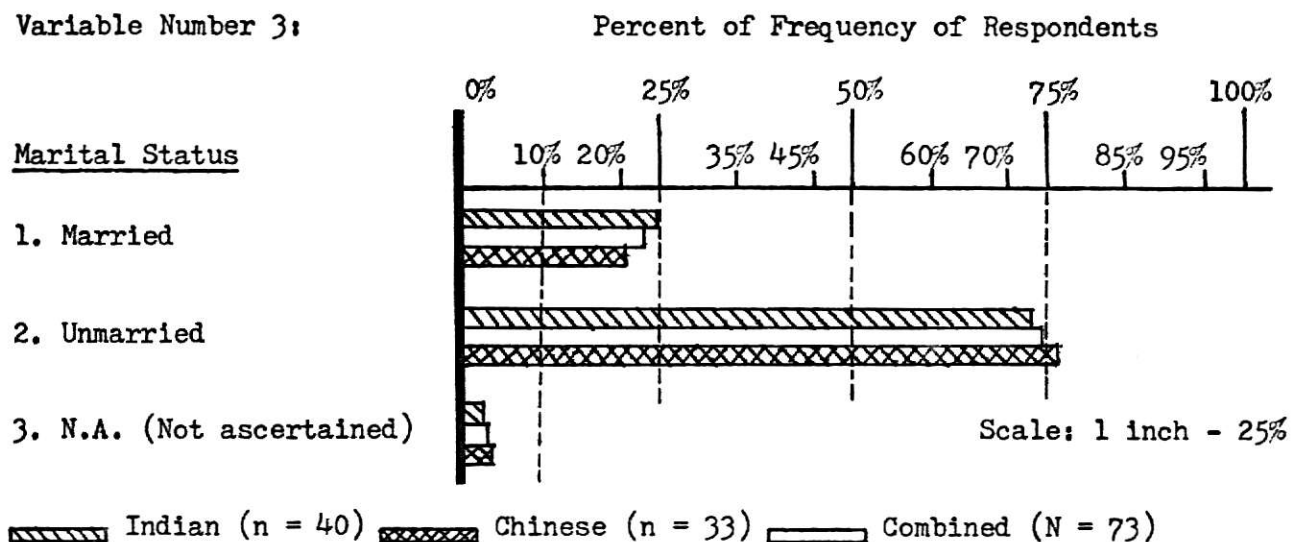


Fig. 3. Distribution of Indian & Chinese Student Sample According to Marital Status at Kansas State University

TABLE 4  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
MARITAL STATUS AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
Unmarried	54	29	25	73.97	72.50	75.76
Married	17	10	7	23.29	25.00	21.21
N.A. (Not ascertained)	2	1	1	2.74	2.50	3.03
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

As shown in Fig. 3, Table 4, the sample population (73) of Indian and Chinese was broken down, by percentage, into two groups according to individual's Marital Status. More than 73 percent of combined population was recorded as "single", whereas only 23 percent as "married". Separately, almost the same

percentages were accounted for both the categories (married and unmarried).

Only two students did not indicate their status.

Thus, it was observed that a considerably larger percentage of Indian and Chinese students on the campus were reported to be bachelors.

Variable Number 4:

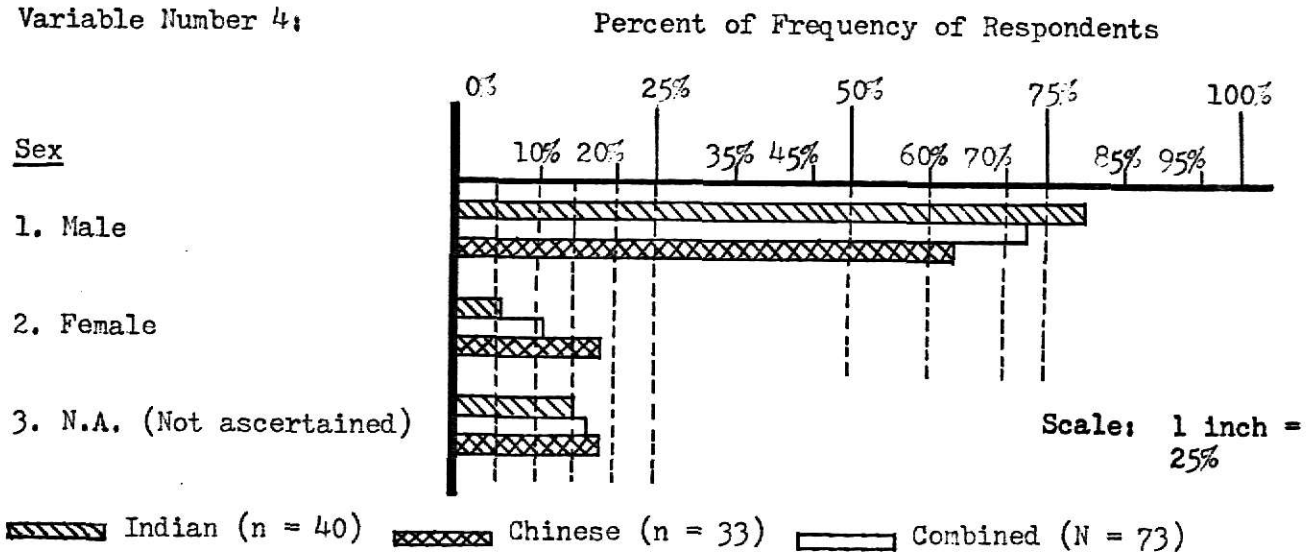


Fig. 4. Distribution of Indian & Chinese Student Sample According to Sex at Kansas State University

TABLE 5  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
SEX AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
Male	53	32	21	72.60	80.00	63.64
N.A. (Not ascertained)	12	6	6	16.44	15.00	18.18
Female	8	2	6	10.96	5.00	18.18
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

A percentage breakdown by "Sex" has been presented in Fig. 4, Table 5. Out of seventy-three Indian and Chinese, fifty-three (73%) were male, and only eight females (11%) were recorded. Percentage of females was still lower (5%) in the case of Indians, but comparatively it was higher (18%) in the case of Chinese. Jointly, more than 16 percent did not ascertain.

It was concluded that within the group of Indian and Chinese students the presence of females was almost negligible.\*

Variable Number 5:

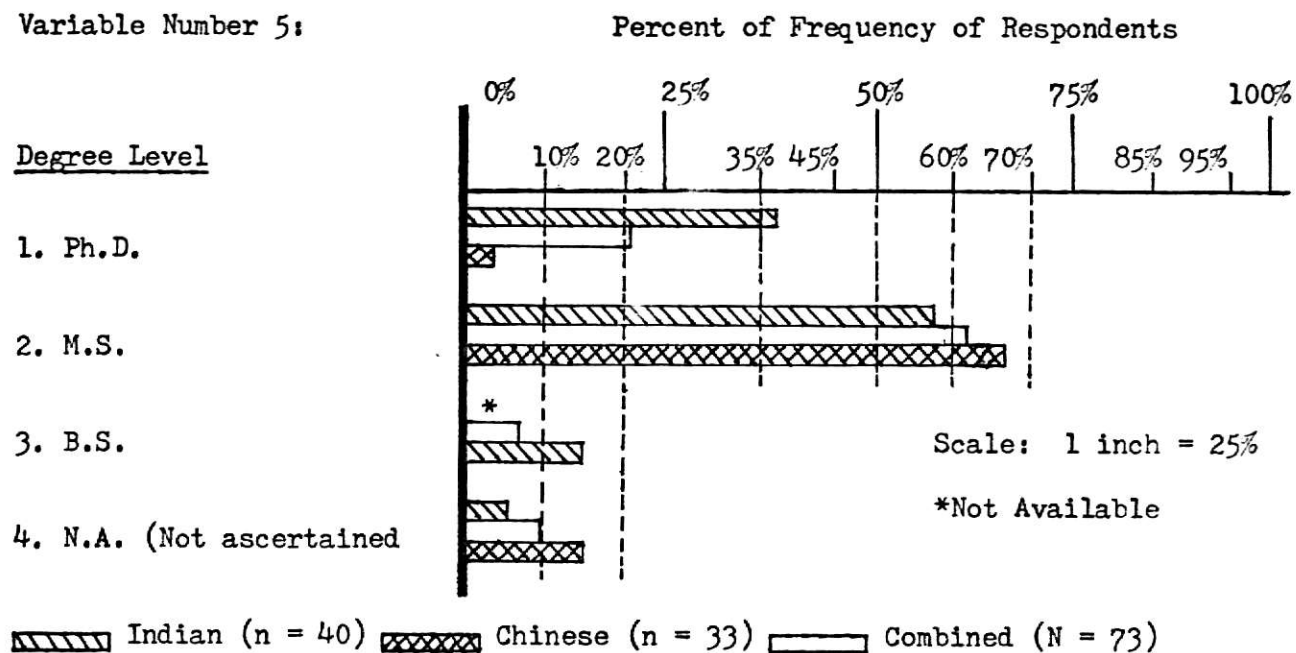


Fig. 5. Distribution of Indian & Chinese Student Sample According to Degree Level at Kansas State University

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\*However, in consideration of any new program for foreign students' wives this factor should be overlooked.

TABLE 6  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
DEGREE LEVEL AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
M.S.	45	23	22	61.64	57.50	66.67
Ph.D.	16	15	1	21.92	37.50	3.03
N.A. (Not ascertained)	7	2	5	9.59	5.00	15.15
B.S.	5		5	6.85		15.15
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

Figure 5 showed the percentage breakdown of Indian and Chinese separately and combined according to the Degree Level of each student.

The detail percent of total have been entered in Table 6. The combined population accounted for more than 61 percent of students studying for their Masters; whereas 22 percent of them studied at Ph.D. level and only 7 percent (all Chinese) were enrolled for the B.S. degrees. Percentage of Chinese for M.S. degrees remained higher (67%) than that of Indians (58%). Only a negligible number (3%) of Chinese students were recorded in Ph.D. programs; whereas a sizeable number (38%) of Indians were pursuing their doctoral degrees. No Indian was reported in undergraduate program, but quite a few (15% of total Chinese) Chinese students were reported. Jointly, 10 percent of Indian and Chinese did not ascertain.

The majority (84%) of Indian and Chinese students were found enrolled in the graduate school.

More Chinese than Indians seemed to have come for earning their initial degree in the undergraduate curriculum, whereas a great majority of Indians were either working towards their second or third degrees at graduate level.

Variable Number 7:

Percent of Frequency of Respondents

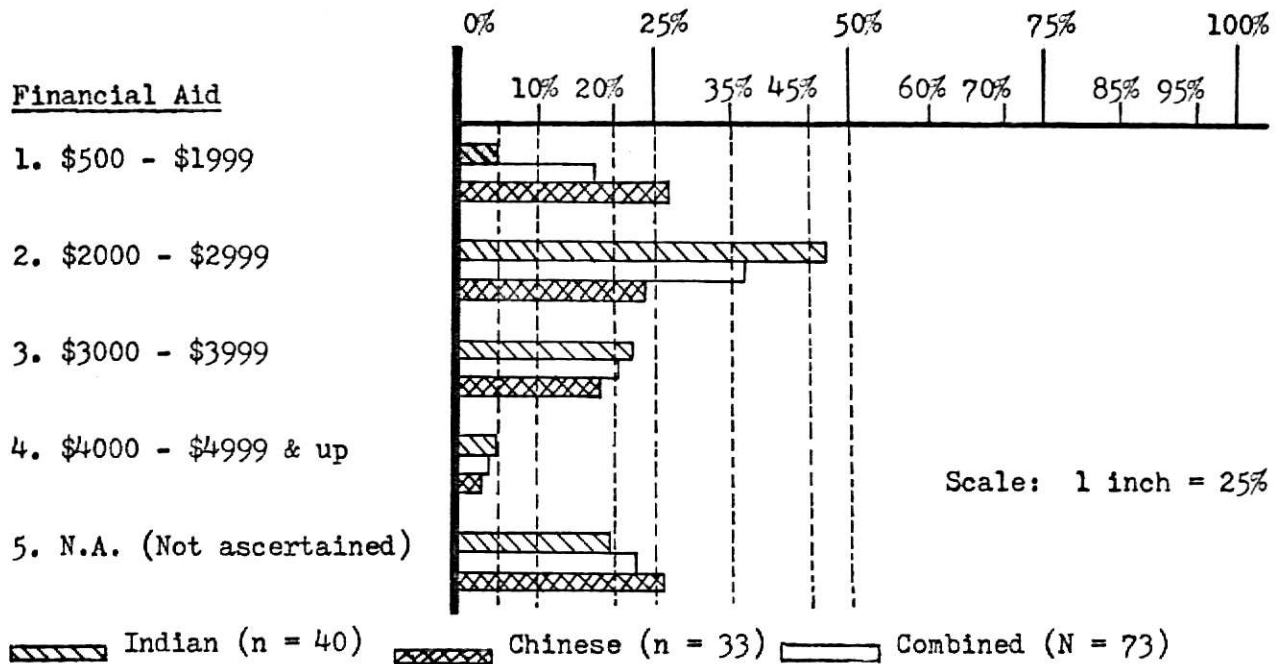


Fig. 6. Distribution of Indian & Chinese Student Sample According to Financial Aid at Kansas State University

TABLE 7  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
FINANCIAL AID AT KANSAS STATE UNIVERSITY

Code Description				Percent of Total		
	IC*	I*	C*	IC*	I*	C*
\$2000 - \$2999	27	19	8	36.99	47.50	24.24
N.A. (Not ascertained)	17	8	9	23.29	20.00	27.27
\$3000 - \$3999	15	9	6	20.55	22.50	18.18
\$500 - \$1999	11	2	9	15.07	5.00	27.27
\$4000 - \$4999 & up	3	2	1	4.11	5.00	3.03
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

Frequency distribution by percent for the four major income groups has been plotted above in the Fig. 6, Table 7. Combinely 37 percent of Indian and Chinese were receiving Financial Aid between \$2000 - \$2999 annually. Twenty percent received between \$3000 - \$3999 annual income. Fifteen percent received

less than \$2000 a year; and only very few (4%) had more than \$4000 annual income. However, 23 percent of combined population did not ascertain. In the case of Chinese the distribution was more even in the categories \$500 - \$1999, \$2000 - \$2999, and \$3000 - \$3999; whereas in the case of Indians it was extremely high (48%) in the second category and low (5%) in the first category.

Variable Number 8:

Percent of Frequency of Respondents

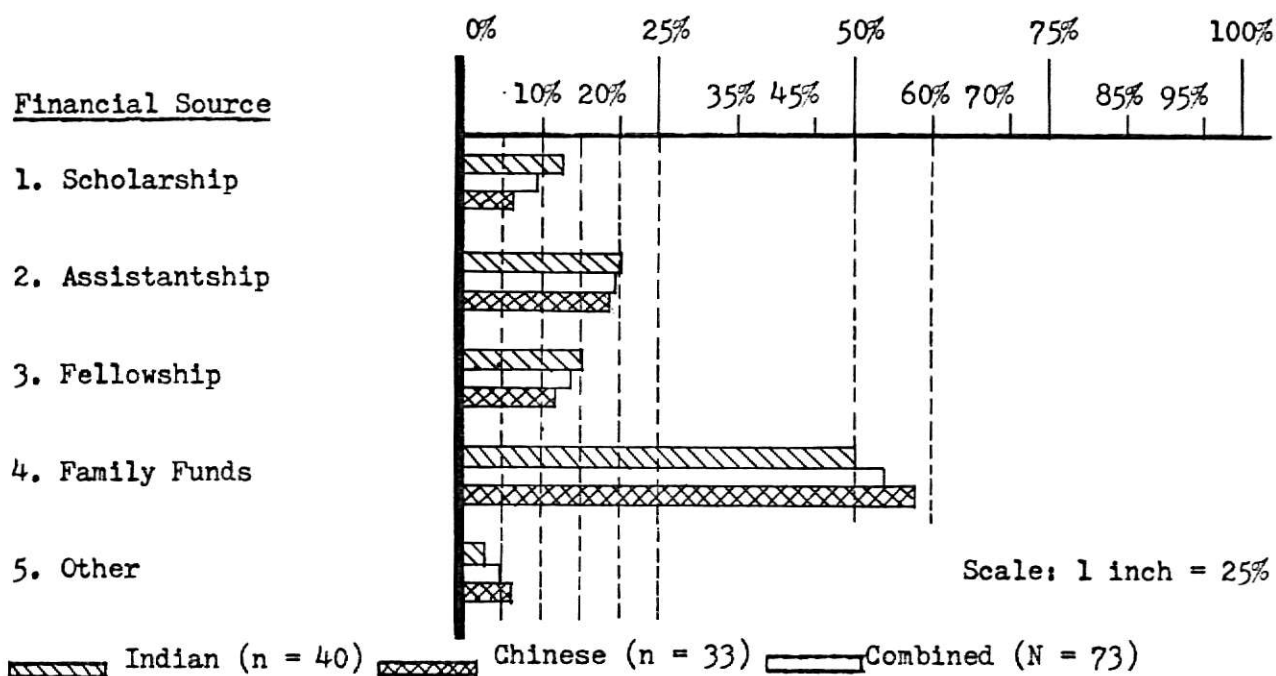


Fig. 7. Distribution of Indian & Chinese Student Sample According to Financial Source at Kansas State University

TABLE 8  
DISTRIBUTION OF INDIAN & CHINESE STUDENT SAMPLE ACCORDING TO  
FINANCIAL SOURCE AT KANSAS STATE UNIVERSITY

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
Family Funds	39	20	19	53.42	50.00	57.58
Assistantship	14	8	6	19.18	20.00	18.18
Fellowship	10	6	4	13.70	15.00	12.12
Scholarship	7	5	2	9.59	12.50	6.06
Other	3	1	2	4.11	2.50	6.06
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese

According to the major sources of income, the distribution of Indian and Chinese Students Sample was recorded in Table 8. A graphical presentation in Fig. 7 showed the four major sources of income by way of Scholarship, Assistantship, Fellowship, or Family Funds. More than 50 percent of total population had reported the source of their income as "Family Funds"; in the separate account, too, Indians (50%) and Chinese (58%) reported the same source for their income. Over 18 percent of students, both combinely and separately, were receiving income through Assistantships. An average of 13 percent received their income through Fellowships; and as little as 6 percent of Chinese and as high as 12 percent of Indians were supported by Scholarships. Totally, only three respondents (4%) mentioned a source other than listed above.

It was obviously concluded that the major source of income of an average Indian or Chinese student was through his or her "Family Funds".

#### Selection of Sample

It was decided from the very beginning the project was to be carried out as an exploratory research based on the scientific approach using more of descriptive and simple techniques of data analysis rather than using more refined and advanced statistical tools. The latter approach was, in fact, expected to be developed out of the present study as a basis for more concrete future investigation. Both the sampling technique and the formulation of final questionnaire were derived from the usual techniques prescribed by the authorities in the field, maintaining required adequacy and representativeness in the case of sampling and enough precision and simplicity in the case of the questionnaire.

Since there was no hypothesis formulated in the beginning that could be tested, the selection of sample size was also based on very arbitrary decision.



However, some of the facts such as a 'well defined nature of the population' and a 'more or less homogeneous nature of the population' with respect to certain quantitative characteristics (described earlier) were additional bases for such a decision. On the other hand, the major dichotomy (i.e., Indian and Chinese) of population under study did add a factor of heterogeneity (due to two distinct cultural groups involved)\* with respect to all of the preference attributes to be studied during the project.

