MEASURING THE PERCEIVED QUALITY OF LIFE

OF EAST CENTRAL OKLAHOMA FARMERS

By

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to

Daytra and Alexica

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THE RESEARCH PROBLEM AND CONCEPTUAL ISSUES

IN QUALITY OF LIFE RESEARCH

The Research Problem

Dissatisfaction with the Quality of Life (QOL) in the United States has risen in spite of economic growth and affluence achieved in past decades (Environmental Protection Agency, 1973; "What America Thinks of Itself," 1973). This paradox of affluence, documented by numerous studies of economic well-being among cities (Schneider, 1975), geographical locations (Liu, 1974; Knox, 1973), and races (Lowry, 1970), has led researchers to propose a broader measure of well-being to include environmental, social and political as well as economic indicators as well-being (Liu, 1974).

Castle (1972) in his Presidential address to the American Agricultural Economics Association challenged agricultural economists to consider quality of life issues in agricultural marketing, rural development and resource economics. In the past decade, concern with farm structure (referring to the socio-economic and demographic characteristics of farm size and status) has heightened interest in quality of farm life and its measurement. Structural changes have been highlighted by growth in the number of part-time, small-scale and large farms; by decline in the numbers of mid-size farms; and by an increase in the average size of farms.

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Although many stereotypes of farm size and status exist, recent national debate nat not clarified understanding of what structure of agriculture is consistent with the well-being of people (Brewster, 1979). A basic hypothesis of this study is that the perceived quality of life differs according to the needs and concerns of individuals as well as specific groups of farmers in the sample (large versus small, part-time versus full-time, low income versus non-low income operators, and whites versus minorities).

A central issue in the structural debate is the role of small farms in American Agriculture. Small farms are frequently characterized as inefficient, low income operators that remain in farming possibly because of agrarian values and the virtues of rural living. Research is needed to test Schumacher's "small is beautiful" hypothesis and determine which farm size yields the higher perceived quality of life among farm operators (Schumaker, 1973).

Because part-time farming is an alternative for operators of all farm sizes to remain economically viable a need exists to determine the effect of off-farm employment on the perceived QOL. Research is also needed to understand the structural changes and their effect on the quality of life for low income and minority operators.

Babb (1979) suggests that performance measures should be developed to evaluate, compare and assess alternatives relating to farm structure. A Quality of Life Index (QLI) is essential to quantify the relationship between performance and structure. Quality of life, a composite measure of well-being in specific life "domains", is expected to be a function of socio-economic and demograhpic variables including age, education, income and number of children.

These variables will be used to account for differences in the QLI among a sample of Oklahoma farmers. The QLI not only can help to appraise choices among alternative structures but also can aid in developing appropriate public policies and extension programs.

Research Objectives and Hypotheses to be Tested

Research Objectives

The primary objective of this study is to construct a Quality of Life Index (QLI) of perceived well-being and to explore differences in QOL among a sample of East Central Oklahoma farmers. The specific objectives are to:

1. Identify socio-psychological factors to measure well-being;

2. Aggregate the socio-psychological factors of well-being into an overall Quality of Life Index (QLI);

3. Use the QLI to determine differences in the perceived well-being among particular groups of farmers included in the sample; and

4. Determine socio-economic, demographic and other variables that account for differences in QOL among respondents.

Hypotheses

1. Small farmers have a higher perceived quality of life than mid-size or large family farmers.

2. Part-time farmers have a higher perceived quality of life than full-time or aged (including disabled) farmers.

3. Low-income farmers irrespective of race have a lower perceived quality of life than non-low income farmers.

4. Minority farmers (Blacks and American Indians) have a lower perceived quality of life than White farmers.

Conceptual Issues in Quality of Life Research

Since the introduction of the term "Quality of Life" (QOL) in the early 1960s, no wide agreement yet exists for its meaning. The ambiguity may be due to the subjective nature of the term and the diverse objectives, backgrounds, training and disciplines of those researching the topic. In 1973, the U. S. Environmental Protection Agency (EPA) in a comprehensive survey of quality of life literature notes the vagueness of the term:

> The concept of Quality of Life has emerged in the last few years as an undefinable measure of society's determination and desire to improve or at least not permit a further degradation of its condition. Despite its current undefinability, it represents a yearning of people for something which they feel they have lost or are losing, or have been denied, and which to some extent they wish to regain or acquire (p. iii).

Many attempts have been made to sharpen the definition and focus underlying theory for quality of life research. QOL concepts and empirical measures have been developed using economic theory and objective and subjective indicators.

The Use of Existing Economic Theory

in Quality of Life Research

Production Approach. Liu (1975) defines quality of life as a multi-dimensional and subjective name for the "well-being" of people and the environment in which they live. Production theory is one basis for

quantifying QOL or output in terms of social and physical inputs. These interdependent inputs or factors can be employed in various proportions to attain a desired level of QOL (Liu, 1975). Using the analytical framework derived, Liu measures QOL by nine equally weighted components. He cites several domains of life found to be important in assessing overall QOL including the individual's health, standard of living, children, housing and family.

Seidman (1977), in a critique of Liu's work, questioned his arbitraty choice of weights for the nine components of the QOL composite index. He also questioned the empirical framework provided by the production function approach and concluded that an alternative theoretical measure should be developed.

Utility Maximization Approach. Gillingham and Reece (1979) used utility maximization theory to derive the "true" Cost of Living Index (COL) as a measure of QOL (Pollack, 1971). The authors defined QOL as the "level" of satisfaction an individual achieves as a result of the consumption of market goods, leisure, public goods and other characteristics (physical and social) of the individual's environment.

Gillingham and Reece used their cost of living measure to determine the level of satisfaction of various groups of individuals under alternative states of the world. It is a cardinal measure suitable for analyzing the relative probability that QOL for an individual will be higher in one situation over another. The authors cautioned that QOL empirical problems and methods of estimation need further research.

The Social Indicators Approach to

Quality of Life Research

With the recognized limitations of existing economic theory and
economic variables as a measure of total well-being, the social
indicator's approach is gaining widespread acceptance. A social
indicator is obtained by aggregating social statistics into a meaningful
summary to measure goal (well-being) achievement (Olson, 1973). Tests by
Atkinson, Andrews and Crandall suggest the Social Indicators Approach is
a realiable and stable measure of quality of life over time.

Social indicators that are used in Quality of Life research can be
classified into two broad types--objective and subjective indicators.
Subjective indicators are based on direct reports from individuals about
their own perceptions and feelings of well-being whereas objective
indicators are based upon counting the occurrences of given phenomenon
such as dollars of income, quantity of community services or square feet
in a dwelling (Andrews, 1974). Objective indicators include items
such as infant mortality rates as a measure of community health; crime
reports, street lighting and police patrols as a measure of neighborhood
safety; and income as a measure of ability to command goods and services.
These objective indicators do not necessarily reveal whether people
experience more or less satisfaction. Objective indicators seem to
provide an inadequate measure of well-being because they fail to record
subtle influences such as discrimination on the well-being of people.
They are viewed only as a method of alerting policy makers to gross
shortcomings in important factors that contribute to well-being. They
do not record tradeoffs such as amenities that may make people prefer
rural residence despite fewer community services.

The literature suggests that subjective indicators are preferred by researchers as a measure of well-being although it is recognized that both subjective and objective social indicators are necessary to interpret adequately the meaning of overall quality of life (Converse and Rogers, p. 128; Bharadwaj and Wilkening, p. 422; Kennedy et al., p. 467). Kennedy et al. proposes the use of experiential and demographic variables to facilitate a better understanding of the experience of different groups of the population.

This study will analyze the subjective or perceived quality of life for farm people in East Central Oklahoma. Selected socio-economic and demographic data are used to examine the association between objective and subjective measures of quality of life.

Organization of the Remainder of Thesis

The sampling procedures and the reliability of the random sample as compared to 1978 Oklahoma Census data are analyzed in Chapter II. In addition, a summary of selected socio-economic and demographic variables within a derived classification system is presented. Chapter III outlines the procedures used to construct the socio-psychological factors of well-being and the overall Quality of Life Indices (QLI). Regression results highlighting the significant variables of the QLI are also included. Chapter IV will summarize each socio-psychological index and QLI in terms of the hypotheses in Chapter I under a detailed classification system.

CHAPTER II

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

OF THE SURVEY RESPONDENTS

Introduction

A personal interview survey of 424 eastern Oklahoma farmers was conducted during the summer of 1981. The survey, taken from four contiguous counties--Wagoner, McIntosh, Muskogee, and Okmulgee--consists of 372 farmers obtained through random cluster sampling plus a minority supplement of 52 farmers. The names for the minority supplement were randomly selected from a list provided by the county Agriculture Stabilization and Conservation Service (ASCS). The random sample and minority supplement, consisting of 96 percent male respondents, are used to analyze the responses of minorities and whites as compared to respondents in the random sample. The responses will be used to compare issues relating to farm structure and quality of life.

Wagoner, McIntosh, Muskogee and Okmulgee counties were chosen because they have high proportions of part-time, minority, low income and small scale farmers emphasized in the study. Each respondent represented approximately 10 farmers from a proportional allocation to each county, based on the number of farms specified by the 1978 Census of Agriculture (USDA, 1978).

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Reliability of the Random Sample

The percentage of sample farmers in the smallest farm size strati-
fied by economic sales classes and acres was less than in the Census of
Agriculture for Oklahoma (Tables 1 and 2). This deviation could be due
to slightly different screening for a unit to be classified as a farm--
sales of more than $1,000 of crops and livestock last year in the
sample as compared to the Census classification of a farm based on
"normal" sales of over $1,000 of farm products.

The difference between the Census and sample could also be
accounted for by the difference in the year (1978 versus 1980). The
area random survey missed some farm operators who live in cities or
elsewhere some distance from the area. The random sample may have had
less tendency than the census to double count farms where both the
absentee owner and renter are classified as "operators" of the same
farm. Finally, the concept of "sales" may differ from that used by the
Census of Agriculture.

The Classification System

Respondents were classified by status according to the character-
istics of the principal operator and by farm size based on the annual
value of crops and livestock sold. By status the respondents may be
(1) aged or disabled where aged respondents are 65 years or older and
disabled respondents are not aged but report 50 percent or greater
disability, (2) part-time, reporting 150 or more days of off-farm
employment, and (3) full-time able-bodied respondents who are not
aged and depend on the farm for their livelihood. The full-time
able-bodied category is approximated by the difference between the

Table 1. Distribution of the Random Sample by Farm Size in Acres and a Comparison with 1978 Oklahoma Census Data

Farm Size (Acres)	Random Sample		1978 Census		Deviation of Survey (Percent)
	Number	Percent	Number	Percent	
1-49	50	13.44	14,945	18.83	-5.39
50-179	130	34.95	25,683	32.35	+2.60
180-499	109	29.30	21,011	26.47	+2.83
500-999	53	14.25	10,149	12.78	+1.47
1,000 +	30	8.06	7,600	9.57	-1.51
Total	372	100.00	79,388	100.00	0.00

Table 2. Distribution of the Random Sample by Farm Size in Economic Sales Classes Compared with 1978 Oklahoma Census Data

Farm Size by Economic Sales Class	Random Sample		1978 Census		Deviation of Survey (Percent)
	Number	Percent	Number	Percent	
$1,000-$4,999	116	32.22	34,173	43.07	-10.85
$5,000-$39,999	168	46.67	33,886	42.71	+3.96
$40,000-$99,999	50	13.89	7,566	9.54	+4.35
$100,000 +	26	7.22	3,716	4.68	+2.54
Total	360[a]	100.00	79,341[b]	100.00	0.00

[a]Excludes 12 respondents not classified by farm size.

[b]Excludes abnormal farms not classified by value of sales.

number of all farms and the number of farms with part-time, aged and disabled heads. This typology is designed to render farms relatively homogenous within and heterogeneous among classes.

Stratified by gross annual sales, the four economic sales classes or farm sizes are (1) $1,000-$4,999, (2) $5,000-$39,999, (3) $40,000-$99,999, and (4) $100,000 or greater.

Low income respondents within the classification system by farm size and status are determined by the total family income (TFI) and the number of individuals in the family (N). The criterion used to determine low income respondents is as follows:

If $N = 1$ and TFI $\leq$ $5,000

$N = 2$ and $5,000 $\leq$ TFI $\leq$ $7,499

$N = 3$ or more and $7,500 $\leq$ TFI $\leq$ $9,999.

The numerical analysis of respondents in the random sample and minority supplement stratified by farm size, status, and low income is shown in Tables 3, 4, and 5.

The random sample had a larger percentage of part-time respondents and those operating in the economic sales class of $5,000-$39,999 than did the minority supplement. Most full-time respondents operated larger farms whereas part-time, aged and disabled respondents operated smaller farms.

The aged and disabled group and the smallest farm size evidenced the highest incidence of low income respondents. A smaller percentage of low income respondents were represented among operators in the economic sales class of $40,000-$99,999 and part-time operators. Part-time farmers have a small percentage of low income operators, and they were concentrated on the two smallest farm sizes.

