

**RELATIONSHIP BETWEEN OCCUPATIONAL SECURITY
AND
RESISTANCE TO TECHNOLOGICAL INNOVATIONS
IN
RURAL LEBANON**

**By
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A Thesis

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ABSTRACT

As is the case in many districts of rural Lebanon one can find tractors roaring across the fields adjacent to lands tilled by wooden plows drawn by cows or horses and sometimes by men. One of the major problems that rural Lebanon is faced with is the proper adjustment from traditional agricultural methods to those of the twentieth century.

The core problem of this research is a study of the relationship between the occupational security of a group and its resistance to technological innovations. Items were constructed in a questionnaire to measure the variables of "occupational security" and "resistance to technological innovations". In order to be able to measure the occupational security of the subjects they were tested as to their attitudes toward their residential area, opportunity for occupational advancement, internal and external competition, group solidarity, social status maintained through occupation, recognition received at work, and income. To measure the individuals' attitudes toward technological innovations questions were asked to determine their satisfaction with the present methods used in their occupations and their ideas regarding the effects of technological innovations on production, social life, and relationship existing in the community. Two major occupational groups were taken for study: the rug-makers of Kusba and the other occupational groups existing in the village. The second sample included four occupational groups or classes: the unskilled laborers; the skilled laborers; the olive growers; and the professionals.

Occupational security was utilized as a cardinal variable and an item was specifically designed to measure this attribute. Both

occupational security and related items were weighed against each occupational group's resistance to technological innovations as a test of the hypothesis.

A chi square test, for statistics significance, was used throughout this study.

CHAPTER I

INTRODUCTION

Statement of the Problem:

It is the hypothesis of this thesis that there is a positive correlation between the feelings of occupational security of a group and its resistance to technological innovations.

Because of the conscious effort now being exerted to stimulate technological advancement in "underdeveloped areas" the sociological factor which is related to the attitudes toward material change take an added significance. "Changing people's customs is an even more delicate responsibility than surgery. When a surgeon takes his instruments he assumes the responsibility of a human life. The administrator of a program of technological change carries a heavier responsibility. Whenever he seeks to alter people's way of life, he is dealing not with one individual but with the well-being and happiness of generations of men and women."¹

It is not the assumption of this thesis that people are born with innate tendencies to accept or to refuse changes. On the contrary one of its underlying assumptions is that, "every society is an organized entity... New technological practices are disruptive to such entities."² Thus when the present culture of a group is completely enshrouded by the traditions of their forebears, abrupt change may shake the very foundations of the society. An example appears in Spicer's book where the introduction of

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1. Edward Spicer, Human Problems in Technological Change, Russel Sage Foundation, New York, 1952, p. 13.
 2. George Theodorson, Acceptance of Industrialization And Its Attendant Consequences For The Social Patterns Of Non-Western Societies, American Sociological Review, Volume 18, 1953, p. 477.

a steel axe into the culture of an Australian tribe led to complete social disorganization.

Millions of dollars are being spent annually by the United States government through the International Cooperation Association and by the United Nations through its technical assistance program to provide aid and thus stimulate technological growth in underdeveloped countries. That there were certain oversights in planning in many of these programs is evident. As a case in point, we might turn to the I.C.A. program in the republic of Lebanon. Agreement was entered into by the United States and the Lebanese governments where through joint financial and planning programs five community centers were to be established in rural Lebanon. These five centers were to serve as models for more extended program. "In the spring of 1952 the Lebanese government submitted a request to the Technical Cooperation Service (Point Four) of Lebanon for the completion of the (Kasmie) project. Point Four Technicians and their counterparts in the government made a survey which proved the feasibility of the project."³ It was planned that these five centers were to help the people in the fields of home economics, agriculture and sanitation. In addition the installations were to serve as adult educational and recreation centers. Today, two of the five projected centers have been completed but the program, to all practical effects, has either been abandoned or has at least been temporarily held in abeyance. One of the buildings has been diverted to school use and a portion of it is devoted to raising poultry.

3. Raja Ibrahim Sukkari, Point Four And The Lebanese Government: Projects In Rural Country Development, B.A. Thesis At BCW, Beirut, Lebanon, June 1955, p. 48.

As is mentioned later in this thesis, the universe of study was the small town of Kusba in rural Lebanon. The majority of its people are engaged either in agriculture or in local industry. In spite of the fact that urbanization has found its way to the town, the rural way of life is still the dominant theme in the lives of its citizens, however, the coexistence of urbanization and ruralization is creating some conflicts. The economic institution is a dominant one but we might add that in Lebanese rural family all the major social institutions, even the education, are so tightly interlocked that to make a separation between economic and familial systems would throw the entire way of life into disequilibrium. To do so weaken the entire structure of the family and community.

As Barnett says, "It seems that any innovation, when understood as a mental phenomenon, conforms to one of a limited number of reaction patterns of the contents of the ideas that are embodied in the mental reactions. The conception of a new idea is not specific, unitary phenomenon; it is the result of a particular conjunction of psychological processes none of which, when taken alone is peculiar to the pattern of thought that is essential to the conception of a novelty. There is, no innovative, 'faculty', nor is there any specifically creative instrument that is possessed by some men and not by others."⁴

The relative degree of resistance to, or willingness to accept, technological innovations are socio-psychological phenomenon which are inseparable from the cultural fabric. While an innovation may not be accepted intact it often finds its way into the society after having

4. H. G. Barnett, Innovation: The Basis of Cultural Change, First Edition, McGraw-Hill Book Company, Inc. New York, 1953, p. 1.

been modified so as to make it consonant with the existing culture. It was the purpose of this study to determine what factors bore the strongest relationship either to a willingness to accept or to a resistance to technological innovations.

Related Studies:

Edward Spicer in "Human Problems in Technological Change"⁵ gave a picturesque analytical representation of social problems that might arise as a result of technological impact on a non-industrialized society. Margaret Mead in "Cultural Patterns and Technical Change"⁶ described in detail some of the problems involved in a society's acquisition of technical skills and pointed out some of the cultural elements that hinder the acceptance of technological innovations. George Theodorson wrote, "apparently the persons receiving the least gratifications under the old system will be the first to be attracted to the new possibilities."⁷

Relevant Theories:

This study is related to the theory of social change in that any culture is a systematic and integrated whole. Thus any change however infinitesimal will create some disturbances in the social organization of a given society. It is related to the theory of industrialization in that it will draw upon and add to a knowledge of the impact of technological innovations on the social life in general. Also it is related to the "cultural lag" theory in that it portrays two different cultural aspects (material and nonmaterial), one surviving within an eighteenth century setting, the other adjusting to the demands of the present day.

5. Edward Spicer, Op. Cit.

6. Margaret Mead, Cultural Patterns and Technical Change, a manual. Paris, UNESCO, 1953.

7. George Theodorson, Op. Cit. P. 478.

CHAPTER II

BACKGROUND

General Description of The Universe:

The population from which the samples in this study were drawn was the small town of Kusba located in the Kura valley of northern central Lebanon. The dominant agricultural crop is olives. There are other minor crops such as, figs, grapes, almonds and tobacco. As in the case of most of the villages in Kura valley, olives comprise the most important, and what could be considered as the only commercial crop.

The population of Kusba is approximately 2850. During the past thirty years approximately six hundred persons emigrated to Brazil, Australia, Argentinian, or the United States of America. The population of Kusba is divided into two christian religious sects, the Greek Orthodox and the Maronites. The great perponderance of the population is Greek Orthodox and only forty are Maronite followers.

Kusba is eighteen kilometers from Tripoli and it is ninety-five kilometers from Beirut. Because it is located astride a main highway it has extensive commerce with both of the abovementioned cities. More than sixty students attend school at Tripoli and commute daily from the village. More than 90% of the shop owners in Kusba buy their merchandise from Tripoli and go there on such business on an average of twice a week. Many commute daily to Tripoli to work and in addition, as there are limited recreational facilities, such as movie theatres, in the village, numerous persons visit Tripoli during the weekends to obtain this type of recreation. Because of this lively interchange there has been a strong interaction process between the ruralites of Kusba and the urbanites of Tripoli.

This cultural exchange has had profound effect upon the home life

of the villagers. Girls are now permitted to take employment in Tripoli, in various capacities. Some serve as clerks others as secretaries or school teachers in Tripoli as well as in some other Lebanese cities. The general population of Kusba now permits girls to work outside the home and even mixed dancing is now generally accepted. However, it should be pointed out that the rug-makers of Kusba consider these behaviors intolerable deviations, although they do participate in some other village activities such as picnicing, hunting, and religious ceremonies. In conclusion it might be said that although the people of Kusba are rapidly moving toward urbanization they are now in a transition which represents neither the purely traditional rural nor the urban state. The exception to this rule are the rug-makers who strictly abide by the traditional rural way of life.