One of the four basic methods of sampling described by Young<sup>15</sup> and by several other authors was used for selecting the final sample. These methods were: 1) Simple Random Sampling, 2) Stratified Random Sampling, 3) Sampling by Regular Intervals, and 4) Area Sampling. However, many combinations of these four were possible, too. For the purpose of this study, the third method was selected. Although it was not strictly based on the one described by Young and in a few other books, it did very closely represent the basic principle involved in this type.

The method of sampling by regular intervals as described by Young involved procedure of selecting the cases at regular intervals from the series, alphabetical list, or any other arbitrary arrangement. It further specified that every fifth, third, tenth, twentieth, or twenty-fifth case could be chosen, depending on the desired number of cases to be included in the sample.

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\*However, since both the cultures involved were basically Oriental, they bore many similarities in their social norms, attitudes, traditions, etc., except for some of the peculiar attributes and behaviors typical of any tribal, regional, or national origin and related to local customs and formalities. For a quick grasp of these comparisons, the following books are recommended for further reference; however, numerous are available.

Francis L.K. Hsu. Americans and Chinese. New York: The Natural History Press, 1970. xxviii + 493 pp.

Beatrice Pitney Lamb. India a World in Transition. New York: Frederick A. Praeger, Publishers, 1968. xii + 428 pp.

The technique could be used only on finite universes where complete listings were available. The method further emphasized that in selecting items at regular intervals from a file or list it was necessary to make certain that there was no periodicity or other distortions in the arrangements of items that would tend to bias the sample.

As described earlier in Table 1, an average yearly enrollment of Indian and Chinese students during academic year 1970-71 was 235, of which 110 were Indians and 125 Chinese. An arbitrary figure of 100 (42.5%) was chosen as the desired number of cases to be included in the sample. This covered 50 Indians and 50 Chinese students. An up-to-date list of all the foreign students (443) enrolled during 1970-71 was secured from the office of the Foreign Student Advisor at Kansas State University. The list contained all the names of foreign students arranged in alphabetical order irrespective of the country of origin. There were more than 50 countries shown on the list.

In many places, the names of Indians as well as Chinese Students appeared in a separate series on the list; and in a few places the names of both the nationalities appeared together in a series. Such series contained a minimum of two to a maximum of twenty-two names at a time. However, a few names were completely isolated by the names of other nationalities appearing in between the foregoing series. In order to avoid any bias in the selection of a random sample, all of the isolated names of both Indian and Chinese as well as all the names from the series of two to four students were selected. From the series of five to ten students, first four, five, six, seven, eight, and nine students were respectively selected. Finally, from the series of more than ten students every alternate name was chosen. Thus the final figures of 84 Indians and 74 Chinese were derived. In each case, the names were numbered on small pieces of paper and thoroughly mixed. At the end of this process

50 numbers from each case (i.e. Indian and Chinese) were randomly picked up.

Thus, finally a random sample of 100, including 50 Indians and 50 Chinese, was reached in this selection.

### Design of Questionnaire

The questionnaire which was designed to collect the information for this study was sent to each one of the 50 Indians and 50 Chinese students. As a matter of fact, the questionnaire was not sent by mail but the author personally distributed it to each respondent by visiting each one's home.

On a few occasions the questionnaire was distributed to a group of four or five students at a time discussing with them the purpose of the study and the difficulties they faced on the spot in understanding the nature of the questionnaire, expressing appreciation for their time and efforts, and requesting them to fill out the questionnaire carefully, neatly, frankly, and most important of all at their earliest convenience. This treatment and the approach were not only confined to a particular group or an individual, but the author kept it uniform throughout his effort of questionnaire distribution.

Most of the questionnaires were personally collected and a few of them were received by mail. Further details on the compilation of data have been described in the following chapter. However, the detail design of the questionnaire has been discussed below.

<sup>16</sup>  
Design.- Rummel had pointed out that every questionnaire should include, either in its body or in a covering letter, (1) a descriptive title of the study, (2) a brief statement of the purpose of the study, (3) the name of the sponsoring agency or institution, and (4) the name and address of the person to whom the completed questionnaire is to be returned.

The questionnaire\* prepared for this study included a covering letter which satisfied all of the above four conditions. The main body of the questionnaire consisted of parts I and II. In part I, section (a) contained the questions seeking information on personal data; sections (b), (c), (d), and (e), contained a check list of questions (closed-end) seeking information on respondent's preference status; and section (f) contained the questions (open-end) seeking information on the present status (general) of the respondent. Part II was the most important portion of the questionnaire. It was a closed-end, check-list type that carried four major sections. Each one of these sections was related to physical, economic, social, and academic problem areas, respectively. There were, altogether, fifty-three (53) problem statements on which the respondents were asked to express their objective response by checking any of the four scale values provided against each statement. The scale measured the intensity with which the respondents faced the particular problem. There were twelve problem statements under the physical problem area with the ninth one having parts 'a' and 'b'; eight statements under the economic problem area; twelve under social problem area; and nineteen under academic problem area with the sixteenth one having parts 'a' and 'b'. Moreover, each section carried an extra space for an open-end comment which was also required to be scaled by the respondents.

Scaling and Scoring.- The scale used in this study was a five-point scale (however, on the questionnaire only four points appeared, the fifth being Not Ascertained, having a value equal to zero) as shown below:

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\*Presented in appendix-A, pp. 88-95.

TABLE 9  
FORMAT OF SCALE USED IN THE QUESTIONNAIRE

	Very Great Problem	Problem	Little Problem	No Problem	Not Ascertained
Points	4	3	2	1	0
Code* Number	(1)	(2)	(3)	(4)	(5)

\*As entered in the Code Book; refer Appendix-B, pp. 97-104.

Thus, the maximum numerical value which could be obtained for any of the fifty-three problem statements on the questionnaire was "four" (4) and the minimum was zero (0) in cases where respondents did not ascertain. The weights (points) assigned on the scale showed the intensity with which each problem statement was to be measured. In other words, the higher the weight (points), the more intensely the problem was felt by the respondents. All fifty-three statements described the types of problems then existing which would generally be faced by the students under study. The numerical values assigned to the scale helped in computing the following important types of numerical scores:\*

1) Problem Score - "For Each of the 73 Respondents"

- a. Area-wise (i.e. Physical, Economic, Social, and Academic), and
- b. Overall Problem Statements (including all areas).

(This has been presented in Table 18 of Appendix 'C', pp. 106-109.)

2) Intensity\*\* Score - "For Each of the 53 Statements" across the entire sample population (i.e. out of all the seventy-three respondents how many of them checked the particular statement as "Very Great Problem,"

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\*These scores helped in developing a quantitative analysis of data by using some of the basic statistical tools for deriving more objective conclusions.

\*\*Since this explained how intensely each problem (statement) was felt by the respondents.

"Problem," "Little Problem," or "No Problem," and how many did not ascertain). This allowed the author to compute a single numerical Score of Intensity.

(This has been presented in Tables 20a, 20b, 20c, 21a, 21b, and 21c of Appendix 'C', pp. 115 - 123.)

- 3) From the (1) above, the Mean Scores for seventy-three respondents were computed again for (a) and (b) (i.e. totally, five Mean Scores were computed).

(This has been presented in Table 11, pp. 49.)

- 4) Each time in all of the above three cases separate Scores were obtained for the three basic groups given below:

(a) Indian & Chinese, (b) Indian, and (c) Chinese. This was done for making comparisons between groups, wherever it was needed.

Further, these scores helped in carrying out the following three basic statistical tests utilized in this study:

- 1) Spearman Rank Correlation Coefficient Test,

(Presented in Tables 22a, 22b, 22c, 23a, 23b, 23c, and 23d of Appendix 'D', pp. 134 - 146.)

- 2) 't'-test of significance, and

(Presented in Tables 24a, 24b, 24c, 24d, 24e, and 24f of Appendix 'E', pp. 148 - 153.)

- 3) Chi-square Test.

(Presented in Table 17, p. 61.)

Further details on the "Analysis and Interpretation of Data" have been discussed in the following chapter.

### CHAPTER III

#### ANALYSIS AND INTERPRETATION OF DATA

##### Compilation of Data

Finally seventy-three (73%) respondents out of 100 constituted the true "field sample" for this study. This brought down the initially designed sample from 42.5 percent to 31 percent.\*

The data that were compiled from the field sample were then carefully scrutinized for further analysis. The systematic compartmentalization of the questionnaire into two main parts and various other sections considerably reduced (in fact, eliminated) the labor of rearranging or reordering of the data. Further, it also helped in simplifying the methods of analysis applied in this study. Apparently it became very easy to code all the items on the questionnaire under each variable for which the frequency distributions were quickly obtained by using the computer. The frequency distributions for all the variables involved in this study were the bases for all the other analyses presented in this report.

##### Methods of Analysis

Basically there were twenty-two variables included in part I, and fifty-three (counting each problem statement) in part II of the questionnaire. In all there were eighty variables included in this study. The seventy-sixth was the overall problem score of each respondent; and the seventy-seventh, seventy-eight, and seventy-ninth and eightieth were respectively the individual's

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\*The readers should note that these were the final figures arrived at after the elimination of a few partially filled out questionnaires where either the respondents seemed to be confused or deliberately avoided many important sections.



scores on physical, economic, social, and academic problems. First seventy-six variables were punched on the IBM cards for obtaining the frequency distributions for each one of them; whereas the remaining distributions for the last four variables were manually computed.

All the methods of analysis have been discussed in detail under the following captions.

An Analysis of Preference and Present Status  
of Indian and Chinese Students

Table 10a showed the frequency distributions and percent of total for the first 22 variables covered in the questionnaire, part I. The variables such as Major Field, Age, Marital Status, Sex, Degree Level, Financial Aid, and Financial Source have already been discussed in chapter II, on pages 14-34 of this report. In the following paragraphs a detailed discussion on the remaining variables has been carried out.

A close examination of Table 10a would reveal that jointly more than 86 percent of Indians and Chinese did not possess a car. This forced them to live near campus, and possibly close to some kind of shopping facilities and other services. In fact, their living-pattern formed a thick cluster in the immediate vicinity around the South, South-West, and South-East borders of the campus.\* Interestingly, the streets in and around the Aggieville\*\* area (covering several blocks) within the walking distance to the campus have big clusters of this population within the properties lined up on their edges.

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\*This information was available from the Foreign Student Advisor's office. From the available addresses a rough map was prepared to study the living-pattern of this population in the off-campus areas.

\*\*This has been a small business district very close to the South-East corner of the campus providing the daily life facilities and services to most of the University students.



**TABLE 10a**  
**IMPIRICAL DATA SHOWING FREQUENCY DISTRIBUTION AND PERCENT OF TOTAL FOR THE**  
**FIRST "TWENTY-TWO" VARIABLES COVERED IN THE QUESTIONNAIRE UNDER PART I**

Code Description	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 1, Name: Major Field (a. Personal Data)</u>						
1. Engineering	33	21	12	45.21	52.50	36.36
2. Architecture & Planning	8		8	10.96		24.24
3. Physical Sciences	8	5	3	10.96	12.50	9.09
4. Biological Sciences	4	4		5.48	10.00	
5. Agriculture & Vet. Medicine	11	9	2	15.07	22.50	6.06
6. Social Sciences	2		2	2.74		6.06
9. N.A. (Not Ascertained)	7	1	6	9.59	2.50	18.18
Total	73	40	33	100.00	100.00	100.00

Variable: Number 2, Name: Age Group

1. 18-22 years	6	5	1	8.22	12.50	3.03
2. 23-27 years	38	17	21	52.05	42.50	63.64
3. 28-up years	27	17	10	36.99	42.50	30.30
4. N.A.	2	1	1	2.74	2.50	3.03
Total	73	40	33	100.00	100.00	100.00

Variable: Number 3, Name: Marital Status

1. Married	17	10	7	23.29	25.00	21.21
2. Unmarried	54	29	25	73.97	72.50	75.76
3. N.A.	2	1	1	2.74	2.50	3.03
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.

Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 4, Name: Sex</u>						
1. Male	53	32	21	72.60	80.00	63.64
2. Female	8	2	6	10.96	5.00	18.18
3. N.A.	12	6	6	16.44	15.00	18.18
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 5, Name: Degree Level</u>						
1. Ph.D.	16	15	1	21.92	37.50	3.03
2. M.S.	45	23	22	61.64	57.50	66.67
3. B.S.	5		5	6.85		15.15
4. N.A.	7	2	5	9.59	5.00	15.15
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 6, Name: Car Possession</u>						
1. Yes	10	4	6	13.70	10.00	18.18
2. No	63	36	27	86.30	90.00	81.82
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 7, Name: Financial Aid</u>						
1. \$500 - \$1999	11	2	9	15.07	5.00	27.27
2. \$2000 - \$2999	27	19	8	36.99	47.50	24.24
3. \$3000 - \$3999	15	9	6	20.55	22.50	18.18
4. \$4000 - \$4999 & up	3	2	1	4.11	5.00	3.03
5. N.A.	17	8	9	23.29	20.00	27.27
Total	73	40	33	100.00	100.00	100.00

\*IC; Indian-Chinese; I; Indian; C; Chinese.

Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 8, Name: Financial Source</u>						
1. Scholarship	7	5	2	9.59	12.50	6.06
2. Assistantship	14	8	6	19.18	20.00	18.18
3. Fellowship	10	6	4	13.70	15.00	12.12
4. Family Funds	39	20	19	53.42	50.00	57.58
5. Other	3	1	2	4.11	2.50	6.06
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 9, Name: Choice of Accommodation (b,c,d,&amp;e. Preference Status)</u>						
1. Dormitory	7	3	4	9.59	7.50	12.12
5. Trailer House	1	1		1.37	2.50	
6. International House (if available)	8	4	4	10.96	10.00	12.12
7. Efficiency Apartment (one room with compact kitchen)	10	4	6	13.70	10.00	18.18
8. An Apartment (having a separate kitchen)	45	28	17	61.64	70.00	51.52
9. A Rooming House (with no cooking facility)	2		2	2.74		6.06
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 10, Name: Rent Paying Capacity</u>						
1. Low \$25 - \$44	55	31	24	75.34	77.50	72.73
2. Medium \$45-\$84	4	1	3	5.48	2.50	9.09
3. High \$85 - \$144	14	8	6	19.18	20.00	18.18
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.



Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 14, Name: Rent-Paying Capacity</u>						
1. Low \$25 - \$44	51	33	18	69.86	82.50	54.55
2. Medium \$45 - \$84	11	6	5	15.07	15.00	15.15
3. High \$85 - \$144	11	1	10	15.07	2.50	30.30
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 15, Name: Number of Roommates Preferred</u>						
1. With one roommate	44	24	20	60.27	60.00	60.61
2. With two roommates	16	10	6	21.92	25.00	18.18
3. With three roommates	1	1		1.37	2.50	
6. Alone	12	5	7	16.44	12.50	21.21
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 16, Name: Preference of Roommates - Nationality</u>						
1. American	9		9	12.33		27.27
2. Indian	34	34		47.58	85.00	
3. Chinese	12		12	16.44		36.36
5. American, Chinese	3		3	4.11		9.09
7. American, Indian, Chinese	1	1		1.37	2.50	
8. N.A.	14	5	9	19.18	12.50	27.27
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.

Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 17, Name: Organization Membership</u>						
2. National	38	19	19	52.05	47.50	57.58
3. International	6	6		8.22	15.00	
4. Not Ascertained N.A.	24	10	14	32.88	25.00	42.42
5. National, International	4	4		5.48	10.00	
8. Religious, International	1	1		1.37	2.50	
Total	73	40	33	100.00	100.00	100.00

Variable: Number 18, Name: Food Habits

1. American	32	15	17	48.84	37.50	51.52
2. Indian	5	5		6.85	12.50	
3. Chinese	11	1	10	15.07	2.50	30.30
5. American, Chinese	1	1		1.37	2.50	
7. American, Indian, Chinese	5	5		6.85	12.50	
8. N.A.	17	11	6	23.29	27.50	18.18
9. Other	2	2		2.74	5.00	
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.

Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 19, Name: Leisure Time Activities</u>						
1. Reading, writing	11	10	1	15.07	25.00	3.03
2. TV watching & Movies	15	8	7	20.55	20.00	21.21
3. Music, Clubs, Sports	16	5	11	21.92	12.50	33.33
4. No. 1 & No. 2	5	4	1	6.85	10.00	3.03
5. No. 1 & No. 3	1		1	1.37		3.03
6. No. 2 & No. 3	9	5	4	12.33	12.50	12.12
7. No. 1 & No. 2 & No. 3	2	1	1	2.74	2.50	3.03
8. Other	10	3	7	13.70	7.50	21.21
9. N.A.	4	4		5.48	10.00	
Total	73	40		100.00	100.00	100.00

Variable: Number 20, Name: Close Friends

1. 1 - 2	9	7	2	12.33	17.50	6.06
2. 3 - 5	18	9	9	24.66	22.50	27.27
3. 5 - 10	10	5	5	13.70	12.50	15.15
4. 10 & over	26	13	13	35.62	32.50	39.39
5. N.A.	10	6	4	13.70	15.00	12.12
Total	73	40		100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.

Table 10a (continued)

Code	Frequency			Percent of Total		
	IC*	I*	C*	IC*	I*	C*
<u>Variable: Number 21, Name: Friend Circle</u>						
1. American	1		1	1.37		3.03
2. Indian	9	8	1	12.33	20.00	3.03
3. Chinese	13		13	17.81		39.39
4. American, Indian	13	13		17.81	32.50	
5. American, Chinese	7		7	9.59		21.21
6. Chinese, Indian	3	1	2	4.11	2.50	6.06
7. American, Indian, Chinese	27	18	9	36.99	45.00	27.27
Total	73	40	33	100.00	100.00	100.00
<u>Variable: Number 22, Name: Duration of Stay</u>						
1. 1 to 6 months	17	12	5	23.29	30.00	15.15
2. 7 to 12 months	28	12	16	38.36	30.00	48.48
3. 13 to 18 months	11	4	7	15.07	10.00	21.21
4. 19 to 24 months	5	5		6.85	12.50	
5. 24 to 30 months	4	3	1	5.48	7.50	3.03
6. 31 to 36 months & over	5	3	2	6.85	7.50	6.06
7. N.A.	3	1	2	4.11	2.50	6.06
Total	73	40	33	100.00	100.00	100.00

\*IC: Indian-Chinese; I: Indian; C: Chinese.



Bluemont, Anderson, Moro, Laramie, Vattier, Fremont, Fairview, Fairchild, Osage, and North 11 to North 17 streets were among those common streets where most of the combined population lived.\*

The facts that could be attributed to the above situation were quite conceivable from some of the following preferences expressed by the group under study.

Preference status:\*\* It was found that more than 70 percent of Indians, 51 percent of Chinese, and jointly 61 percent of both had mentioned an "apartment living" as their Choice of Accommodation. The next larger preference was an Efficiency Apartment (14%) followed by International House (if available) (11%), and then Dormitories (10%). More than 75 percent of the combined population had shown the Rent Paying Capacity between \$25-\$45 (Low); whereas about 20 percent had shown between \$85-\$144 (High). Jointly, over 54 percent preferred to have one roommate and only about 16 percent extended their preference to two roommates. On the other hand, more than 24 percent preferred to live alone. Equal number of Indians (35%) mentioned that they would prefer an American or Indian as their roommate, whereas at least 70 percent of Chinese preferred only Chinese as their roommates. Interestingly, no Indian preferred to live with Chinese and vice versa.

Present Status:\*\*\* In fact, more than 60 percent of the combined population lived in apartments. Separately, majority of Indians (80%) were living in the apartments, and only as little as 16 percent lived in the dormitories. An

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\*Over 90 percent of those who lived off-campus. The information was derived from the addresses collected that more than 80 percent lived off-campus.