Table 3. Distribution of the Random Sample and Minority Supplement by Status, Income and Farm Size by Economic Sales Class

Farm Size	Sample	Aged and Disabled LI[b]	Other	Total	Part-time LI	Other	Total	Full-time LI	Other	Total	All Farms LI	Other	Total
$1,000–$4,999	Random	18	17	35	3	56	59	10	12	22	31	85	116
	Whites	14	15	29	3	50	53	5	9	14	22	74	96
	Minorities	21	3	24	1	14	15	8	6	14	30	23	53
$5,000–$39,999	Random	17	28	45	4	71	75	10	38	48	31	137	168
	Whites	15	22	37	3	65	68	9	33	42	27	120	147
	Minorities	4	14	18	1	13	14	1	5	6	6	32	38
$40,000–$99,999	Random	1	9	10	--	7	7	4	29	33	5	45	50
	Whites	1	8	9	--	6	6	4	26	30	5	40	45
	Minorities	--	1	1	--	1	1	1	4	5	1	6	7
$100,000 +	Random	--	1	1	--	1	1	6	18	24	6	20	26
	Whites	--	1	1	--	1	1	6	15	21	6	17	23
	Minorities	--	--	--	--	--	--	--	3	3	--	3	3
All Farms[a]	Random	36	55	91	7	135	142	30	97	127	72	289	360
	Whites	30	46	76	6	122	128	24	83	107	60	251	311
	Minorities	25	18	43	2	28	30	10	18	28	37	64	101

[a]Excludes 12 respondents not classified by value and sales.

[b]See text p. 12 for definition of low income (LI).

Table 4. Distribution of the Random Sample and Minority Supplement by Status and Income

Status	Sample	Sample Farms					
		Low Income		Other		Total	
		Number	Percent	Number	Percent	Number	Percent
Aged and	Random	38	40.86	55	59.14	93	100.00
Disabled	Whites	32	41.03	46	58.97	78	100.00
	Minorities	25	58.14	18	41.86	43	100.00
Part-time	Random	13	8.72	136	91.28	149	100.00
	Whites	11	8.21	123	91.79	134	100.00
	Minorities	3	9.68	28	90.32	31	100.00
Full-time	Random	33	25.38	97	74.62	130	100.00
	Whites	26	23.85	83	76.15	109	100.00
	Minorities	11	37.93	18	62.07	29	100.00
All Farms	Random	84	22.58	288	77.42	372	100.00
	Whites	69	21.50	252	78.50	321	100.00
	Minorities	39	37.86	64	62.14	103	100.00

Table 5. Distribution of the Random Sample and Minority Supplement by Farm Size and Income

| Farm Size | Sample | Sample Farms | | | | | |
| | | Low Income | | Other | | Total | |
		Number	Percent	Number	Percent	Number	Percent
$1,000–	Random	31	26.72	85	73.28	116	100.00
$4,999	Whites	22	22.92	74	77.08	96	100.00
	Minorities	30	56.60	23	43.40	53	100.00
$5,000–	Random	31	18.45	137	81.55	168	100.00
$39,999	Whites	27	18.37	120	81.63	147	100.00
	Minorities	6	15.79	32	84.21	38	100.00
$40,000–	Random	5	10.00	45	90.00	50	100.00
$99,999	Whites	5	11.11	40	88.89	45	100.00
	Minorities	1	14.29	6	85.71	7	100.00
$100,000 +	Random	6	23.08	20	76.92	26	100.00
	Whites	6	26.09	17	73.61	23	100.00
	Minorities	0	0.00	3	100.00	3	100.00
All Farms	Random	73	20.28	287	79.72	360[a]	100.00
	Whites	60	19.29	251	80.71	311	100.00
	Minorities	37	36.63	74	63.37	101	100.00

[a]Excludes 12 respondents not classified by farm size.

Ninety percent of the minorities (random sample and minority supplement combined) were on the two smallest farm sizes. Minorities on these small farms had a large percentage of aged and disabled operators. The remaining ten percent of minorities were full-time operators of larger farms. Minorities (American Indians and Blacks) represented 28 percent of the combined random sample and minority supplement.

<div align="center">

Socio-Economic and Demographic Characteristics

of the Respondents

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A limited number of socio-economic and demographic variables are considered to relate differences in attitudes to farm structural measures such as farm size and status. Specific variables to be considered for the random sample, whites and minorities are the respondents age, education, number of children, percentage of land owned that is operated, total family income, net worth and total acres operated. The mean responses for each sample stratified by farm size and status are shown in Tables 6 and 7. Table 8 summarizes the statistical significance of each response as determined by the F statistic and the new Duncan's Multiple Range test (DMR).

The F statistic for the samples is computed for farm size, status, low income and the interactions of the following groups: (1) farm size and status; (2) farm size and low income; (3) status and low income and (4) farm size, status and low income. The new Duncan's Multiple Range test (DMR), a statistical comparison of the means, will be computed for variables with an F statistic significant at $p < .05$ for the permutations described above. The DMR is a powerful statistical

Table 6. Socio-Economic and Demographic Characteristics for the Random Sample and Minority
Supplement by Race, Farm Size and Income

		Farm Size											
		$1,000-$4,999			$5,000-$39,999			$40,000-$99,999			$100,000 +		
Variables	Sample	LI[a]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
							-Mean Responses[b]-						
No. of	Random	4.06	2.67	3.04	3.00	2.65	2.72	2.40	2.44	2.44	3.00	3.05	3.03
Children	Whites	4.36	2.58	2.98	3.11	2.50	2.61	2.40	2.60	2.57	3.00	3.00	3.00
	Minorities	3.30	3.21	3.26	3.33	3.71	3.65	--b	1.33	2.85	--b	--b	--b
Age	Random	62.00	50.71	53.05	63.48	52.86	54.89	47.20	54.75	53.93	44.16	46.95	46.03
	Whites	60.59	50.09	52.52	63.40	52.06	54.17	47.20	54.47	53.66	44.16	47.82	46.86
	Minorities	66.73	50.56	59.14	63.00	60.67	61.08	--	59.90	56.66	--	--	--
Education	Random	9.70	12.21	11.60	9.29	11.87	11.38	10.80	11.92	11.80	13.66	12.70	12.92
	Whites	9.72	12.42	11.80	9.14	12.07	11.53	10.80	12.02	11.88	13.66	12.00	12.43
	Minorities	8.15	10.95	9.40	8.83	9.78	9.61	--	10.00	11.33	--	--	--
Years	Random	30.00	15.80	19.73	36.03	22.93	25.34	26.20	25.18	25.28	21.50	22.47	22.21
Farming for	Whites	30.18	15.76	19.17	34.65	22.30	24.55	26.20	25.61	26.56	21.50	22.53	22.23
Oneself	Minorities	32.63	18.47	26.80	42.00	32.24	33.91	--	15.83	16.42	--	--	--
Percent of	Random	79.75	85.01	83.28	56.70	63.26	62.14	50.51	62.44	60.06	12.98	57.97	47.18
Land	Whites	72.78	79.59	77.79	53.16	59.70	58.64	48.52	61.31	58.56	12.98	49.23	38.20
Owned	Minorities	60.37	56.90	59.17	80.23	67.97	70.20	32.98	65.91	57.29	--	--	--
Total Family	Random	4.19	28.47	22.45	4.74	30.86	26.30	3.62	57.61	53.20	2.29	78.87	61.20
Income	Whites	4.47	30.00	24.77	4.40	32.22	27.43	3.62	56.28	51.49	2.29	83.82	62.55
(1,000)	Minorities	3.32	20.27	10.67	6.66	23.86	21.15	--	66.04	56.75	--	--	--
Net Worth	Random	97.30	168.98	149.91	166.07	278.22	259.06	568.00	487.58	495.62	309.16	1277.50	1054.03
(1,000)	Whites	106.21	181.72	164.75	185.39	287.41	270.41	568.00	431.00	446.22	309.16	1247.05	1002.39
	Minorities	51.64	174.50	103.62	86.66	175.48	161.08	--	841.87	746.60	--	--	--
Total	Random	124.93	92.97	101.51	304.35	335.05	329.39	1462.00	649.82	731.12	2116.33	2011.80	2035.92
Acres	Whites	126.77	95.45	102.63	313.55	353.39	346.07	1462.00	686.50	772.75	2116.33	1652.11	1773.21
Operated	Minorities	128.96	81.39	108.32	205.50	184.87	118.13	--	441.16	516.71	--	--	--

[a]See text p. 12 for definition of low income (LI).

[b]Mean values will not be computed for variables with less than five respondents.

Table 7. Socio-Economic and Demographic Characteristics for the Random Sample and Minority
Supplement by Race, Status and Income

Variables	Sample	Aged and Disabled			Part-time			Full-time			All Farms		
		LI[a]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
							Mean Responses						
No. of	Random	4.18	2.40	3.12	3.69	2.63	2.72	2.51	2.83	3.45	2.65	2.83	2.83
Children	Whites	4.15	2.52	3.19	2.72	2.54	2.64	2.69	2.65	2.66	3.53	2.57	2.78
	Minorities	3.52	3.27	3.41	3.66	3.14	3.19	3.54	3.55	3.55	3.53	3.29	3.38
Age	Random	70.34	68.70	69.37	49.08	46.20	46.44	48.39	49.79	49.46	59.19	51.85	53.46
	Whites	70.34	68.89	69.48	49.10	46.12	46.35	47.23	49.78	49.16	58.38	51.53	53.00
	Minorities	69.68	71.17	70.30	44.33	46.64	46.39	56.50	50.76	52.57	65.11	55.48	59.12
Education	Random	8.50	11.00	9.97	11.16	12.61	12.49	11.71	11.87	11.84	10.06	12.05	11.61
	Whites	8.43	11.26	10.10	11.40	12.70	12.60	11.53	11.89	11.80	10.05	12.17	11.72
	Minorities	7.64	8.77	8.11	10.66	11.39	11.30	11.33	11.84	11.68	8.55	10.62	9.82
Years Farming	Random	41.67	33.36	36.70	19.23	15.63	15.96	21.36	21.58	21.52	30.08	21.16	23.21
For Oneself	Whites	41.54	34.21	37.16	16.90	15.47	15.59	20.57	21.81	21.50	29.54	21.05	22.90
	Minorities	38.20	38.83	38.46	24.66	18.47	19.19	24.27	19.88	21.60	33.23	25.20	28.43
Percent of	Random	77.00	63.28	66.99	68.89	62.13	62.73	29.17	58.60	50.99	45.60	60.46	57.08
Land Owned	Whites	74.88	63.05	66.19	59.08	61.84	61.64	27.29	55.07	46.89	42.58	58.73	54.82
	Minorities	69.64	67.39	68.51	97.32	63.89	69.55	43.56	72.06	67.50	61.50	70.07	68.02
Total Family	Random	4.45	31.47	21.34	5.20	35.30	34.23	3.80	44.31	34.99	4.22	37.60	31.30
Income	Whites	4.34	33.55	22.75	5.56	35.43	34.49	3.61	46.67	27.33	4.12	38.79	32.67
(1,000)	Minorities	3.78	19.79	10.48	6.25	31.51	29.83	3.37	30.00	20.49	3.80	27.79	19.00
Net Worth	Random	200.28	417.40	334.69	161.25	244.82	239.98	159.87	467.28	349.92	179.05	353.10	218.70
(1,000)	Whites	229.97	472.79	381.29	176.42	239.42	235.86	183.81	440.60	385.75	204.69	348.67	321.92
	Minorities	60.57	163.33	103.68	31.25	255.33	239.87	66.75	520.36	352.36	60.65	301.29	211.35
Total Acres	Random	269.78	493.87	402.81	217.61	204.06	205.24	726.93	705.35	710.83	441.30	428.24	431.19
Operated	Whites	294.15	560.71	451.35	191.09	208.43	207.00	870.23	646.24	699.66	494.79	416.93	433.67
	Minorities	125.84	167.72	143.37	249.66	126.71	138.61	277.54	889.88	657.62	178.15	352.89	286.72

[a] See text p. 12 for definition of low income (LI).

Table 8. Statistical Results Related to the Socio-Economic and Demographic
Characteristics for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
					--Prob. > F--			
No. of	Random	0.9362	0.5282	0.2207	0.6729	0.6674	0.0278*	0.1743
Children	Whites	0.7949	0.3657	0.0895	0.7395	0.9577	0.0965	0.4527
	Minorities	0.2153	0.8620	0.2541	0.6272	0.0107*	0.5739	0.9749
Age	Random	0.5780	0.0001*	0.7163	0.1049	0.0735	0.4651	0.2711
	Whites	0.6972	0.0001*	0.4961	0.1148	0.0537*	0.2621	0.2008
	Minorities	0.2125	0.0001*	0.9350	0.9502	0.7774	0.3735	0.1835
Education	Random	0.0951	0.1802	0.0629	0.3471	0.1859	0.1629	0.0502*
	Whites	0.1249	0.1850	0.0447*	0.2497	0.0952	0.2062	0.0860
	Minorities	0.0102*	0.0836	0.9768	0.7031	0.4030	0.3409	0.2550
Years	Random	0.0005*	0.0001*	0.0248*	0.2003	0.5830	0.2283	0.7949
Farming	Whites	0.0006*	0.0001*	0.1729	0.2753	0.6474	0.1875	0.6519
for Oneself	Minorities	0.2201	0.0380*	0.2533	0.2433	0.8272	0.4990	0.7813
Percent of	Random	0.0098*	0.3310	0.0187	0.7639	0.6384	0.5939	0.5079
Land Owned	Whites	0.0157*	0.4029	0.0075	0.6305	0.8774	0.4539	0.9131
	Minorities	0.8760	0.3291	0.9099	0.8215	0.6146	0.7773	0.7543
Total Family	Random	0.0001*	0.0589*	0.0001*	0.0003*	0.0008	0.8334	0.9740
Income	Whites	0.0001*	0.1134	0.0001*	0.0049*	0.0015*	0.9070	0.9774
(1,000)	Minorities	0.0001*	0.0001*	0.0001*	0.0001*	0.2871	0.4599	0.7995
Net Worth	Random	0.0001*	0.0001*	0.4682	0.0603	0.0009*	0.0540*	0.0223*
(1,000)	Whites	0.0010*	0.0001*	0.4600	0.0737	0.0019*	0.1218	0.0323*
	Minorities	0.0001*	0.0787	0.1205	0.0083*	0.5722	0.9317	0.9266
Total Acres	Random	0.0001*	0.0015*	0.0028	0.0778	0.7026	0.6588	0.5171
Operated	Whites	0.0001*	0.0002*	0.0280	0.0188*	0.4531	0.6986	0.4098
	Minorities	0.0001*	0.8845	0.7212	0.9991	0.9218	0.9773	0.9917

*
Significant Multiple Range Test.

tool because it has a high probability of declaring a difference in means when an actual difference exists (McClave and Dietrich, 1979).