Urban Occupational Group Sample:

This sample is composed of four occupational classes: unskilled laborers; skilled laborers; olive growers; and professionals. The subjects falling within this sample were much more urbanized than the rug-makers. These four occupational classes were grouped to provide one of two major samples of this study. Although the general group contains one rural class, the olive growers, they will be referred to collectively as the "urban occupational group". In general, the members of this occupational group are subject to a faster rate of cultural change and have much more extensive outside contacts than the rug-makers have.

Rug-Makers Sample:

The rug-makers were included in the study because they are considered by the other villagers as a more secure and satisfied closed knit group. Thus they were taken for study as compared with the other

occupational groups in the same village.

The rug industry was introduced to Kusba 200 years ago and, so far as is known, was the first contact that the villagers had with industrialization. "The art of rug-making in Lebanon originated in a small village in the southern part of Lebanon" said one of the rug-makers in Kusba. Another rug-maker said that their industry "was brought from a small Syrian village near Houran." Due to the absence of any written literature on the historical development of this industry information on this subject was obtained through oral interrogation. The following details were reconstructed.

"It was in 1765 or 1775 that three persons of three different families first learned the art of rug-making and taught it to their children and their wives. The rug industry remained limited to these three conjugal families for about twenty five years. Between 1805 and 1810 there were a total of twenty five persons engaged in rug-making."

The rug-makers weave on a wooden loom of about three meters square. The finished rug is cut into four small mats which are used as filters in the olive presses. The children and grand children of the rug-making pioneers have preserved and continued the trade. They are of the belief that the very existence of a rug-maker is related to two factors:

- a. helping the rug industry to survive by using the same methods and artifacts as those used by "the fathers and grandfathers";
- b. and to guard against the diffusion of the skills of rug-making to other persons who are not related by blood to the three conjugal families who initiated the industry. At the present time there are two hundred and forty persons of both sexes engaged in the rug-making industry.

"In Shiheem they do not make filtering mats as we do here. They are surrounded by poor people who cannot afford to buy wool blankets but who use goats hair blankets instead. In Shiheem there are three hundred looms, only two of which are used to make filtering mats. In Kusba since most of the people can afford wool blankets we concentrate on making filtering mats" said one of the rug-makers.

The forty-five conjugal families engaged in rug-making might be divided into three large extended families. The annual average of the mats produced is around 16000 pieces. "Only 6000 of these are consumed by the local market." The rug-making people refer to Kura district as their local market. The surplus is consumed by other olive growing districts in Lebanon such as Shueifat, Tripoli, Akkar, Zugharta, and to a certain extent southern Lebanon. Also part of the surplus is consumed by the olive growing districts in Syria such as, Safita, Tartous, Latikiyya, and Aleppo. Sometimes people from Turkey also buy some of the mats. In 1947, approximately 4000 pieces were exported to Cyprus.

"Before the economic blockade took place between the two republics of Lebanon and Syria the demand was somewhat higher. But even at the present time only in rare cases will there be two hundred or two hundred fifty mats left unsold from year to year," said one of the rug-makers.

The rug-making process can be divided into the following stages:

- a. The buying of goat hair. This initial stage is usually done by the adult males of the rug-making family.
- b. Cleaning the hair and storing it in the girab (a leather sack which will be tied to the waist in spinning - it is the place in which the hair will be stored.) In most cases the second step will be done by the very young (5-10 years) males and females.

c. Spinning the hair. Most of the spinning is done in the open under the olive trees. The reasons that spinning is done under the shadows of olive trees go back to two factors; first, to avoid the heat of the sun and secondly, the live tree has become the symbol of the rug-making way of life. "If the olive trees were to vanish, our occupation will soon vanish also" say the rug-makers.

d. Weaving the threads into mats. This last stage is usually accomplished by the heads of the rug-making families or the mature males in these families.

Rug-making is a job in which all the family members participate.

Labor is divided among all able-bodied members. Sex and age are decisive factors in job appointments. The father is the manager of the working group in his family and carries out the most complex tasks such as going outside the village, sometimes to Syria, to buy goat hair and then personally weaving on the loom. It has been the custom to assign work on by sexual divisions of labor and this has led to status ascription within the family wherein the father is the dominant figure. All decisions must be approved by him and he must be consulted on every problem. Thus, he acts as the planning and administrative head of the whole family which, is considered as a single functional working unit. The children are brought up in a rigid social system that reinforces the authority of the father and exacts obedience to tradition. Dependence upon the father characterizes the life of the rug-makers as they remain within the immediate family, and to them the utmost respect for the father is tantamount to a moral obligation. When a male becomes a father he faithfully imitates the role his father played before him. As the personality passes through the

socialization process it is brought into the traditional configuration. So it is likely that the rug-makers who have been brought up in such a culture will not only come to conform to the cultural traits of the group but these cultural traits themselves will be reinvigorated through the sentimental and emotional outlooks of the rug-makers. Custom shapes their dispositions and define their social beings as members of the rug-making group.

When a child is still under one year of age his mother prepares a place for him near her place of work and it is here that the child spends most of each day. According to one of the rug-makers, "If the children grow up in an atmosphere where their nostrils are filled with the odor of goat's hair they will become good workers in the future." They are encouraged to pick up the hair with their fingers, play with it, and place it in their mouths. Thus infancy is a preparatory stage by which the child comes to feel attached to the rug-industry everafterward. Thus, by the time he becomes mature he has developed his attitude toward life and his ambitions have become defined from within a specific cultural frame of reference. The perpetuation of the industry is dependent upon such rigid socialization.

The rug-makers form not only a distinct occupational group but what almost amount to an ethnic group. They have developed some values and beliefs which conflict with the values of the other villagers. A black long-haired goat is much appreciated omen in the morning for it foretells of good day. The other villagers upon seeing such a goat consider it an evil omen. To the rug-makers the goat is the raw capital of their industry. Every rug-maker addresses other males of the group as "brother-in-law". Beside the occupational ethnocentrism that they have developed there

exists an extreme strong "weness" spirit which can be felt when one hears any rug-maker speaking. He usually begins his conversation by "We should try to..... This is not good for us..... Our suggestions are as follows...."

The "WE" that a rug-maker uses shows the extent to which the individual self or personality is totally amalgamated within the social life of the group. In spite of the in-group attachment a sort of social compromise has been formed by means of which they can "give and take" with the other villagers. They participate in several of the activities that take place in the village life.

Due to the fact that the demand for the mats is always more than what they can actually supply the rug-makers do not worry about the selling of their products. In most cases the demand exceeds the supply. There exists among them a kind of internal occupational competition but it is motivated by the prestige factor rather than by the economic factor. Internal competition is a means for increasing the social status of a rug-making family. The positive relationship between the amount of rugs produced and social status work as a tie that keeps the family united and working for the common welfare of the whole body. This kind of competition has also effected the attitudes of the rug-making parents toward educating their children. Instead of sending them to school they keep them at home to work in order to add to the social status of the family. Also, this institutionalized competition has continued in creating an informal monthly gathering among the heads of the rug-making families. They assemble at the home of a rug-maker or at a central place in the village where they discuss the rates of family mat production during the past month and also try to agree on the price for which they should sell. Since the prices are fixed beforehand, this gives the clients no chance to bargain with the

rug-makers. Hence economic competition never interferes with the latter group's social relationships.

The rug-makers look with admiration upon and appreciate very much, the way of life of their fathers and grandfathers. They have developed through time a certain occupational folklore which contains many stories that glorify their forebears and extols the effort they exerted to cultivate the rug-industry to its present state. All stories have one common thesis which could be briefly summarized as follows. "Our fathers were able to produce rugs with their wooden tools and instruments that we inherited from them..... Why don't we follow their pace ?.... With their painstaking effort they made these tools.... They were inseparable parts of themselves and so are we.... We should be sincere and trustworthy in taking care of these tools with which we have been able to produce the best filtering mats in the world...."

They continue with stories which have the following central emphasis. "Our fathers were not educated and why should we be? The school teachers do not know how to teach us or our children our occupation.... Therefore, why should we send our children to school? If they ever go to school they will be ashamed to come back to spinning and weaving. If they become educated they will turn their backs on us and we lose them..... To hell with any educational programs that are going to separate us from the way of life that our fathers lived, and down with all the schools that are going to separate our dearest children from us, "say the rug-makers". Another rug-maker said, "We were born to work with our hands rather with our thoughts and contemplations, spinning and weaving." Thus the art of rug-making forms a sort of social axis around which the social life of the rug-making family rotates with a centripetal force that ties their life from birth to death with rug-making.

