

SOME DETERMINANTS OF THE INTENTION
OF LIVING IN SAUDI VILLAGES BY
STUDENTS OF THE COLLEGE OF AGRICULTURE,
KING SAUD UNIVERSITY, AFTER GRADUATION
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ABSTRACT

Agricultural education plays an important role in agricultural development. Thus, researchers and specialists should review and develop agricultural education in universities to fit individual circumstances and meet the needs of society. The College of Agriculture at King Saud University prepares its students to participate in agricultural production and deal with farmers in villages and rural areas. Therefore, the current study aims at determining the desires and intentions of male students of this college concerning living permanently in Saudi villages after graduation and at discovering the reasons for this preference. An appropriate questionnaire was designed and referred in order to collect the data. A stratified random sample of 94 students was chosen to represent a variety of students in terms of specialization and number of hours finished. Discriminant analysis is used as a statistical technique to determine important variables in classifying students into intention groups.

Results of the study show that 43.8% of the sample have a rural background. It was expected that these students would be stimulated by their study in the College of Agriculture to intend to live in villages. However, only 39% of them indicated the intention to live in a Saudi village after graduation. The most common reason for preference of living place was closeness to family, relatives, friends and birthplace which was mentioned by 76.6% of the city group and by 93.8% of the village group. Other reasons given by the city group were liking city life, city job opportunities and city facilities.

INTRODUCTION

Education is defined by Durkheim as one of the processes by which an individual learns the ways of living of a given group and acquires the physical, intellectual and moral tools necessary to function in society (Ritzer, 1983). Therefore, education, in general, and agricultural education, in particular, should be looked at by researchers and decision makers in order to develop programs to fit individual circumstances. Schools and universities as elements of the educational system should have crucial and clearly specified functions to prepare individuals according to the needs of life in both rural and urban areas (Durkheim, 1973; Parke *et al.*, 1982).

Universities play a vital and positive role in the comprehensive social and economic national development. They offer and contribute to all kinds of knowledge. However, the growth of that knowledge requires specialization. The college of

agriculture in a university deals with the type specialized knowledge for educating and training individuals at different levels to be knowledgeable, skilled and experienced participants in agricultural production and its related activities (Gamie and Mohamed, 1984).

In the Kingdom of Saudi Arabia, there has been a rapid growth in higher education. Specifically, the number of male graduates rose from 795 in 1979-1980 to 9755 in 1989-1990 (Ministry of Planning, 1991). A good percentage of these males graduated from the College of Agriculture at King Saud University. One of the rare studies which was conducted on the field work of the graduates of this college showed that at least 34% of those graduates were working in their field of specialization (Al-Zaidi and Al-Odaibi, 1988). Therefore, it is important to evaluate this situation to insure that agriculture in the Kingdom utilizes from the education of its graduates.

Although the student body of the College of Agriculture in any specific year is considered to be a relatively homogeneous group, there still exist some differences among them with relation to their socio-economic and demographic background. These factors should be considered because of their influence on the migration intentions and decisions of students to settle after graduation (Ahmed, 1977; Seyfrit, 1986). Internal migration is very common especially among young people, and college graduates are more likely to migrate than old and self-employed ones (Spencer, 1982). Many of these young graduates still prefer to stay or move to cities because of the unbalanced distribution of development to urban areas over rural areas in many Third World countries including Saudi Arabia (Newby, 1980; Gamue, 1982).

This study, then, has three main objectives:

- 1- To determine the socioeconomic and demographic characteristics of students in the College of Agriculture, King Saud University.
- 2- To determine differences between students who intend to live in Saudi villages and students who intend to live in cities after graduation with relation to age, area of specialization, number of hours completed, family income, parents' education, existence of a rural background, social class, exposure to media, cosmopolitanism, and fatalism.
- 3- To identify the reasons of the students' preferences to live in a village or city after graduation.