\*\*The preference status was covered under variables 9 to 12 in sections b, c, d, and e of the questionnaire, part I.

\*\*\*The present status was covered under variables 13 to 22 in section 'f' of the questionnaire, part I.

equal number (36%) of Chinese lived in apartments as well as dormitories. Surprisingly, 24 percent of Chinese also lived in the rooming houses (with no cooking facilities) but only 12 percent of Indians lived in such type. Jointly, almost 70 percent paid rents between \$25-\$44. Together, 60 percent lived with one roommate, and more than 16 percent lived alone. Contradictory to their preference status, it was found that 85 percent of Indians lived with Indians; whereas only 36 percent of Chinese shared with their co-nationals, and the equal number of them lived either with an American or American, Indian, and Chinese.

Under the Organization Membership, 52 percent of Indians and Chinese listed the names of National Organizations (i.e. either Indian or Chinese Associations on the campus), and only 8 percent mentioned they were members of some International Organization (i.e. People to People Club, Cosmopolitan Club, International Co-ordinating Council, etc., of the International Center at Kansas State University).

The question that inquired about the familiarity to other than their native food habits revealed the fact that more Chinese than Indians, 51 percent and 38 percent respectively, were accustomed to the American food habits. Sizeable number of Indians, however, did not ascertain (28%). But a fairly good number of Indians were accustomed to various other food habits, whereas Chinese were either accustomed to American or to their native food habits (30%).

The major leisure-time activities listed by both Indians and Chinese were either Reading-Writing, TV Watching & Movies, or Music Clubs & Sports (15%, 21%, and 22%, respectively); very few listed the other combinations of these three basic categories in which the leisure-time activities were divided.

Over 35 percent of the entire group had more than 10 close friends, whereas 25 percent mentioned between 3 to 5. Thirteen percent, however, did

not ascertain. Forty-five percent of Indians had a friend circle of American, Indian, and Chinese students; whereas only 27 percent of the Chinese had mentioned the friend circle of this type. On the other hand about 40 percent of the Chinese had an exclusive circle of their co-nationals; but only 20 percent of the Indians showed this tendency.

Of the combined population more than 38 percent had completed 7 to 12 months of their stay on the campus (i.e. in Manhattan), whereas 23 percent had lived in Manhattan for more than 13 but less than 18 months. Very few lived in Manhattan for more than 19 or over 36 months (average 6%).

In Table 10b frequency distributions for the area-wise and total problem scores of each respondent have been shown. The class-intervals shown in the table were based on the empirical data on individual's problem scores given in Table 18 of Appendix-C. These distributions were used in the Chi-square computations (refer to Table 17, page 61) where the Major Fields of study were tested against the area-wise and total problem scores.

Table 18 presented the "Area-wise and Total Problem Scores of Each Respondent: (N=73) Including Various Mean Scores." As described earlier, this table was used in computing the observed frequencies for Low and High problem scores (in the case of total problem score) using the Mean as the cutting point, in the Chi-square test. Later on, the various Mean scores were used in computing the 't' values (of Student's 't' test) for six different variables presented in Tables 24a, 24b, 24c, 24d, 24e, and 24f of Appendix-E. However, other than these computational uses, the Mean scores shown in Table 11 gave the measures of intensity with which the respondents had expressed their problems. For example, all the Mean scores of Chinese, except for the Mean score on the physical 'problems', were much higher than those of Indians. However, the Mean score on the physical 'problems' of Indians was so close to that of

TABLE 10b  
FREQUENCY DISTRIBUTION AND PERCENT OF TOTAL FOR AREA-WISE AND  
TOTAL PROBLEM SCORES OF EACH RESPONDENT

(Manually Computed Data)

Code Description	Frequency Indian-Chinese	Percent of Total Indian-Chinese
<u>Variable: Number 76, Name: Total Problem Score</u>		
1. 0 to 50	1	1.37
2. 51 to 74	7	9.59
3. 75 to 99	31	42.47
4. 100 to 124	22	30.14
5. 125 to 149	11	15.07
6. 150 to 175	1	1.37
Total	73	100.00
<u>Variable: Number 77, Name: Physical Problem Score</u>		
1. 0 to 14	3	4.11
2. 15 to 24	25	34.25
3. 25 to 34	36	49.31
4. 35 to 45	9	12.33
Total	73	100.00
<u>Variable: Number 78, Name: Economic Problem Score</u>		
1. 0 to 14	14	19.18
2. 15 to 24	44	60.27
3. 25 to 35	15	20.55
Total	73	100.00
<u>Variable: Number 79, Name: Social Problem Score</u>		
1. 0 to 14	10	13.70
2. 15 to 24	37	50.68
3. 25 to 34	20	27.40
4. 35 to 45	6	8.22
Total	73	100.00
<u>Variable: Number 80, Name: Academic Problem Score</u>		
1. 0 to 14	1	1.37
2. 15 to 24	13	17.80
3. 25 to 34	31	42.47
4. 35 to 44	16	21.92
5. 45 to 55	12	16.44
Total	73	100.00

TABLE 11  
MEAN PROBLEM SCORES

	Physical Problems	Economic Problems	Social Problems	Academic Problems	Total (Overall Problems)
<u>Mean Scores: (N=73), Indian &amp; Chinese</u>					
Mean	26.44	19.32	22.16	33.29	101.21
Variance	50.36	35.08	61.75	96.43	529.97
Standard Deviation	7.09	5.92	7.86	9.82	23.02
<u>Mean Scores: (N=40), Indians</u>					
Mean	26.62	18.1	19.9	28.23	92.85
Variance	52.86	44.20	71.79	60.38	559.16
Standard Deviation	7.27	6.65	8.47	7.77	23.65
<u>Mean Scores: (N=33), Chinese</u>					
Mean	26.21	20.78	24.90	39.42	111.33
Variance	48.80	20.99	37.27	72.50	317.92
Standard Deviation	6.99	4.58	6.11	8.51	17.83

Chinese that both were considered the same. From this it was derived that except in the area of physical problems, the Chinese had greater problems in the remaining three areas of economic, social, and academic adjustment. Except in the case of academic problems, however, the amount of variability\* between the individual's problem scores was comparatively higher for Indians than for Chinese.

#### An Analysis of Problem Statements: Intensity, Ranking, and Patterns

Basically, all the tables except Tables 18 and 19, Appendix-C, contained the problem statements arranged in frequency\*\* rank order according to the Intensity Scores derived for each one of them, and explained earlier in the chapter II. Table 18 presented the area-wise and total problem scores of each respondent including various mean scores. Table 19, titled "Frequency Distribution for each Problem Statement Shown for each Scaled Value", presented various frequencies (number of respondents) that were obtained under five different scale values. In fact, this served as a basis for computing the "Intensity Score" for each problem statement. Tables 20a, 20b, and 20c described the overall problems arranged in 'rank order' with their scores on the 'right' and rank on the 'left' of each one of them. These tables covered Indian & Chinese, Chinese, and Indian students' problems respectively; whereas Tables 21a, 21b, and 21c contained the area-wise problems, however, exactly in the same fashion as described above. In fact, the area-wise problems were first separated from the overall problems, then rearranged in 'rank order' according to their scores under the four distinct areas of adjustment.

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\*Comparing the Standard Deviations.

\*\*Since the scores were directly proportional to the 'observed frequencies' this term was used.

The observed and expected 'ranges' were given at the end of each table. However, the comparisons were based on the ranks and not the scores, simply because the number of cases sampled in each category were not equal (i.e. 40 Indians and 33 Chinese) to get the required validity in doing so.

Problem patterns: Looking at the overall problems of the combined population, it seemed that the 'higher amount of non-resident fees', 'limited assistantships', 'having enough funds to pay the school expenses', 'high standard of living', and 'unreasonable amount of higher rents' were among the most intense problems expressed by this group in the area of economic adjustment. Those problems that were ranked very high within the physical area by this group were 'inability to find adequate housing', 'dormitory not preferred because of limited finance and food limitations', 'inadequate eating facilities on and off campus (expensive)', 'lack of transportation facilities',\* and 'farness of Banking facilities'.

Under the area of social problems the group felt that 'inability to get Permanent Resident Visa',\*\* 'finding suitable dates', 'personal friendship with Americans', and 'being permitted work by the Immigration office (part-time jobs, etc.)' were among the great problems of adjustment. The only problem that was severely felt by this group of students in the area of academic adjustment was the problem of 'inadequate facilities in the departments, such as study space, lockers, tables, research tools and aids, etc'.

The problems such as 'complicated registration procedure', 'using the library', 'finding adequate worship group of own religion', 'understanding America

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\*In the questionnaire this variable (number 75) was listed under the area of academic problems; but in the analysis it was constantly included under the area of physical problems.

\*\*Such visa permits an unlimited stay in the United States with no restrictions on jobs, etc.

textbooks', 'evaluation of credits', 'health & hospitalization of school', 'American examination system', 'insufficient guidance during the orientation program', and 'inadequate help from the Foreign Student Advisor's office' were among the least severe problems expressed by the entire group.

However, when these problems were studied independently of the combined group in the light of each sub-group (i.e. Indians and Chinese), the marked differences in their expressions in the certain areas of adjustment were clearly noted. While the kinds and the severeness of the problems under other areas remained more or less the same for both the sub-groups, the group of Chinese had expressed more severe problems under the area of academic adjustment. For this latter group, 'reciting and speaking in the class', 'understanding lectures', 'giving oral reports', and 'writing reports' were among the problems of greater intensity. On the other hand, their counterpart had expressed these problems with the least amount of intensity and severeness to them. The problems of Indians were almost congruent to that of the combined group. However, they did mention some of the additional physical problems other than those listed for the entire group. They felt that the owners were not cooperative and simply collected the rents, the housing they had to rent was too far from the campus having inadequate living spaces, and that the rents were unreasonably high. They also felt the 'strangeness of American food' was a great problem to them; whereas the same was not felt as a problem by Chinese.

The problem of 'competing with American students for grades' was the least severe problem (ranked last on the list of 53 statements) to Indians, but at the same time it was ranked twenty-seventh (showing almost double the intensity) by the Chinese. Interestingly enough, the problem of 'finding suitable dates' was found to be a matter of great problem (ranked sixth) to the Chinese more



than what it was to their counterpart, Indians, who ranked the problem twenty-sixth.

From Tables 21a, 21b, and 21c of the area-wise problems, the following facts were observed: Based on their Median Scores, the four major areas of adjustment were arranged in order of their overall problem intensity. In the case of combined population, the problem under economic area came on the top list (Median score 162.5), followed by the physical problems (Median score 137.5), then by the social problems (Median score 127), and finally by the academic problems (Median score 112). The same pattern of succession was observed to be prevalent in the case of the problems of Indians. The Median scores for each of the problem areas were: 84 for economic, 78.5 for physical, 64 for social, and 52 for academic. In contrast to the above pattern of intensity with which the different problem areas were expressed by the combined group and the Indians, a notable difference was observed in the case of Chinese. The table of area-wise problems under this group recorded the areas in the following descending array: economic, social, physical, and academic. The Median scores for each were 79, 66.5, 64, and 60 respectively. Thus, it was concluded that the Chinese had greater economic and social problems, whereas the Indians had greater economic and physical problems.

#### Comparison of Problem Rankings Based on Intensity Scores Using Correlation Technique

Basically, the tables of appendix 'D' contained the fifteen Correlation Coefficients ( $r_s$  or 'rho') computed manually using the method of Spearman's Rank Order Correlation. In fact, the basic objective in computing these coefficients was to measure the degree of association with which the ranks of overall problems in the cases of Indian-Chinese against Indians, Indian-

Chinese against Chinese, and Indians against Chinese were related. The various values of ' $r_s$ ' given in tables 22a, 22b, and 22c of Appendix 'E' have been summarized in terms of ' $t$ ' values in Table 12 below:

TABLE 12  
VALUES OF ' $t$ ' FOR CORRESPONDING VALUES OF ' $r_s$ '  
(df = 51; N = 53)

	Indian-Chinese against Indians	Indian-Chinese against Chinese	Indians against Chinese	
' $r_s$ '	0.869	0.791	0.425	Observed.
' $t$ '	12.5	9.3	3.36	

At 0.05 level of significance critical value of ' $t$ ' is equal to 2.01

Using the appropriate formula\* the values of ' $r_s$ ' were converted into the ' $t$ ' values as shown above. These values were found significant when compared with the expected ' $t$ ' values at 0.05 level of significance and degrees of freedom equal to 51.

The above figures suggested that the problem ranks of Indian-Chinese and Indians were highly correlated, and that of Indian-Chinese and Chinese were also highly correlated; whereas the problem ranks of Indians and that of Chinese showed a considerably lower degree of association. This confirmed some of the previous observations that the problems of Chinese were quite in contrast with those of Indians.

In Tables 23a, 23b, 23c, and 23d the twelve different values of ' $r_s$ ' were computed for each of the four major areas of physical, economic, social, and academic problems in the cases of Indian-Chinese against Indians, Indian-Chinese

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$$*t = r_s \sqrt{\frac{N - 2}{1 - r_s^2}}$$

against Chinese, and Indians against Chinese. The observed and the required values of ' $r_s$ ' for each problem area under the three different cases have been summarized in Table 13 below:

TABLE 13  
VALUES OF ' $r_s$ ' FOR THE FOUR MAJOR PROBLEM AREAS

	(N = 14) Physical	(N = 8) Economic	(N = 12) Social	(N = 19) Academic	
Obs.	0.792	0.785	0.812	0.317	IC against I
	0.891	0.991	0.882	0.663	IC against C
	0.425	0.643	0.501	-0.440	I against C
Exp.	0.456	0.643	0.506	0.388	

Obs. = Observed; Exp. = Expected. IC = Indian-Chinese, I = Indians, and C = Chinese

In the above table the critical values of ' $r_s$ ' (i.e. Expected) for the given values of 'N' at 0.05 significance level have been shown for comparisons. In the case of Indian-Chinese against Indians for all the areas except academic the figures showed a very high correlation between the problem ranks of these groups. This suggested that the problems of Indians in the academic area differed in ranking. In fact, they did rank low, separately, as seen earlier. In the case of Indian-Chinese against Chinese the figures suggested a very high correlation between the problem ranks of these groups. In the case of Indians against Chinese, once again it was confirmed (now area-wise), that the problem ranks of these two groups were not significantly related in the areas of physical and social problems; but the relationship was just significant in the area of economic problems. This confirmed the previous fact that both the groups had listed economic problems as the most common and severe problems, followed by physical problem area in the case of Indians and social problem area

in the case of Chinese. The figure under the academic area showed a high inverse relationship (since the observed value of 0.440 was negative, but numerically greater than expected value of 0.388) between the problem ranks of Indians and Chinese. This fact was observed in the earlier analysis that had shown exactly the same relationship. In other words, both of these sub-groups had expressed the particular problems under the particular area with an equal intensity (such as for most of the economic problems, followed by social and physical problems) amounting to a close relationship (as seen in the immediately preceding analysis) between the problem ranks of these areas. But still, the problem ranks under the academic area considerably differed to such an extent that an inverse relationship resulted. In fact, their problems in this area were observed to be altogether in diametrically opposite directions on the intensity scale (higher in the case of Chinese and lower in the case of Indians).

Examining the Influence of a Few Selected Variables  
on the Patterns of Adjustment Problems  
Using 't' Test

Basically, the tables of Appendix 'E' presented the 't' scores for six different variables. Each one of them was treated in a separate table. Under each variable the Mean Problem Scores of area-wise and overall problems were tested for any significance of difference that might be observed due to significantly high or low problem scores.\* The following variables were tested: a) country of origin, b) degree level, c) age, d) marital status, e) income level (coded as "financial aid"), and f) duration of stay; and the results were recorded in Tables 24a, 24b, 24c, 24d, 24e, and 24f respectively.

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\*Readers should note here that higher the problem scores the greater the intensity of problems in that area.

From the above tables the following relationships were observed under each variable:

Country of origin. Under this variable an analysis of the data of Table 18 (Appendix-'C') showed a significance of difference at an indicated level in the cases given in the following table:

TABLE 14  
SIGNIFICANT 't' VALUES FOR COUNTRY OF ORIGIN AGAINST  
GIVEN PROBLEM AREAS (N = 73)

X = 33		Economic	Social	Academic	Overall
Y = 40					
	't'	1.97	2.84	5.87	3.70
		p(0.054)	p(0.006)	p(0.0001)	p(0.0001)

X = Chinese; Y = Indians; 'p' = Level of significance.

The above table suggested that there was a significant difference between the mean scores of Chinese and Indians. The significant 't' values\* indicated that the Chinese (since 't' was positive) had reported greater problems (i.e. high mean score) in the areas of economic, social, academic, and overall problems. This further strengthened the conclusions made under the previous headings, namely: "An Analysis of Preference and Present Status of Indian and Chinese Students" and "An Analysis of Problem Statements: Intensity, Ranking, and Patterns." In addition to this, it was also concluded that the 'country of origin' was found to be a major cause of differing "patterns of adjustment problems" that prevailed on this campus.

\*'t' values from Pooled Variance Estimate were used. Refer to table in the appendix (in each case).

\*\*The patterns of adjustment problems chiefly depended on the intensity with which the problems were expressed or felt by the students who were, in fact, looked upon under various categories -- such as Country of Origin, Degree Level, Age, etc.

Degree Level. Similar analysis presented in Table 24b showed that there was a significant difference between the mean scores of M.S. students and Ph.D. students (of combined population). Significant cases (areas) were summarized under Table 15.

TABLE 15  
SIGNIFICANT 't' VALUES FOR DEGREE LEVEL AGAINST  
GIVEN PROBLEM AREAS (N = 61)

X = 45 Y = 16		Economic	Social	Academic	Overall
	't'	5.16	3.76	2.75	3.74
		p(0.001)	p(0.0001)	p(0.008)	p(0.0001)

X = Masters (M.S.); Y = Ph.D. students; 'p' = Level of Significance.

The significant values of 't' suggested that the students working towards their Masters Degree programs reported greater problems more frequently than those working for their Ph.D. programs under the areas indicated on the above table. Thus, the degree level also affected the adjustment patterns of such problems.

Age. The analysis based on the combined population under this variable showed that there was a significant difference between the mean scores of older students and younger students. The difference was summarized in the following table (also refer to Table 24c).

TABLE 16  
SIGNIFICANT 't' VALUES FOR AGE AGAINST GIVEN PROBLEM AREAS (N = 71)

X = 27 Y = 44		Physical	Economic	Overall
	't'	-2.98	-2.17	-2.39
		p(0.004)	p(0.034)	p(0.02)

X = Older, 28 & up; Y = Younger, 18-27); 'p' = Level of Significance.

The above table indicated that the younger people (since 't' was negative) reported more frequent and greater problems than the older in the areas of economic, physical, and overall adjustment. Age was also a contributing factor in deciding the patterns of adjustment problems.

Marital status. The significance of difference in the mean scores of married and unmarried students was found only under the area of economic adjustment. The significant 't' value at 0.021 level was recorded as 2.38, ( $X = 54$  and  $Y = 17$ ) where X represented "unmarried" and Y represented "married" students with N equal to 71. From this it was derived that the unmarried students had reported greater economic problems than the married students. This was an added element to the patterns of adjustment empirically tested. (Please refer to Table 24d of Appendix-'E' for further details).

Income (financial aid). There was no significant difference found between the mean scores of low-income (\$500-\$2,999) students and the high-income (\$3,000-\$4,999) students under any of the four major areas of adjustment or under the overall problem area. This was indicated by the insignificant 't' values observed under this variable and presented in Table 24e.

It was then concluded that the income level had no bearing on the patterns of adjustment problems; however, the problems under the economic area were reported to be the most severe problems both by Indians and Chinese. (Please refer to Table 24e of Appendix-'E' for further details.)