The rug-makers do not consider their occupation as a mere means of living. Most of their conversations center around the subject of rug-making. They compare their present production of rugs with that of their fathers. They give credit in every achievement to their fathers or grandfathers, who supplied them with the occupational capital that is needed in rug-making. The children of the rug-making people receive a whole series of indoctrinating lectures. "You should take your father as an example in life..... These tools, the wooden loom, the well-polished wooden stick, etc. are the source of our living as a family.... Our fathers and grandfathers had strong confidence that their offsprings will take care of them..." Soon after the child is born he will be subjected to these social stimuli. Although the rug-makers think of the future, their life aspirations are reached through the process of imitating their fathers. Added to that they have a sacred attachment to their inherited tools.

A second factor that plays a major role in stabilizing the rug-culture was an experience that the olive press owners of Kura had with some rugs that were imported 10 years ago from France and Italy. The imported filtering mats lasted only half as long as those made by local people. That single, and only, experience convinced both the olive press owners and the rug-makers that the traditional local methods and tools that are used in rug-making, were superior to the industrial methods in Europe for making such mats. The rug-makers felt all the more faith in what they had inherited from their fathers.

A third factor helping in creating conservative attitudes toward the introduction of any sort of mechanical improvement to the rug-industry is the prosperous economic life long enjoyed by the rug-makers. Due to an unabating demand which exceeds the production volume of rugs, they have

a high satisfaction with present production and methods of production. They are afraid that if they introduce new methods or machines they may possibly lower the quality. The economic prosperity that they are enjoying works as a direct variable in limiting or narrowing their outlook. The element of necessity does not plague their work world and thus is hindered the introduction of new change or the adoption of modern machines.

As for their negative attitude toward education, the rug-makers see the many other children of the villagers who go to school and then leave the village after they receive their education. The families with educated children suffer a loss in able-bodied persons who are considered their most productive members. To a rug-making family the youth are of paramount importance in its success. As was mentioned before, because the socio-occupational status of any rug-making family is related to the amount of rugs that family can produce, this is a very important reason for the rug-makers having very large families and subsequently attempting to keep all their children at home.

In spite of the fact that the rug-makers are still using wooden tools and instruments of the eighteenth century they are supplying the electric olive presses of the twentieth century with workable hand made filters. The rug-makers have proven that with ability and hard work they can stand external competition. But meantime, the olive presses of Tunisia, Greece, Italy, France and Turkey are supplied by European mats that are manufactured in large industrial plants. The present rug-industry of Kusba is undoubtedly in the pathway of the creeping industrialization that is setting in rural Lebanon but this is still a world in which the rug-makers of Kusba are not participating citizens.

CHAPTER III

METHODOLOGY

Source Of Data:

The universe of study consisted of the different occupational classes of Kusba: the rug-makers of Kusba and the other occupational classes found in the village. In both samples only male subjects were included. The first group studied actually consisted of the entire population of male rug-makers both single and married. A list of all the rug-makers was prepared by the writer. It reached sixty five in number. It was then shown to three rug-makers for validity check, each checking the list independently. An additional twenty and five rug-makers were added to the original list by the first and the second judges respectively. Thus the list of the rug-makers sample was raised to ninety cases. A further step was carried out for validating the number of cases by presenting the entire list to the Mukhtar of the village for verification. He and two other persons went over the whole list and approved of all the names that appeared in the list and agreed that this comprised the entire population of male rug-makers.

The second sample was chosen by dividing the other general occupational group into four major categories: unskilled laborers; skilled laborers; olive growers; and professionals. The unskilled laborers included the following: small retailers; daily laborers; wood cutters; and owners of small clothing shops. The skilled laborers included the electricians; taxi drivers; carpenters; wooden plow makers; masons; and house builders. The third sub-sample included the olive growing people in Kusba. As for the professional category, it included the following: physicians; engineers; dentists; lawyers; and school teachers.

The writer prepared full tentative lists of each of the above-mentioned sub-samples. Then three persons from each occupational class were used as judges in checking the accuracy of the listings after which it was taken to the Mukhtar who acted as a final judge. It so happened that in all the Mukhtar verified every case that was presented to him.

Below is a table showing the original numbers of each occupational class:

<u>Class</u>	<u>Total</u>
Rug-makers	90
<u>Urban occupational group</u>	
Unskilled laborers	23
Skilled laborers	32
Olive growers	38
Professionals	28
	<hr/>
	211 Sum total

The writer started by interviewing the rug-makers. The whole population of ninety cases was interviewed. The next step was to equate the second sample (urban occupational group) with the rug-making group and then to equate the sub-samples within the urban occupational group. Because the number, ninety, could not be divided into four equal categories, and due to the fact that the number of the rug-makers could not be raised, an arbitrary decision was taken to randomly discard two cases among the rug-makers. Thus the final total number of cases of rug-makers amounted to eighty eight.

In order to arrive at a total number of non-rug-makers that would balance the rug-makers, the non-rug-making sample was divided into four sub-classes of twenty two cases each. Twenty two cases were chosen from each sub-class populations by random method. The total number of cases in each

urban occupation sub-class were listed by name. Each name was identified by a number which was then entered upon a slip of paper. Each sub-class population was then drawn upon by placing the slips in a hopper, Thoroughly mixing them, withdrawing a slip and notating its number, replacing it in the hopper etc., until a total number of twenty two cases had been drawn from each population group.

Below is a table showing the occupational distribution of the final samples used for study.

<u>Class</u>	<u>Total</u>
Rug-makers	88
<u>Urban occupational group</u>	
Unskilled laborers	22
Skilled laborers	22
Olive growers	22
Professionals	22
	<hr/>
	176 Sum total

The items were measured on five point scale weighted ordinally from one to five. Median scores were computed for each item and used as a means of data display in the tables. It should be further added that as in the case of any ordinal five-point scale, one can only assume equidistant intervals between scale points.

A coded sheet was specially prepared for recording the scores. After the questions were coded two persons independently checked the coded sheets. Punched cards were used for data manipulation.

It should be mentioned that through all the entire interviewing process, no refusals were encountered.

Collection of Data:

A questionnaire was constructed in an attempt to measure occupational security feelings and the subjects' attitude toward the acceptance of technological innovations. The following areas were attacked to determine occupational security feelings about occupational environment, opportunity for self advancement, occupational competition, degree of social status obtained through occupation, kind and amount of participation in making plans as to how work should be done, and income. The study utilized occupational security as a cardinal variable, one scale being specifically designed to measure this attribute. Also, the questionnaire inquired as to the subjects' ideas about introducing new methods to their own occupations, effects of technological innovations on the quality of production, and on employment in general. Finally, both occupational security feelings items and those items which in composite best seem to summarize feelings of occupational security, were weighed against each occupational group's willingness to accept technological innovations. This last step was intended to provide a test for the hypothesis.

CHAPTER IV

FEELINGS OF OCCUPATIONAL SECURITY

Introduction:

This investigation centered upon two general areas, feelings of occupational security and attitudes toward technological innovations. Since it was the premise of this study that there was an inverse relationship between these two sets of attitudes, the results of both phases of the investigation are presented in the following two chapters. As it could be understood from the title of this chapter it deals with the feelings of occupational security.

Occupational security extends beyond the immediate work situation into general feelings in regard to the community. Accordingly, an attempt was made to measure the various dimensions of satisfaction with community life. Altogether, the various factors tested in an effort to derive feelings of occupational and community satisfaction were as follows:

- a. Satisfaction with the physical attributes of the neighborhood and with social relations within the neighborhood and at home.
- b. Satisfaction with educational status and with educational opportunity.
- c. Satisfaction with medical facilities and conditions of sanitation.
- d. Satisfaction with welfare and religious services received in the community.
- e. Satisfaction with leisure time recreational opportunities.
- f. Satisfaction with personal income.
- g. Satisfaction with opportunities for self advancement within the occupation.
- h. Satisfaction with status gained through occupation.

- i. Degree of social cohesion within the occupational group and attitudes toward the intensity of external competition.
- j. Feelings of general security derived from life.

The above categories might be conveniently placed in three classes. Items "a" through "e" are concerned with feelings toward the general community social environment. Items "f" through "i" bear upon attitude toward the respondent's occupation, and finally, item "j" feelings of general security derived from life was added in an attempt to produce a summary measurement of security feeling or, in other words, to isolate a cardinal variable.