The total number of students enrolled in the College of Agriculture, King Saud University, at the end of the first semester in 1992 was 574. A stratified random sample of 94 students (about 14% of the total) was chosen to cover the variety of students in terms of areas of specialization and number of hours completed. An appropriate questionnaire was designed and data were collected in 1992. Some questions were rephrased and other were deleted after the questionnaire was reviewed by referees in areas of social sciences pretested with 20 students from the College of Agriculture.

Among the statistical tools used in the current study are stepwise discriminant analysis and discriminant analysis, both of which are multivariate techniques that can furnish guidelines in the development of criterion measures of behavior.

(Miller, 1977; Gamie, 1980). Stepwise discriminant analysis is a technique to select from a large group of explanatory variables those which have the best ability to discriminate or distinguish between specified classes. Discriminant analysis is a techniques which can be used to develop a rule to classify an individual or unit into one of a set of specified classes based on a set of explanatory variables. Such techniques require the assumption of multivariate normality and technically are for continuous explanatory variables only (Johnson and Wichern, 1982; Jackson, 1983; and Lunneborg and Abbott, 1983). Linear discriminant rules require the assumption of equal covariance matrices. In this study, we have classification variables and in such cases, linear discriminant rules are not optimal. While there are quadratic rules in the case of unequal covariance matrices, such rules have been found to perform poorly in small samples (Norusis 1988). Because we have relatively small samples in our specified groups, we choose to employ a linear discriminant rule recognizing that it is in no way optimal.

The independent or explanatory variables of the current study are:

- age of the student (AGE)
- area of specialization with 8 possible specializations (S1 - S8)
- The number of hours completed (HR1 means less than 30 hours, HR2 means 30-60 hours, and HR3 means more than 60 hours)
- monthly family income in SR (FAMINC)
- years of education of the father (FEDUC)
- education of the mother (MEDUC; 0 = no education, 1 = one or more years of education)
- rural background (RURAL; 1 = rural, 0 = no rural background)
- social class (SOCCLASS; 1 = poor and up to 5 = rich)

- media exposure(MEXP; a score of up to 18 points for a person always exposed to six different media; 3 points per media)
- cosmopolitanism (TRAVEL; a score which weights local to foreign travel in a ratio of 1 to 2)
- fatalism (FATAL; a score of up to 8 points for a person who greatly agreed with two statements which reflect the concept of fatalism).

The dependent variable is the intention of permanent life location which was measured through asking the subject the following closed question:

Where do you intend to live permanently after graduation?

Village() City () Undecided().

By asking about the intention, we can anticipate the future behavior of the individual (Shuman and Johnson, 1976; Fishbein, 1978; Hill, 1981; and sayfrit, 1986). It is also mentioned by Fishbein and Ajzen (1975) that the best predictor of a single-act is the person's corresponding intention.

RESULTS AND DISCUSSION

Characteristics of the target respondents:

Because of socio-economic and demographic differences between individuals in a study, the researcher can predict current and future behavior (Wardwell, 1982). Thus, we summarize results for the characteristics of the students in this study in Table(1) and Figure(1). We see that the number of students who intend to live permanently in a village after graduation is only 16 students

(about 17%) while the number who intend to live permanently in a city is 64 students (about 58%). The undecided students numbered 14 (about 13%). It was also determined that 43.6% of the sample have a rural background. While expected to be stimulated to live permanently in a village by their study, only 19% of them indicated such an intention after graduation.

With reference to the differences of these three categories in terms of various characteristics, we found that the majority are close in age. The range was 18 to 25 with a mean of about 21.5 years. However, students who intend to live in a city seem to be relatively older.

Concerning the monthly family income, the range was from 2000 to 30,000 SR for the city group and the mean income was 10,800 SR per month. The village had a family income from 2000 to 19,000 with a mean income of 700 SR per month. Overall, the city group had a higher mean income and a wider range than the other two groups (See Figure 1). It is known that poverty and low income are connected to rural areas (Moland and Page, 1962).

For the education of the father, there were 21 students whose father had no education (24.7%), 33 of them with fathers having from 1 to 8 years of education (38.8%), and the remaining having different levels of higher education. The undecided group has the highest mean of 7.6 years of father education, the city group a mean of 6.7 years and the village group has the lowest mean of 5.3 years of father education. In general, rural people have less opportunities and access to education similar to urban residents (Parks, Ross, and Just, 1982).