Duration of stay. Table 24f showed that there was no significant difference between the mean scores of students who had shorter (1 to 12 months) duration of stay and those who had longer (13 and up months) ones. Under none of the five basic areas were the 't' scores found to be significant. This lead to the conclusion that the duration of stay had no influence on the patterns of

adjustment problems. In other words, the intensity of the adjustment problems remained independent of the duration of students' sojourn in the university situation. (Please refer to Table 24f of Appendix-'E' for further details).

Examining the Influence of "Major Field" on the Patterns  
of Adjustment Problems Using Chi-square Test

Table 17 "Chi-square Tests for the Major Fields against the Frequency of Respondents for Area-wise and Total Problem Scores" included the following major fields: a) Engineering, b) Architecture and Planning, c) Physical Sciences, d) Biological Sciences, e) Agriculture and Vet. Medicine, f) Social Sciences.

As referred to earlier on page 47 with the explanation of Table 10b, the different categories under the total problem scores were combined into two basic groups of Low problem scores and High problem scores using the mean score of Table 18 as the cutting point, whereas the categories under the area-wise problem scores (included in Table 10b)\* were arbitrarily combined into the above major dichotomies. In fact, the initial tests were run for all the categories that appeared in Table 10b in the case of area-wise problem scores. But, since many cells in the contingency tables were empty, the categories were arbitrarily combined into two and the values of Chi-squares were computed using the desk-computer. Nevertheless, the expected frequencies in many cells were so low (less than 5) that a need for squeezing the categories of the major field into two or three groups was also clearly warranted. These were the limitations with which the analysis was presented in Table 17.

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\*However, the corresponding frequencies of each class-interval under each problem area were adjusted according to the 'real frequencies' in each of the six major fields, the total being 66. Remaining cases were of those 7 who did not ascertain.



TABLE 17  
CHI-SQUARE TESTS FOR THE MAJOR FIELDS AGAINST THE FREQUENCY OF RESPONDENTS  
FOR AREA-WISE AND TOTAL PROBLEM SCORES

(For degrees of freedom; df=5 and Level of Significance =.05)

Major Field	Total	Total Problem Score		Physical		Economic		Social		Academic	
		Low	High	Low	High	Low	High	Low	High	Low	High
Engineering											
Obs. Frq.	33	18	15	13	20	24	9	21	12	24	9
Exp. Frq.		18.5	14.5	12.5	20.5	26.0	7.0	22.5	10.5	22.0	11.0
Architecture & Planning											
Obs. Frq.	8	2	6	3	5	5	3	4	4	1	7
Exp. Frq.		4.5	3.5	7.5	5.0	6.3	1.7	5.5	2.5	5.3	10.7
Physical Sciences											
Obs. Frq.	8	6	2	2	6	7	1	7	1	6	2
Exp. Frq.		4.5	3.5	7.5	5.0	6.3	1.7	5.5	2.5	5.3	10.7
Biological Sciences											
Obs. Frq.	4	2	2	1	3	3	1	3	1	3	1
Exp. Frq.		2.2	1.8	3.3	2.4	3.1	0.8	2.7	1.3	2.7	5.3
Agriculture & Vet. Medicine											
Obs. Frq.	11	7	4	4	7	11	0	9	2	9	2
Exp. Frq.		6.2	4.8	10.5	6.8	8.7	2.3	2.1	3.5	7.4	14.7
Social Sciences											
Obs. Frq.	2	2	0	2	0	1	1	1	1	1	1
Exp. Frq.		1.1	0.9	0.7	1.3	1.6	0.4	1.4	0.7	1.3	0.9
Total											
Obs. Frq.	66	37	29	25	41	52	14	45	21	44	22
Exp. Frq.		37	29	25	41	52	14	45	21	44	22
Chi-square (2, .95)		2.1897		4.1692		5.9529		4.2428		12.8693	

Obs. Frq. - Observed Frequency

Exp. Frq. - Expected Frequency

As shown in Table 17, the values of Chi-square were found significant (12.869) only in the case of academic problem scores. The degrees of freedom and the level of significance used were 5 and 0.05 respectively. Thus it was concluded that the major field had an influence on the students' academic adjustment problems. Except in the field of Architecture & Planning, the problem scores were lower in other fields but equal in the field of social science in both Low problem score and High problem score categories. However, these were very preliminary conclusions subject to further testing by increasing the number of observations (i.e. sample size) or combining the categories if required.

## CHAPTER IV

## SUMMARY OF ESSENTIAL FINDINGS

From the foregoing analysis and interpretation of data presented in Chapter III and the discussion carried out earlier in Chapter II on population characteristics, the following essential findings were recorded:

1. The profile drawn earlier in this report suggested the following portrait of the Indian and Chinese student at Kansas State University. The student was a male (73%), age 26. He was a graduate student (84%) enrolled in the College of Engineering (45%), Arts & Science (29%), Agriculture & Vet. Medicine (15%) or Architecture & Planning (11%) and was working toward a Master's degree (62%). The student was single (73%) and lived in off-campus housing (80%). His primary source of financial assistance was personal or family savings (50%) and he received an average income between \$2,000-\$2,999 (37%). Since he did not possess a car (86%), he lived close to the campus.

Preference status. The student preferred apartment living (61%), having a capacity of paying a monthly rent between \$25 to \$45 per head (75%). He preferred to have either one roommate (54%) or live alone (24%). He would rather choose his co-national to be his roommate (34% Indians, 70% Chinese) and he did not prefer to live with his counterpart.

Present status. An average Indian and Chinese student lived in an apartment (60%). However, the Chinese student also lived in the dormitory (36%) and the rooming house (24%). The student paid the monthly rent between \$25 to \$45 per head (70%). The student lived with his co-nationals (85% Indians and only 36% Chinese). He was a

member of his own national organization (52%). He was also accustomed to American food habits (51% Chinese and only 38% Indians). The student's major leisure-time activities included: reading & writing; TV watching & movies; and music, clubs, & sports (58%). He had ten or more close friends (35%). The Indian student had a friend-circle of Americans, Indians, and Chinese (45%), whereas the Chinese student had an exclusive circle of his co-nationals (40%). While attending the school, the student had lived for more than seven but less than twelve months duration in Manhattan (38%).

2. The patterns of adjustment problems. The following patterns of adjustment were recorded:
  - a) Except in the area of physical problems the Chinese students had greater problems in the areas of economic, social, and academic adjustments than Indians.
  - b) Both the sub-groups (i.e. Indians and Chinese) had reported greater economic problems such as high tuition fees, limited assistantships, higher rents, high standard of living, etc. These were followed by the physical problems, such as acute shortage of adequate housing within reasonable limits, lack of transportation facilities, remoteness of banking facilities, food limitations and cost (high) of dormitory living, etc. The greatest social problems reported were regarding obtaining permanent visa, finding suitable 'dates', getting permission from Immigration office to work\*, and increasing personal friendship with Americans. The only severe

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\*However, this was a very recently developed situation pointed out earlier in the footnote on page 13 of this report.

problem that was recorded under the area of academic adjustment pertained to inadequate facilities in the departments such as study space, tables, lockers, research tools and aids, etc. However, the Chinese did report many other severe problems under this area such as writing reports, reading reports, understanding lectures, reciting and speaking in the class, etc.

- c) The problems such as difficulties in registration, in using the library, in finding adequate worship group of own religion, in understanding American textbooks, health and hospitalization of school, American examination system, insufficient guidance during orientation program, in receiving adequate help from the Foreign Student Advisor's office were among the least severe problems reported by the entire group.
- d) The overall problems of Chinese were quite in contrast with those of Indians, where the academic area was put to the maximum inverse relationship.
- e) The Chinese had reported greater academic problems than Indians, whereas the Indians had reported greater physical problems.
- f) The problems of Indians were almost congruent to that of the combined group. However, they did mention some additional physical problems other than those listed for the entire group. They felt that the owners were not cooperative and simply collected the rent, the housing they had to rent was too far from the campus having inadequate living spaces, and that the rents were unreasonably high. They also felt the strangeness of American food was a great problem to them, whereas the same was not felt by the Chinese.

- g) In spite of the fact that the Chinese had greater academic problems than Indians, the comparisons within the four major areas under "Chinese students problems" revealed that economic and social problems were greater than physical and academic problems. However, in the case of Indians, economic and physical problems were reported to be greater than the social and academic problems.
- h) The correlation test confirmed that both the groups had listed economic problems as the most common (and severe) problems followed by the physical problems in the case of Indians and social problems in the case of Chinese.
- i) From the 't' test results it was concluded that the "country of origin" did influence the "patterns of adjustment problems" of Indian and Chinese students that prevailed on this campus since the Chinese had reported more varied and greater problems than Indians.
- j) Degree level had also indicated an influence on the patterns of adjustment problems since it was found that the students of the Master's degree program had reported greater problems in the areas of economic, social, academic, and overall adjustment.
- k) It was noted that age was also a major contributing factor that had its influence on the patterns of adjustment problems since the younger students reported more frequent and greater problems than the older students in the areas of physical, economic, and overall adjustment.
- l) To a certain extent the marital status also had an influence on the adjustment patterns of these problems since it was revealed that the single students reported greater economic problems than

the married students.


- m) From the results of the 't' test it was concluded that the income level had no bearing on the patterns of adjustment problems; however, the problems under the economic area were reported to be the most severe problems both by Indians and Chinese.
- n) The duration of stay had no influence on the patterns of adjustment problems since no one group of shorter or longer duration reported lesser or greater problems. In other words, the intensity of the adjustment problems remained independent of the duration of students' sojourn in the university situation.
- p) The results of Chi-square tests indicated that the major field had an influence on the patterns of students' academic adjustment problems since it was found that except in the field of Architecture & Planning, the problem scores were lower in other fields.
- q) The following comments were recorded:

Indians:

- 1) Mixing and being adopted to American culture and society - more and more dates and mixing.
- 2) Before enrolling for a course need to have an idea of the professor's teaching methods and grading [system].
- 3) Little help for India Association as an organization.
- 4) Discrimination by professors in class as compared with American students.
- 5) Discrimination in academic life.
- 6) Social communication with Americans [difficult].
- 7) In general the mutual contacts between the native students and foreign students is rather slight.

- 8) Limited campus employment.
- 9) Uncertainty of getting job.
- 10) Inadequate assistance for latecomers.

Chinese:

- 1) Shopping without having a car.
- 2) Apartments too noisy 



## CHAPTER V

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Published in the Journal of the Sociology and Social Research, an article read: "The presence of an increasing number of the international students on college and universities campuses indicates a great problem which should be of great concern to sociologist as well as educators."<sup>17</sup> On the other hand, while considering the extent of the recent developments, expansions, and specializations\* gradually emerging within the field of "traditional planning", the author had felt that such concern should then also be extended to the "planners" or more specifically to the "social planners". This study was a similar attempt made by the author (planner) in this direction. Although no specialized training was received by the author in the discipline of sociology, the constant guidance of one of the most prominent sociologists\*\* on this project had greatly substantiated the need by pouring the required knowledge of such discipline.

The above article further read: "Adjustment to the campus life is a common problem to all students entering the university but it is more difficult for a student from a foreign country who is handicapped by the language difficulties, unfamiliar customs and mores, and a more acute financial problem." The present study was an exploratory attempt to present an "inventory analysis" of such underlying problems of adjustment and difficulties faced by the particular

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\*Such as "Institutional Planning and Development" (campus planning).

\*\*Dr. George Peters of the Department of Sociology and Anthropology at Kansas State University was on the advisory committee of this project.

segment of the foreign students' population, specifically Indians and Chinese at Kansas State University.

A brief overview of the preceding introductory chapter would reveal that there were several institutions and organizations at which the similar kind of studies had been carried out on foreign students and their adjustment problems. In many instances it was revealed that such problems and difficulties seemed to have centered around the four basic areas of adjustment, namely: 1) physical, 2) social, 3) economic, and 4) academic.

However, the patterns of such adjustment problems differed from campus to campus. Since such variations chiefly depended on several basic factors, such as the type of institution (size) and its setting (size of a town or city), programs and facilities offered by such institution, characteristics of the foreign students' population present on the campus (i.e. problem people), the intensity and magnitude with which such adjustment problems were experienced and felt by the population concerned,\* and the areas under which such problems of adjustment had, basically, assumed the critical shape. There were a number of other variables (independent), such as country of origin; age; academic, social, financial and personal status;\*\* etc. that had some bearing on the patterns of such adjustment problems.

As a matter of fact, some of the foregoing variables were tested during this project only to discover that they had considerable influence on the patterns of such adjustment problems. Under some of them either the intensity of the problems increased or decreased, and in some cases remained unaffected.

Several authors and researchers in the past had clearly indicated the need

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\*This involved many variables related to sociological or social-psychological factors responsible for an individual's or a group's behavior.

\*\*Degree-level, Income-level, and Marital Status, etc., were tested.

and significance of such studies and their several advantages. Many of them argued that results of such studies would not simply help in minimizing the problems of international students but they would also be useful in framing up new programs and policies to extend additional help to these students. They thought this would, in turn, increase better international understanding and help in progressing toward a more meaningful cross-cultural education.

A more elaborate description of some of the anticipated contributions of this study were included under the "significance of the project" covered in the introductory chapter. However, the most significant contribution was the achievement of information on the various aspects of adjustment problems, in other words, "the problem highlights" that would help in updating the data on hand, designing and improving the various needs of Indian and Chinese students on the campus, and reexamining the strengthening existing administrative and other related programs for the particular segment of foreign students as an integral part of the entire concept of "Institutional Planning and Development".

The need for such information was felt vital at the resident campus. Since many other institutions had made sincere attempts in developing their own sets of information on the various aspects of their foreign students' population such as their needs and interests, their difficulties, and their problems of adjustment during their sojourn in the university situation, many authorities on the resident campus had also felt the similar necessity of having a set of useful information.

While working on this project the author and his advisory committee held several discussions at length on the preparation and use of entire questionnaire methodology employed in this study. In fact, the use and application of such method was felt imperative. The method had functioned as an important research tool in compiling the useful empirical data. All the data that were compiled

through the questionnaires were intensively used in various analyses based on different statistical techniques in order to present the meaningful interpretations from which the useful inferences of this study were drawn.

However, there were a few limitations with which the author had to work while dealing with the few statistical tools utilized in this study. From this emerged a set of recommendations that have been incorporated in this chapter along with a few others.

The presentation made in the preceding chapter on the "essential findings" as related to the problem people and the problem areas was the essence of this report from which the following salient conclusions on this study were finally reached.

### Conclusions

#### Problem People.

- 1) A comparison between the preference status and the present status of an average Indian and Chinese student revealed that most of them had lived within their personal choice of accommodation and rent paying capacity, except for a one-third majority of Chinese who had to, for some reason, live in the dormitories and rooming houses against their generally expressed aptitude and desire. The most significant reason that could be assigned to this difference was the fact of acute shortage of reasonable housing facilities and unreasonable amount of higher rents experienced by these students. This seemed to have forced the affected students to switch their likings to somewhat less desirable alternatives and make compromises with the prevailing situation.
- 2) Another important conclusion that was derived from this comparison was the fact that three-fourths of Chinese preferred to live with

their co-nationals but in reality only about one-third of them lived together. The same phenomenon was found exactly reversed in the case of Indian students. This suggested a comparatively weak possession of communication skills by Chinese to manage to get the desired situation of living, whereas their counterpart could somehow manage to get the things they desired. Of course, the shortage of housing seemed to be another factor restricting the desired living situation.

- 3) From the recorded observations it was also concluded that an average Indian and Chinese student was only a member of his own national organization and did not seem to take any active interest in an International, professional, or any other such organizations. It was felt that either the programs within such outside organizations did not attract him or the burden of his educational responsibilities restricted his participation and enthusiasm for doing things otherwise.
- 4) Two-thirds of average Indian students and at least half the average Chinese students were not used to other than their own native food habits. This fact supported the arguments as to why an average Indian and Chinese did not prefer dormitory living - food limitations. Since more Chinese were accustomed to other than their native food habits a sizeable number of them could manage to live in the dormitories. Restricted food habits could also be a reason for the complain of the majority regarding inadequate eating facilities on and off campus. Since they did not find the kind of food they would most welcome to eat with equal interest of eating their native dishes.
- 5) An average Indian student seemed to be making friends with the people from different countries, whereas his counterpart confined himself mostly to the friendship with his co-nationals. Again many factors

seemed to have been associated with this phenomenon as "isolation". The most important of all, and often described by many competent researchers\* in the past, were the lack of communication and the difficulties expressed by a majority of these students in achieving a true friendship with Americans. These aspects were conceivable from the number of comments made by the respondents (however, all of them were listed by the Indians) under their social problems (in addition to those provided statements). For example, one of the informants had mentioned, "In general the mutual contacts between the native American students and foreign students is rather slighted." Another had expressed a problem of "Social communication with Americans" on the highest scale value (i.e. very great problem). Yet another one had said, "Mixing and being adopted to American culture and society - more and more 'dates' and mixing," was a great problem to him.

#### Problem Areas.

- 1) Economic. It was clearly observed that the economic problems of both Indians and Chinese were on the top list. Obviously an average student with his limited annual budget was more concerned about his economic stability, and hence experienced greater economic problems. However, the individual's income level did not prove to be a significant cause of an increased problems' intensity felt by the students under any of the four major problem areas or an overall problem area. In many instances the annual budget was proved to be inadequate for the duration of one calendar-year. The recorded average income of \$2,000-\$2,999 per year was not an ideal budget (for just comfortable living) to

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\*References included in the bibliography.

operate a reasonable living on this campus, while at the same time dispensing the essential expenditures for at least the basic required items such as tuition fees, board, lodging, books, etc. The usual annual expenditure figure for one calendar-year sent to a foreign student on his I-20\* form by the office of the Foreign Student Advisor at Kansas State University was \$3,000 (1970). This was somehow not an accurate estimate of such expenditure, and hence many students found it difficult to operate within such limits. An annual tuition-fee (non-resident) of more than \$1200 was generally paid by the student. This left him no choice other than to resort to some additional source of income. Since there were limited assistantships available (a major complaint received from the students), a number of them tried for some part-time work on the campus (since no permission was generally granted to work off-campus except during summer).

Higher rents and high standards of living were among the most frequent "very great" economic problems expressed by the average Indian and Chinese students.

- 2) Physical. After the economic problems, the physical problems ranked second for Indians and third for Chinese. This showed that the Indians had more severe physical problems than Chinese. Acute shortage of adequate housing within reasonable limits, lack of transportation facilities, and remoteness of banking facilities were among the most frequently expressed physical problems by the combined group. Since it was discovered that a vast majority of both Indians and Chinese did

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\*A certificate of eligibility required by the Immigration authorities as an entry permit to the United States by all foreign students.



not possess a car, they felt it necessary to have an alternate arrangement of some sort of transportation on which they could easily depend. However, the shortage of adequate housing was felt because in many instances it was difficult for an average student to pay high rent for an alternate accommodation, or even to choose to go far away from the campus for cheaper rents. The latter could have further increased the problem of transportation. The problems of Indians chiefly centered around "housing and food" whereas their counterpart had shown little concern about such problems.

- 3) Academic. Under this area the Chinese reported greater problems than Indians. The problems pertained chiefly to the academic difficulties such as writing and giving reports (oral), understanding lectures, reciting and speaking in the class, etc., whereas these were not problems to Indians. However, the most severe problem felt by both Indians and Chinese under this area was inadequate facilities in the departments such as study space, tables, lockers, research tools and aids, etc. Since a majority of them were enrolled in the College of Engineering, it seemed that most of the facilities lacked were in the various departments under this college. However, this was just a broad generalization subject to further investigation. The difficulties of Chinese under this area were assumed to be related to their earlier educational background, such as training in the English language in their home country.