Possibly one of the strongest indexes of group cohesion and emotional security is the feeling that people have toward physical attributes of the neighborhood and the social relationships existing in both within the neighborhood and home. Studies of urbanization have led to the conclusion that in a close knit group there is a strong tie between social relations in the community and in the home. Indeed, this is very well born out as the case in table one. The rug-makers scored consistently higher on all three variables than did the non-rug-making occupational group. The most significant difference between the attitudes of these two groups was their outlook upon the physical attributes of the neighborhood. To an extent this might be explained by the considerably lower mobility enjoyed by the sacred occupational group, the rug-makers. Many members of the non-rug-making occupational group are employed in urban industry and it is well known that the non-making-rug group in general has had exposure to greater range of urban environments. As measured on five points scale the median scores obtained by the rug-makers were respectively 0.5 and 0.4 higher in regard to satisfaction with both, social relationships within

TABLE 1

SATISFACTION WITH THE PHYSICAL ATTRIBUTES OF NEIGHBORHOOD AND
WITH RELATIONSHIPS WITHIN THE NEIGHBORHOOD AND HOME

	Satisfaction with Social Relations at home	Satisfaction with Phy- sical attributes with- in neighborhood	Satisfaction with Social Relationships within neighborhood	Cumulative median score	Total
RUG-MAKERS	3.4	4.1	3.6	11.1	88
NON-RUG-MAKERS	2.9	3.4	3.1	9.4	88
UNSKILLED	2.7	3.2	2.8	8.7	22
SKILLED	3.4	4.0	3.1	10.5	22
OLIVE GROWERS	2.8	3.5	3.5	9.8	22
PROFESSIONALS	2.6	2.8	2.7	8.1	22

the neighborhood and the home, than the scores made by the non-rug-making group.

One of the most pronounced features of a highly mobile and aggressive society is its desire to expand upon educational opportunities. Because those of low educational status suffer employment discrimination there is usually an evidence in such societies a desire on the part of the individual to attain increased educational opportunity for himself and for his children. This drive is, of course, most apparent in the middle and upper social economic classes. This principle was found to generally hold in this study when comparisons of the relative satisfactions of rug-makers and other occupational groups were made. With the exception of the olive growers, who in themselves constitute a somewhat sacred occupational group, the desire for extended educational opportunity and dissatisfaction with present opportunities was found to be correlated with the occupational hierarchy. When the rug-makers and the non-rug-makers are considered as single groups the differences in outlook toward education between the two are striking.

As regards satisfaction with the amount and the type of education the respondents have received and the opportunities available for their children the rug-makers obtained much higher median scores. We might conclude that on each of the five factors measured the rug-makers consistently indicated from a moderate to a high degree of satisfaction with educational opportunities, and the non-rug-makers consistently indicated, dissatisfaction with the educational system as it is reflected in these five factors.

TABLE 2

SATISFACTION WITH EDUCATIONAL STATUS AND EDUCATIONAL OPPORTUNITIES

	Satisfaction with the amount of education	Satisfaction with the type of education	Satisfaction with educational opportunity available	Satisfaction with the amount of education children get	Satisfaction with the type of education children get	Cumulative median score	Total
RUG-MAKERS	3.3	4.2	4.5	4.1	4.4	20.5	88
NON-RUG-MAKERS	1.7	1.9	1.7	2.0	1.9	9.2	88
UNSKILLED	1.8	1.9	1.9	1.9	2.1	9.6	22
SKILLED	1.8	1.7	1.1	1.7	1.5	7.8	22
OLIVE GROWERS	1.9	1.6	2.5	1.8	1.7	9.5	22
PROFESSIONALS	1.4	2.4	1.8	2.9	2.5	11.0	22

There was a general feeling among the residence of Kusba that sanitary conditions are substandard. It is not surprising therefore, to discover that neither group showed a high degree of satisfaction with conditions of sanitation either within the immediate neighborhood or within the village in general.

TABLE 3

SATISFACTION WITH THE MEDICAL FACILITIES AND SANITATION FACILITIES

	Satisfaction with sanitary conditions in neighborhood	Satisfaction with sanitary conditions in general	Satisfaction with medical facilities	Cumulative Median score	Total
RUG-MAKERS	1.9	2.7	2.9	7.5	88
NON-RUG-MAKERS	1.7	1.3	1.8	4.8	88
UNSKILLED	1.7	1.4	1.4	4.5	22
SKILLED	1.6	1.5	1.4	4.5	22
OLIVE GROWERS	1.6	1.5	1.6	4.7	22
PROFESSIONALS	1.8	1.3	1.8	4.9	22

The difference in view points as to a need for greater medical attention was somewhat more pronounced, a fact that may be in part attributable to the practice of folk remedy and the folklore beliefs regarding medicine that prevail among the rug-makers. There was general dissatisfaction expressed by the non-rug-makers in regard to all three factors, neighborhood, village sanitation and availability of medical attention, while the rug-makers were just passingly satisfied by conditions of village sanitation and availability of medical attention.

The Lebanese government in conjunction with the village municipality renders a limited amount of welfare services. In addition, there are a few private clubs who have as a minor aim certain philanthropic enterprises. Beyond this a certain amount of mutual aid is extended through the church on special occasions and membership in the church provides an index of community solidarity. In regard to satisfaction with welfare services received (both of a welfare and ritualistic nature) the rug-makers expressed consistently higher satisfaction than did the non-rug-makers. The difference in attitudes between these two groups was most conspicuous as regards the extension of welfare services.

This might be explained by the fact that the rug-makers have been traditionally a strong cohesive in-group. Members extend mutual aid to one another and are therefore less interested in and less dependent upon outside welfare services. The non-rug-makers expressed relative dissatisfaction with the degree of welfare services available within the community.

Both groups expressed the opinion that leisure time recreational opportunities were adequate. However, it should be pointed out that the patterns of recreation differ somewhat for these two groups. As is true in most rural Lebanese areas a great deal of recreation still occurs within

TABLE 4

SATISFACTION WITH THE WELFARE AND RELIGIOUS SERVICES IN THE COMMUNITY

	Satisfaction with welfare agencies	Satisfaction with the religious services	Cumulative median score	Total
RUG-MAKERS	3.6	3.5	7.1	88
NON-RUG-MAKERS	1.7	2.5	4.2	88
UNSKILLED	1.4	1.6	3.0	22
SKILLED	1.8	2.9	4.7	22
OLIVE GROWERS	1.9	2.9	4.8	22
PROFESSIONALS	1.5	2.6	4.1	22

the home, and it is here that those engaged in occupations still obtain most of their divertissement. With the rug-makers recreation is somewhat different matter permeating the working hours. They have a high degree of social interaction as they do their work exchanging stories, jokes, and often singing as they spin, in a single chorus. None of the rug-makers was very dissatisfied with recreational opportunities. Only 13.6% of the non-rug-making group registered very much dissatisfaction.

TABLE 5

SATISFACTION WITH THE RECREATIONAL OPPORTUNITIES

	Satisfaction with recreational opportunities	Total
RUG-MAKERS	3.2	88
NON-RUG-MAKERS	2.0	88
UNSKILLED	2.1	22
SKILLED	2.6	22
OLIVE GROWERS	2.6	22
PROFESSIONALS	2.8	22

Two types of personal income information were sought. First, the respondent was sounded out as to the extent to which the income derived from the occupation met his general needs. Secondly, an attempt was made to determine how the respondent evaluated his income as compared with that attainable through other occupations. On both of these factors, satisfaction with personal income and relative satisfaction with income accruing to their particular occupation, the rug-makers expressed a high degree of satisfaction. Conversely, the non-rug-making occupational group expressed dissatisfaction on both scores. When the non-rug-making group is arrayed by occupation there was little difference in attitudes toward income between unskilled laborers and professionals. All of these groups were over-shadowed by the high degree of satisfaction in income felt by the rug-making group.

TABLE 6

SATISFACTION WITH OCCUPATIONAL INCOME AS RATED TO MEET

PERSONAL NEEDS

	<i>Satisfaction with income gained through occupation</i>	<i>Satisfaction with monetary returns accrued through occupation</i>	<i>Cumulative median score</i>	<i>Total</i>
RUG-MAKERS	4.1	3.6	7.7	88
NON-RUG-MAKERS	2.1	2.1	4.2	88
UNSKILLED	2.5	2.3	4.8	22
SKILLED	2.1	3.2	5.3	22
OLIVE GROWERS	2.1	2.5	4.6	22
PROFESSIONALS	2.1	2.6	4.7	22

These differences in attitudes are to a large extent grounded in differences in fact. The rug-makers enjoy a high degree of economic independence and have developed a reputation as a people from whom money can be borrowed in time of need. Moreover, through the monopolization they enjoy in their trade and through diligent industry that continues well into the night, it is not uncommon for a rug-maker to earn well over 700 pounds per month, an earning power surpassed by very few of the professionals. Since the rug-makers are well aware of the relative advantages they have in earning this might be expected to be a major factor contributing to occupational security. In general, there was no positive correlation apparent between the skills hierarchy and satisfaction with income.