With regard to media exposure, the differences in the average media exposure in the three groups are minor. The reason for this might be the homogeneity of the sample in terms of their educational and cultural background which makes them have close exposure to the media (television, radio, movies, lectures, and books). Many of these media are equally available in both rural and urban areas (Willets, Bealer and Crider, 1982).

When it comes to cosmopolitanism of the students as represented by travel within and outside the country, we found that the village group had a lower mean than both the city group and the undecided group. The closeness between the last two categories might help us predict that the undecided group is more likely to reside in the city than in the village after graduation.

Concerning fatality, the undecided group has a slightly higher mean than the city and village groups but there are no large differences. The reason for this might be the close religious and cultural background and the equal access to media by students in the three categories (Willets, Bealer, and Crider, 1982). Another reason could be the inaccuracy of the measurement of fatalism in the current study which might lead the researcher to utilize from that particular point in any future studies.

As far as the social class is concerned, the village group had the lowest average social class with a mean of 3.2. While this is not significantly different from the means for the city and undecided groups, it is agreeable with expected differences between rurality and urbanity in terms of the social class which is connected with the socioeconomic status of individuals who live or

intend to live in rural areas (Moladnd and Page, 1982). The relative closeness of the social class among the three groups might be due to the modesty in the religious background of the students in grading and evaluating their own social status. In future studies, it is suggested that other scales be used beside or instead of a self-acknowledged measurement.

Reasons for preference of permanent living place:

As indicated before, the majority of the students in the sample (64 out of 94) mentioned that they intend to live permanently in the city. Almost half of them (31 out of 64) intend to live in the capital Riyadh. The second largest number (6) intend to live in Jeddah, and smaller numbers of students intend to live in various cities scattered over the different regions of the Kingdom. Only 15 students intend to live in villages after graduation.

The most common reason for the preference of living place in both groups was closeness to family, relative, friends and birthplace. This reason was mentioned by 49 (76.6%) of the city group and by 15 (93.8%) of the village group. This result shows the higher degree of kinship and family solidarity in the village compared with the city. Other reasons given by the city group were liking city life (21 students), city job opportunities (19 students), city facilities (17 students), religious reasons (6 students), having business in city (5 students), more educational opportunities (4 students), and finally desiring to be away from family (2 students).

Other reasons mentioned by those who prefer to live in a village after graduation were the

simplicity of the village (5 students) and less pollution and peaceful life (8 students). Only two students out of 16 mentioned each of needing to develop the family, farm, availability of more resources, and desiring to reflect their education, i.e., to educate farmers. The explanation given by the students might be related to less attention given to the village in terms of health, educational, and other facilities. Thus, more conscious efforts are needed by planners and decision makers to develop such facilities (Gamus, 1982; Newby, 1980; Parke, Moss, and Just, 1982).

Differences between the city and village groups:

In this section, we discuss how various socio-economic and demographic explanatory variables are important in predicting which students will intend to live permanently in the city and which in the village after graduation. Because of the primary interest in the groups who have a decided intention, we omit the undecided group from this discussion. Important explanatory variables were chosen by a stepwise technique and a linear discriminant function was fit (see Table 2).

By comparing these coefficients, we can make various conclusions. A person's having a rural background makes the village score higher while having a high monthly family income makes the city score higher. If a person's father has a relatively high level of education, it will make the village score higher. An individual who travels more makes the village score lower. Specialization 3 (animal production) makes the village score higher while specialization 4 (plant production) makes the city score slightly higher. Students with the middle number of hours completed (HR2 means 30-60 hours completed) make the village

Table 1 Some socio-economic and geographic characteristics of the students by intention group