Many Indians had also felt the problem of discrimination by professors in the class. Many comments were recorded under this area (presented at the end of Chapter IV on page 67.)

- 4) Social. The problems under this area were expressed with equal intensity



both by the Indians and Chinese. However, the social problems were ranked second by the Chinese but third by the Indians. Obtaining permanent visa, finding suitable 'dates', getting permission from the Immigration office to work, and increasing personal friendship with Americans were among the most frequently expressed problems both by Indians and Chinese. A search for part-time work, as seen earlier, seemed to have increased the demand for obtaining work permits from the Immigration authorities. However, until recently the permits for summer jobs were regularly issued to these students by the authorities without any sort of restrictions. Perhaps many were unable to get the permit for a full-time or part-time regular job during a period other than summer. The problem of "friendship" was conceived to be a greater responsibility of the "host" than the "guest". In their studies of "friendship", Klein, Alexander, and other co-authors had concluded by saying that, "We accept their [foreign students] rationalizations about the press of studies or language difficulties more readily than we can look at our lack of openness to strangers. The human consequences of their 'not making it' with us are serious."<sup>18</sup>

However, it was felt that there should be an equal attempt from both sides.

- 5) It seemed that these students received enough help from the Foreign Students Advisor's office and during the orientation program. They felt that the services from the students' health center were adequate. They found no difficulties in using the library, finding adequate worship group of own religion, in understanding American textbooks, and dealing with the American examination system.
- 6) The variables such as the country of origin, degree level, age, and

marital status had significant influence on the "patterns of adjustment problems" of these students. Younger bachelor students studying at the Master's level, especially Chinese, had reported greater problems as compared to others. However, the variables such as income-level and duration of stay had no significant influence on the patterns of adjustment problems. It was recorded that the students' major field of study had only significant influence on the patterns of academic adjustment problems. It was further noted that the students (all of them Chinese) in the field of Architecture and Planning had reported greater academic problems as compared to those who were enrolled in other fields. However, the conclusions on this last variable were subject to further testing.

- 7) From all the preceding tests and analyses, a final and the most important conclusion of this study was reached on the problem people and overall problem areas. The conclusion was that:

The overall problems of the Chinese students were quite in contrast with those of the Indian students at Kansas State University, and it was found and tested that the problems under "academic area" were put to the maximum inverse relationship.

#### Recommendations

From the entire study carried out on this research project emerged the two distinct sets of recommendations presented below:

#### Implication of the Study for a "planner".

It was anticipated that the final conclusions and the more elaborate informational data incorporated in this research report would enable the

university administrative authorities to understand fully the problems of Indian and Chinese students on this campus. However, to a planner the following points were made which deserved his greater attention:

- a) Problem of acute shortage of housing needed a very careful attention and should be given top consideration. Reasonable apartment-type living units were in demand by most of these students. Bearing this factor in mind, the possibilities of converting one of the existing residence halls into an International House with the provision of some cooking facilities were considered a most appropriate solution in the existing situation. Along with this, the need for introducing some Indian and Chinese food dishes either in the Union cafeteria or in the food-center of any of the residence halls on the campus was considered important.
- b) Possibilities of working out alternative rational schemes for providing some sort of transportation facilities should be developed since this need was vital.
- c) Adjustment difficulties did not seem to be solved merely by a longer residence and longer contact with an American educational system. A program planned specifically to help these students must be designed to integrate them more fully into the social life of the university and the community; to help especially the Chinese students overcome language barriers in reading, writing, and understanding English (not through "meaningless" routine, so called English Proficiency Test given to each new arrival, failure in which would determine the special course the student will have to take; but such procedure should be less formalized to win students' interest); and to assist financially those students without part-time work or with insufficient aid from their family or country.

- d) There was a need for directing the interests of these students toward more active participation in the international, other national, and professional organizations on and off campus, to help them improve their communication skills, develop friendship with Americans, and sustain more and more helpful contacts.
- e) Since the majority of the students had no complaint against the help received from the Foreign Students Advisor's office, it was assumed that the services extended by this office were excellent. However, in order to achieve still greater efficiency and to provide more varied and extended services (including some new programs other than those existing), a need for an additional staff aid to the Foreign Students Advisor to help him reduce his extra burden of work was felt vital since this would permit him to devote more time to the individuals seeking his help or guidance.

#### Implication of the Study for the Future Research.

Since the study was exploratory in nature, its scope was also limited. However, every possible detail in presenting the useful data was carefully worked out. From the experience gathered on this research project, the following recommendations for future research emerged:

- a) Future research should be based on a more elaborate sample size to minimize the sampling error. This would also add to the validity of observations.
- b) If possible an attempt should be made to study a single nationality at a time. This would permit study of many aspects of the project in detail such as those variables remained untested in the present study. It also would help in reducing the work to obtain the required

"concentration" on the limited aspects of the study.

- c) Based on the present study, a series of hypotheses should be initially formed in order to testify the results of this study for greater reliability. Each set of hypotheses could be formed and tested as a part of a separate study instead of attempting to combine all at a time into one single project.
- d) Questionnaire methodology (especially scaling and scoring) could still be further refined and pretested. Many new items could be added, or many items could be dropped or revised according to the need of the study.
- e) The variables tested in this study using the different statistical "inference tests" (correlation, 't' test, Chi-square tests, etc.) should be retested, possibly by taking two more "random samples" and then the results should be finally combined to present more valid generalizations. In order to eliminate the slightest bias due to sampling selection procedure, it would be more advantageous that a third person other than the researcher performs this job.
- f) Similar studies on other foreign nationalities should also be carried out since doing it stage by stage all these studies would finally present the entire picture of all the foreign students coming to this university from the various countries all over the world.
- g) A more thorough examination of the past research work done on Foreign Students at various other institutions itself could be made into a documentary type of research from which many helpful clues would result. References included in this study would provide a much wider platform for such studies. But rather than using the entire platform at a time in a random fashion, it would be far more rewarding if at the very

outset the entire space is skillfully planned into a systematic compartmentalization of various aspects of the study. This would help the researcher in knowing where to start laying his first 'brick' on the platform.

- h) Finally the time factor involved in such research work demands a very generous estimation. Usually it should depend on the amount and type of research work undertaken and the other simultaneous responsibilities carried out by the researcher. The author's experience of this project suggests that the dealings such as statistical manipulations, data processing, initial compilation of data using either the questionnaire or an interview techniques would consume a considerable amount of time on such projects. An interview technique is even more time consuming, hence, if used, an additional time factor should be allowed to avoid last minute "cut-downs" or "short-cuts" as far as possible.

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APPENDIX-A  
QUESTIONNAIRE

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 Community Planning  
 College of Architecture & Design  
 Kansas State University  
 Manhattan, Kansas 66502

1114 Vattier  
 Manhattan, Kansas 66502

Phone: AC 913 539-1680

April 5, 1971

Dear Fellow Student:

I hope it is still not far from your memory a little article that appeared in the Collegian few weeks ago about 'A STUDY MADE ON FOREIGN STUDENTS' in the Department of Regional & Community Planning. Do you recollect it now? Well! if you do, then here is a chance for you to participate in the study and extend your cooperation to your fellow student for its fulfillment. On the other hand, if you do not recollect, then I would just briefly explain the purpose of this study.

Basically, the study is designed to identify the major adjustment problems a foreign student is likely to encounter on the campus. Kansas State University is one attended by as many as 500 Foreign Students from various countries all over the world. Since the majority of Foreign Students on this campus are either from India or China, the author has restricted his study to these two major segments of entire Foreign Student population.

The intensity and magnitude of adjustment problems of Foreign Students have scarcely been critically examined in the light of their resulting implications toward recognizing more innovative aspects of administrative, physical and academic planning on the campuses. Many campuses still lack the real understanding and realization of such problems of Foreign Students either simply due to non-availability of sufficient funds to carry out effective research in this area or due to their lack of concern about the Foreign Student affairs, since they have developed a magnificently rehearsed 'smiling-in-face' attitude. What is needed is the detail information concerning the nature, intensity and magnitude of such problems for proper analysis; formulation of improved plans; policies and programs; and their effective implementation. The same is true of Kansas State University in many respects.

For gathering such basic information your contribution is vital. Hence, I have attached with this letter a three-page questionnaire which I would request you to fill out and return to me at your earliest. If you so desire I shall be glad to pick it up in person from your local address. Please do not hesitate to contact me on phone or in person if you have any doubts. It is my promise to you that all the contents of every questionnaire shall be treated as 'STRICTLY CONFIDENTIAL' and except for the group statistics nothing shall be included in the final study.

With this, I am looking forward to receiving your fullest cooperation. Your interest in this matter is highly appreciated.

Thank you very much.

Sincerely yours,

(Nasir F. Nagamia)

Graduate Student  
(MRCP)  
Department of Regional &  
Community Planning  
Kansas State University

QUESTIONNAIRE

## PART I

a. ADDRESS: \_\_\_\_\_ MAJOR FIELD: \_\_\_\_\_

\_\_\_\_\_ AGE GROUP: 18 - 22 ( ) Ph.D. ( )  
 23 - 27 ( ) M.S. ( )  
 28 & up ( ) B.S. ( )

DO YOU HAVE A CAR? YES ( ) NO ( ) MARRIED ( ) UNMARRIED ( ) MALE ( )  
 FEMALE ( )

FINANCIAL SOURCE: \$ \_\_\_\_\_/ANNUALLY. PRESENT VISA STATUS: \_\_\_\_\_

SCHOLARSHIP ( ) ASSISTANTSHIP ( ) FELLOWSHIP ( ) FAMILY FUNDS ( ) OTHER \_\_\_\_\_

PLEASE FOLLOW ALL THE WRITTEN INSTRUCTIONS CAREFULLY:

b. WHILE SELECTING A 'REASONABLE HOUSING ACCOMMODATION' WHICH ONE OF THE FOLLOWING LISTED FACILITIES YOU CONSIDER TO BE THE MOST DESIRABLE? (check one)

( ) Dormitory	( ) International House (if available)
( ) Jardine Terrace	( ) Efficiency Apartment (one room with compact kitchen)
( ) Fraternity	( ) An Apartment (having a separate kitchen)
( ) Sorority	( ) A Rooming House (with no cooking facility)
( ) Trailer House	( ) Any other Specify _____

c. MY ANNUAL BUDGET WILL ALLOW ME TO CHOOSE AN ACCOMMODATION AT: (check one)

Rental Range	( ) Low \$25 to \$44	( ) Medium \$45 to \$84
Per Month:	( ) High \$85 to \$144	( ) Higher \$145 to \$225

d. I WOULD PREFER TO SHARE MY ACCOMMODATION: (check one)

( ) With one roommate	( ) With three roommates	( ) Up to five roommates
( ) With two roommates	( ) With four roommates	( ) Alone

e. I WOULD PREFER MY ROOMMATE(S) TO BE: (check one)

( ) American ( ) Indian ( ) Chinese ( ) Other Specify \_\_\_\_\_

f.

## PRESENT STATUS: (General)

1. The type of accommodation I live in at present is \_\_\_\_\_
2. I pay monthly rent of \$ \_\_\_\_\_
3. I share my accommodation with \_\_\_\_\_ roommates. If alone check here ( ).
4. My present roommates are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, national.
5. I am a member of the following organizations on the campus:  
Specify \_\_\_\_\_  
\_\_\_\_\_
6. I am accustomed to (also) \_\_\_\_\_ food habits (not native).
7. My leisure-time activities are: \_\_\_\_\_.
8. I have about \_\_\_\_\_ close friends in Manhattan.
9. My friend-circle includes: ( ) Americans ( ) Indians ( ) Chinese ( ) Other \_\_\_\_\_
10. I have completed \_\_\_\_\_ years in Manhattan.

## PART II

LISTED BELOW ARE SOME OF THE MOST IMMEDIATE PROBLEMS A FOREIGN STUDENT IS LIKELY TO ENCOUNTER WHILE ATTENDING 'KANSAS STATE UNIVERSITY';

PLEASE READ EACH OF THE FOLLOWING STATEMENTS CAREFULLY AND THEN INDICATE ON YOUR RIGHT BY CHECKING THE MOST APPROPRIATE PARENTHESIS 'YOUR OPINION' BASED ON YOUR PERSONAL EXPERIENCE:

	VERY GREAT PROBLEM	PROBLEM	LITTLE PROBLEM	'NO' PROBLEM
<b>I. WHAT PHYSICAL PROBLEMS HAVE YOU HAD?</b>				
1. Inability to find adequate housing .....	( )	( )	( )	( )
2. Housing too far from the campus .....	( )	( )	( )	( )
3. Housing discrimination (off campus) .....	( )	( )	( )	( )
4. Inadequate cooking facility .....	( )	( )	( )	( )
5. Inadequate sanitation facility .....	( )	( )	( )	( )
6. Inadequate heating facility .....	( )	( )	( )	( )
7. Inadequate living space .....	( )	( )	( )	( )
8. Unreasonable higher rents .....	( )	( )	( )	( )
9. Dormitory living not preferred because of:				
a. limited finance .....	( )	( )	( )	( )
b. food limitations .....	( )	( )	( )	( )
10. Inadequate eating facilities on & off campus (expensive) .....	( )	( )	( )	( )
11. Strangeness of American food .....	( )	( )	( )	( )
12. Owner not cooperative, simply collects rent .....	( )	( )	( )	( )
13. Other specify _____	( )	( )	( )	( )
<b>II. WHAT ECONOMIC PROBLEMS HAVE YOU HAD?</b>				
1. Loss of money value through currency exchange .....	( )	( )	( )	( )



	VERY GREAT PROBLEM	PROBLEM	LITTLE PROBLEM	'NO' PROBLEM
2. Having enough funds for school expenses .	( )	( )	( )	( )
3. Inadequate funds for living expenses ....	( )	( )	( )	( )
4. Banking facilities too far .....	( )	( )	( )	( )
5. Limited availability of assistantships ..	( )	( )	( )	( )
6. Higher amount of non-resident fees .....	( )	( )	( )	( )
7. Household items too expensive .....	( )	( )	( )	( )
8. Standard of living very high .....	( )	( )	( )	( )
9. Other specify _____	( )	( )	( )	( )

### III. WHAT SOCIAL PROBLEMS HAVE YOU HAD?

1. Being accepted in a friendly group .....	( )	( )	( )	( )
2. Feeling welcome at college functions ....	( )	( )	( )	( )
3. Finding suitable 'dates' .....	( )	( )	( )	( )
4. Finding adequate worship group of own religion .....	( )	( )	( )	( )
5. Feeling slighted in social or recreational groups away from the campus .....	( )	( )	( )	( )
6. Discrimination in athletics or extra- curricular activities .....	( )	( )	( )	( )
7. Finding leisure-time activities .....	( )	( )	( )	( )
8. Personal friendship with Americans .....	( )	( )	( )	( )
9. Health & hospitalization of school .....	( )	( )	( )	( )
10. Part-time job interfering with school work .....	( )	( )	( )	( )
11. Being permitted work by the Immigration office .....	( )	( )	( )	( )

	VERY GREAT PROBLEM	PROBLEM	LITTLE PROBLEM	'NO' PROBLEM
12. Inability to get 'permanent resident visa' .....	( )	( )	( )	( )
13. Other specify .....	( )	( )	( )	( )
IV. WHAT ACADEMIC PROBLEMS HAVE YOU HAD?				
1. Understanding lectures .....	( )	( )	( )	( )
2. Writing reports .....	( )	( )	( )	( )
3. Giving oral reports .....	( )	( )	( )	( )
4. Using the library .....	( )	( )	( )	( )
5. Complicated registration procedure .....	( )	( )	( )	( )
6. Inadequate counseling .....	( )	( )	( )	( )
7. Evaluation of credits .....	( )	( )	( )	( )
8. Getting acquainted with American educational methods, standards and learning experience .....	( )	( )	( )	( )
9. Understanding American textbooks .....	( )	( )	( )	( )
10. Competing with American students for grades .....	( )	( )	( )	( )
11. American examination system .....	( )	( )	( )	( )
12. Reciting or speaking in the class .....	( )	( )	( )	( )
13. Having too little time to complete studies because of Immigration laws (visa restriction other than F1) .....	( )	( )	( )	( )
14. Repetition of English Proficiency Test .....	( )	( )	( )	( )
15. Inadequate help from Foreign Student Advisor's Office .....	( )	( )	( )	( )
16. Inadequate facilities in the department:				
a. study space (locker, table, etc.) .	( )	( )	( )	( )

	VERY GREAT PROBLEM	PROBLEM	LITTLE PROBLEM	'NO' PROBLEM
b. research tool & aids .....	( )	( )	( )	( )
17. Inadequate assistance upon arrival .....	( )	( )	( )	( )
18. Insufficient guidance during 'orientation program' .....	( )	( )	( )	( )
19. Lack of transportation facilities .....	( )	( )	( )	( )
20. Other specify _____	( )	( )	( )	( )

THANK YOU FOR YOUR COOPERATION

**APPENDIX-B****CODE BOOK**

*Cancelled*

**TABLE 9**  
**CODE BOOK\***

INDIAN & CHINESE STUDENTS STUDY

Column No.	Number of Columns	Variable No.	Item
1, 2	two	-	Questionnaire ID number - beginning 01 to 73
3	one	1	<u>Major Field:</u> 1. Engineering 2. Architecture & Planning 3. Physical Sciences 4. Biological Sciences 5. Agriculture & Vet. Medicine 6. Social Sciences 7. Fine Arts 8. Business Administration 9. N.A. (Not Ascertained)
4	one	2	<u>Age Group:</u> 1. 18-22 years 2. 23-27 years 3. 28-up years 4. N.A. (Not Ascertained)
5	one	3	<u>Marital Status:</u> 1. Married 2. Unmarried 3. N.A. (Not Ascertained)
6	one	4	<u>Sex:</u> 1. Male 2. Female 3. N.A. (Not Ascertained)
7	one	5	<u>Degree Level:</u> 1. Ph.D. 2. M.S. 3. B.S. 4. N.A. (Not Ascertained)

\*For the use of computer to punch coded items under each variable on IBM cards.