Students of business and industrial organization have long pointed to the importance of opportunity for self advancement as an element in personal morale. Traditionally, in western society upward mobility has meant movement across occupational lines. Mobility is usually achieved not through a refinement of present skills but through a progression up through the hierarchy from unskilled to skilled to managerial. No such hierarchy exists within the rug-making group where all positions are considered highly functional and essential to the ongoingness of the industry. There is no perceivable social differentiation between the various tasks involved in rug-making. Yet, when the attitudes of the rug-makers toward opportunity for self advancement within the occupation were sampled, they expressed a relatively high degree of satisfaction with their opportunities toward advancement and they felt that the opportunity for advancement in this particular occupation was fairly great. On the other hand, while the non-rug-making groups were moderately satisfied with opportunity for self advancement within their given occupation they felt that as a whole the

TABLE 7

SATISFACTION WITH OCCUPATIONAL OPPORTUNITY FOR

SELF ADVANCEMENT

	Satisfaction with occupational opportunity for self advancement	Satisfaction with the amount of occupational opportunity for self advancement	Cumulative median score	Total
RUG-MAKERS	4.8	3.1	7.9	88
NON-RUG-MAKERS	2.7	1.8	4.5	88
UNSKILLED	2.5	2.6	5.1	22
SKILLED	3.3	2.2	5.5	22
OLIVE GROWERS	3.1	2.3	5.4	22
PROFESSIONALS	2.7	2.3	5.0	22

occupation itself did not admit adequate mobility up through the skills hierarchy. This might be construed as evidence that the orientation of the urban workers is toward progression through the occupational hierarchy while the universe of the rug-makers is a single contained one without discernable strata.

It could be inferred from the foregoing analysis of satisfaction with personal income that the rug-makers would assess their status as being relatively high. It is at least true in western society that personal income is a major factor in personal status and that the status linked to the person's occupation permeates his entire network of interrelationships and is a main contributor to his general community status. Inasmuch as there are other factors than income that bear upon status, different status variables were taken into account in this study. The degree to which a person is permitted to make suggestions in the performance of his work is an indicative of the degree to which he is permitted participation and the degree to which he enjoys freedom from a fixed position. Certainly the treatment the person receives by his peers and superiors contribute to his status as well as the personal recognition that he receives for outstanding accomplishment. And finally the respondent was asked outright as to the degree of actual satisfaction with the social status that he gets from his occupation.

On all four factors tested, the rug-makers displayed higher median scores than did the members of the other occupational group. While the social status felt to be derived from the occupation seemed to correlate fairly closely with the skills hierarchy in the urban group, none of this group, not even the professionals, felt that they enjoyed as high a status as did the rug-makers. The differences between the two general groups were

TABLE 8

SATISFACTION WITH STATUS GAINED THROUGH OCCUPATION

	Satisfaction with opportunity for making suggestions as how work should be done	Satisfaction with treatment received at work	Satisfaction with the recognition person gets for outstanding accomplishments	Satisfaction with the status person gets from occupation	Cumulative median score	Total
RUG-MAKERS	3.1	3.1	3.7	3.7	13.6	88
NON-RUG-MAKERS	1.7	2.4	2.7	2.9	9.7	88
UNSKILLED	2.5	2.8	2.5	2.6	10.4	22
SKILLED	2.7	2.8	3.3	3.1	11.9	22
OLIVE GROWERS	2.6	2.6	2.7	2.7	10.6	22
PROFESSIONALS	1.5	2.8	2.2	3.1	9.6	22

pronounced in regard to freedom to make suggestions as to how work will be performed and in personal recognition for outstanding accomplishments. Several interpretations may be made of this observation. Since there are apparently few changes suggested or made in the performance of fabricating rug products it may be assumed that the matter of making suggestions is not of great importance and that the respondent may have expressed satisfaction with this freedom although in fact it may hardly exist. Furthermore, the various work specialities in rug-making are rigidly ascribed to the person immediately after he makes entry as an active worker into this enterprise. Most decisions as to the conduct of the business are made by the heads of the households or by the elders in the group. This is a social situation which is whole heartedly supported by the younger generation. A further interpretation may run to the effect that recognition and other personal gratifications that are bestowed by the primary group are much more meaningful to the individual than are those rewards given by the secondary society.

As for the factor on status alone, it might be assumed that because of his lesser mobility the rug-maker tends to evaluate his status from within a frame of reference consisting of only the immediate village. On the other hand the members of the urbanized occupations may evaluate their status from a much broader frame of reference. In either even if we are to assume that status is related to general life's satisfaction we must concede that the insular attitudes of the rug-makers are more conducive to emotional satisfaction.

Two factors that were thought to have definite bearing upon feelings of personal security were the degree of social cohesion in the group, as measured indirectly by the degree of social distance felt to exist within the group, and the extent to which the members of the various occupations

felt threatened by external competition. The median scores obtained by the rug-makers revealed less feelings of social distance than was the case among the other general occupational group. Of the eighty-eight rug-makers only one revealed a feeling of social distance while forty-nine of this number maintained that they felt very close to their occupational associates. Of the urban occupational group 29% expressed feelings of social distance from their fellow workers while only eight of this number expressed a sentiment of feeling very close.

TABLE 9

FEELING OF CLOSELINESS SUBJECT HAS TO FELLOW OCCUPATIONAL MEMBERS

	<i>Very distant</i>	<i>Somewhat distant</i>	<i>Fairly close</i>	<i>Very close</i>	<i>Median score</i>	<i>Total</i>
RUG-MAKERS	-	1	38	49	4.6	88
NON-RUG-MAKERS	4	22	54	8	3.0	88
UNSKILLED	3	7	12	-	2.8	22
SKILLED	-	4	16	2	3.2	22
OLIVE GROWERS	1	4	17	-	3.2	22
PROFESSIONALS	-	7	9	6	2.8	22

It goes without saying that the intensity of external competition may prove to be a threat to the integrity of a group. When asked the extent to which external competition was felt to exist, significantly, 31.8% of the rug-makers responded that there was no external competition. Such an answer was given by only 7.9% of the urban occupational group and these were the land owning olive growers and the professional workers who are in fact faced with very little competition. Virtually all of the unskilled laborers felt that external competition was much too intense a feeling shared to lesser degree by the skilled laborers. When the rug-makers and the urban occupational group are considered as two single groups over one half of the urban occupational group indicated that external competition was much too intensive, a response that was made by none of the rug-makers. The opinion among the rug-making group was that competition was rather evenly balanced or totally absent.

TABLE 10

FEELINGS ABOUT OCCUPATIONAL COMPETITION INVOLVED

	Competition is much too intensive	Competition is somewhat too intensive	Competition is about right	There is no competition	Median score	Total
RUG-MAKERS	-	25	35	28	3.0	88
NON-RUG-MAKERS	46	21	14	7	1.8	88
UNSKILLED	21	1	-	-	0.6	22
SKILLED	9	10	3	-	2.1	22
OLIVE GROWERS	6	9	2	5	2.6	22
PROFESSIONALS	10	1	9	2	2.0	22

When the question was asked, "How much security do you enjoy as compared with that enjoyed by your father," both occupational groups, the rug-makers and the non-rug-makers gave evidence of feelings of upward mobility. 94% of the rug-makers and 48.0% of the urban occupational group felt that they enjoy a higher degree of security than did their fathers. Conversely, 28.4% of the urban occupational group and 1.2% of the rug-makers felt that they enjoyed less security than their fathers had.

TABLE 11

FEELINGS OF GENERAL SECURITY AS COMPARED WITH THAT
OF THE FATHERS

	<i>Much more secure</i>	<i>Somewhat more secure</i>	<i>About the same</i>	<i>Somewhat the same</i>	<i>Much less secure</i>	<i>Median score</i>	<i>Total</i>
RUG-MAKERS	27	56	4	1	-	4.4	88
NON-RUG-MAKERS	3	40	20	20	5	3.4	88
UNSKILLED	-	9	5	8	-	3.1	22
SKILLED	1	12	5	4	-	3.4	22
OLIVE GROWERS	1	9	7	3	2	3.3	22
PROFESSIONALS	1	10	3	5	3	3.5	22

Since occupational mobility is relatively absent in the rug-making group and since to all appearances the relative security they have enjoyed in the community has remained very constant over the years this upward shift in felt security can only be explained in terms of underlying psychological factors.

We have in the course of this section examined a number of factors which collectively were believed to contribute to a composite feeling of occupational security. In an effort to subsume all of these factors within a single variable the question was asked "How would you compare general security and satisfaction you draw from life compared with that enjoyed by people that you know of who are engaged in other types of work?" Of the rug-makers, 87.0% replied that they derive a great amount of security from their occupation than do those people engaged in other occupations. 39.0% of the urban occupation group responded in like manner while 33.0% of their number answered that they enjoy less security than did members of other occupational groups. Only 3.4% of the rug-makers felt inferior to other occupational groups in terms of security.

The median scores made by the rug-makers and urban occupational group were respectively 4.3 and 2.9. We might deduce from this item, as from virtually all items that have been tested before in this section, that the rug-makers derived greater degree of satisfaction from social conditions within the occupation itself than do the members of the urban occupational group. In addition, they enjoy such benefits as higher satisfaction with income, a greater cohesion within the group and a relative absence of fear of competition from outside group.