Age

For the random sample and for whites and minorities, age was significantly related to status. As expected, aged and disabled respondents were oldest whereas part-time farmers were youngest. For whites age significantly interacted with farm size and low income. The data suggest that older whites tend to have low incomes on the two smallest farms whereas younger whites tend to have low incomes on the largest farms. Low income respondents for all farms and minorities as a whole were older than other respondents by farm size and status.

Education

Although low income respondents in all samples evidenced lower educational attainment than other respondents, statistical significance was limited to whites. Low income white respondents by farm size and status consistently evidenced lower educational attainment than non low income operators except for the largest farm size of $100,000 or more in sales. The low income respondents in this farm size averaged the most education (13.66 years) and were the youngest of all white respondents. They were also primarily renters, owning 13 percent of the land operated, and had a net worth several times smaller than that of non-low income operators of the same farm size.

Operators of the largest farm size ($100,000 or more for the random sample and whites; $40,000-$99,999 for minorities) evidenced greater educational attainment than operators of all other farm sizes.

Statistical significance was limited to minorities by farm size. A
relationship also exists for minorities between farm size, education
and income. The minority low income respondents of the smallest farms
had the least education and were also the oldest of all respondents.
The minority group averaging the most education was non-low income
operators in the $40,000-$99,999 sales class.

Aged and disabled operators averaged the least education for all
samples whereas part-time respondents averaged the most education for
the random sample and whites. Full-time respondents averaged the most
education for minorities.

Years Farming for Oneself

Years farming for oneself measures experience as an operator and
is an important aspect of farming, particularly in making management
decisions. The variable was significantly related to farm size for the
random sample and whites, indicating that the largest and smallest
farm operators had less experience than operators of mid-sized farms.
Status was statistically significant for all samples. The aged and
disabled operators had the most experience farming and part-time
had the least.

Low income farmers had farmed longer than other operators for
all the samples but statistical significance was limited to the random
sample. Minorities generally farmed more years for themselves than
respondents in the random sample and whites.

Total Family Income and the

Number of Children

Total family income consists of net income from farm and off-farm sources and includes rents, wages, interest and dividends, government payments and royalties. Off-farm income is an essential element of total family income of farmers because it buffers fluctuations in farm income and enables many operators to remain in farming. Off-farm income has helped to raise farm families' overall level of satisfaction (Lee, p. 86) and has brought family income closer to that of persons in the non-farm sector (Larson, p. 10; Carlin and Reinsel, p. 43). Lee, Polzin and MacDonald view off-farm work as both rational and efficient for the overall economy and the farm family.

National results by Carlin and Ghelfi indicated off-farm income was related to farm size when measured by the value of agricultural products sold. They concluded that small farm and young (less than 45 years old) operators were more likely to have off-farm sources of income. The additional income may provide a source of capital for expansion and stability.

Total family income for the random sample, whites and minorities was positively related to farm size, i.e., the larger the farm size the greater the total family income. Aged and disabled operators experienced lower total family income than part-time and full-time operators for the random sample, whites and minorities.

Generally, minorities had lower incomes than whites. Part-time minority operators in the economic sales class of $40,000-$99,999 evidenced the highest incomes of all minorities. Compared to whites, non-low income minority farmers in the $40,000-$99,999 sales class were

older, had less farming experience, owned a larger percentage of land operated, had more net worth, operated fewer acres and had fewer children.

The number of children in the family was statistically significant in the random sample for the interaction of status and income. The number of children is also significant for minorities for the interaction of farm size and low income. As expected, low income respondents by farm size and status had more children than other respondents.

Total Acres Operated

Total acres operated is closely related to total family income. It is highly significant for the random sample and for whites by farm size, status and income.

As expected, total acres operated is directly related to the economic sales class of respondents with the largest size farms operating the most acreage. Full-time respondents operated the most acreage and part-time the least for all samples. Low income respondents, for all farms except minorities, operated more acreage than non-low income respondents.

Net Worth

Wealth or net worth may influence the economic well-being of respondents in the sample. The average net worth of farm families, as indicated by Carlin and Ghelfi (p. 372), is nearly twice that of all families in the United States. Although no explicit formula is given, the authors concluded that the average level of well-being increased when net worth is considered as a component measure of

well-being. A significant increase for the aged was noted by Weisbrod and Hansen when considering net worth as a factor in well-being.

For the random sample of whites and minorities, net worth is significantly related to farm size with the average net worth increasing as farm size increases. Part-time farmers evidenced the least and full-time the most net worth for the random sample and whites. Aged and disabled operators evidenced the least net worth and full-time the most among minority operators. Overall, minorities averaged a smaller net worth than others with the least disparity between minorities and whites among part-time operators. Low income respondents generally had a lower net worth than other respondents by farm size and status.

Percent of Land Owned

The percentage of land owned is related to total family income and net worth. A larger percentage of land owned is expected to be associated with a larger net worth and spendable income. Percent of land owned is significant for the random sample and whites by farm size and low income. The larger the farm size the smaller the percentage of land owned for the random sample and whites. For the overall sample low income respondents owned a smaller percentage of land operated than did non-low income farmers.

Part-time low income minorities owned the largest percentage of land operated--97 percent. They also operated more land than did other part-time operators, had the least net worth and were younger than other respondents.

Summary of the Socio-Economic and

Demographic Characteristics

of the Respondents

Low income respondents in the sample were generally older, farmed longer, operated more acreage but owned a smaller percentage of land than did other respondents. Low income operators also had more children, averaged less education and evidenced a smaller net worth. Age was also a factor in determining the farm size operated by low income white respondents. Older whites evidenced low incomes in the two smaller farms and younger whites tended to be low income on the largest farm sizes.

Minorities, when compared to respondents in the random sample and whites usually farmed longer, had more children, were older and averaged lower educational levels. Minorities also had a lower total family income, a lower net worth and operated fewer acres than did respondents in the random sample and whites. Non-low income minorities in the economic sales class of $40,000-$99,999 was one exception because they evidenced a higher total family income, owned a larger percentage of land, evidenced a greater net worth, operated fewer acres and averaged fewer children than whites of the same sales class.

Among the status groups part-time farmers averaged greater educational attainment, were younger, had fewer years experience and generally averaged more total family income than full-time, aged and disabled operators.

CHAPTER III

CONSTRUCTION OF THE SOCIO-PSYCHOLOGICAL FACTORS

OF WELL-BEING AND THE OVERALL QUALITY

OF LIFE INDEX

Factor analysis will be used to identify and aggregate socio-psychological factors of well-being into the overall Quality of Life Index. The Statistical Analysis System (SAS), employing the principal axes solution and the varimax method of rotation, will be utilized to obtain the factor analysis results.

The statistical procedures are based on the responses of the random sample to selected attitudinal variables. The variables were taken from the well-tested National Opinion Research Center's nation-wide survey designed to measure well-being. Other questions were added to determine satisfaction with employment opportunities and federal, state and county agricultural programs (see Table 9).

A three point numerical scale of possible responses to the variables is arranged so that dissatisfaction and disagreement with a question or item is assigned the lowest value. Satisfaction (or agreement) is assigned the highest value and the median score on the overall scale of items is assigned. One domain of the scale, two variables concerned with overall happiness and excitement of life, items were assigned a five point scale.

Table 9. Summary of Attitudinal Variables Used in Quality of Life
Research by Means and Standard Deviations

Attitudinal Variables[a]	Mean[b]	Standard Deviation	Attitudinal Variables[a]	Mean[b]	Standard Deviation
V29	2.47	0.83	V37	2.77	0.56
V30	1.94	0.95	V38	2.81	0.55
V31	2.57	0.75	V39	2.71	0.67
V32	2.74	1.05	V40	2.04	0.91
V33	3.29	0.75	V41	1.68	0.85
V34	2.75	0.65	V42	2.59	0.57
V35	2.87	0.47	V43	2.52	0.53
V36	2.92	0.34	V44	2.47	0.72

[a]V29: In spite of what some people say, the lot (situation/condition) of the average man is getting worse, not better. V30: It's hardly fair to bring a child into the world with the way things look for the future. V31: Most public officials (people in public office) are not really interested in the problems of the average man. Satisfaction or dissatisfaction with: V32 - taken all together, how would you say things are these days—would you say that you are (1) not too happy, (2) don't know, (3) pretty happy, or (4) very happy; V33 - In general, do you find life (1) dull, (2) no opinion, (3) pretty routine, or (4) exciting; V34 - house or apartment; V35 - with your community as a place to live; V37 - job; V38 - health; V39 - standard of living (things like income, car, furniture, etc.); V40 - job opportunities around here; V41 - county, state and federal programs for welfare, Social Security, and Medicare; V42 - The Cooperative Extension Service or Office; V43 - Land Grant University Agricultural Research; V44 - Agricultural Stabilization and Conservation Service (ASCS).

[b]Most means responses are based on a three point scale where 1 = disagree; 2 = undecided; and 3 = agree. Variables 32 and 33 are based on a four point scale where 1 = not too happy; 2 = don't know; 3 = pretty happy; 4 = very happy and 1 = dull; 2 = no opinion; 3 = pretty routine; 4 = exciting, for each variable, respectively.

After assigning response score values, the individuals actual response to each variable was standardized by the following procedure:

$$R_{ji} = \frac{x_{ji} - \bar{x}_j}{s_{ji}}$$

where R_{ji} = the standardized response of variable j for the ith individual,

x_{ji} = the actual observed response of variable j for the ith individual,

$\bar{x}_j$ = the mean response for variable j, and

s_j = the standard deviation of variable j.

The standardized responses were then used to construct the socio-psychological factors of well-being. The attitudinal variables as shown in the questionnaire, their mean responses and standard deviations are shown in Table 9.

Quality of Life Component Index Construction

The model for principal components is specified by $Z_j = a_{j1}F_1 + a_{j2}F_2 + \ldots + a_{jn}F_n$ (j = 1, 2, ..., n) where each of the n observed values is described linearly in terms of n new uncorrelated components F_1, F_2, ..., F_n and a_{ji} represents the factor loadings for variable j on factor i. The factor loadings, determined by the intersection of a row and column, represent the relative importance of a variables influence on a factor. They also serve as a basis for combining variables into common groups.

The rotated and unrotated factor patterns (matrices of factor loadings) are displayed in the computer output. Although the unrotated factor pattern is the initial result of a factor analysis on the data, the rotated factor pattern is used in actual index construction. The

rotated factor pattern provides a simple and theoretically meaningful factor structure by reducing the ambiguity that accompanies the unrotated factor pattern. The varimax method of rotation was used because it maximizes the number of variables with high loadings while uniquely defining a factor in terms of a cluster of intercorrelated variables.

The cluster of intercorrelated variables, herein designated reduced factors (F^r), must have a minimum factor loading of $|.5|$ to be here considered important on a factor. The scoring coefficient corresponding to each variable in the cluster is used to weight the standardized individual responses. The weighted responses will be developed into the socio-psychological factors of well-being. The scoring coefficient matrix and the rotated and unrotated factor matrices are displayed with other factor analytic output in Appendix A.

The number of factors retained in the analysis is dependent on the number of eigenvalues with a minimum value of one or greater. The eigenvalues, the sum of the column of squared factor loadings, are used to measure the amount of variation in the model accounted for by a factor. Six factors had an eigenvalue of one or greater but the model allowing only five factors will be used to construct the socio-psychological indices. The sixth factor resulted in a less plausible configuration because it had only one significant factor loading-- satisfaction with marriage. Minor, Bradburn and Schaffer (p. 136) excluded a similar item from their analysis that measures satisfaction with marriage. They concluded that life satisfaction structures estimated without marital satisfaction were not misspecified.

A review of the variables that were significant for each reduced factor results in the derivation of the Anomie, Satisfaction I,

Satisfaction II, and Hedonistic Indices of well-being. Table 10 shows each socio-psychological factor summarized by significant variables, factor loadings and factor weights. The statistics are used to aggregate scores of individual respondents.