<u>Column No.</u>	<u>Number of Columns</u>	<u>Variable No.</u>	<u>Item</u>
8	one	6	<u>Car Possession:</u> 1. Yes 2. No
9	one	7	<u>Financial Aid:</u> 1. \$500 - \$1999 2. \$2000 - \$2999 3. \$3000 - \$3999 4. \$4000 - \$4999 & up 5. N.A. (Not Ascertained)
10	one	8	<u>Financial Source:</u> 1. Scholarship 2. Assistantship 3. Fellowship 4. Family Funds 5. Other 6. N.A. (Not Ascertained)
11	one	9	<u>Choice of Accommodation:</u> 1. Dormitory 2. Jardine Terrace 3. Fraternity 4. Sorority 5. Trailer House 6. International House (if available) 7. Efficiency Apartment (one room with compact kitchen) 8. An Apartment (having a separate kitchen) 9. A Rooming House (with no cooking facility)
12	one	10	<u>Rent Paying Capacity:</u> 1. Low \$25 - \$44 2. Medium \$45 - \$84 3. High \$85 - \$144 4. Higher \$145 - \$225 5. N.A. (Not Ascertained)

Column No.	Number of Columns	Variable No.	Item
13	one	11	<u>Number of Roommates Preferred:</u> 1. With one roommate 2. With two roommates 3. With three roommates 4. With four roommates 5. Up to five roommates 6. Alone 7. N.A. (Not Ascertained)
14	one	12	<u>Preference of Roommate:</u> (based on Nationality) 1. American 2. Indian 3. Chinese 4. American, Indian 5. American, Chinese 6. Chinese, Indian 7. American, Indian, Chinese 8. N.A. (Not Ascertained)
15	one	13	<u>Type of Accommodation:</u> 1. Dormitory 2. Jardine Terrace 3. Fraternity 4. Sorority 5. Trailer House 6. International House (if available) 7. Efficiency Apartment (one room with compact kitchen) 8. An Apartment (having separate kitchen) 9. A Rooming House (with no cooking facility)
16	one	14	<u>Rent Paying Capacity:</u> 1. Low \$25 - \$44 2. Medium \$45 - \$84 3. High \$85 - \$144 4. Higher \$145 - \$225 5. N.A. (Not Ascertained)

Column No.	Number of Columns	Variable No.	Item
17	one	15	<u>Number of Roommates Preferred:</u> 1. With one roommate 2. With two roommates 3. With three roommates 4. With four roommates 5. Up to five roommates 6. Alone 7. N.A. (Not Ascertained)
18	one	16	<u>Preference of Roommates: (based on Nationality)</u> 1. American 2. Indian 3. Chinese 4. American, Indian 5. American, Chinese 6. Chinese, Indian 7. American, Indian, Chinese 8. N.A. (Not Ascertained)
19	one	17	<u>Organization Membership:</u> 1. Religious 2. National 3. International 4. N.A. (Not Ascertained) 5. National, International 6. Religious, National, International 7. Religious, National 8. Religious, International
20	one	18	<u>Food Habits:</u> 1. American 2. Indian 3. Chinese 4. American, Indian 5. American, Chinese 6. Indian, Chinese 7. American, Indian, Chinese 8. N.A. (Not Ascertained) 9. Other



Column No.	Number of Columns	Variable No.	Item
21	one	19	<u>Leisure Time Activities:</u> 1. Reading, writing, 2. TV watching & Movies 3. Music, Clubs, Sports 4. No. 1 & No. 2 5. No. 1 & No. 3 6. No. 2 & No. 3 7. No. 1 & No. 2 & No. 3 8. Other 9. N.A. (Not Ascertained)
22	one	20	<u>Close Friends:</u> 1. 1 - 2 2. 3 - 5 3. 5 - 10 4. 10 & over 5. N.A. (Not Ascertained)
23	one	21	<u>Friend Circle:</u> (based on Nationality) 1. American 2. Indian 3. Chinese 4. American, Indian 5. American, Chinese 6. Chinese, Indian 7. American, Indian, Chinese 8. N.A. (Not Ascertained) 9. Other
24	one	22	<u>Duration of Stay:</u> 1. 1 to 6 months 2. 7 to 12 months 3. 13 to 18 months 4. 19 to 24 months 5. 24 to 30 months 6. 31 to 36 months & over 7. N.A. (Not Ascertained)

Column No.	Number of Columns	Variable No.	Item
			<u>QUESTIONNAIRE:</u> Part II
			PROBLEM STATEMENTS (Physical, Economic, Social, & Academic)
			<u>ORDINAL SCALE:</u> (FOR PROBLEM SCORE)
25 to 77	Fifty-three (53)	23 to 75	<u>For Each Problem Statement:</u> 1. Great Problem (4 points) 2. Problem (3 points) 3. Little Problem (2 points) 4. No Problem (1 point) 5. Not Ascertained (0 point)
78	one	76	<u>Total Problem Score of Each Respondent:</u> 1. 0 to 50      EXPECTED RANGE: 2. 51 to 74      0-212 3. 75 to 99 4. 100 to 124      OBSERVED RANGE: 5. 125 to 149      42-149 6. 150 to 175
Codes for Manually Computed Data			
			<u>Area-wise Problem Score of Each Respondent:</u>
--	--	77	Physical Problem Score 1. 0 to 14      EXPECTED RANGE: 2. 15 to 24      0-52 3. 25 to 34      OBSERVED RANGE: 4. 35 to 45      13-42
--	--	78	Economic Problem Score 1. 0 to 14      EXPECTED RANGE: 2. 15 to 24      0-32 3. 25 to 35      OBSERVED RANGE: 8-31

Column No.	Number of Columns	Variable No.	Item
--	--	79	Social Problem Score
		1. 0 to 14	EXPECTED RANGE:
		2. 15 to 24	0-48
		3. 25 to 34	OBSERVED RANGE:
		4. 35 to 45	5-44
--	--	80	Academic Problem Score
		1. 0 to 14	EXPECTED RANGE:
		2. 15 to 24	0-80
		3. 25 to 34	OBSERVED RANGE:
		4. 35 to 44	5-54
		5. 45 to 55	

#### Explanation

The title for ~~Appendix~~ read: Code Book, Indian and Chinese Students Study. This was prepared for the use of Frequency Distribution Program over the computer in order to compute various frequency distributions. All the variables that were to be punched on the IBM cards were pre-numbered and the items under each one of them were also pre-coded as shown in the table. Maximum column-variables (one in each column) punched were seventy-six;\* and the maximum row-variables that could be punched on a series of cards in the same column were nine\*\* for each column-variable. There were seventy-three questionnaires finally included in this study. Hence, the first two columns on every card were used for the identification number given to each questionnaire from 01 to 73. The questionnaires that were marked 01 to 40 were received from the Indian and 41 to 73 were from the Chinese students. The

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\*Although the 'program' permitted the use of all the 80 columns, the information on the area-wise problem scores were not ready at the time of this program; hence, the variable numbers 77 to 80 were dealt with manually in computing the frequency distributions.

\*\*Maximum permitted by the 'program'.

number of data cards (73) corresponded to the number of questionnaires. The items that were checked under each variable on the questionnaires were punched in columns 3 to 24 for the first 1 to 22 variables, respectively. For example, if on the questionnaire number 01 the item number 3 was checked under the variable number 2, then on the card number 01 the code number 3 was punched in the column number 4, and so on. Similarly the columns from 25 to 77 were used for punching the items under the variable number 23 to 73. The items under the variable number seventy-six were punched each time in the column number 78 for all the 73 questionnaires. Frequency distributions for the variables 77 to 80 were manually computed.

APPENDIX-C  
INTENSITY SCORE

TABLE 18  
 AREA-WISE AND TOTAL PROBLEM SCORES OF EACH RESPONDENT;  
 (N=73) INCLUDING VARIOUS MEAN SCORES

Respondent	Physical Problems	Economic Problems	Social Problems	Academic Problems	Total (Overall Problems)
01	32	15	11	22	80
02	29	26	25	47	127
03	39	31	44	47	161
04	29	18	17	32	96
05	30	29	32	34	115
06	40	08	09	21	78
07	24	08	10	27	69
08	14	12	18	20	64
09	26	24	22	24	96
10	38	23	20	38	119
11	27	26	17	32	102
12	24	26	24	22	96
13	18	22	13	27	80
14	38	25	37	37	137
15	23	14	19	22	78
16	26	06	05	05	42
17	28	11	19	21	79
18	23	19	23	28	93
19	35	22	29	27	113
20	22	20	14	28	89
21	17	18	23	33	91
22	28	22	16	28	94

Table 18 (continued)

Respondent	Physical Problems	Economic Problems	Social Problems	Academic Problems	Total (Overall Problems)
23	20	25	26	28	99
24	25	15	13	27	80
25	28	23	19	30	100
26	17	11	17	29	74
27	19	12	16	20	67
28	19	17	14	25	75
29	22	12	08	23	65
30	28	20	18	45	111
31	32	09	15	25	81
32	26	13	24	30	96
33	34	15	33	27	109
34	33	16	18	34	101
35	21	10	14	22	67
36	27	22	20	33	102
37	13	10	15	23	61
38	37	21	40	31	129
39	30	30	16	29	105
40	32	18	23	26	99
41	28	22	29	41	120
42	13	23	32	44	112
43	30	23	28	40	121
44	20	22	16	40	98
45	24	27	27	51	129
46	28	17	22	51	118

Table 18 (continued)

Respondent	Physical Problems	Economic Problems	Social Problems	Academic Problems	Total (Overall Problems)
47	35	18	25	44	122
48	31	29	25	49	134
49	29	10	18	30	87
50	33	22	34	41	130
51	25	18	22	39	104
52	35	24	23	38	120
53	24	19	20	35	98
54	21	27	25	24	97
55	30	19	24	47	120
56	39	22	21	34	116
57	28	18	41	45	132
58	29	20	18	40	107
59	15	09	17	38	79
60	31	25	15	27	98
61	25	21	18	45	109
62	29	17	35	52	133
63	27	26	30	33	116
64	19	23	26	21	89
65	20	21	26	42	109
66	20	17	28	28	93
67	18	16	23	41	98
68	18	17	21	33	89
69	34	26	35	54	149
70	23	21	20	31	95



Table 18 (continued)

Respondent	Physical Problems	Economic Problems	Social Problems	Academic Problems	Total (Overall Problems)
71	15	17	28	29	89
72	42	27	29	51	149
73	27	23	21	43	114
<u>Mean Scores: (N=73), Indian &amp; Chinese</u>					
Mean	26.44	19.32	22.16	33.29	101.21
Variance	50.36	35.08	61.75	96.43	529.97
Standard Deviation	7.09	5.92	7.86	9.82	23.02
<u>Mean Scores: (N=40), Indians</u>					
Mean	26.62	18.1	19.9	28.23	92.85
Variance	52.86	44.20	71.79	60.38	559.16
Standard Deviation	7.27	6.65	8.47	7.77	23.65
<u>Mean Scores: (N=33), Chinese</u>					
Mean	26.21	20.78	24.90	39.42	111.33
Variance	48.80	20.99	37.27	72.50	317.92
Standard Deviation	6.99	4.58	6.11	8.51	17.83

TABLE 19  
FREQUENCY DISTRIBUTION FOR EACH PROBLEM STATEMENT  
SHOWN FOR EACH SCALED VALUE

Variable Number	Problem Statements	Scale*														
		Indian & Chinese					Indian					Chinese				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
23	Inability to find adequate housing	19	31	12	10	1	13	16	3	8		6	15	9	2	1
24	Housing too far from the campus	5	11	17	38	2	5	8	10	17		3	7	21	2	
25	Housing discrimina- tion (off campus)	4	10	20	32	7	3	7	11	17	2	1	3	9	15	5
26	Inadequate cooking facility	7	15	16	33	2	4	4	10	22		3	11	6	11	2
27	Inadequate sanitation facility	1	9	25	35	3		7	14	19		1	2	11	16	3
28	Inadequate heating facility	2	9	23	37	2	1	4	11	23	1	1	5	12	14	1
29	Inadequate living space	3	11	30	27	2	2	7	16	15		1	4	14	12	2
30	Unreasonable higher rents	8	18	17	28	2	5	11	7	16	1	3	7	10	12	1
31	Dormitory living not preferred because of limited finance	24	18	14	6	11	13	9	8	3	7	11	9	6	3	4
32	Dormitory living not preferred because of food limitations	17	15	15	17	9	9	11	7	9	4	8	4	8	8	5
33	Inadequate eating facilities on & off campus (expensive)	10	27	20	14	2	4	15	13	8		6	12	7	6	2
34	Strangeness of American food	5	15	21	30	2	2	7	15	16		3	8	6	14	2

\*1 = 4 points; 2 = 3 points; 3 = 2 points; 4 = 1 point; 5 = 0 point

Table 19 (continued)

Variable Number	Problem Statements	Scale*														
		Indian & Chinese					Indian					Chinese				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
35	Owner not cooperative, simply collects rent	8	13	15	30	7	7	10	8	14	1	1	3	7	16	6
36	Loss of money value through currency exchange	9	15	12	32	5	6	8	4	17	5	3	7	8	15	
37	Having enough funds for school expenses	10	21	19	22	1	7	8	11	13	1	3	13	8	9	
38	Inadequate funds for living expenses	7	17	26	22	1	2	9	14	14	1	5	8	12	8	
39	Banking facilities too far	10	20	21	21	1	4	10	10	15	1	6	10	11	6	
40	Limited availability of assistantships	32	15	12	9	5	15	10	6	6	3	17	5	6	3	2
41	Higher amount of non-resident fees	42	14	4	10	3	22	7	3	6	2	20	7	1	4	1
42	Household items too expensive	9	18	27	15	4	4	10	17	8	1	5	8	10	7	3
43	Standard of living very high	7	22	27	16	1	3	9	15	12	1	4	13	12	4	
44	Being accepted in a friendly group	5	11	15	41	1	3	5	7	24	1	2	6	8	17	
45	Feeling welcome at college functions	2	16	24	29	2	1	5	12	20	2	1	11	12	9	
46	Finding suitable 'dates'	17	14	16	12	14	9	5	8	5	13	8	9	8	7	1
47	Finding adequate worship group of own religion	4	7	9	46	7	1	2	3	31	3	3	5	6	15	4
48	Feeling slighted in social or recreational groups away from the campus	1	12	23	33	4		5	9	23	3	1	7	14	10	1

\*1 = 4 points; 2 = 3 points; 3 = 2 points; 4 = 1 point; 5 = 0 point

Table 19 (continued)

Variable Number	Problem Statements	Scale*														
		Indian & Chinese					Indian					Chinese				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
49	Discrimination in athletics or extra-curricular activities	2	6	18	40	7	1	2	7	23	7	1	4	11	17	
50	Finding leisure-time activities	3	13	22	34	1	3	8	10	18	1		5	12	16	
51	Personal friendship with Americans	7	17	23	25	1	5	6	12	16	1	2	11	11	9	
52	Health & hospitalization of school		8	23	40	2		5	9	25	1		3	14	15	1
53	Part-time job interfering with school work	8	13	15	27	10	2	5	6	19	8	6	8	9	8	2
54	Being permitted work by the Immigration office	15	10	14	25	9	9	5	3	16	7	6	5	11	9	2
55	Inability to get 'permanent resident visa'	25	17	5	14	12	12	9	3	8	8	13	8	2	6	4
56	Understanding lectures	2	9	20	41	1		2	3	34	1	2	7	17	7	
57	Writing reports	3	9	21	38	2		2	6	30	2	3	7	15	8	
58	Giving oral reports	3	13	19	34	4			9	27	4	3	13	10	7	
59	Using the library	2	3	16	52		1	3	4	32		1		12	20	
60	Complicated registration procedure		2	22	48	1			12	27	1		2	10	21	
61	Inadequate counseling	2	7	21	40	3	1	2	7	29	1	1	5	14	11	2
62	Evaluation of credits		6	23	41	3		3	10	26	1		3	13	15	2
63	Getting acquainted with American educational methods, standards and learning experience	2	7	22	41	1	1	1	8	29	1	1	6	14	12	

\*1 = 4 points; 2 = 3 points; 3 = 2 points; 4 = 1 point; 5 = 0 point

Table 19 (continued)

Variable Number	Problem Statements	Scale*														
		Indian & Chinese					Indian					Chinese				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
64	Understanding American textbooks		6	19	47	1		1	2	36	1		5	17	11	
65	Competing with American students for grades	2	7	16	46	2			4	34	2	2	7	12	12	
66	American examination system	3	7	16	46	1		1	6	32	1	3	6	10	14	
67	Reciting or speaking in the class	4	14	20	34	1		3	7	29	1	4	11	13	5	
68	Having too little time to complete studies because of Immigration laws (visa restriction other than Fl)	5	6	13	41	8	3	4	5	22	6	2	2	8	19	2
69	Repetition of English Proficiency Test	5	11	17	38	2	4	5	7	22	2	1	6	10	16	
70	Inadequate help from Foreign Student Advisor's Office	3	5	24	37	4	2	2	11	23	2	1	3	13	14	2
71	Inadequate facilities in the department: study space (locker, table, etc.)	14	12	18	28	1	7	6	8	19		7	6	10	9	1
72	Inadequate facilities in the department: research tool & aids	10	13	16	30	4	5	3	8	21	3	5	10	8	9	1
73	Inadequate assistance upon arrival	7	11	18	35	2	6	4	7	22	1	1	7	11	13	1
74	Insufficient guidance during 'orientation program'	4	6	19	39	5	2	2	5	27	4	2	4	14	12	1

\*1 = 4 points; 2 = 3 points; 3 = 2 points; 4 = 1 point; 5 = 0 point

Table 19 (continued)

Variable Number	Problem Statements	Scale*														
		Indian & Chinese					Indian					Chinese				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
75	Lack of transportation facilities	9	25	12	25	2	4	10	6	18	2	5	15	6	7	
76	Total problem score	1	7	31	22	11	1	7	19	8	4		12	14	7	

\*1 = 4 points; 2 = 3 points; 3 = 2 points; 4 = 1 point; 5 = 0 point

TABLE 20a  
OVERALL PROBLEMS OF INDIAN AND CHINESE STUDENTS  
(Arranged in frequency rank order)

RANK NUMBER	PROBLEM	SCORE
1.	Higher amount of non-resident fees .....	228
2.	Limited amount of assistantships .....	206
3.	Inability to find adequate housing .....	203
4.	Dormitory living not preferred because of limited finance .....	184
5.	Inability to get 'permanent resident visa' .....	175
6.	Inadequate eating facilities on & off campus (expensive) .....	175
7.	Standard of living very high .....	164
8.	Having enough funds for school expenses .....	163
9.	Banking facilities too far .....	163
10.	Lack of transportation facilities .....	160
11.	Dormitory living not preferred because of food limitations .....	160
12.	Household items too expensive .....	159
13.	Inadequate facilities in the department: study space (locker, table, etc.) .....	156
14.	Finding suitable 'dates' .....	153
15.	Inadequate funds for living expenses .....	153
16.	Personal friendship with Americans .....	150
17.	Unreasonable Higher rents .....	148
18.	Being permitted work by immigration office .....	143
19.	Inadequate facilities in the department b. Research tools and aids .....	141
20.	Inadequate cooking facilities .....	138

Table 20a (continued)

RANK NUMBER	PROBLEM	SCORE
21.	Loss of money value through currency exchange .....	137
22.	Strangeness of American food .....	137
23.	Feeling welcome at college functions .....	133
24.	Inadequate assistance upon arrival .....	132
25.	Reciting or speaking in the class .....	132
26.	Inadequate living space .....	132
27.	Owner not cooperative, simply collects rent .....	131
28.	Part-time job interfering with school work .....	128
29.	Finding leisure time activities .....	126
30.	Housing too far from the campus .....	125
31.	Repetition of English Proficiency Test .....	125
32.	Being accepted in friendly group .....	124
33.	Giving oral reports .....	120
34.	Writing reports .....	119
35.	Feeling slighted in social or recreational groups away from the campus .....	119
36.	Housing discrimination (off-campus) .....	118
37.	Inadequate heating facilities .....	118
38.	Understanding lectures .....	116
39.	Inadequate sanitation facilities .....	116
40.	Getting acquainted with American educational methods, standards, and learning experience .....	114
41.	Inadequate help from Foreign Student Advisor's office .	112
42.	Insufficient guidance during Orientation Program .....	111
43.	American examination system .....	111
44.	Inadequate counseling .....	111



Table 20a (continued)

RANK NUMBER	PROBLEM	SCORE
45.	Health & Hospitalization of school .....	110
46.	Competing with American students for grades .....	107
47.	Having too little time to complete studies because of Immigration laws (visa restriction other than F1) .....	105
48.	Evaluation of credits .....	105
49.	Understanding American textbooks .....	103
50.	Discrimination in athletics or extra-curricular activities .....	102
51.	Finding adequate worship group of own religion .....	101
52.	Using the library .....	101
53.	Complicated registration procedure .....	98

Total number of respondents - 73

Problem Score:

Expected range - 0-292

Observed range - 98-229

TABLE 20b  
OVERALL PROBLEMS OF CHINESE STUDENTS  
(Arranged in frequency rank order)

RANK NUMBER	PROBLEMS	SCORE
1.	Higher amounts of non-resident fees .....	107
2.	Limited availability of assistantships .....	98
3.	Inability to find adequate housing .....	89
4.	Inability to get permanent resident visa .....	86
5.	Dormitory living not preferred because of limited finance .....	86
6.	Finding suitable dates .....	84
7.	Lack of transportation facilities .....	84
8.	Standard of living very high .....	83
9.	Banking facilities too far .....	82
10.	Inadequate eating facilities on & off campus (expensive) .....	80
11.	Reciting or speaking in the class .....	80
12.	Understanding lectures .....	78
13.	Giving oral reports .....	78
14.	Inadequate funds for living expenses .....	76
15.	Having enough funds for school expenses .....	76
16.	Inadequate study space in the department: a. (locker, table, etc.) .....	75
17.	Inadequate facilities in the department: b. research tools and aids .....	75
18.	Part-time job interfering with school work .....	74
19.	Personal friendship with Americans .....	72
20.	Household items too expensive .....	71
21.	Writing reports .....	71

Table 20b (continued)

RANK NUMBER	PROBLEMS	SCORE
22.	Being permitted work by the Immigration office .....	70
23.	Feeling welcome at college functions .....	70
24.	Dormitory living not preferred because of: food limitations .....	68
25.	Inadequate cooking facilities .....	68
26.	Unreasonable higher rents .....	65
27.	Competing with American students for grades .....	65
28.	Loss of money value through currency exchange .....	64
29.	Feeling slighted in the social or recreational groups away from the campus .....	63
30.	Strangeness of American food .....	62
31.	Getting acquainted with American educational methods, standards, and learning experience .....	62
32.	Understanding American textbooks .....	60
33.	Insufficient guidance during Orientation Program .....	60
34.	Inadequate assistance upon arrival .....	60
35.	Being accepted in friendly group .....	59
36.	Repetition of English Proficiency Test .....	58
37.	Inadequate counseling .....	58
38.	Inadequate heating facilities .....	57
39.	Inadequate living space .....	56
40.	Discrimination in athletics or extra-curricular activities .....	55
41.	Finding leisure time activities .....	55
42.	American examination system .....	54
43.	Finding adequate worship group of own religion .....	54
44.	Inadequate help from Foreign Student Advisor's office .	53

Table 20b (continued)

RANK NUMBER	PROBLEMS	SCORE
45.	Health & Hospitalization of School .....	52
46.	Evaluation of credits .....	50
47.	Having too little time to complete studies because of Immigration laws (visa restriction other than F1) .....	49
48.	Housing discrimination off-campus.....	49
49.	Inadequate sanitation facilities .....	48
50.	Using the library .....	48
51.	Complicated registration procedure .....	47
52.	Housing too far from the campus .....	44
53.	Owner not cooperative, simply collects rent .....	43

Total number of respondents - 33

Problem Score:

Expected range - 0-132

Observed range - 43-107

TABLE 20c  
OVERALL PROBLEMS OF INDIAN STUDENTS  
(Arranged in frequency rank order)

RANK NUMBER	PROBLEMS	SCORE
1.	Higher amounts of non-resident fees .....	121
2.	Inability to find adequate housing :.....	114
3.	Limited availability of assistantships .....	108
4.	Dormitory living not preferred because of limited finance .....	100
5.	Inadequate eating facilities on & off campus .....	95
6.	Dormitory living not preferred because of food limitations .....	92
7.	Inability to get permanent resident visa .....	89
8.	Household items too expensive .....	88
9.	Owner not cooperative, simply collects rent .....	88
10.	Having enough funds for school expenses .....	87
11.	Unreasonable higher rents .....	83
12.	Banking facilities too far .....	81
13.	Standard of living very high .....	81
14.	Housing too far from the campus .....	81
15.	Inadequate facilities in the department: a. Study space (locker, table, etc.) .....	81
16.	Personal friendship with Americans .....	78
17.	Inadequate funds for living expenses .....	77
18.	Lack of transportation facilities .....	76
19.	Finding leisure-time activities .....	76
20.	Inadequate living space .....	76
21.	Strangeness of American food .....	75

Table 20c (continued)

RANK NUMBER	PROBLEMS	SCORE
22.	Being permitted work by the Immigration office .....	73
23.	Loss of money value through currency exchange .....	73
24.	Finding suitable dates .....	72
25.	Inadequate assistance upon arrival .....	72
26.	Housing discrimination (off campus) .....	72
27.	Inadequate cooking facilities .....	70
28.	Inadequate sanitation facilities .....	68
29.	Repetition of English Proficiency Test .....	67
30.	Inadequate facilities in the department: Research tools & aids .....	66
31.	Being accepted in a friendly group .....	65
32.	Feeling welcome at college functions .....	63
33.	Inadequate heating facilities .....	61
34.	Inadequate help from Foreign Student Advisor's office .	59
35.	Health & Hospitalization of school .....	58
36.	Having too little time to complete studies because of Immigration laws (visa restriction other than F1) .....	56
37.	Feeling slighted in social or recreational groups away from the campus .....	56
38.	Evaluation of credits .....	55
39.	Part-time job interfering with school work .....	54
40.	Inadequate counseling .....	53
41.	Using the library .....	53
42.	Reciting or speaking in the class .....	52
43.	Getting acquainted with American educational methods, standards, and learning experience .....	52
44.	Insufficient guidance during orientation program .....	51
45.	Complicated registration procedure .....	51

Table 20c (continued)

RANK NUMBER	PROBLEMS	SCORE
46.	Writing reports .....	48
47.	Finding adequate worship group of own religion .....	47
48.	American examination system .....	47
49.	Discrimination in athletics & extra-curricular activities .....	47
50.	Understanding lectures .....	46
51.	Giving oral reports .....	45
52.	Understanding American textbooks .....	43
53.	Competing with American students for grades .....	42

Total number of respondents - 40

Problem Score:

Expected range - 0-160

Observed range - 42-121

TABLE 21a  
AREA-WISE  
INDIAN & CHINESE STUDENTS PROBLEMS  
(In frequency rank order)

RANK	PROBLEM	SCORE
<u>Economic Problems:</u>		
1.	Higher amount of non-resident fees .....	228
2.	Limited amount of assistantships .....	206
3.	Standard of living very high .....	164
4.	Having enough funds for school expenses .....	163
5.	Banking facilities too far .....	163
6.	Households items too expensive .....	159
7.	Inadequate funds for living expenses .....	153
8.	Loss of money value through currency exchange .....	137
	MEDIAN SCORE	162.5
<u>Physical Problems:</u>		
1.	Inability to find adequate housing .....	203
2.	Dormitory living not preferred because of:	
	a. limited finance .....	184
3.	Inadequate eating facilities on & off campus .....	175
4.	Dormitory living not preferred because of:	
	b. food limitations .....	160
5.	Lack of transportation facilities .....	160
6.	Unreasonable higher rents .....	148
7.	Inadequate cooking facilities .....	138
8.	Strangeness of American food .....	137
9.	Inadequate living space .....	132
10.	Owner not cooperative, simply collects rent .....	131
11.	Housing too far from the campus .....	125



Table 21a (continued)

RANK	PROBLEM	SCORE
12.	Housing discrimination (off campus) .....	118
13.	Inadequate heating facilities .....	118
14.	Inadequate sanitation facilities .....	116
	MEDIAN SCORE	137.5

Social Problems:

1.	Inability to get permanent resident visa .....	175
2.	Finding suitable dates .....	154
3.	Personal friendship with Americans .....	150
4.	Being permitted work by the Immigration office .....	143
5.	Feeling welcome at college function .....	133
6.	Part-time job interfering with school work .....	128
7.	Finding leisure-time activities .....	126
8.	Being accepted in friendly group .....	124
9.	Feeling slighted in social & recreational groups away from the campus .....	119
10.	Health & hospitalization of school .....	110
11.	Discrimination in athletics or extracurricular activities .....	102
12.	Finding adequate worship group of own religion .....	101
	MEDIAN SCORE	127

Academic Problems:

1.	Inadequate facilities in the department: a. study space (locker, table, etc.) .....	156
2.	Inadequate facilities in the department: b. research tools & aids .....	141
3.	Inadequate assistance upon arrival .....	132
4.	Reciting or speaking in the class .....	132
5.	Repetition of English Proficiency Test .....	125

Table 21a (continued)

RANK	PROBLEM	SCORE
6.	Giving oral reports .....	120
7.	Writing reports .....	119
8.	Understanding lectures .....	116
9.	Getting acquainted with American educational methods, standards, and learning experience .....	114
10.	Inadequate help from Foreign Student's Advisor's Office .....	112
11.	Insufficient guidance during orientation program .....	111
12.	American examination system .....	111
13.	Inadequate counseling .....	111
14.	Competing with American students for grades .....	107
15.	Having too little time to complete studies because of Immigration laws (visa restriction other than F1) .....	105
16.	Evaluation of credits .....	105
17.	Understanding American textbooks .....	103
18.	Using the library .....	101
19.	Complicated registration procedure .....	98
	MEDIAN SCORE	112

TABLE 21b  
AREA-WISE PROBLEMS OF CHINESE STUDENTS  
(Arranged in frequency rank order)

RANK	PROBLEM	SCORE
<u>Economic Problems:</u>		
1.	Higher amounts of non-resident fees .....	107
2.	Limited availability of assistantships .....	98
3.	Standard of living very high .....	87
4.	Banking facilities too far .....	82
5.	Inadequate funds for living expenses .....	76
6.	Having enough funds for school expenses .....	76
7.	Household items too expensive .....	71
8.	Loss of money value through currency exchange .....	64
	MEDIAN SCORE	79
<u>Social Problems:</u>		
1.	Inability to get permanent resident visa .....	86
2.	Finding suitable 'dates' .....	84
3.	Part-time job interfering with school work .....	74
4.	Personal friendship with Americans .....	72
5.	Being permitted work by the Immigration office .....	70
6.	Feeling welcome at college functions .....	70
7.	Feeling slighted in social or recreational groups away from the campus .....	63
8.	Being accepted in a friendly group .....	59
9.	Discrimination in athletics or extracurricular activities .....	55
10.	Finding leisure time activities .....	55
11.	Finding adequate worship group of own religion .....	54

Table 21b (continued)

RANK	PROBLEM	SCORE
12.	Health & hospitalization of school .....	54
	MEDIAN SCORE	66.5
<u>Physical Problems:</u>		
1.	Inability to find adequate housing .....	89
2.	Dormitory living not preferred because of:	
	a. limited finance .....	86
3.	Lack of transportation facilities .....	84
4.	Inadequate eating facilities on & off campus .....	80
5.	Dormitory living not preferred because of:	
	b. food limitations .....	68
6.	Inadequate cooking facilities .....	68
7.	Unreasonable higher rents .....	65
8.	Strangeness of American food .....	62
9.	Inadequate heating facilities .....	57
10.	Inadequate living space .....	56
11.	Housing discrimination (off campus) .....	49
12.	Inadequate sanitation facilities .....	48
13.	Housing too far from the campus .....	44
14.	Owner not cooperative, simply collects rent .....	43
	MEDIAN SCORE	64
<u>Academic Problems:</u>		
1.	Reciting or speaking in the class .....	80
2.	Giving oral reports .....	78
3.	Understanding lectures .....	78
4.	Inadequate facilities in the department:	
	a. study space (locker, table, etc.) .....	75
5.	Inadequate facilities in the department:	
	b. research tools & aids .....	75

Table 21b (continued)

RANK	PROBLEM	SCORE
6.	Writing reports .....	71
7.	Competing with American students for grades .....	65
8.	Getting acquainted with American educational methods, standards, and learning experience .....	62
9.	Understanding American textbooks .....	60
10.	Insufficient guidance during orientation program .....	60
11.	Inadequate assistance upon arrival .....	60
12.	Repetition of English Proficiency Test .....	58
13.	Inadequate counseling .....	58
14.	American examination system .....	54
15.	Inadequate help from Foreign Student Advisor's Office .....	53
16.	Evaluation of credits .....	50
17.	Having too little time to complete studies because of Immigration Laws (visa restriction other than F1) .....	49
18.	Using the library .....	48
19.	Complicated registration procedure .....	47
MEDIAN SCORE		60

TABLE 21c  
AREA-WISE  
INDIAN STUDENTS PROBLEMS  
(In frequency rank order)

RANK	PROBLEM	SCORE
<u>Economic Problems:</u>		
1.	Higher amounts of non-resident fees .....	121
2.	Limited availability of assistantships .....	108
3.	Household items too expensive .....	88
4.	Having enough funds for school expenses .....	87
5.	Banking facilities too far .....	81
6.	Standard of living very high .....	81
7.	Inadequate funds for living expenses .....	77
8.	Loss of money value through currency exchange .....	73
	MEDIAN SCORE	84
<u>Physical Problems:</u>		
1.	Inability to find adequate housing .....	114
2.	Dormitory living not preferred because of:	
	a. limited finance .....	100
3.	Inadequate eating facilities on & off campus .....	95
4.	Dormitory living not preferred because of:	
	b. food limitations .....	92
5.	Owner not cooperative, simply collects rent .....	88
6.	Unreasonable higher rents .....	83
7.	Housing too far from the campus .....	81
8.	Inadequate living space .....	76
9.	Lack of transportation facilities .....	76
10.	Strangeness of American food .....	75
11.	Housing discrimination (off campus) .....	72

Table 21c (continued)

RANK	PROBLEM	SCORE
12.	Inadequate cooking facilities .....	70
13.	Inadequate sanitation facilities .....	68
14.	Inadequate heating facilities .....	61
	MEDIAN SCORE	78.5

Social Problems:

1.	Inability to get permanent resident visa .....	89
2.	Personal friendships with Americans .....	78
3.	Finding leisure time activities .....	76
4.	Being permitted work by the Immigration office .....	73
5.	Finding suitable 'dates' .....	72
6.	Being accepted in a friendly group .....	65
7.	Feeling welcome at college functions .....	63
8.	Health & hospitalization of school .....	58
9.	Feeling slighted in social or recreational groups away from the campus .....	56
10.	Part-time job interfering with school work .....	54
11.	Discrimination in athletics and extracurricular activities .....	47
12.	Finding adequate worship group of own religion .....	47
	MEDIAN SCORE	64

Academic Problems:

1.	Inadequate facilities in the department: a. study space (locker, table, etc.) .....	81
2.	Inadequate assistance upon arrival .....	72
3.	Repetition of English Proficiency Test .....	67
4.	Inadequate facilities in the department: b. research tools & aids .....	66
5.	Inadequate help from Foreign Student's Advisor's Office .....	59

Table 21c (continued)

RANK	PROBLEM	SCORE
6.	Having too little time to complete studies because of Immigration laws (visa restrictions other than F1) .....	56
7.	Evaluation of credits .....	55
8.	Inadequate counseling .....	53
9.	Using the library .....	53
10.	Reciting or speaking in the class .....	52
11.	Getting acquainted with American educational methods, standards, and learning experience .....	52
12.	Insufficient guidance during orientation program .....	51
13.	Complicated registration procedure .....	51
14.	Writing reports .....	48
15.	American examination system .....	47
16.	Understanding lectures .....	46
17.	Giving oral reports .....	45
18.	Understanding American textbooks .....	43
19.	Competing with American students for grades .....	42
	MEDIAN SCORE	52



**APPENDIX-D**

**SPEARMAN RHO, RANK ORDER  
CORRELATION COEFFICIENTS**

TABLE 22a  
 SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
 FIFTY-THREE PROBLEM STATEMENTS BY INDIAN & CHINESE AGAINST THAT OF INDIAN

Variable & Statement	Indian & Chinese	Indian	d1	d1 <sup>2</sup>
23	3	2	1	01
24	30	14	16	256
25	36	26	10	100
26	20	27	-7	49
27	39	28	11	121
28	37	33	4	16
29	26	20	6	36
30	17	11	6	36
31	4	4	0	0
32	11	6	5	25
33	6	5	1	01
34	22	21	1	01
35	27	9	18	324
36	21	23	-2	04
37	8	10	-2	04
38	15	17	-2	04
39	9	12	-3	09
40	2	3	-1	01
41	1	1	0	0
42	12	8	4	16
43	7	13	-6	36
44	32	31	1	01
45	23	32	-9	81

Table 22a (continued)

Variable & Statement	Indian & Chinese	Indian	d1	d1 <sup>2</sup>
46	14	24	-10	100
47	51	47	4	16
48	35	37	-2	04
49	50	49	1	01
50	29	19	10	100
51	16	16	0	0
52	45	35	10	100
53	28	39	-11	121
54	18	22	-4	16
55	5	7	-2	04
56	38	50	-12	144
57	34	46	-12	144
58	33	51	-18	324
59	52	41	11	121
60	53	45	8	64
61	44	40	4	16
62	48	38	10	100
63	40	43	-3	09
64	49	52	-3	09
65	46	53	-7	49
66	43	48	-5	25
67	25	42	-17	289
68	47	36	11	121
69	31	29	2	04
70	41	34	7	49

Table 22a (continued)

Variable & Statement	Indian & Chinese	Indian	d1	d1 <sup>2</sup>
71	13	15	-2	04
72	19	30	-11	121
73	26	25	1	01
74	44	44	0	0
75	10	18	-8	64
(N = 53)			TOTAL	3242

$$r_s = 1 - \frac{6 \sum_{i=1}^N d_i^2}{N^3 - N}$$

$$= 1 - \frac{6 (3242)}{148877-53}$$

$r_s = 0.869$       Observed

't' = 12.5      Observed\*

Expected 't' value at 0.05 Level of Significance (df = 51):

= 2.01

---

\*Using  $t = r_s \frac{N-2}{1-r_s^2}$

TABLE 22b  
 SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
 FIFTY-THREE PROBLEM STATEMENTS BY INDIAN & CHINESE AGAINST THAT OF CHINESE

Variable & Statement	Indian & Chinese	Chinese	d1	d1 <sup>2</sup>
23	3	3	0	0
24	30	52	-22	484
25	36	48	-12	144
26	20	25	-5	25
27	39	49	-10	100
28	37	38	-1	1
29	26	39	-13	169
30	17	26	-9	81
31	4	5	-1	1
32	11	24	13	169
33	6	10	-4	16
34	22	30	-8	64
35	27	53	-26	736
36	21	28	-7	49
37	8	15	-7	49
38	15	14	1	01
39	9	9	0	0
40	2	2	0	0
41	1	1	0	0
42	12	20	-8	64
43	7	8	-1	01
44	32	35	-3	09
45	23	23	0	0

Table 22b (continued)

Variable & Statement	Indian & Chinese	Chinese	d1	d1 <sup>2</sup>
46	14	6	8	64
47	51	43	8	64
48	35	29	6	36
49	50	40	10	100
50	29	41	12	144
51	16	19	-3	09
52	45	45	0	0
53	28	18	10	100
54	18	22	-4	16
55	5	4	1	1
56	38	12	26	736
57	34	21	13	169
58	33	13	20	400
59	52	50	2	04
60	53	51	1	01
61	44	37	7	49
62	48	46	2	04
63	40	31	9	81
64	49	32	17	289
65	46	27	19	361
66	43	42	1	01
67	25	11	14	196
68	47	47	0	0
69	31	36	-5	25
70	41	44	-3	09

Table 22b (continued)