TABLE 12

SATISFACTION AND GENERAL SECURITY DRAWN FROM LIFE AS
COMPARED WITH THOSE OF THE OTHER OCCUPATIONAL GROUPS
WHOM THE SUBJECT KNOW OF

	<i>Great deal more satisfied</i>	<i>Somewhat more satisfied</i>	<i>About the same</i>	<i>Somewhat less satisfied</i>	<i>Much less satisfied</i>	<i>Median score</i>	<i>Total</i>
RUG-MAKERS	19	58	8	1	2	4.3	88
NON-RUG-MAKERS	12	23	24	16	13	2.9	88
UNSKILLED	-	9	6	2	5	2.2	22
SKILLED	8	6	4	4	-	3.9	22
OLIVE GROWERS	3	6	5	4	4	3.0	22
PROFESSIONALS	1	2	9	6	4	2.4	22

CHAPTER V

ATTITUDES TOWARD TECHNOLOGICAL INNOVATIONS

Having discovered well defined differences in feelings of occupational security it was assumed that there would be corresponding differences between the rug-makers and the urban occupational group in regard to attitudes toward technological innovations. The factors tested in order to determine differences in the technological realm were as follows:

- a. Willingness to accept technological innovations.
- b. Anticipated effects of technological innovations on production.
- c. Anticipated impact of technological advancement on social relationships.
- d. Anticipated effects of technological innovations on employment.
- e. Satisfaction with present methods used in work.
- f. Degree of interest expressed in making technological improvements and the respondents own occupational estimates of the effectiveness of those already introduced.
- g. Preference as to the disposition of excess personal funds.

It is obvious in the order of the above categories, an attempt was first made to test the willingness of the respondent to accept technological innovations. The remaining categories were dedicated to the task of isolating the rationale which the respondent had in accepting or rejecting technological innovations. It was assumed that such matters as quality or quantity of production, the expected impact of technological advancement on the community and upon matters of employment would be reflected in the subject's attitude toward mechanization. It was further felt desirable to determine whether technological innovation constituted a problem for the respondent. In short was mechanization a matter of such signal interest that it was

seldom discussed, but was instead repressed, or was their dawning conflict within the group as evidenced by a considerable discussion as to the possible merits of innovation.

And finally, it was assumed that the particular use to which the respondent put his excess personal funds would also be related to attitudes toward technological innovations. In this connection would the respondent display the urban disposition to invest his funds in various corporate enterprise or would he display a tendency to plow the funds back into his own business in an effort to expand it, or would he reveal the provincial characteristic of placing his excess personal funds in savings?

The questions were asked to determine willingness to accept technological innovations. On one item the respondent was asked to indicate his willingness to accept the introduction of technological innovations in other occupations, and on a second item to indicate his willingness to accept innovations in his own occupation. The median scores obtained by the urban occupational group indicated a rather high degree of readiness to accept innovations both in their own and in other occupation. It might be pointed out that the somewhat more conventional olive growers indicated a somewhat lesser enthusiasm for change than did the other occupational classes, but in all there was little difference in outlook toward improvements in the respondent own occupation or in other occupations. The rug-makers on the other hand showed a decisive difference in this latter respect. They showed a relative tolerance or at least indifference toward mechanical improvements in other occupations but in reference to their own occupations they showed a rigid resistance to innovations.

In summary, in their attitudes toward technological innovations in occupations other than their own 57.9% of the rug-makers were indifferent,

TABLE 13

WILLINGNESS TO ACCEPT TECHNOLOGICAL INNOVATIONS

	<i>Willingness to accept the introduction of technological innovations to other occupations</i>	<i>Willingness to accept the introduction of technological innovations to own occupation</i>	<i>Cumulative median score</i>	<i>Total</i>
RUG-MAKERS	2.7	1.2	3.9	88
NON-RUG-MAKERS	4.5	4.2	8.7	88
UNSKILLED	4.4	4.4	8.8	22
SKILLED	4.4	4.5	8.7	22
OLIVE GROWERS	3.3	3.9	7.2	22
PROFESSIONALS	4.5	4.4	8.9	22

31.8% of them were opposed; of the urban occupational group 12.5% were indifferent and 81.8% were infavor of such innovations. As regarded attitudes toward technological change in their own occupations 1.2% of the rug-makers was indifferent to such changes and 98.6% were opposed; within the urban occupational group 1.2% were indifferent and 68.2% were infavor of measures designed to increase technological effectiveness.

The next issue to be tested was the anticipated effects of technological innovations on both the quantity and the quality of production. As can be seen in the table below, both occupational groups were generally agreed that increased mechanization would raise production output. However, the urban occupational group was more convinced of this fact than were the rug-makers.

When interrogated as to the effect of innovations on the quality of production the responses of these two general groups were quite different. 95.4% of the rug-making group expressed the belief that innovation would lower the quality of their production; 3.2% thought that it will make no difference. On the other hand, 81.8% of the urban occupational group expressed the opinion that mechanization would definitely improve the quality of production while only 1.2% thought it would make no appreciable difference. Of the 13 members of the urban occupational group who were of the belief that innovations would lower the quality of production, 9 were olive growers.

It should be pointed out that the matter of "production quality" is a major rationale among the rug-makers in opposing mechanization. This belief received strong encouragement in the year 1949 when the olive press owners in Kura district experimented with the use of machine

TABLE 14

SUBJECTS THINKING AS TO THE EFFECTS OF TECHNOLOGICAL
INNOVATIONS ON PRODUCTION

	<i>Effect of technological innovations on the quantity of production</i>	<i>Effect of technological innovations on the quality of production</i>	<i>Median score</i>	<i>Total</i>
RUG-MAKERS	3.9	1.6	5.5	88
NON-RUG-MAKERS	4.5	5.2	9.7	88
UNSKILLED	4.4	4.4	8.8	22
SKILLED	4.5	4.2	8.7	22
OLIVE GROWERS	4.5	3.8	8.3	22
PROFESSIONALS	4.5	4.5	9.0	22

produced rugs purchased from abroad and discontinued their use on the grounds that they were of inferior quality. This has served to reaffirm the conviction of the rug-makers that it is impossible to produce satisfactory filters by other than hand methods.

The respondents were asked the degree to which they thought technological innovations would weaken or strengthen friendship ties within the community and within their own occupational group. Of the rug-makers 20.4% felt that technological advancement would weaken friendship ties within the community and 32.9% of the urban occupational group expressed a similar attitude. As to the effects of technological advancement upon social relationships within the occupational group, 32.2% of the rug-makers felt that innovations would weaken the social fabric and 32.9% of the urban occupational group also felt that this would be the case. Significantly, only one rug-maker was of the belief that technological innovations would increase harmony within the occupational group and further, unlike the urban occupational group, the rug-makers drew a distinction between the anticipated effects upon the community and upon their specific occupation.

This would tend to indicate once again that the social relationships of the rug-makers are more strongly oriented toward the occupational group than is true of those in other walks of life. This fact is easily verified by the observation of the easy social interchange taking place within the group as it works, and by the periodic informal gathering during which the relative production of each family is compared and discussed and various issues such as current prices to be charged are debated by the group members.

TABLE 15

EFFECT OF TECHNOLOGICAL INNOVATIONS ON SOCIAL RELATIONSHIPS

	Effect of technological innovations on social relationships within the community	Effects of technological innovations on social relationships within the occupational group.	Cumulative median score	Total
RUG-MAKERS	2.9	2.5	5.4	88
NON-RUG-MAKERS	2.8	2.8	5.6	88
UNSKILLED	2.5	2.6	5.1	22
SKILLED	2.3	2.1	4.4	22
OLIVE GROWERS	2.5	2.3	4.8	22
PROFESSIONALS	3.0	3.0	6.0	22

The fact has been documented in a number of studies of labor in U.S. society that much of the objection on the part of the laboring class against technological advancement is based upon the fear that they will be left unemployed. We would expect such attitudes to prevail in any society. As pertains to the effects of technological innovation on employment in this study the respondent was asked three questions: "do you think that technological innovations will increase or decrease employment opportunity"; "will it effect employment practices in such a way that only educated people will be able to obtain work or will it make work available for every one who is willing to take employment"; and "in general will it increase or decrease employment opportunity for all?"

There were diametrical differences between the two occupational groups on all three items. 84.1% of the rug-makers believed that technological innovations would decrease employment opportunity while an equal percentage (84.1%) of the urban occupational group were of the belief that innovation was the route to increased employment opportunity. 98.6% of the rug-makers felt that innovations would lead to conditions where only the highly qualified would be able to obtain employment, whereas 79.5% of the urban group expressed the philosophy that innovations would lead to conditions more favorable to the employment of all. In like vein, 97.2% of the rug-makers believed that general employment opportunity would be depressed by mechanization while 81.8% of the urban group believed that general employment opportunities would be broadened.