The Overall Quality of Life Indices

The socio-psychological factors of well-being derived from factor analysis are combined in several combinations to form three alternative forms of the overall Quality of Life Index. The formulas are as follows:

$$QLI_i I = AN_i + SAT\ I_i + SAT\ II_i \tag{3.1}$$

$$QLI_i II = AN_i + SAT\ II_i \tag{3.2}$$

$$QLI_i III = AN_i + SAT\ II_i + HED_i \tag{3.3}$$

where i = individual 1, 2, 3, ... N and

AN_i = the Anomie Index for the ith individual is derived from the weighted reduced factor one. The Anomie Index is designed to measure the degree of confidence (or lack of confidence) in the social environment of the individual. Anomie is characterized by feelings of pessimism, fatalism and aleination that are frequently associated with non-deferred gratification of wants and the insecurity that attends poverty. Feelings of personal efficacy or effectiveness, the opposite of Anomie, are considered to be signs of emotional health and an indication of satisfaction and well-being (Tweeten and Lu). Because Anomie is expected to be inversely related to quality of life, the Anomie Index is negatively correlative with the QLI.

$SAT\ I_i$ = the Satisfaction I Index for the ith individual derived from weighted reduced factor two. The Satisfaction I Index is designed to measure satisfaction with agricultural agencies, particularly the Cooperative Extension Service; land grand agricultural research; and U. S. Department of Agriculture programs of the Farmers Home Administration, Soil Conservation Service and Agricultural Stabilization and Conservation Service.

Table 10. Summary of the Socio-Psychological Factors of Well-Being by Significant Variables, Factor Loadings and Factor Weights

Socio-Psychological Factors of Well-Being[b]											
Anomie			Satisfaction I			Satisfaction II			Hedonistic		
Variable[a]	Loading	Weight	Variable[b]	Loading	Weight	Variable[b]	Loading	Weight	Variable[b]	Loading	Weight
V29	0.739	0.403	V42	0.681	0.381	V37	0.641	0.419	V32		
V30	0.732	0.384	V43	0.662	0.373	V39	0.774	0.515	V33		
V31	0.695	0.367	V44	0.694	0.423	V40	0.496	0.048			
						V38	0.722	0.631			
						V41	-0.702	-0.582			
						V34	0.576	0.418			
						V35	0.817	0.664			

[a]Refer to footnote a of Table 9.

[b]Refer to pp. 31 and 33 for definitions of the socio-psychological factors.

$SAT\ II_i$ = the Satisfaction II Index for the ith individual derived
from the weighted reduced factors three, four and five.
The Satisfaction II Index is designed to measure the
individual's satisfaction with various aspects of their
lives such as their work, family life, job, health, house
or apartment. Many of the domains of life have been tested
in other studies (Andrews and Withey, 1974; Rodgers and
Converse, 1975) concluding that overall life satisfaction
can be adequately explained in terms of a simple linear
additive combination of the important domains of life.
(George and Bearon view life satisfaction as a more indepth
measure or assessment of the individual's overall "conditions
of existence" derived from a comparison of one's aspirations
to actual achievements.)

HED_i = the Hedonistic Index for the ith individual derived from
two variables (V32 and V33) that did not meet the minimum
factor loading criterion used to determine significant
variables on the reduced factors. The Hedonistic Index is
designed to measure the individuals subjectively perceived
gratifications in life as a component of quality of life.

The Model for Quality of Life Research

Stepwise regression is initially used to isolate a subset of
independent variables that underly the Quality of Life Indices. A
summary of the stepwise and prescribed regression equations is shown in
Tables 11 through 16. The results for the individual socio-psychological
factors of well-being are shown in Appendix B.

Tha standardized coefficients in each table depict the number of
standard deviation changes in the Quality of Life Index that would be
predicted when a variable changed by one standard deviation. The
values for T for H_o: $\beta = 0$, Prob. $> |T|$, R^2 and the Prob. $> |F|$ are
also presented to analyze the significance of each variable and the
utility of the overall model. The results provided background for the
analysis of each factor and index in Chapter IV.

However, the classification system in Chapter IV is deemed to be
a richer source of information on the relationship between respondent

Table 11. Stepwise Regression Equation for the Overall Quality of Life
Index I

Variables	Standard Coefficient	T for H_o: $\beta = 0$	Prob. $> \lvert T \rvert$
Disabled Respondents	-0.18	-3.64	< 0.01
Education	0.14	2.80	< 0.01
Reside on Place	0.16	3.16	< 0.01
Farm Income	0.11	2.34	< 0.01
Agricultural Agency Dealings	0.10	2.11	0.03

$R^2 = 0.152$ F Statistic = 8.53   Prob. $> \lvert F \rvert = 0.01$

Table 12. Prescribed Regression Equation for the Overall Quality of
Life Index I

Variables	Standard Coefficient	T for H_o: $\beta = 0$	Prob. $> \lvert T \rvert$
Age	4.62	2.60	< 0.01
Skill at Farming	0.11	2.02	0.05
Black Respondents	-0.10	-2.08	0.03
Disabled Respondents	-0.11	-2.29	< 0.02
In-kind Assistance	-0.14	-2.80	< 0.01
$(Age)^2$	-4.67	-2.60	< 0.01

$R^2 = 0.149$ F Statistic = 3.37   Prob. $> \lvert F \rvert = 0.01$

Table 13. Stepwise Regression Equation for the Overall Quality of Life Index II

Variables	Standard Coefficient	T for H_0: $\beta = 0$	Prob. > |T|
Disabled Respondents	-0.21	-4.25	< 0.01
Reside on Place	0.18	3.61	< 0.01
Black Respondents	-0.13	-2.58	< 0.01
Education	0.10	2.16	0.03

$R^2 = 0.171$ F Statistic = 11.51   Prob. > \|F\| = 0.01

Table 14. Prescribed Regression Equation for the Overall Quality of Life Index II

Variables	Standard Coefficient	T for H_0: $\beta = 0$	Prob. > |T|
Age	3.69	2.08	0.03
Percent of Land Owned	-0.09	-1.92	0.05
Black Respondents	-0.12	-2.52	< 0.01
Disabled Respondents	-0.13	-2.77	< 0.01
In-kind Assistance	-0.16	-3.18	< 0.01
Education x Income	-0.31	-2.16	0.03
Cropland	-0.10	-2.00	0.04
Total Family Income	0.28	2.12	0.03
$(Age)^2$	-3.73	-2.08	0.03

$R^2 = 0.15$ F Statistic = 3.50   Prob. > \|F\| = 0.01

Table 15. Stepwise Regression Equation for the Overall Quality of Life Index III

Variables	Standard Coefficient	T for H_o: $\beta = 0$	Prob. > $|T|$
Disabled Respondents	-0.14	-2.77	< 0.01
Farm Income	0.20	3.97	< 0.01
Off-farm Income	0.31	4.43	< 0.01
Operator's Off-farm Occupation	-0.18	-2.73	< 0.01
Black Respondents	-0.11	-2.24	< 0.02

$R^2 = 0.192$ F Statistic = 11.34   Prob. > $|F|$ = 0.01

Table 16. Prescribed Regression Equation for the Overall Quality of Life Index III

Variables	Standard Coefficient	T for H_o: $\beta = 0$	Prob. > $|T|$
Age	3.34	1.94	0.05
Black Respondents	-0.13	-2.87	< 0.01
Disabled Respondets	-0.11	-2.45	< 0.01
Ratio of Farm to Total Income	0.11	2.40	< 0.01
In-kind Assistance	-0.13	-2.71	< 0.01
Off-farm Work	0.21	3.12	< 0.01
$(Age)^2$	-3.41	-1.96	0.05

$R^2 = 0.202$ F Statistic = 4.84   Prob. > $|F|$ = 0.01

characteristics and quality of life measures than the regression

analysis.

CHAPTER IV

SUMMARY AND CONCLUSIONS OF THE SOCIO-PSYCHOLOGICAL

FACTORS AND THE OVERALL QUALITY OF LIFE INDICES

Introduction

The emphasis to this point has been on developing an index to
measure the perceived Quality of Life (QOL) of East Central Oklahoma
farmers. The attitudinal variables from the survey were grouped and
weighted by factor analysis to form four socio-psychological factors
of well-being. The Anomie, Satisfaction I, Satisfaction II and
Hedonistic Indices were used in different combinations to derive
three Quality of Life Indices (QLI).

In this chapter, the mean responses for the weighted socio-
psychological factors, their component variables and the overall Quality
of Life Indices will be presented. The data will be analyzed for
respondents in the random sample, whites and minorities within a
classification system based on farm size, status and income.

The F Statistic for the samples is computed for farm size, status,
low-income and the interactions within the following groups: (1) farm
size and status; (2) farm size and low income; (3) status and low
income; and (4) farm size, status and low income. The new Duncan's
Multiple Range Test (DMR), a statistical comparison of the means, will
be computed for variables with an F statistic significant at $p < .05$
for the permutations described above. The DMR Test is a powerful

statistical tool because it has a high probability of declaring a differ-
ence in means when an actual difference exists (McClave and Dietrich, 1979).

An analysis of the Anomie, Satisfaction I, Satisfaction II,
Hedonistic and overall Quality of Life Indices follows.

The Anomie Index: Tables 17 through 19

The Anomie Index, measuring the degree of confidence or lack of
confidence in the social environment of the individual, was statistically
significant in the random sample for the interaction of farm size, status
and low income. Respondents operating in the economic sales class of
$40,000-$99,999 and part-time averaged the lowest Anomie (evidenced
the most confidence in the social environment). Low income respondents
for all samples evidenced the highest Anomie.

Minorities operating the two smaller farm sizes averaged less
confidence in the social environment (higher Anomie) than whites
operating the same farm sizes. Minorities farming full-time and those
operating in the economic sales class of $40,000-$99,999 had more
confidence in the social environment than whites in the same classes.
No appreciable difference existed between part-time operators of
different races.

Reviewing the components of the Anomie Index, the "concern of
public officials about the problems of the average man" was statis-
tically significant for minorities by farm size and whites by farm
size and status. White respondents operating farm size $5,000-$39,999
agreed more strongly than other whites that "public officials are not
really interested in the problems of the average man." Also whites
operating in the $40,000-$99,999 sales class disagreed least with

Table 17. Summary of the Individual Variables and Composite Anomie Index for the Random Sample and Minority Supplement by Race, Farm Size and Income

| | | Farm Size | | | | | | | | | | | |
| | | $1,000–$4,999 | | | $5,000–$39,999 | | | $40,000–$99,999 | | | $100,000 + | | |
Variables[a]	Sample	LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
		----------------------------------Mean Responses[b]----------------------------------											
V29	Random	2.22	2.37	2.33	2.67	2.53	2.55	2.80	2.28	2.34	2.33	2.70	2.61
	Whites	2.18	2.31	2.28	2.70	2.51	2.55	2.80	2.32	2.37	2.33	2.76	2.65
	Minorities	2.50	2.60	2.54	2.66	2.62	2.63	--d	1.83	1.71	--d	--d	--d
V30	Random	2.16	1.85	1.93	2.25	1.91	1.98	1.80	1.86	1.86	1.83	1.85	1.84
	Whites	2.09	1.86	1.91	2.22	1.91	1.97	1.80	1.85	1.84	1.83	1.76	1.78
	Minorities	2.06	1.60	1.86	2.66	1.78	1.92	--	1.83	1.71	--	--	--
V31	Random	2.54	2.63	2.61	2.64	2.60	2.61	2.40	2.42	2.42	2.16	2.45	2.38
	Whites	2.59	2.58	2.58	2.62	2.63	2.63	2.40	2.35	2.35	2.16	2.58	2.47
	Minorities	2.63	2.73	2.67	2.66	2.65	2.65	--	3.00	3.00	--	--	--
Anomie	Random	6.93	6.87	6.88	7.58	7.02	7.12	7.00	6.57	6.62	6.33	7.00	6.84
	Whites	6.86	6.75	6.78	7.55	7.02	7.12	7.00	6.52	6.57	6.33	7.11	6.91
	Minorities	7.20	6.95	7.09	8.00	7.06	7.21	--	6.66	6.42	--	--	--

[a]V29: In spite of what some people say, the lot (situation/condition) of the average man is getting worse not better. V30: It's hardly fair to bring a child into the world with the way things look for the future. V31: Most public officials (people in public office) are not really interested in the problems of the average man. Anomie: A composite index derived from variables V29, V30, and V31 using factor analysis. The Anomie Index is designed to measure the degree of confidence or lack of confidence in the social environment of the individual.

[b]Mean responses for the individual variables are based on a three-point scale where 1 = disagree; 2 = undecided; and 3 = agree.

[c]See text p. 12 for definition of low income (LI).

[d]Mean values will not be computed for variables with less than five respondents.

Table 18. Summary of the Individual Variables and Composite Anomie Index for the Random Sample and Minority Supplement by Race, Status and Income

Variables[a]	Sample	Status Aged and Disabled LI[c]	Other	Total	Part-time LI	Other	Total	Full-time LI	Other	Total	All Farms LI	Other	Total
		Mean Responses[b]											
V29	Random	2.39	2.45	2.43	2.38	2.41	2.40	2.54	2.53	2.53	2.45	2.46	2.45
	Whites	2.46	2.34	2.39	2.27	2.43	2.41	2.57	2.51	2.53	2.47	2.44	2.45
	Minorities	2.52	2.88	2.67	--d	2.32	2.38	2.18	2.50	2.37	2.45	2.53	2.50
V30	Random	2.28	2.96	2.09	1.92	1.77	1.79	2.00	2.01	2.00	2.11	1.89	1.94
	Whites	2.34	1.93	2.10	1.72	1.78	1.77	1.88	2.01	1.98	2.07	1.88	1.92
	Minorities	2.12	1.66	1.93	--	1.75	1.80	2.09	1.83	1.93	2.12	1.75	1.89
V31	Random	2.63	2.65	2.59	2.53	2.57	2.56	2.51	2.59	2.57	2.57	2.57	2.57
	Whites	2.62	2.50	2.55	2.45	2.59	2.57	2.57	2.58	2.58	2.57	2.57	2.57
	Minorities	2.72	2.83	2.76	--	2.60	2.50	2.54	2.05	2.58	2.64	2.67	2.66
Anomie	Random	7.31	6.98	7.11	6.84	6.74	6.75	7.06	7.11	7.10	7.14	6.91	6.96
	Whites	7.43	6.78	7.05	6.45	6.78	6.75	7.03	7.08	7.07	7.13	6.88	6.93
	Minorities	7.36	7.38	7.37	--	6.67	6.77	6.81	6.94	6.89	7.23	6.95	7.05

[a]V29: In spite of what some people say, the lot (situation/condition) of the average man is getting worse not better. V30: It's hardly fair to bring a child into the world with the way things look for the future. V31: Most public officials (people in public office) are not really interested in the problems of the average man. Anomie: A composite index derived from variables V29, V30, and V31 using factor analysis. The Anomie Index is designed to measure the degree of confidence or lack of confidence in the social environment of the individual.