Variable & Statement	Indian & Chinese	Chinese	d1	d1 <sup>2</sup>
71	13	16	-3	09
72	19	17	2	4
73	26	34	-8	64
74	44	33	11	121
75	10	7	3	09
(N = 53)			TOTAL	5209

$$r_s = 1 - \frac{6 \sum_{i=1}^N d_i^2}{N^3 - N}$$

$$= 1 - \frac{6 (5209)}{148824}$$

$$r_s = 0.7905 \quad \text{Observed}$$

$$'t' = 9.3 \quad \text{Observed*}$$

Expected 't' value at 0.05 Level of Significance (df = 51):

$$= 2.01$$

---


$$\text{*Using } t = r_s \frac{N - 2}{1 - r_s^2}$$

TABLE 22c  
 SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
 FIFTY-THREE PROBLEM STATEMENTS BY INDIAN AGAINST THAT OF CHINESE

Variable & Statement	Indian	Chinese	di	di <sup>2</sup>
23	2	3	1	01
24	14	52	-38	1444
25	26	48	-22	484
26	27	25	2	04
27	28	49	-21	441
28	33	38	-15	225
29	20	39	-19	361
30	11	26	-15	225
31	04	5	-1	01
32	06	24	-18	324
33	05	10	-5	25
34	21	30	-9	81
35	09	53	-46	2116
36	23	28	-5	25
37	10	15	-5	25
38	17	14	3	09
39	12	9	3	09
40	03	2	1	01
41	01	1	0	0
42	08	20	-12	144
43	13	8	5	25
44	31	35	-4	16
45	32	23	9	81



Table 22c (continued)

Variable & Statement	Indian	Chinese	d1	d1 <sup>2</sup>
46	24	6	18	324
47	47	43	4	16
48	37	29	8	64
49	49	40	9	81
50	19	41	-22	484
51	16	19	-3	09
52	35	45	-10	100
53	39	18	21	441
54	22	22	0	0
55	07	4	3	09
56	50	12	38	1444
57	46	21	25	625
58	51	13	38	1444
59	41	50	-9	81
60	45	51	-6	36
61	40	37	3	09
62	38	46	-8	64
63	43	31	12	144
64	52	32	20	400
65	53	27	26	676
66	48	42	6	36
67	42	11	31	961
68	36	47	-11	121
69	29	36	-7	49
70	34	44	-10	100

Table 22c (continued)

Variable & Statement	Indian	Chinese	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>
71	15	16	1	01
72	30	17	13	169
73	25	34	-9	81
74	44	33	11	121
75	18	7	11	121
(N = 53)			TOTAL	14266

$$r_s = 1 - \frac{6 \sum_{i=1}^N d_i^2}{N^3 - N}$$

$$= 1 - \frac{6 (14266)}{148824}$$

$r_s = 0.425$  Observed

't' = 3.36 Observed

Expected 't' value at 0.05 Level of Significance (df = 51):

= 2.01

---


$$*Using \quad t = r_s \quad \frac{N - 2}{1 - r_s^2}$$

TABLE 23a  
SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
PHYSICAL PROBLEM STATEMENTS BY INDIAN & CHINESE, INDIAN, AND THAT OF CHINESE

Statement	I & C*	I*	di	di <sup>2</sup>	C*	di	di <sup>2</sup>	di	di <sup>2</sup>
23	1	1	0	0	1	0	0	0	0
24	11	7	3	9	13	-2	4	-6	36
25	12	11	1	1	11	1	1	0	0
26	7	12	-5	25	6	1	1	6	36
27	14	13	1	1	12	2	4	1	1
28	13	14	-1	1	9	4	16	5	25
29	9	8	1	1	10	-1	1	-2	4
30	6	6	0	0	7	-1	1	-1	1
31	2	2	0	0	2	0	0	0	0
32	4	5	1	1	5	-1	1	0	0
33	3	3	0	0	4	-1	1	-1	1
34	8	10	-2	4	8	0	0	2	4
35	10	4	6	36	14	-4	16	-10	100
75	5	9	-4	16	3	2	4	6	36
(N = 14)			TOTAL 95			TOTAL 50		TOTAL 244	

\*I & C: Indian & Chinese; I: Indian; C: Chinese

IC against I

$$r_s = 1 - \frac{6 \sum_{i=1}^N di^2}{N^3 - N} = 1 - \frac{6 \times 95}{2744} = r_s = 0.792$$

I against C

$$r_s = 1 - \frac{6 \times 244}{2744} = r_s = 0.425$$

IC against C

$$r_s = 1 - \frac{6 \times 50}{2744} = r_s = 0.891$$

Expected ' $r_s$ ' at 0.05 Level of Significance = 0.456

TABLE 23b  
 SPEARMAN 'rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
 ECONOMIC PROBLEM STATEMENTS BY INDIAN & CHINESE, INDIAN, AND THAT OF CHINESE

Statement	I & C*	I*	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>	C*	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>
36	8	8	0	0	8	0	0	0	0
37	4	4	0	0	6	-2	4	0	0
38	7	7	0	0	5	2	4	2	4
39	5	5	0	0	4	1	1	1	1
40	2	2	0	0	2	0	0	0	0
41	1	1	0	0	1	0	0	0	0
42	6	3	3	9	7	-1	1	-4	16
43	3	6	-3	9	3	0	0	3	9
(N = 8)			TOTAL 18			TOTAL 10		TOTAL 30	

\*I & C: Indian & Chinese; I: Indian; C: Chinese

IC against I

$$r_s = 1 - \frac{6 \sum_{i=1}^N d_i^2}{N^3 - N} = 1 - \frac{6 \times 18}{504} = r_s = 0.785$$

IC against C

$$r_s = 1 - \frac{6 \times 10}{504} = r_s = 0.991$$

I against C

$$r_s = 1 - \frac{6 \times 30}{504} = r_s = 0.643$$

Expected ' $r_s$ ' at 0.05 Level of Significance = 0.643

TABLE 23c

SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE SOCIAL PROBLEM STATEMENTS BY INDIAN & CHINESE, INDIAN, AND THAT OF CHINESE

Statement	I & C*	I*	di	di <sup>2</sup>	C*	di	di <sup>2</sup>	di	di <sup>2</sup>
44	8	6	2	4	8	0	0	-2	4
45	5	7	-2	4	6	-1	1	1	1
46	2	5	-3	9	2	0	0	3	9
47	12	12	0	0	11	1	1	1	1
48	9	9	0	0	7	2	4	2	4
49	11	11	0	0	9	2	4	2	4
50	7	3	4	16	10	-3	9	-7	49
51	3	2	1	1	4	1	1	2	4
52	10	8	2	4	12	-2	4	-4	16
53	6	10	-4	16	3	3	9	7	49
54	4	4	0	0	5	1	1	-1	1
55	1	1	0	0	1	0	0	0	0
(N = 12)			TOTAL	54		TOTAL	34	TOTAL	142

\*I&C: Indian & Chinese; I: Indian; C: Chinese

IC against I

$$r_s = 1 - \frac{6 \sum_{i=1}^N di^2}{N^3 - N} = 1 - \frac{6 \times 54}{1716} = r_s = 0.812$$

IC against C

$$r_s = 1 - \frac{6 \times 34}{1716} = r_s = 0.882$$

C against I

$$r_s = 1 - \frac{6 \times 142}{1716} = r_s = 0.501$$

Expected ' $r_s$ ' at 0.05 Level of Significance = 0.506

TABLE 23d  
SPEARMAN 'Rho' RANK CORRELATION COEFFICIENT:  $r_s$ . USING THE RANKS OF ALL THE  
ACADEMIC PROBLEM STATEMENTS BY INDIAN & CHINESE, INDIAN, AND THAT OF CHINESE

Statement	I & C*	I*	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>	C*	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>	d <sub>i</sub>	d <sub>i</sub> <sup>2</sup>
56	8	16	-8	64	3	5	25	13	169
57	7	14	-7	49	6	1	1	8	64
58	6	17	-11	121	2	4	16	15	225
59	18	9	9	81	18	0	0	-9	81
60	19	13	6	36	19	0	0	-6	36
61	13	8	5	25	13	0	0	-5	25
62	16	7	9	81	16	0	0	-9	81
63	9	11	-2	04	8	1	01	3	09
64	17	18	-1	01	9	8	64	9	81
65	14	19	-5	25	7	7	49	12	144
66	12	15	-3	09	14	-2	04	1	1
67	4	10	-6	36	1	3	09	9	81
68	15	6	9	81	17	-2	04	-11	121
69	5	3	2	04	12	-7	49	-9	81
70	10	5	5	25	15	-5	25	-10	100
71	1	1	0	0	5	-4	16	-4	16
72	2	4	-2	04	4	-2	04	0	0
73	3	2	1	1	11	-8	64	-9	81
74	11	12	-1	1	10	1	01	2	04
(N = 19)			TOTAL	648		TOTAL	327	TOTAL	1400

\*I & C: Indian & Chinese; I: Indian; C: Chinese

IC against I

$$r_s = 1 - \frac{6 \sum d_i^2}{N^3 - N}$$

$$= 1 - \frac{6 \times 648}{5832} = r_s = 0.317$$

IC against C

$$r_s = 1 - \frac{6 \times 327}{5832} = r_s = 0.6625$$

C against I

$$r_s = 1 - \frac{6 \times 1400}{5832} = r_s = -0.44$$

Expected ' $r_s$ ' at 0.05 Level of Significance = 0.388

**APPENDIX-E****T-TEST**

**TABLE 24a**  
**t-TEST\* VALUES FOR COUNTRY OF ORIGIN**  
**AND PROBLEM SCORE**  
**(N = 73)**

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
Chinese	33	26.2121	-0.25	71	0.809	-0.25	69.32	0.809
Indians	40	26.6250						
<u>Economic</u>								
Chinese	33	20.7879	1.97	71	0.054	2.04	68.97	0.046
Indians	40	18.1000						
<u>Social</u>								
Chinese	33	24.9091	2.84	71	0.006	2.93	69.83	0.005
Indians	40	19.9000						
<u>Academic</u>								
Chinese	33	39.4242	5.87	71	0.0001	5.82	65.65	0.000
Indians	40	28.2250						
<u>Total</u>								
Chinese	33	111.3333	3.70	71	0.0001	3.80	70.48	0.000
Indians	40	92.8500						

\*BMDX 70 - T Program, Computing Center, Kansas State University



TABLE 24b  
t-TEST\*VALUES FOR DEGREE LEVEL  
AND PROBLEM SCORE  
(N = 61)

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
Masters	45	26.1333	-0.12	59	0.908	-0.11	23.99	0.913
Ph.D.s	16	26.3750						
<u>Economic</u>								
Masters	45	21.2889	5.16	59	0.000	5.39	28.71	0.000
Ph.D.s	16	13.6875						
<u>Social</u>								
Masters	45	24.2889	3.76	59	0.000	4.37	36.27	0.000
Ph.D.s	16	16.5625						
<u>Academic</u>								
Masters	45	33.7111	2.75	59	0.008	3.30	39.21	0.002
Ph.D.s	16	26.5625						
<u>Total</u>								
Masters	45	105.4222	3.74	59	0.000	4.33	36.10	0.000
Ph.D.s	16	83.1875						

\*BMDX 70 - T Program, Computing Center, Kansas State University

TABLE 24c  
t-TEST\* VALUES FOR AGE AND  
PROBLEM SCORE  
(N = 71)

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
Older	27	23.2592	-2.98	69	0.004	-2.99	55.56	0.004
Younger	44	28.1818						
<u>Economic</u>								
Older	27	17.3333	-2.17	69	0.034	-2.15	53.30	0.037
Younger	44	20.4091						
<u>Social</u>								
Older	27	20.8889	-1.09	69	0.282	-1.17	66.33	0.249
Younger	44	23.0000						
<u>Academic</u>								
Older	27	31.2963	-1.25	69	0.218	-1.33	65.16	0.191
Younger	44	34.2954						
<u>Total</u>								
Older	27	92.7778	-2.39	69	0.020	-2.52	64.42	0.015
Younger	44	105.8864						

Older - 28 and up years  
Younger - 18 to 27 years

\*BMDX 70 - T Program, Computing Center, Kansas State University

**TABLE 24d**  
**t-TEST\* VALUES FOR MARITAL STATUS**  
**AND PROBLEM SCORE**  
**(N = 71)**

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
Unmarried	54	26.2963	-0.68	69	0.502	-0.67	26.47	0.509
Married	17	27.6470						
<u>Economic</u>								
Unmarried	54	20.2592	2.38	69	0.021	2.32	25.74	0.029
Married	17	16.4118						
<u>Social</u>								
Unmarried	54	22.4074	0.21	69	0.836	0.19	22.63	0.856
Married	17	21.9412						
<u>Academic</u>								
Unmarried	54	32.7778	-0.89	69	0.382	-0.78	22.37	0.449
Married	17	35.2353						
<u>Total</u>								
Unmarried	54	101.7407	0.08	69	0.940	0.07	21.54	0.949
Married	17	101.2353						

\*BMDX 70 - T Program, Computing Center, Kansas State University

TABLE 24e  
t-TEST\*VALUES FOR INCOME (FINANCIAL AID)  
AND PROBLEM SCORE  
(N = 57)

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
High income	19	27.1579	0.45	55	0.658	0.46	37.86	0.652
Low income	38	26.2105						
<u>Economic</u>								
High income	19	17.9474	-1.13	55	0.266	-1.21	43.28	0.235
Low income	38	19.8158						
<u>Social</u>								
High income	19	23.6316	0.84	55	0.411	0.78	30.01	0.447
Low income	38	21.7105						
<u>Academic</u>								
High income	19	33.5789	-0.06	55	0.954	-0.05	29.84	0.958
Low income	38	33.7368						
<u>Total</u>								
High income	19	102.3158	0.13	55	0.901	0.12	30.56	0.908
Low income	38	101.4737						

High income - \$3,000 & up  
Low income - \$500 - \$2,999

\*BMDX 70 - T Program, Computing Center, Kansas State University

TABLE 24f  
t-TEST\*VALUES FOR DURATION OF STAY AND  
PROBLEM SCORE  
(N = 70)

Variable Index	Number of Cases	Mean	Pooled Variance Estimate			Separate Variance Estimate		
			T Value	Degrees of Freedom	P Value	T Value	Degrees of Freedom	P Value
<u>Physical</u>								
Longer duration	25	25.8400	-0.66	68	0.516	-0.68	54.96	0.501
Shorter duration	45	27.0000						
<u>Economic</u>								
Longer duration	25	18.4800	-0.84	68	0.409	-0.85	51.26	0.405
Shorter duration	45	19.7333						
<u>Social</u>								
Longer duration	25	21.8000	-0.12	68	0.903	-0.14	65.60	0.892
Shorter duration	45	22.0444						
<u>Academic</u>								
Longer duration	25	30.8000	-0.12	68	0.182	-1.45	59.99	0.154
Shorter duration	45	34.0444						
<u>Total</u>								
Longer duration	25	96.9200	-1.04	68	0.304	-1.12	60.26	0.271
Shorter duration	45	102.8222						

Longer duration - 13 & up months

Shorter duration - 1 to 12 months

\*BMDX 70 - T Program, Computing Center, Kansas State University

**APPENDIX-F**

The author's agreement on "planning" as a Social Science is quite candid and well-defined viewpoint in his possession.

Other social scientists such as sociologists, anthropologists, social-psychologists, geographers, and political scientists may have been working with, basically, the same goals (within their professional framework) while dealing with the problems of mankind.

They might be very close or even more similar in their ways of conducting their research work on a variety of human aspects, every time creating and dealing with some new ideas and innovations or refining their tools and techniques of research. Further, on many occasions they might as well prescribe (in a similar way) many useful remedial solutions to a problem or problems they tackle. And, in many ways, such solutions are of great practical importance and application to such problems. But then, the only thing which I think they lack (probably) is the thinking in terms of "long range applicability" of their solutions that are, eighty times in every 100, based on an "examined-diagnosed-prescribed" type of formula. They often neglect to bridge the gap between the current and the future implications of their solutions.

Whereas a "planner", while sailing in the same boat with other social scientists, has something more to offer with his solutions. He has been trained more extensively in the realm of "long range thinking"\* within the rational limits; and perhaps, he is the only one expert in bridging the gap between the past, present, and future implications of his solutions as he links this with the entire "process of change" which he recognizes as the "Planning Process."

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\*This is the essence of the word "planning".

THE INVENTORY ANALYSIS OF MAJOR ADJUSTMENT PROBLEMS OF INDIAN  
AND CHINESE STUDENTS AT KANSAS STATE UNIVERSITY

by

NASIR FAKHRUDDIN NAGAMIA

B.ARCH., Maharaja Sayajirao University of Baroda, Baroda, India, 1968

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1971



Basically, this project was an exploratory attempt designed to present an inventory analysis of the major adjustment problems of Indian and Chinese students enrolled at Kansas State University during the academic year 1970-71. The study recorded the intensity and magnitude of such problems and their resulting patterns typical of this campus. The results were also judged in the light of their overall implication for planning and administrative purposes.

The presentation of elaborate informational data comparing the problems of both the nationalities, and the findings and conclusions derived from such comparisons were the major contributions of this study.

The chief instrument of the study was a four-page questionnaire, consisting mainly of background questions, a checklist of four questions seeking information on students' preference of living, a series of ten questions inquiring about the present status of living, a checklist of 53 problem statements designed to discover the reaction of students to their experiences on campus and the community, and space for personal comments. The questionnaires were distributed to 50 Indians and 50 Chinese students of whom 40 (80%) Indians and 33 (66%) Chinese returned them with objective data and informal comments. In all there were 235 Indian and Chinese students out of 443 total number of foreign students enrolled in that year.

From the data that were compiled, following information was revealed: The average Indian and Chinese student was a male graduate student, age 26, enrolled in the College of Engineering (45%), and was working toward a Master's degree (62%). He was single and lived off-campus (80%). His primary source of income was family funds (50%), and he received an average income between \$2,000-\$2,999 per year. He did not possess a car (86%). He preferred to live in an apartment (61%) and to pay a monthly rent of \$25 to \$45 per hear (75%). He preferred to have one roommate (54%) and would rather choose his co-national (34% Indians;

70% Chinese).

Statistical manipulations of the responses on the problem checklist indicated the following results: Both Indians and Chinese had reported greater economic problems followed by physical, social, and academic. Except for physical problems, Chinese had greater economic, social, and academic problems than Indians, whereas the Indians reported greater Physical problems. In the case of Chinese the sequence of high-problem area to low-problem area was observed to be: economic, social, physical, and academic; whereas in the case of Indians it was in this order: economic, physical, social, and academic. Problems were ranked from high to low problem scores. Spearman's correlation test ( $N=53$ ) indicated that there was a significant correlation (0.643) between the ranks of economic problems of Indians and Chinese, followed by social problems (0.501) and physical problems (0.425), whereas there was a significant inverse relationship ( $-0.44$ ) between the ranks of academic problems of Indians and Chinese.

Country of origin, degree level, age, and marital status had significant influence (indicated by significant 't' values) on the "patterns of adjustment problems" of these students. Younger bachelor students studying at the Master's level had reported greater problems as compared to older, married students studying at Ph.D. level. Mean problem score of Chinese differed significantly from that of Indians'; it was much higher in the overall areas as well as separately in all other areas except in the area of physical problems.

Most frequent economic problems were: high tuition-fee, limited assistantships, high rents, and high standard of living; physical problems were: shortage of housing, lack of transportation facilities, remoteness of banking facilities, food limitations and cost of dormitory living; social problems were: obtaining permanent visa, finding suitable 'dates', getting permission to work, and personal friendship with Americans; academic problem was: inadequate facilities

in the department - study space, lockers, etc.

It was finally concluded that the overall problems of Chinese were quite in contrast with those of Indian students at the Kansas State University, and it was found and tested that the problems under "academic area" were put to the maximum inverse relationship.