TABLE 16

EFFECTS OF TECHNOLOGICAL INNOVATIONS ON EMPLOYMENT

	<u>OPPORTUNITY</u>					
	<i>Technological innovations would greatly increase opportunity</i>	<i>Technological innovations would somewhat increase opportunity</i>	<i>It would make no difference</i>	<i>Technological innovations would somewhat decrease opportunity</i>	<i>Technological innovations would greatly decrease opportunity</i>	<i>Total</i>
RUG-MAKERS	-	1	11	64	12	88
NON-RUG-MAKERS	27	49	6	5	1	88
UNSKILLED	4	15	2	1	-	22
SKILLED	7	15	-	-	-	22
OLIVE GROWERS	9	8	2	2	1	22
PROFESSIONALS	7	11	2	2	-	22

TABLE 18

EFFECT OF TECHNOLOGICAL INNOVATIONS IN GENERAL

	<i>It would create great deal more employ- ment opportuni- ty</i>	<i>It would create some- what more employ- ment opportuni- ty</i>	<i>It would make no difference</i>	<i>It would somewhat lessen employment opportunity</i>	<i>It would greatly lessen employment opportunity</i>	<i>Total</i>
RUG-MAKERS	1	1	-	45	41	88
NON-RUG-MAKERS	32	42	4	8	2	88
UNSKILLED	6	14	1	1	-	22
SKILLED	13	9	-	-	-	22
OLIVE GROWERS	9	8	-	3	2	22
PROFESSIONALS	4	11	3	4	-	22

We might surmise that the rug-maker, living in a restricted production environment where he has not yet been exposed to the philosophy that "machines make more jobs", would be highly ethnocentric in his occupational belief. Not yet inured to the notion of occupational mobility, unaware of the vast industrial world lying beyond his horizon, he tends to think of employment opportunity in terms of his own specific occupation. Consequently, his security feelings as well as his anxieties and fears of the external world are closely bound up with his means of making a livelihood. These fears make him strongly resistant to the incursion of any practice which threatens to produce disequilibrium in this socio-occupational order.

An effort was made to determine the extent to which technological improvements have already been introduced in each of the two general occupational groups and to further discover the extent to which improvements were felt to impair or add to the effectiveness of production. 98.6% of the rug-makers responded that to their knowledge no mechanical improvements had been introduced to the trade. The one member of this group who responded that an innovation had been introduced was at a loss to describe the exact nature of this change. On the other hand, only 4.2% of the urban occupational group replied that they had witnessed no technological change in their occupations. 93.2% felt that these innovations had been of definite help in the pursuit of their work.

TABLE 19

FEELING ABOUT THE MECHANICAL IMPROVEMENTS THAT HAVE BEEN INTRO-
DUCTED TO SUBJECT'S OWN OCCUPATION

	<i>No mechanical im- provements have been introduced to my occupation</i>	<i>They have hindered a great deal</i>	<i>They have hindered somewhat</i>	<i>They have made no change</i>	<i>They have helped fairly much</i>	<i>They have helped a great deal</i>	<i>Total</i>
RUG-MAKERS	87	1	-	-	-	-	88
NON-RUG-MAKERS	3	-	-	3	52	30	88
UNSKILLED	1	-	-	-	13	8	22
SKILLED	-	-	-	-	13	9	22
OLIVE GROWERS	-	-	-	3	9	10	22
PROFESSIONALS	2	-	-	-	17	3	22

When asked "how satisfied the respondents were with the present methods used in their occupation, 97.2% of the rug-makers replied that their methods were sufficient as they were. 67.0% of the urban occupational groups replied that their methods should be greatly improved upon. Of the latter group those who indicated a satisfaction with present work methods, six of the eight were olive growers.

TABLE 20

SATISFACTION WITH THE PRESENT METHODS USED IN OCCUPATION

	Our present methods should be greatly improved upon	Our present methods should be somewhat improved	Our present methods are sufficient as they are	Total
RUG-MAKERS	2	-	86	88
NON-RUG-MAKERS	59	21	8	88
UNSKILLED	17	4	1	22
SKILLED	15	6	1	22
OLIVE GROWERS	11	5	6	22
PROFESSIONALS	16	6	-	22

The olive growers have traditionally favored conventional farming practices. On a rare occasion involving technological experimentation it was found that when tractors were used for soil cultivation the deep plowing resulted in injury to the tree roots. In viewing these two general occupational groups as wholes we can conclude, however, that there is significant difference in their respective satisfaction with present production methods.

One index of the likelihood of a group's experimenting with technological improvements might be the interest in such improvements reflected in their social discussion. Therefore an attempt was made to determine how frequently technological innovation was subject for discussion. Of the rug-makers 98.6% responded that technological innovations were rarely or never discussed in the work group. Of the total eighty-eight rug-makers eighty-one replied that this subject was never brought up for discussion or that it was brought up very rarely. The respondent belonging to the urban occupational group showed a high preoccupation with this topic. 71.6% of these persons responded that the possibilities of introducing technological innovations were discussed often. Only one of this group replied that it was discussed not at all.

TABLE 21

POSSIBILITIES OF INTRODUCING TECHNOLOGICAL INNOVATIONS

DISCUSSED

	<i>Not at all</i>	<i>Very rarely</i>	<i>Occasionally</i>	<i>Fairly often</i>	<i>Very often</i>	<i>Total</i>
RUG-MAKERS	81	6	-	-	1	88
NON-RUG-MAKERS	1	4	20	36	27	88
UNSKILLED	1	1	5	6	9	22
SKILLED	-	-	4	13	5	22
OLIVE GROWERS	-	2	6	13	1	22
PROFESSIONALS	-	1	5	4	12	22

It becomes evident that either of two cases exist, the possibilities of mechanization are so remote in the opinions of the rug-makers that they do not evoke much interest, or there is such a deep seated distrust against any such movement that it is even inhibited in their social conversations of the two general occupational groups. If in possession of excess funds, it might be expected that the urban attitude would be to invest it in one's own business in order to expand it or to invest it in the stocks of other concerns. The ethnocentric attitude, where there was no incentive to enlarge one own enterprise, would be to put the excess money in savings. Of the rug-makers, 18.2% replied that they would prefer to save their excess money. 1.2% maintained that they would invest it in enterprises other than their own, while 80.7% responded that they would invest it in their own enterprises.

TABLE 22

PREFERENCE OF EXCESS MONEY INVESTMENT

	<i>Invest it in my own enterprise</i>	<i>Invest it in some enterprises other than my own</i>	<i>Save it</i>	<i>Total</i>
RUG-MAKERS	71	1	16	88
NON-RUG-MAKERS	38	40	10	88
UNSKILLED	9	8	5	22
SKILLED	13	9	-	22
OLIVE GROWERS	9	10	3	22
PROFESSIONALS	7	13	2	22

As compared to 1.2% of the rug-makers, 45.5% of the urban occupational group replied that they would invest their excess funds in enterprises other than their own. 11.0% answered that they would save it and 45.1% were predisposed to invest such funds in their own enterprises. Thus almost half of the urban group were oriented toward the notion of corporate type of investment whereas this orientation was evidenced by virtually none of the rug-makers. Here again, was a philosophy involving closely around the immediate occupational group.

We might thus conclude that there is a highly positive relationship existing between feelings of occupational security and a resistance to accept technological innovation.

CONCLUSION

The measuring indicies showed that the rug-makers were the most occupationally secure of the two general occupational groups investigated in this study. The rug-makers were the most resistant occupational group to the introduction of technological innovations. It was found that the professional class, whose members had more education than the other subjects, was very highly dissatisfied with the kind of prestige they are getting through their occupation. Thus there was no positive relationship between the amount of education and the satisfaction one gets from work.

Also it was found that there was more dissatisfaction among the professional class as to their income than there was among the rug-makers. Education in Kusba at the present time is not contributing much in enabling the educated people to increase their incomes.

Another finding was that the more the subjects resisted the acceptance of technological innovations the more pessimistic they were about the effects of technological innovations on the quality of production. There was found to exist a direct relationship between the willingness to accept technological innovations in their own occupations and the belief that employment opportunity would thus be expanded.

In the light of the preceding, it was found that a strong correlation exists between the occupational security of a group and its resistance to technological innovations.

This study might be considered as a motivation for the following areas:

- a. An anthropological case study of the rug-making group of Kusba might be of some significance in showing the extent to which the primary group relations blue-print the life theme of the person.

- b. A comparative study between the rug-makers of Kusba and those of Shiheem might show the significance of the effect of environmental demands on local industry.
- c. A research in social psychology as to the elements contributing to the general security of an occupational group.