[b]Mean responses for the individual variables are based on a three-point scale where 1 = disagree; 2 = undecided; and 3 = agree.

[c]See text p. 12 for definition of low income (LI).

[d]Mean values will not be computed for variables with less than five respondents.

Table 19. Statistical Results Related to the Individual Variables and Composite Anomie Index for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
					---Prob. > F---			
V29	Random	0.3731	0.9604	0.4802	0.7063	0.6181	0.9963	0.4475
	Whites	0.3953	0.9803	0.3221	0.8010	0.5266	0.9279	0.4753
	Minorities	0.1406	0.4805	0.7553	0.5880	0.8391	0.3199	0.9874
V30	Random	0.1228	0.1256	0.2369	0.1867	0.2114	0.1793	0.0132
	Whites	0.1054	0.1509	0.3112	0.1269	0.4814	0.1045	0.0352
	Minorities	0.4445	0.8287	0.2125	0.4878	0.5658	0.8436	0.6297
V31	Random	0.1496	0.1174	0.2686	0.3320	0.8585	0.3062	0.4598
	Whites	0.0538	0.0433	0.4430	0.2711	0.4702	0.0897	0.6242
	Minorities	0.0488*	0.5550	0.2458	0.1853	0.6199	0.3511	0.0137
Anomie	Random	0.1442	0.1742	0.6296	0.2517	0.6190	0.3725	0.0490
	Whites	0.1406	0.2020	0.5160	0.2096	0.5231	0.2030	0.0967
	Minorities	0.4444	0.4474	0.9136	0.4356	0.7547	0.9951	0.2728

*Significant Multiple Range Test.

the statement. As farm size increased, the proportion of full-time, aged and disabled minority operators who agreed with the statement increased and the proportion of part-time minorities who disagreed increased.

The Satisfaction I Index (SAT I):
Tables 20 through 22

Mean responses consistently evidenced a positive correlation between farm size and the Satisfaction I Index that measures satisfaction with agricultural agencies. The larger the farm size the greater the satisfaction. Statistical significance was limited to minorities however.

Although minorities generally rated lower on the Satisfaction I Index, part-time minorities and those operating farms with $40,000-$99,999 in gross annual sales rated higher than respondents in the random sample and whites. These two groups of minorities were less satisfied with land grant university agricultural research than with other agencies.

The least satisfied white respondents in the random sample were non-low income on the smallest farms. Their lowest satisfaction was with land grant university agricultural research.

The largest farmers were least satisfied with programs administered by the United States Department of Agriculture. Both the largest and smallest farmers were most satisfied with the Cooperative Extension Service among all agencies considered.

Table 20. Summary of the Individual Variables and Composite Satisfaction I Index for the Random
Sample and Minority Supplement by Race, Farm Size and Income

Variables[a]	Sample	$1,000–$4,999			$5,000–$39,999			$40,000–$99,999			$100,000 +		
		LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
							—Mean Responses[b]—						
V42	Random	2.61	2.55	2.56	2.54	2.55	2.55	3.00	2.68	2.72	3.00	2.85	2.88
	Whites	2.54	2.58	2.57	2.55	2.57	2.57	3.00	2.67	2.71	3.00	2.88	2.91
	Minorities	2.73	2.43	2.60	2.66	2.40	2.44	--d	2.83	2.57	--d	--d	--d
V43	Random	2.45	2.35	2.37	2.58	2.55	2.55	2.80	2.62	2.64	2.83	2.75	2.76
	Whites	2.45	2.35	2.37	2.59	2.55	2.56	2.80	2.67	2.68	2.83	2.70	2.73
	Minorities	2.56	2.47	2.52	2.16	2.43	2.39	--	2.33	2.14	--	--	--
V44	Random	2.58	2.40	2.44	2.38	2.45	2.44	2.00	2.55	2.50	2.66	2.65	2.65
	Whites	2.54	2.39	2.42	2.44	2.46	2.46	2.00	2.55	2.48	2.66	2.70	2.69
	Minorities	2.60	2.64	2.60	2.00	2.50	2.42	--	2.66	2.57	--	--	--
SAT I	Random	28.12	27.37	27.57	28.22	28.13	28.15	28.20	28.86	28.80	28.83	29.20	29.11
	Whites	28.72	27.32	27.64	28.37	28.73	28.25	28.20	28.72	28.66	28.83	29.17	29.08
	Minorities	27.23	27.47	27.33	26.67	27.75	27.57	--	20.33	29.14	--	--	--

[a]Satisfaction or dissatisfaction with: V42 – the Cooperative Extension Service or Office; V43 – Land Grant University Agricultural Research;
V44 – Department of Agriculture programs of the Farmers Home Administration (FHA), Soil Conservation Service (SCS), and Agricultural Stabilization and
Conservation Service (ASCS); SAT I – A composite index derived from variables V42, V43, and V44 using factor analysis. The Satisfaction Index I is
designed to measure the individual's satisfaction or dissatisfaction with agricultural agencies.

[b]Mean responses for the individual variables are based on a three-point scale where 1 = dissatisfied; 2 = undecided; and 3 = satisfied.

[c]See text. p. 12 for definition of low income (LI).

[d]Mean values will not be computed for variables with less than five respondents.

Table 21. Summary of the Individual Variables and Composite Satisfaction I Index for the Random Sample and Minority Supplement by Race, Status and Income

Variables[a]	Sample	Status											
		Aged and Disabled			Part-time			Full-time			All Farms		
		LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
		Mean Responses[b]											
V42	Random	2.55	2.58	2.56	2.53	2.56	2.56	2.75	2.64	2.67	2.63	2.59	2.60
	Whites	2.53	2.65	2.60	2.65	2.45	2.55	2.76	2.66	2.68	2.60	2.61	2.61
	Minorities	2.80	2.22	2.55	--d	2.57	2.58	2.45	2.55	2.51	2.69	2.46	2.55
V43	Random	2.55	2.58	2.56	2.38	2.45	2.44	2.57	2.56	2.56	2.53	2.51	2.52
	Whites	2.53	2.58	2.56	2.36	2.45	2.44	2.65	2.59	2.60	2.55	2.52	2.52
	Minorities	2.52	2.44	2.48	--	2.46	2.48	2.27	2.50	2.41	2.46	2.46	2.46
V44	Random	2.60	2.47	2.52	2.46	2.41	2.42	2.36	2.53	2.49	2.48	2.46	2.47
	Whites	2.59	2.43	2.50	2.36	2.42	2.41	2.38	2.57	2.53	2.47	2.47	2.47
	Minorities	2.52	2.61	2.55	--	2.60	2.61	2.45	2.38	2.41	2.51	2.54	2.53
SAT I	Random	28.10	28.41	28.29	28.46	27.89	27.94	28.15	28.21	28.20	28.17	28.10	28.12
	Whites	28.28	28.36	28.33	28.09	27.83	27.85	28.65	28.37	28.44	28.39	28.11	28.17
	Minorities	27.60	27.77	27.67	--	28.46	28.58	25.36	27.38	26.62	27.12	27.96	27.65

[a] Satisfaction or dissatisfaction with: V42 - The Cooperative Extension Service or Office; V43 - Land Grant University Agricultural Research; V44 - Department of Agricultural programs of the Farmers Home Administration (FHA), Soil Conservation Service (SCS), and Agricultural Stabilization and Conservation Service (ASCS); SAT I - a composite index derived from variables V42, V43, and V44 using factor analysis. The Satisfaction Index I is designed to measure satisfaction or dissatisfaction with agricultural agencies.

[b] Mean responses for the individual variables are based on a three-point scale where 1 = dissatisfied; 2 = undecided; and 3 = satisfied.

[c] See text p. 12 for definition of low income (LI).

[d] Mean values will not be computed for variables with less than five respondents.

Table 22. Statistical Results Related to the Individual Variables and Composite Satisfaction I Index for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
		---Prob. > F--						
V42	Random	0.1354	0.9960	0.3496	0.9826	0.5217	0.9715	0.4225
	Whites	0.1767	0.9806	0.6712	0.9989	0.7321	0.9279	0.7334
	Minorities	0.3979	0.9523	0.7798	0.1704	0.0127*	0.5526	0.3440
V43	Random	0.0032*	0.6207	0.8812	0.3405	0.1742	0.4664	0.0529
	Whites	0.0037	0.8846	0.9586	0.3405	0.7058	0.4109	0.4111
	Minorities	0.0242*	0.9165	0.5232	0.0479	0.0279*	0.6965	0.0123*
V44	Random	0.8916	0.4233	0.1563	0.5972	0.6475	0.8463	0.1754
	Whites	0.8967	0.3997	0.2099	0.5041	0.7082	0.9463	0.3426
	Minorities	0.4066	0.1483	0.1355	0.6563	0.4677	0.7909	0.2918
SAT I	Random	0.1362	0.8667	0.9772	0.2474	0.8252	0.7860	0.9620
	Whites	0.4552	0.6695	0.6471	0.2766	0.5629	0.7431	0.8839
	Minorities	0.0084	0.2340	0.1182	0.2074	0.0317*	0.7798	0.4391

*Significant Multiple Range Test.

The Satisfaction II Index (SAT II):

Tables 23 through 25

Part-time minorities and respondents in the random sample were more satisfied with life situations than were other status groups. Full-time white operators were more satisfied than were part-time white operators.

Some similarities were apparent between the respondents satisfaction with Agricultural Agencies (SAT I) and satisfaction with different life domains (SAT II). Minorities generally rated lower than whites on both indices. The least satisfied minority is low income persons operating the smallest farms. This group is least satisfied with job opportunities in the area even though on average they are retirement age at 66.7 years (See Table 6). The interaction between farm size and the Satisfaction II Index was significant for minorities.

Whites and respondents in the random sample operating the smallest farms were least satisfied with agricultural agencies and life situations. The most satisfied respondents in the random sample and whites were operating in the economic sales class of $40,000–$99,999. Whites were least satisfied with county, state and federal programs for welfare, social security and medicare.

The Hedonistic Index (HED):

Tables 26 through 28

The Hedonistic Index, measuring the individuals gratification with life, is statistically significant for the random sample and whites by

Table 23. Summary of the Individual Variables and Composite Satisfaction II Index for the Random Sample and Minority Supplement by Race, Farm Size and Income

Variables[a]	Sample	Farm Size											
		$1,000–$4,999			$5,000–$39,999			$40,000–$99,999			$100,000 +		
		LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
		Mean Responses[b]											
V37	Random	2.80	2.57	2.64	2.90	2.78	2.80	3.00	2.95	2.96	3.00	2.90	2.92
	Whites	2.77	2.52	2.58	2.92	2.81	2.93	3.00	2.95	2.95	3.00	2.88	2.91
	Minorities	2.76	2.86	2.81	2.83	2.78	2.78	--d	3.00	3.00	--d	--d	--d
V39	Random	2.58	2.72	2.68	2.61	2.81	2.77	2.60	2.68	2.68	2.33	2.80	2.69
	Whites	2.72	2.68	2.69	2.62	2.82	2.78	2.60	2.65	2.64	2.33	2.76	2.65
	Minorities	2.33	2.73	2.50	2.66	2.65	2.65	--	3.00	3.00	--	--	--
V40	Random	2.12	1.79	1.88	1.77	2.06	2.01	1.80	2.40	2.34	2.50	2.25	2.30
	Whites	2.36	1.76	1.90	1.85	2.06	2.02	1.80	2.35	2.28	2.50	2.23	2.30
	Minorities	1.56	1.82	1.67	1.16	1.81	1.71	--	2.83	2.57	--	--	--
V38	Random	2.70	2.84	2.81	2.67	2.83	2.80	3.00	2.73	2.76	3.00	3.00	3.00
	Whites	2.77	2.85	2.83	2.62	2.84	2.80	3.00	2.70	2.73	3.00	3.00	3.00
	Minorities	2.43	2.73	2.56	2.66	2.75	2.73	--	3.00	3.00	--	--	--
V41	Random	1.83	1.72	1.75	2.09	1.62	1.70	1.40	1.42	1.42	1.33	1.60	1.53
	Whites	1.81	1.71	1.73	2.14	1.61	1.71	1.40	1.40	1.40	1.33	1.70	1.60
	Minorities	2.30	1.69	2.03	1.83	1.90	1.89	--	1.83	1.71	--	--	--
V34	Random	2.54	2.75	2.69	2.90	2.75	2.78	2.60	2.80	2.78	2.83	2.70	2.73
	Whites	2.81	2.82	2.82	2.88	2.75	2.78	2.60	2.77	2.75	2.83	2.64	2.69
	Minorities	2.30	2.30	2.30	3.00	2.71	2.76	--	3.00	3.00	--	--	--
V35	Random	2.87	2.84	2.85	2.87	2.86	2.86	3.00	3.00	3.00	2.33	2.80	2.69
	Whites	2.90	2.82	2.84	2.85	2.86	2.86	3.00	3.00	3.00	2.33	2.76	2.65
	Minorities	2.70	2.91	2.79	2.66	2.90	2.86	--	3.00	2.71	--	--	--
SAT II	Random	18.64	18.34	18.42	18.61	18.95	19.52	19.00	19.57	19.52	19.00	19.35	19.26
	Whites	19.36	18.28	18.53	18.62	19.01	18.94	19.00	19.42	19.37	19.00	19.17	19.13
	Minorities	17.03	18.26	17.56	18.00	18.50	18.42	--	20.66	20.14	--	--	--

[a] Satisfaction or dissatisfaction with your: V37 – Job; V39 – Standard of living (things like income, car, furniture, etc.); V40 – Job opportunities around here; V38 – Health; V41 – County, state and federal programs for welfare, Social Security, and Medicare; V34 – House or apartment; V35 – With your community as a place to live; SAT II – A composite index derived to measure the individual's satisfaction with different life domains.