Factor		Public School	City	Village	Total
		N = 14 (10%)	N = 84 (68%)	N = 15 (12%)	N = 24
Age	Mean	21.1	21.6	21.3	21.5
	s.d.	1.5	1.7	1.1	1.6
Monthly Income	Mean	7000	10800	7700	9600
	s.d.	4600	5300	4900	5900
Father Education	Mean	7.4	6.7	5.3	6.6
	s.d.	4.9	5.6	5.2	5.4
Mother Education	Mean	8.4	8.3	8.0	8.4
	s.d.	1.9	1.9	1.8	1.8
Travel	Mean	1.3	4.1	3.3	4.0
	s.d.	2.0	2.1	2.0	2.0
Familiarity	Mean	5.1	5.0	4.9	5.1
	s.d.	0.9	1.0	1.3	1.1
Social Class	Mean	1.1	1.5	1.2	1.4
	s.d.	0.7	0.8	0.5	0.7

Table 2. Variables Chosen by Stepwise Procedure and the Coefficient Vector of the Resulting Linear Discriminant Function

Variable	Coefficient Vector ¹	
	City Group	Village Group
Constant ²	17.139	-20.904
Age	4.177	2.676
Income	-1.001	0.604
Father Education	-0.176	0.729
Mother Education	0.142	0.324
Travel	11.299	15.147
Familiarity	2.119	1.107
Social Class	-1.175	2.170
Total	1.234	4.228

1- Coefficient vector = $Cov^{-1} \bar{X}_j$
 2- Constant = $-0.5 \bar{X}_j Cov^{-1} \bar{X}_j$

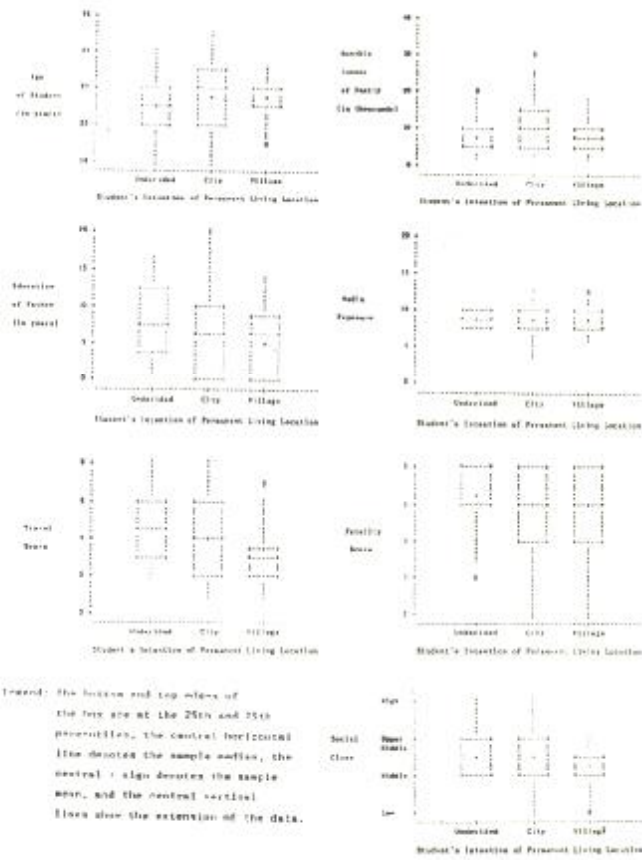


Figure 1. Box Plots of Various Socio-Economic and Demographic Factors

score slightly higher. Finally, the results show that the fatality score does not distinguish between the two groups.

Most of the previous results agree with those in the literature (Willels, Bealer, and Crider, 1982; Spencer and Inkeles, 1982; Seyfrit 1986). However, results for the father's education and the fatality score are not in agreement. The reason could be the unique circumstances of the life style in Saudi Arabia with recent rapid growth, quick change and the mobility of urban and rural people all over the country besides the explanation about the measurement of fatalism mentioned before.

Note that if the students in the study are themselves classified by the linear discriminant rule given, some are correctly classified and others misclassified. The misclassification results are given in Table 3. The actual choice of the village group was 93.75% correctly classified but the city group was only 79.25% correctly classified. It is worthwhile to mention here that if a linear discriminant function is fit for the three intention groups (city, village and undecided) using the same variables, the greatest number misclassified were in the undecided group while no one whose choice was a village was incorrectly classified into the city. Based on these results, it will be possible to predict the intentions and behavior of individuals concerning the place of permanent residence through these explanatory variables. However, it is important to conduct similar studies with larger samples of students to reach (possibly) confirmed results.