15. How do you feel about the kind of social relationships you have with your neighborhood?

- | | |
|--------------------------------|---------------------------|
| _____ 1. Very dissatisfied | _____ 3. Indifferent |
| _____ 2. Somewhat dissatisfied | _____ 4. Fairly satisfied |
| | _____ 5. Very satisfied. |

16. How satisfied are you with your homelife?

- | | |
|--------------------------|------------------------------|
| _____ 4. Very pleasant | _____ 2. Somewhat unpleasant |
| _____ 3. Fairly pleasant | _____ 1. Very unpleasant |

17. How do you feel about the amount of education you have?

- _____ 1. I would like a great more education
- _____ 2. I would like somewhat more education
- _____ 3. My education is about right
- _____ 4. I have more education than I need

18. How do you feel about the type of education you have?

- _____ 1. It should be more liberal
- _____ 2. It should be somewhat more liberal
- _____ 3. It is about right
- _____ 4. It should be somewhat more practical
- _____ 5. It should be much more practical.

19. How do you feel about the educational opportunities available in your district?

- _____ 1. Our educational opportunities should be greatly increased.
- _____ 2. Our educational opportunities should be somewhat increased.
- _____ 3. Our educational opportunities are about right.
- _____ 4. Our educational opportunities are somewhat more than we need.
- _____ 5. Our educational opportunities are much more than we need.

20. How do you feel about the amount of education that your children are or will be getting?

- _____ 5. They are getting far too much education
- _____ 4. They are getting somewhat too much education
- _____ 3. It is about right.
- _____ 2. They are getting somewhat too little education
- _____ 1. They are getting much too little education

21. How do you feel about the type of education that your children are getting ?

- _____ 1. It should be much more liberal
- _____ 2. It should be somewhat more liberal
- _____ 3. It is about right.
- _____ 4. It should be somewhat more practical
- _____ 5. It should be much more practical

22. How do you feel about the sanitary conditions that exist in your neighborhood?

- _____ 1. They should be greatly improved.
- _____ 2. They should be somewhat improved.
- _____ 3. They are about right.
- _____ 4. They are somewhat more than we need.
- _____ 5. They are much more than we need.

23. How do you feel about the problem of sanitary conditions in general?

- _____ 1. This problem is very important.
- _____ 2. This problem is fairly important.
- _____ 3. This problem is of little importance.
- _____ 4. This problem is not at all important.

24. How adequate do you feel about the present medical attention that is available in case of emergency?

- _____ 4. It is highly adequate
- _____ 3. It is fairly adequate
- _____ 2. It is somewhat inadequate
- _____ 1. It is very inadequate.

25. How do you feel about the income you make from your occupation?

- _____ 5. It is much more than I need. _____ 3. It is about right
_____ 4. It is somewhat more than I need _____ 2. It is somewhat less than I need.
_____ 1. It is much less than I need.

26. How do you feel about the opportunities for self advancement in your occupation?

- _____ 5. Very satisfied _____ 3. About right
_____ 4. Fairly satisfied _____ 2. Somewhat dissatisfied
_____ 1. Very dissatisfied

27. How adequate do you feel the monetary returns are that you get from your work?

- _____ 4. My work pays me highly _____ 2. My work pays me somewhat poorly
_____ 3. My work pays me fairly highly _____ 1. My work pays me very poorly.

28. How much opportunity is there for self advancement in your occupation?

- _____ 4. Opportunity for self advancement is great.
_____ 3. Opportunity for self advancement is good.
_____ 2. Opportunity for self advancement is fairly poor.
_____ 1. Opportunity for self advancement is very poor.

29. How much opportunity do you have in making suggestions as to how your work should be done?

- _____ 1. I would like much more opportunity
_____ 2. I would like somewhat more opportunity
_____ 3. I am satisfied with the opportunity.
_____ 4. I would prefer not to have to make suggestions as to how my work should be done.

30. How satisfied are you with the social status you get from your occupation?

- _____ 5. Very satisfied _____ 3. About right
_____ 4. Fairly satisfied _____ 2. Somewhat dissatisfied
_____ 1. Very dissatisfied

31. How do you feel about the way you are treated by the person who manages your work?

- _____ 4. I am treated very well _____ 2. I am treated rather poorly
_____ 3. I am treated fairly well _____ 1. I am treated very poorly.

32. How much recognition do you feel that those persons get who do outstanding work?

- _____ 5. A great deal of recognition
_____ 4. Fairly much recognition
_____ 3. Somewhat too little recognition
_____ 2. Very little recognition
_____ 1. No recognition

33. How do you feel about the occupational competition involved in your type of work?

- _____ 1. Competition is much intensive
_____ 2. Competition is somewhat too intensive
_____ 3. Competition is about right
_____ 4. There is no competition

34. How close do you feel to the members of your occupational group?

- _____ 4. Very close _____ 2. Somewhat distant
_____ 3. Fairly close _____ 1. Very distant

35. How satisfied are you with the kind of recreation that you have at your spare time?

- _____ 5. Very satisfied _____ 2. Somewhat dissatisfied
_____ 3. Fairly satisfied _____ 1. Very dissatisfied

36. How satisfied are you with the services that the welfare agencies are giving to your community?

- _____ 1. We need a great deal more welfare services
_____ 2. We need somewhat more welfare services
_____ 3. We get all the welfare services we need.

- _____ 4. We need somewhat less welfare services
- _____ 5. We need no welfare services.
37. How satisfied are you with the religious services offered by the church in your village?
- _____ 5. Very satisfied _____ 3. Indifferent
- _____ 4. Fairly satisfied _____ 2. Somewhat dissatisfied
- _____ 1. Very dissatisfied.
38. Which of the family sizes do you prefer?
- _____ 6. 10 or more children _____ 3. 3-4 children
- _____ 5. 7-8 children _____ 2. 1-2 children
- _____ 4. 5-6 children _____ 1. No children
39. How satisfied are you with the present methods used in your occupation?
- _____ 1. Our present methods should be greatly improved upon
- _____ 2. Our present methods should be somewhat improved
- _____ 3. Our present methods are sufficient as they are.
40. How willing would you be to see technological innovations introduced to other occupations?
- _____ 5. Very willing _____ 3. Indifferent
- _____ 4. Fairly willing _____ 2. Somewhat unwilling
- _____ 1. Very unwilling
41. How willing would you be to have technological innovations introduced to your own occupation?
- _____ 1. Very unwilling _____ 3. Indifferent
- _____ 2. Somewhat unwilling _____ 4. Fairly willing
- _____ 5. Very willing
42. What do you think the effects of technological innovations would be on the quantity of production?
- _____ 5. It would greatly increase the quantity.
- _____ 4. It would fairly increase the quantity

- _____ 3. It would make no difference
- _____ 2. It would somewhat decrease the quantity
- _____ 1. It would greatly decrease the quantity.
43. What do you think would be the effects of technological innovations on the quality of the materials made in your occupation?
- _____ 5. It would greatly improve the quality
- _____ 4. It would somewhat improve the quality
- _____ 3. It would make no difference
- _____ 2. It would somewhat lower the quality
- _____ 1. It would greatly lower the quality.
44. What would be the effects of technological innovations on the spirit of friendship in your community?
- _____ 1. It would greatly weaken the friendship
- _____ 2. It would somewhat weaken the friendship
- _____ 3. It would make no difference
- _____ 4. It would somewhat strengthen friendship
- _____ 5. It would greatly strengthen friendship
45. What do you think would be the effect of technological innovations on the relationship that exists between the members of your occupation?
- _____ 5. It would greatly increase social relations between the workers of my occupation.
- _____ 4. It would somewhat increase social relations between the workers in my occupation.
- _____ 3. It would make no difference.
- _____ 2. It would somewhat decrease social relations between the workers in my occupation.
- _____ 1. It would greatly decrease social relations between the workers in my occupation.
46. How do you think technological innovations will effect general employment opportunity?
- _____ 5. It would greatly increase employment opportunity.
- _____ 4. It would somewhat increase employment opportunity.
- _____ 3. It would make no difference.

_____ 2. It would somewhat decrease employment opportunity.

_____ 1. It would greatly decrease employment opportunity.

47. How do you think technological innovations effect employment practices?

_____ 1. Only highly educated people will be able to get job.

_____ 2. Only people who have some "big men" behind them will get job.

_____ 3. Most people will be able to get job.

_____ 4. Every one will be able to get job.

48. How do you think technological innovations would effect general employment?

_____ 5. It would create a great deal more employment opportunity.

_____ 4. It will create somewhat more employment opportunity

_____ 3. It will make no difference

_____ 2. It will somewhat lessen employment opportunity.

_____ 1. It will greatly lessen employment opportunity.

49. How do you feel about the mechanical improvements that have been introduced to your occupation?

_____ 5. They have helped a great deal

_____ 4. They have helped fairly much

_____ 3. They have made no change.

_____ 2. They have hindered somewhat

_____ 1. They have hindered a great deal

_____ 0. No mechanical improvement have been introduced in my occupation.

50. How often are the possibilities of introducing technological innovations. discussed in your work group?

_____ 5. Very often

_____ 3. Occasionally

_____ 4. Fairly often

_____ 2. Very rarely

_____ 1. Not at all

51. When you compare your life with your father's life do you consider yourself to be:

_____ 5. Much more secure

_____ 3. About the same

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