[b] Mean responses for the individual variables are based on a three-point scale where 1 = dissatisfied; 2 = undecided; and 3 = satisfied.

[c] See text p. 12 for definition of low income (LI).

[d] Mean values will not be computed for variables with less than five respondents.

Table 24. Summary of the Individual Variables and Composite Satisfaction II Index for the Random Sample and Minority Supplement by Race, Status and Income

Variables[a]	Sample	Aged and Disabled			Part-time			Full-time			All Farms		
		LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total

Status — Mean Responses[b]

Variables[a]	Sample	LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
V37	Random	2.83	2.82	2.83	2.69	2.66	2.66	2.93	2.85	2.87	2.85	2.75	2.78
	Whites	2.80	2.86	2.83	2.72	2.63	2.63	2.96	2.89	2.90	2.85	2.75	2.77
	Minorities	2.84	2.83	2.83	--d	2.92	2.90	2.70	2.72	2.71	2.78	2.84	2.82
V39	Random	2.52	2.94	2.77	2.69	2.72	2.72	2.54	2.72	2.67	2.55	2.76	2.72
	Whites	2.56	3.00	2.82	2.63	2.69	2.69	2.61	2.69	2.67	2.59	2.75	2.71
	Minorities	2.52	2.61	2.55	--	2.78	2.80	2.09	2.77	2.51	2.43	2.73	2.62
V40	Random	1.84	2.10	2.00	2.07	2.00	2.00	2.15	2.08	2.10	2.00	2.04	2.03
	Whites	1.93	2.06	2.01	2.00	1.98	1.98	2.30	2.08	2.13	2.08	2.03	2.04
	Minorities	1.40	1.77	1.55	--	2.00	2.06	1.54	2.00	1.82	1.53	1.93	1.78
V38	Random	2.60	2.61	2.61	3.00	2.94	2.94	2.81	2.80	2.80	2.75	2.83	2.81
	Whites	2.59	2.58	2.58	3.00	2.93	2.94	2.84	2.81	2.82	2.75	2.83	2.81
	Minorities	2.48	2.66	2.55	--	2.92	2.93	2.45	2.66	2.58	2.51	2.78	2.67
V41	Random	2.13	1.80	2.61	1.69	1.54	1.55	1.66	1.62	1.63	1.88	1.62	1.68
	Whites	2.18	1.78	1.94	1.63	1.52	1.53	1.61	1.66	1.65	1.88	1.61	1.67
	Minorities	2.32	1.94	2.16	--	1.85	1.87	1.90	1.50	1.65	2.17	1.78	1.93
V34	Random	2.68	2.85	2.78	3.00	2.80	2.81	2.69	2.64	2.66	2.73	2.76	2.75
	Whites	2.75	2.82	2.79	3.00	2.81	2.82	2.84	2.68	2.72	2.82	2.77	2.78
	Minorities	2.48	2.72	2.58	--	2.64	2.67	2.27	2.44	2.37	2.46	2.60	2.55
V35	Random	2.89	2.85	2.78	3.00	2.90	2.81	2.75	2.85	2.66	2.85	2.87	2.87
	Whites	2.93	2.82	2.87	3.00	2.91	2.91	2.69	2.83	2.79	2.85	2.86	2.86
	Minorities	2.72	3.00	2.83	--	2.82	2.77	2.63	3.00	2.86	2.66	2.92	2.82
SAT II	Random	18.26	18.98	18.68	19.38	18.91	18.95	18.78	18.83	18.82	18.64	18.89	18.84
	Whites	18.43	18.91	18.71	19.27	18.86	18.89	19.23	18.87	18.96	18.86	18.87	18.87
	Minorities	17.44	18.55	17.90	--	18.96	19.03	16.27	18.44	17.62	17.23	18.70	18.16

[a]Satisfaction or dissatisfaction with your: V37 – Job; V39 – Standard of living (things like income, care, furniture, etc.); V40 – Job opportunities around here; V38 – Health; V41 – County, state and federal programs for welfare, Social Security, and Medicare; V34 – House or apartment; V35 – with your community as a place to live; SAT II – A composite index derived to measure the individual's satisfaction with different life domains.

[b]Mean responses for the individual variables are based on a three-point scale where 1 = dissatisfied; 2 = undecided; and 3 = satisfied.

[c]See text p. 12 for definition of low income (LI).

[d]Mean values will not be computed for variables with less than five respondents.

Table 25. Statistical Results Related to the Individual Variables and Composite Satisfaction II Index for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
					------Prob. > F------			
V37	Random	0.0734	0.0237*	0.2446	0.0098*	0.7618	0.9542	0.4819
	Whites	0.0516*	0.0588*	0.2040	0.0226*	0.9230	0.6341	0.7993
	Minorities	0.0024	0.7218	0.9623	0.0161	0.0673	0.2477	0.0225*
V39	Random	0.2722	0.1420	0.1224	0.0170*	0.6401	0.6306	0.3727
	Whites	0.1536	0.0544	0.2738	0.0267*	0.4343	0.5577	0.4533
	Minorities	0.8090	0.0852	0.2997	0.8684	0.4091	0.1036	0.1985
V40	Random	0.0567*	0.6234	0.7964	0.5730	0.1306	0.7008	0.4753
	Whites	0.3256	0.8535	0.5780	0.6637	0.0529	0.4638	0.2916
	Minorities	0.0487*	0.1729	0.1826	0.6505	0.0844	0.2580	0.5837
V38	Random	0.6709	0.1935	0.3381	0.7511	0.6887	0.8592	0.6987
	Whites	0.4972	0.2023	0.2699	0.7876	0.4902	0.8359	0.6829
	Minorities	0.4643	0.5939	0.9393	0.8045	0.8706	0.6697	0.8836
V41	Random	0.0404*	0.1183	0.7518	0.2467	0.4982	0.7501	0.5435
	Whites	0.0739	0.1878	0.8074	0.3791	0.6804	0.9368	0.4480
	Minorities	0.1452	0.5571	0.7302	0.1214	0.0736	0.1683	0.0908
V34	Random	0.1501	0.1414	0.6873	0.0467*	0.6070	0.9466	0.7270
	Whites	0.2823	0.3053	0.4402	0.1012	0.6337	0.9652	0.7616
	Minorities	0.0361	0.4066	0.5364	0.4490	0.9389	0.6280	0.5340
V35	Random	0.0053*	0.0611	0.7200	0.0054*	0.1355	0.9119	0.9716
	Whites	0.0049*	0.0810	0.7730	0.0054*	0.1839	0.8077	0.8131
	Minorities	1.0000	0.1745	0.0003*	0.9957	0.0186*	0.3775	0.0303*
SAT II	Random	0.0569*	0.9239	0.7213	0.1081	0.4659	0.8642	0.6460
	Whites	0.2737	0.9185	0.2989	0.1330	0.2068	0.7775	0.5706
	Minorities	0.0291	0.1466	0.1872	0.8368	0.6072	0.8082	0.7917

*Significant Multiple Range Test.

Table 26. Summary of the Individual Variables and Composite Hedonistic Index for the Random Sample and Minority Supplement by Race, Farm Size and Income

Variables[a]	Sample	$1,000-$4,999 LI[c]	Other	Total	$5,000-$39,999 LI	Other	Total	$40,000-$99,999 LI	Other	Total	$100,000 + LI	Other	Total
		Mean Responses[b]											
V32	Random	2.61	2.91	2.83	2.19	2.65	2.57	3.40	3.02	3.06	3.00	2.85	2.88
	Whites	2.72	2.94	2.89	2.22	2.63	2.55	3.40	3.05	3.08	3.00	2.88	2.91
	Minorities	2.06	2.47	2.24	1.66	2.87	2.68	--d	3.00	2.71	--d	--d	--d
V33	Random	3.12	3.30	3.25	2.80	3.36	3.26	3.20	3.40	3.38	3.16	3.60	3.50
	Whites	3.09	3.35	3.29	2.85	3.40	3.30	3.20	3.45	3.42	3.16	3.58	3.47
	Minorities	2.86	3.04	2.94	2.66	3.12	3.05	--	3.16	3.28	--	--	--
HED	Random	5.74	6.22	6.09	5.00	6.02	5.83	6.60	6.42	6.44	6.16	6.45	6.38
	Whites	5.81	6.29	6.18	5.07	6.04	5.86	6.60	6.50	6.51	6.16	6.47	6.39
	Minorities	4.93	5.52	5.18	4.33	6.00	5.73	--	6.16	6.00	--	--	--

[a] V32: Taken all together, how would you say things are these days--would you say that you are (1) not too happy, (2) don't know, (3) pretty happy, or (4) very happy. V33: In general do you find life (1) dull, (2) no opinion, (3) pretty routine, or (4) exciting. HED: A composite index derived from the above variables. The Hedonistic Index is designed to determine the individuals subjectively perceived gratification in life.

[b] Mean responses for the individual variables are based on a four-point scale as indicated above.

[c] See text p. 12 for definition of low income (LI).

[d] Mean values will not be computed for variables with less than five respondents.

Table 27. Summary of the Individual Variables and the Composite Hedonistic Index for the Random Sample and Minority Supplement by Race, Status and Income

Variables[a]	Sample	Status											
		Aged and Disabled			Part-time			Full-time			All Farms		
		LI[c]	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
		Mean Responses[b]											
V32	Random	2.39	2.81	2.64	2.92	2.84	2.85	2.51	2.74	2.68	2.52	2.80	2.74
	Whites	2.46	2.78	2.65	2.81	2.79	2.79	2.57	2.84	2.77	2.56	2.80	2.75
	Minorities	1.96	2.77	2.30	--d	3.14	3.16	1.81	2.05	1.96	2.02	2.73	2.46
V33	Random	2.89	3.30	3.13	3.30	3.46	3.44	3.12	3.26	3.23	3.04	3.36	3.29
	Whites	2.90	3.41	3.20	3.27	3.46	3.44	3.07	3.32	3.26	3.02	3.40	3.32
	Minorities	2.64	2.83	2.72	--	3.46	3.48	3.36	2.88	3.06	2.92	3.12	3.04
HED	Random	5.28	6.12	5.78	6.23	6.30	6.30	5.63	6.01	5.91	5.57	6.17	6.03
	Whites	5.37	6.19	5.85	6.90	6.26	6.24	5.65	6.16	6.04	5.59	6.21	6.08
	Minorities	4.60	5.61	5.02	--	6.60	6.64	5.18	4.94	5.03	4.94	5.85	5.51

[a]V32: Taken all together, how would you say things are these days--would you say that you are (1) not too happy, (2) don't know, (3) pretty happy, or (4) very happy. V33: In general, do you find life (1) dull, (2) no opinion, (3) pretty routine, or (4) exciting. HED: A composite index derived from the above variables. The Hedonistic Index is designed to determine the individuals subjectively perceived gratification in life.

[b]Mean responses for the individual variables are based on a four-point scale as indicated above.

[c]See text p. 12 for definition of low income (LI).

[d]Mean values will not be computed for variables with less than five respondents.

Table 28. Statistical Results Related to the Individual Variables and Composite Hedonistic Index for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
					Prob. > F			
V32	Random	0.0127*	0.6285	0.8527	0.2345	0.4855	0.6199	0.1657
	Whites	0.0112*	0.8175	0.9736	0.2084	0.7343	0.4307	0.2598
	Minorities	0.0297	0.0206*	0.0702	0.2840	0.0401	0.4259	0.3477
V33	Random	0.0198	0.0735	0.0061*	0.4406	0.3917	0.1205	0.0661
	Whites	0.0247	0.0842	0.0041*	0.5367	0.3867	0.1396	0.0451*
	Minorities	0.3965	0.1438	0.3059	0.6075	0.7379	0.8082	0.7315
HED	Random	0.0057*	0.3734	0.2076	0.4786	0.3315	0.4225	0.2050
	Whites	0.0111*	0.6780	0.1230	0.3997	0.4750	0.4605	0.1685
	Minorities	0.0932	0.0160*	0.4931	0.7553	0.3025	0.4649	0.7785

*Significant Multiple Range Test.

farm size. The Hedonistic Index is also significantly related to status

for minorities. Farms with gross annual sales of $40,000-$99,999 and

part-time respondents rated higher on the Hedonistic Scale and its

component variables than all others among all samples considered.