(Table 3): The Classification/Misclassification of Students in the City and Village Groups.

		Classified Choice		
		City	Village	
Actual Choice	City	42 79.25%	11 20.75%	53
	Village	1 6.25%	15 93.75%	16
		43 67.52%	26 37.68%	69

CONCLUSIONS AND RECOMMENDATIONS

Universities as elements of the educational system play important roles in educating and training individuals and stimulate their interest to participate in developmental programs to meet the needs of life in both rural and urban areas. The current study determined the intentions of male students of the College of Agriculture for living in a Saudi village or city after graduation and mentioned the reasons for their preference. Results of the study show that 43.6% of the sample have rural background but only 39% of them indicated that they intend to live in a Saudi village after graduation. The common reason for preference of living place was closeness to family, relatives, friends and birthplace. Other reasons of preference to live in a city were liking city life, city job opportunities, and city facilities.

Discriminant analysis was used to determine important variables in classifying the students into city village intention groups. These were having a rural background or not, monthly family income, father education, travel, animal and plant production specializations, and being in the middle of their education. This analysis also indicated that the actual choice of the village group was 88.75% correctly classified while the city group was only 79.25% correctly classified.

Based on the previous results and explanations it is recommended that more effort and attention should be given to rural development and to urbanizing the village to have good educational, health and other socioeconomic facilities. We should also deal with the poor attitudes concerning the value of agricultural work by creating new related jobs and

better payment. Planners and decision makers should develop the agricultural curriculum to increase the involvement of students in field training besides changing the locations of agricultural institutions to be in or close to rural areas.

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**بعض مهندات اعتزام المعيشة فى القرية السعودية
لطلبة كلية الزراعة جامعة الملك سعود
بعد تخرجهم**

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تم إجراء هذه الدراسة على عينة عشوائية طبقية مكونة من ٩٤ طالب من كلية الزراعة - جامعة الملك سعود حيث تم جمع البيانات عام ١٩٩٢ من خلال استمارة استبيان تم تحكيمها واختيارها ميدانيا على ٢٠ طالب . وتهدف الدراسة الى تحديد بعض الخصائص الاجتماعية والاقتصادية والديمقراطية لطلبة كلية الزراعة وتحديد الفروق بين الطلبة الذين يعتزمون المعيشة فى القرية السعودية بصفة دائمة بعد تخرجهم . وبين من يعتزمون المعيشة فى المدن السعودية فيما يتعلق ببعض المتغيرات المستقلة مثل ... العمر ، التخصص ، عدد الساعات المستكملة ، دخل الأسرة الشهرى ، تعليم الابوين ، النشأة الريفية ، الطبقة الاجتماعية ، التعرض لوسائل الاعلام ، والاتفاحية ، وكذلك القدرة ثم معرفة أسباب تفضيل الطلبة لكان المعيشة بعد التخرج . ومن نتائج الدراسة اتضح ان ٤٣.٦٪ من العينة من ذوى النشأة الريفية . ولكن ٢٩٪ منهم فقط أشاروا انهم يعتزمون المعيشة بالقرية السعودية بعد التخرج .

وكان أكثر الأسباب شيوعا لتحديد مكان المعيشة بعد التخرج هو وجود الأسرة والاتارب والاصدقاء . ومن الأسباب الاخرى للمعيشة فى المدينة بعد التخرج طبيعة الحياة بالمدينة من تسهيلات وفرص عمل ومجازة وفرص تعليمية أكبر .

* قام مركز البحوث الزراعية بكلية الزراعة بالرياض - جامعة الملك سعود بتحويل هذه الدراسة .

المجلة العلمية لكلية الزراعة - جامعة القاهرة - المجلد ٤٤
العدد الرابع (أكتوبر ١٩٩٣) : ٢٢٢ - ٢٩٦