Minorities operating farms of $40,000-$99,999 evidenced the highest

overall average on the Hedonistic Scale, although minority responses

were generally lower than whites and respondents in the random sample.

For all samples, low income respondents averaged lower Hedonistic

scores than did other respondents.

The Overall Quality of Life Indices (QLI):

Tables 29 through 31

The three overall Quality of Life Indices are designed to measure

the individuals perceived quality of life. Each index is an additive

combination of selected socio-psychological factors discussed in the

previous section. The Quality of Life Index I (QLI_iI) utilizes the

Anomie, Satisfaction I, and Satisfaction II Indices. QLI_iII consists

of the Anomie and Satisfaction II Indices and QLI_iIII is a combination

of the Anomie, Satisfaction II and Hedonistic Indices. Each Quality of

Life Index will be summarized by farm size, status, low income and race.

Quality of Life and Farm Size. Although many of the means are

negative due to an arbitrary scaling intercept, QLI_iI for the random

sample indicates a positive relationship between farm size and the

individuals perceived quality of life (QOL). This observation is

generally supported by QLI_iII and QLI_iIII except respondents in the

$40,000-$99,999 sales class averaged the highest perceived QOL.

Operators in this sales class evidenced the lowest Anomie and were more

Table 29. Summary of the Overall Quality of Life Indices for the Random Sample and Minority Supplement by Race, Farm Size and Income

Item[a]	Sample	Farm Size											
		$1,000–$4,999			$5,000–$39,999			$40,000–$99,999			$100,000 +		
		LI	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
QLI_iI	Random	−1.08	−1.11	−1.10	−1.09	−0.52	−0.62	0.49	−0.07	−0.01	−0.27	0.28	0.15
	Whites	−6.79	−1.17	−1.06	−1.09	−0.44	−0.56	0.49	−0.21	−0.13	−0.27	0.17	0.05
	Minorities	−2.35	−0.91	−1.73	−1.88	−1.11	−1.23	--b	0.94	0.09	--b	--b	--b
QLI_iII	Random	−1.10	−0.92	−0.97	−1.05	−0.50	−0.60	0.31	−0.25	−0.19	−0.87	−0.14	−0.31
	Whites	0.64	−1.00	−0.91	−1.10	−0.44	−0.56	0.31	−0.41	−0.33	−0.87	−0.28	−0.43
	Minorities	−2.55	−0.85	−1.81	−1.40	−0.94	01.01	--b	0.80	0.31	--	--	--
QLI_iIII	Random	−1.45	−0.74	−0.93	−2.22	−0.50	−0.81	0.80	0.14	0.21	−0.80	0.35	0.08
	Whites	−0.93	−0.73	−0.78	−2.18	−0.40	−0.73	0.80	0.07	0.15	−0.80	0.23	−0.03
	Minorities	−3.76	−1.44	−2.75	−3.26	−1.04	−1.39	--	0.87	0.27	--	--	--

[a] QLI_iI is an additive combination of the Anomie, Satisfiaction I and Satisfaction II Indices; QLI_iII is an additive combination of the Anomie and Satisfaction II Indices; and QLI_iIII is an additive combination of the Anomie, Satisfiaction II and Hedonistic Indices.

[b] Mean values will not be computed for variables with less than five respondents.

Table 30. Summary of the Overall Quality of Life Indices for the Random Sample and Minority Supplement by Race, Status and Income

		Aged and Disabled			Part-time			Full-time			All Farms		
Item[a]	Sample	LI	Other	Total	LI	Other	Total	LI	Other	Total	LI	Other	Total
$QLI_i I$	Random	-1.41	-0.67	-0.97	-0.44	-0.54	-0.53	-0.56	-0.55	-0.55	-0.93	-0.57	-0.65
	Whites	-1.35	-0.69	-0.96	-0.55	-0.55	-0.55	-0.22	-0.54	-0.47	-0.80	-0.57	-0.62
	Minorities	-2.11	-0.99	-1.64	-0.89	-0.64	-0.67	-2.84	-0.68	-1.50	-2.22	-0.75	-1.31
$QLI_i II$	Random	-1.48	-0.70	-10.2	-0.30	-0.44	-0.43	-0.64	-0.65	-0.65	-0.97	-0.56	-0.65
	Whites	-1.39	-0.75	-1.01	-0.29	-0.46	-0.45	-0.38	-0.69	-0.62	-0.83	-0.59	-0.64
	Minorities	-2.72	-0.76	-1.64	-1.16	-0.67	-0.71	-2.56	-0.59	-1.33	-2.27	-0.67	-1.27
$QLI_i III$	Random	-2.34	-0.61	-1.32	-0.12	-0.12	-0.12	-1.09	-0.69	-0.79	-1.51	-0.41	-0.66
	Whites	-2.13	-0.56	-1.22	-0.25	-0.19	-0.19	-0.83	-0.56	-0.63	-1.36	-0.38	-0.59
	Minorities	-3.88	-1.35	-2.82	-0.11	-0.06	-0.07	-3.35	-1.78	-2.38	-3.44	-0.91	-1.87

The column group header "Status" spans Aged and Disabled, Part-time, and Full-time.

[a] $QLI_i I$ is an additive combination of the Anomie, Satisfaction I and Satisfaction II Indices; $QLI_i II$ is an additive combination of the Anomie and Satisfaction II Indices; and $QLI_i III$ is an additive combination of the Anomie, Satisfaction II and Hedonistic Indices.

Table 31. Statistical Results Related to the Overall Quality of Life Indices for the Random Sample and Minority Supplement

Variables	Sample	Farm Size (F.S.)	Status	Low Income (LI)	F.S. x Status	F.S. x Low Income	Status x Low Income	F.S. x Status x Low Income
$QLI_i I$	Random	0.0173*	0.5524	0.7568	0.2773	0.6908	0.6344	0.9477
	Whites	0.1486	0.5311	0.4386	0.2727	0.5662	0.6200	0.9615
	Minorities	0.1209	0.4374	0.0120	0.8477	0.2145	0.9395	0.9010
$QLI_i II$	Random	0.0836	0.5948	0.5898	0.3367	0.5506	0.8013	0.7068
	Whites	0.3369	0.6227	0.2548	0.2574	0.3760	0.7748	0.7244
	Minorities	0.1604	0.5722	0.0279*	0.8752	0.6516	0.9019	0.7051
$QLI_i III$	Random	0.0064*	0.2980	0.5406	0.2043	0.3853	0.4036	0.3981
	Whites	0.0331*	0.5638	0.6814	0.1393	0.4596	0.5290	0.4624
	Minorities	0.0503*	0.0766	0.0894	0.8616	0.5202	0.6633	0.7286

*Significant Multiple Range Test.

satisfied with life domains (SAT II) than all other farm sizes. They also evidenced the highest average on the Hedonistic Index. These data suggest that farms in the economic sales class of $40,000-$99,999 have a higher perceived Quality of Life among all farm sizes.

Minorities also evidenced a positive relationship between farm size and quality of life by all Quality of Life Indices but statistical significance was limited to QLI_iIII. Because QLI_iI and QLI_iII are not significant by farm size (Table 29) the hypothesis that small farmers have a higher perceived quality of life than mid-sized and large family farms is not accepted for the random sample and minorities.

Quality of Life and Status. The three QLI indicated part-time operators for the random sample and minorities evidenced a higher perceived quality of life than full-time, aged and disabled operators. Part-time white respondents evidenced a higher perceived QOL than other status groups except by QLI_iI where there was no appreciable difference in the average responses of full-time and part-time operators. The socio-economic and demographic variables analyzed in Chapter II suggest that part-time operators averaged greater educational attainment and generally averaged more total income. Earlier analysis indicated part-time minority farmers were happier with life situations and found their life to be more exciting than all other minorities.

Although the QLI by status were not statistically related, the analyses suggest that part-time operators by all races have a higher perceived quality of life than full-time, aged and disabled operators.

Quality of Life and Low Income Respondents. Considering the overall sample ("all farms", Table 30) low income respondents by all indices for the random sample, white and minorities have a lower

perceived quality of life than all other operators. As noted in an earlier chapter on economic and demographic variables, low income respondents evidenced a smaller net worth, averaged less education and had more children than respondents with higher income.

Quality of Life and Race. Mean responses for the Quality of Life III Index indicated whites averaged a greater perceived quality of life than minority operators by farm size and status. QLI_iI and II also evidenced a greater perceived quality of life for whites by status and farm size except in the $40,000-$99,999 economic sales class. Minorities in this farm size evidenced a greater perceived QOL than other minorities and whites. Minorities in the group were more satisfied with agricultural agencies (SAT II) than were others. They also evidenced less anomie than all whites and all minorities.

Summary

The data suggest that the perceived quality of life generally increase as farm size increase but farms in the economic sales class of $40,000-$99,999 had a higher perceived quality of life than all others. Coughenour and Christenson found similar results in their study analyzing attitude about personal well-being, community well-being and perceived adequacy of community services. Part-time operators rated higher on the Quality of Life Index than full-time aged and disabled operators whereas low income operators rated lower than those that were not low income. Generally minorities perceived their quality of life as lower than white respondents except those minorities with gross annual sales of $40,000-$99,999.

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APPENDICES

APPENDIX A

RESULTS OF THE FACTOR ANALYTIC OUTPUT

MEANS AND STD DEVIATIONS

	V29	V30	V31	V32	V33	V34	V35	V36
MEAN	2.47091	1.94183	2.57895	2.74515	3.29640	2.75069	2.87258	2.92798
STD DEV	0.83324	0.95420	0.75277	1.05219	0.75514	0.65312	0.47181	0.34208

	V37	V38	V39	V40	V41	V42	V43	V44
MEAN	2.77839	2.81440	2.71468	2.04432	1.68144	2.59834	2.52355	2.47922
STD DEV	0.56340	0.55918	0.67002	0.91786	0.85369	0.57436	0.53242	0.72283

NUMBER OF OBSERVATIONS=   361

CORRELATION MATRIX

	V29	V30	V31	V32	V33	V34	V35	V36
V29	1.00000	0.38742	0.37013	-0.18591	-0.24893	-0.01847	-0.07305	-0.05610
V30	0.38742	1.00000	0.30999	-0.25551	-0.29983	-0.05454	-0.09672	-0.04691
V31	0.37013	0.30999	1.00000	-0.20599	-0.27828	-0.07285	-0.04981	-0.06415
V32	-0.18591	-0.25551	-0.20599	1.00000	0.31209	0.10535	0.14703	0.09550
V33	-0.24893	-0.29983	-0.27828	0.31209	1.00000	0.04886	0.07511	0.17965
V34	-0.01847	-0.05454	-0.07285	0.10535	0.04886	1.00000	0.23917	0.09347
V35	-0.07305	-0.09672	-0.04981	0.14703	0.07511	0.23917	1.00000	0.04624
V36	-0.05610	-0.04691	-0.06415	0.09550	0.17965	0.09347	0.04624	1.00000
V37	-0.09069	-0.01371	-0.12237	0.09659	0.18093	0.09101	0.16517	0.11874
V38	-0.00268	-0.03591	-0.04098	-0.00507	0.12406	0.04028	0.03646	-0.01199
V39	-0.14676	-0.01734	-0.11768	0.17239	0.19506	0.30673	0.07799	0.01917
V40	-0.07821	-0.05414	-0.10156	0.19293	0.16935	0.14359	0.04515	0.09866
V41	-0.01892	0.17156	-0.03208	-0.04115	-0.09012	-0.01829	0.07825	0.01634
V42	-0.16668	-0.12385	-0.21878	0.12892	0.24323	-0.00111	0.09762	0.12097
V43	-0.18786	-0.00003	-0.17619	-0.01405	0.23477	-0.05497	0.04515	0.10085
V44	-0.05750	0.04456	0.00430	0.00763	0.13599	-0.00512	0.19584	0.05010

	V37	V38	V39	V40	V41	V42	V43	V44
V29	-0.09069	-0.00268	-0.14676	-0.07821	-0.01892	-0.16668	-0.18786	-0.05750
V30	-0.01371	-0.03591	-0.01734	-0.05414	0.17156	-0.12385	-0.00003	0.04456
V31	-0.12237	-0.04098	-0.11768	-0.10156	-0.03208	-0.21878	-0.17619	0.00430
V32	0.09659	-0.00507	0.17239	0.19293	-0.04115	0.12892	-0.01405	0.00763
V33	0.18093	0.12406	0.19506	0.16935	-0.09012	0.24323	0.23477	0.13599
V34	0.09101	0.04028	0.30673	0.14359	-0.01829	-0.00111	-0.05497	-0.00512
V35	0.16517	0.03646	0.07799	0.04515	0.07825	0.09762	0.04515	0.19584
V36	0.11874	-0.01199	0.01917	0.09866	0.01634	0.12097	0.10085	0.05010
V37	1.00000	0.12478	0.28827	0.18019	0.06650	0.08470	0.17487	0.11144
V38	0.12478	1.00000	0.02879	0.02148	-0.10092	0.03536	0.03804	0.08321
V39	0.28827	0.02879	1.00000	0.25098	0.08833	0.04063	0.05392	0.03074
V40	0.18019	0.02148	0.25098	1.00000	-0.05638	0.13398	0.10586	0.06838
V41	0.06650	-0.10092	0.08833	-0.05638	1.00000	0.07823	0.03794	0.10403
V42	0.08470	0.03536	0.04063	0.13398	0.07823	1.00000	0.35348	0.32442
V43	0.17487	0.03804	0.05392	0.10586	0.03794	0.35348	1.00000	0.21240
V44	0.11144	0.08321	0.03074	0.06838	0.10403	0.32442	0.21240	1.00000

PRIOR ESTIMATES OF COMMUNALITY:

	V29	V30	V31	V32	V33	V34	V35	V36
	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

	V37	V38	V39	V40	V41	V42	V43	V44
	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

	1	2	3	4	5	6	7	8
EIGENVALUES	2.809567	1.566155	1.502518	1.155016	1.097814	1.036186	0.934686	0.866096
PORTION	0.176	0.098	0.094	0.072	0.069	0.065	0.058	0.054
CUM PORTION	0.176	0.273	0.367	0.440	0.508	0.573	0.631	0.686

	9	10	11	12	13	14	15	16
EIGENVALUES	0.803125	0.733924	0.714792	0.631881	0.588544	0.583480	0.513925	0.462292
PORTION	0.050	0.046	0.045	0.039	0.037	0.036	0.032	0.029
CUM PORTION	0.736	0.782	0.826	0.866	0.903	0.939	0.971	1.000

6 FACTORS WILL BE RETAINED.

FACTOR PATTERN

	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
V29	-0.55293	0.31215	0.20969	0.28574	0.02756	0.24539
V30	-0.47358	0.59364	0.12202	0.04609	-0.23737	0.01526
V31	-0.56263	0.28149	0.16547	0.22533	0.10180	0.22898
V32	0.49376	-0.28329	0.19418	-0.06654	0.07389	0.27024
V33	0.65296	-0.13142	-0.10114	0.22862	-0.05752	0.08989
V34	0.25745	0.05888	0.63212	-0.07603	0.23740	0.07065
V35	0.31032	0.23838	0.24788	-0.19458	0.67721	0.05119
V36	0.27973	0.10869	0.01219	0.08604	-0.12984	0.63702
V37	0.41977	0.32564	0.26758	0.13932	-0.18540	-0.26485
V38	0.14881	0.06170	0.02631	0.63882	0.25573	-0.45128
V39	0.41728	0.14803	0.55345	-0.09003	-0.30055	-0.23962
V40	0.40130	0.10148	0.30178	0.20523	-0.34951	0.20601
V41	0.00291	0.43812	-0.01900	-0.64949	-0.10080	-0.15752
V42	0.50593	0.30486	-0.42617	-0.01686	0.05441	0.15242
V43	0.42130	0.36053	-0.42940	0.09221	-0.22357	-0.06736
V44	0.29160	0.55723	-0.26674	0.06620	0.33821	0.05049

VARIANCE EXPLAINED BY EACH FACTOR

FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
2.809567	1.566155	1.502518	1.155016	1.097814	1.036186

FINAL COMMUNALITY ESTIMATES

V29	V30	V31	V32	V33	V34	V35	V36
0.589761	0.650283	0.536745	0.444674	0.517513	0.536449	0.713663	0.520272

V37	V38	V39	V40	V41	V42	V43	V44
0.477774	0.703779	0.658196	0.469120	0.649129	0.557005	0.554889	0.588005

ROTATED FACTOR PATTERN

	FACTOR1*	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
V29	0.73973	-0.13230	-0.08902	0.10026	0.01847	0.08214
V30	0.73279	0.08342	0.16502	-0.21528	-0.14440	-0.10915
V31	0.69520	-0.12794	-0.16392	0.07320	0.06064	0.03421
V32	-0.42782	-0.08189	0.10287	0.04030	0.25410	0.42209
V33	-0.45696	0.27926	0.20077	0.27783	-0.00648	0.33641
V34	-0.01242	-0.21125	0.36445	0.00535	0.57698	0.16096
V35	-0.07172	0.19613	0.00859	-0.02652	0.81763	-0.02737
V36	0.04269	0.18402	0.00535	-0.05194	0.03448	0.69330
V37	-0.03438	0.22668	0.64186	0.08750	0.06991	-0.02614
V38	0.02087	0.18014	0.20771	0.72273	0.08334	-0.31378
V39	-0.13514	-0.09802	0.77482	-0.10934	0.12812	0.04003
V40	-0.03049	0.04372	0.49609	0.08396	-0.05234	0.45867
V41	0.05111	0.21917	0.16877	-0.70227	0.10304	-0.25728
V42	-0.21998	0.68177	-0.01521	-0.05257	0.03261	0.19935
V43	-0.13680	0.66223	0.18190	-0.01551	-0.24801	0.05280
V44	0.10753	0.69475	-0.01969	0.03381	0.30348	-0.01184

ORTHOGONAL TRANSFORMATION MATRIX

	1	2	3	4	5	6
1	-0.67188	0.43823	0.43765	0.10403	0.22502	0.32175
2	0.61462	0.64977	0.32141	-0.24296	0.17555	-0.08295
3	0.21816	-0.60273	0.59417	0.01558	0.46575	0.13753
4	0.28037	0.10208	0.10013	0.91351	-0.20403	0.15755
5	-0.02948	0.10961	-0.46266	0.26718	0.80517	-0.23102
6	0.20913	0.00565	-0.35782	-0.15499	0.10813	0.89022

VARIANCE EXPLAINED BY EACH FACTOR

FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
2.068532	1.771904	1.609625	1.190340	1.288372	1.238483

SQUARED MULTIPLE CORRELATIONS OF THE VARIABLES WITH EACH FACTOR

FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

SCORING COEFFICIENT MATRIX

	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
V29	0.40332	-0.01151	-0.01073	0.12927	0.05105	0.18334
V30	0.38458	0.10393	0.19508	-0.13196	-0.11421	-0.00516
V31	0.36722	-0.00602	-0.06688	0.10595	0.09654	0.14185
V32	-0.16465	-0.11544	-0.03466	-0.01082	0.16213	0.29687
V33	-0.14723	0.10285	0.04776	0.19689	-0.06697	0.19300
V34	0.04275	-0.17162	0.17112	-0.00597	0.41808	0.08459
V35	0.00025	0.09856	-0.12467	-0.01966	0.66481	-0.07947
V36	0.13047	0.08195	-0.08710	-0.06521	-0.00559	0.61374
V37	0.05160	0.08560	0.41970	0.07248	-0.03516	-0.11420
V38	0.04957	0.11779	0.14969	0.63119	0.05461	-0.33820
V39	-0.02348	-0.13478	0.51585	-0.11029	-0.00796	-0.06430
V40	0.08846	-0.03199	0.29662	0.04869	-0.13403	0.34674
V41	-0.01826	0.12152	0.12343	-0.58271	0.06781	-0.22732
V42	-0.03802	0.38113	-0.10418	-0.05587	0.00138	0.11999
V43	-0.00682	0.37301	0.09528	-0.01618	-0.24624	-0.00840
V44	0.12740	0.42357	-0.09994	0.04871	0.24476	-0.03930

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
1	213	-4.7739	2.1409	1.9615	1.0223	0.7205	1.6715
2	213	0.1352	-0.2897	1.2915	0.8239	-0.1183	0.4538
3	213	-4.7075	2.0456	0.8806	0.8393	0.8346	0.6721
4	213	0.6615	1.9909	1.2563	-1.2571	0.6667	-0.3169
5	213	-1.9866	1.5314	1.3842	0.8567	0.5320	1.0220
6	213	-0.8935	0.6001	1.2418	1.3723	0.2646	1.5748
7	213	-0.5462	1.1136	1.0465	1.0895	0.9346	1.5141
8	213	1.3963	1.3663	1.2946	0.6000	0.3904	0.8841
9	213	-4.8029	1.6932	2.3842	-0.6698	0.5421	1.0852
10	213	-4.3673	2.2187	1.8638	0.9840	0.4790	1.2704
11	213	-2.6594	-0.3948	1.0393	1.1700	0.4621	0.9320
12	213	-2.8314	2.3936	2.2096	0.5328	0.1764	1.0416
13	213	-2.4025	-1.6386	0.6976	1.1992	0.9279	0.8328
14	213	-0.9225	0.1524	1.6645	-0.3197	0.0862	0.9884
15	213	-2.4604	2.1355	1.6260	0.3558	0.7608	1.0599
16	213	0.2283	1.6087	0.6159	-0.4876	0.8445	-0.1141
17	213	-0.6496	-2.8605	0.8793	1.4554	0.0298	0.7985
18	213	0.8812	-0.3347	-0.1319	-0.5293	0.9155	0.9608
19	213	0.4293	1.6333	-4.7004	1.0230	-1.4663	-0.4525
20	213	0.4445	1.9150	1.8559	0.1836	0.7440	1.4294
21	213	3.9916	-4.1062	-3.2825	-3.1257	-0.5754	-0.5237
22	213	-1.8604	2.3073	-3.0998	1.3617	-3.1281	-0.1925
23	213	2.4440	-0.5215	-0.0986	-0.4999	0.1881	-1.3018
24	213	3.9890	0.0135	-0.0918	-1.9492	0.2233	-2.7584
25	213	0.9175	1.8976	0.6772	-0.0377	0.6166	0.0288
26	213	-1.7954	2.0225	1.5578	-0.8347	0.8901	0.3130
27	213	-2.7704	-1.4925	-1.5387	-1.8107	-0.7458	2.6091
28	213	1.9540	-2.1209	-0.0743	0.4909	0.4937	-0.5452
29	213	-1.5740	1.2813	-0.2474	1.0751	0.5369	1.0597
30	213	-1.2010	-0.5907	-3.3647	1.3845	-1.8052	-0.1653
31	213	1.7890	-1.1332	0.9048	0.7298	0.5754	0.0914
32	213	-1.0316	1.9969	1.7078	-0.1878	1.1674	1.3568
33	213	1.9540	-2.1209	-0.0743	0.4909	0.4937	-0.5452
34	213	-4.5854	1.2410	-1.3979	0.5287	0.5864	0.7649
35	213	2.8109	-2.3297	0.9681	-1.6690	0.8797	-0.6383
36	213	1.8394	0.5407	0.2674	-1.1991	1.2117	-0.8172
37	213	1.8062	0.5883	0.8079	-1.1076	1.1546	-0.3175
38	213	3.4579	-2.6555	0.5270	0.2855	-1.8278	-0.7355
39	213	-1.2777	1.3799	0.0614	0.4889	-0.5180	0.5664
40	213	0.6173	-1.6768	1.5199	-0.2077	0.6613	0.5086
41	213	-5.5883	0.4664	2.1360	0.7932	-0.4412	1.2577
42	213	2.2096	1.5220	1.0991	0.5234	-0.0926	0.0818
43	213	-2.5466	2.7291	1.9568	-0.6175	0.2596	-0.0361
44	213	-1.3629	-2.2853	-0.2648	0.7291	0.5139	0.5323
45	213	-3.4720	0.5575	0.7158	0.5537	1.0105	0.2260
46	213	0.1838	-0.1476	-0.4739	0.8974	1.2729	0.0143
47	213	4.1605	-4.8522	-1.4095	-0.3197	-4.0390	-1.5600
48	213	-3.2501	1.5430	1.6318	1.0198	-3.4699	0.5841
49	213	2.9309	0.1684	-2.6947	0.7236	-0.1333	-0.0904
50	213	0.4672	1.7919	0.7722	0.1912	-0.0799	-0.6150
51	213	1.5226	1.5278	0.4113	-0.4056	0.6252	-0.4167
52	213	-0.7858	1.6060	1.6060	0.3976	0.5876	1.0881
53	213	-2.9984	1.8233	1.7479	1.2629	0.7649	1.8687
54	213	-2.0797	-1.5239	1.1320	1.2727	0.5299	1.7946
55	213	-4.0515	-0.0986	1.6703	-1.7948	1.2219	1.1837
56	213	-2.5639	-0.3719	-2.7517	0.5146	0.4687	0.4550

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
57	213	2.2760	1.4267	0.0181	0.3404	0.0215	-0.9176
58	213	-0.6724	-0.2076	-1.9425	-3.8054	0.5648	-0.4192
59	213	0.1941	1.0269	-0.4535	-1.2304	0.8594	-0.9679
60	213	0.0897	1.5534	0.3066	1.0106	0.6472	0.4446
61	213	-3.6424	2.3624	1.9933	-1.0292	0.7290	0.2221
62	213	-4.3009	2.1235	0.7828	0.8010	0.5931	0.2709
63	213	2.6898	-3.0916	-3.4058	-1.2984	0.2922	-2.4677
64	213	-1.6018	1.6360	0.3514	1.1389	0.7180	0.5135
65	213	0.8479	-0.8316	-3.2256	-1.4011	1.2323	-0.1625
66	213	-3.4728	1.6011	2.0686	-0.6108	0.3811	0.7294
67	213	0.3525	-1.8400	0.9319	1.0109	-0.4449	0.3974
68	213	0.7912	1.7361	1.5605	0.9679	0.3818	1.3296
69	213	-0.5514	0.4156	0.0894	1.4684	-4.9681	1.1979
70	213	-4.7739	2.1409	1.9615	1.0223	0.7205	1.6715
71	213	-1.5812	-0.7821	-0.4054	0.5809	0.3432	-0.9141
72	213	-1.6325	1.7200	1.3214	1.2988	0.6623	1.4598
73	213	-3.8603	-1.2792	0.4866	0.8952	0.4829	0.7043
74	213	-1.0145	0.4390	0.3677	0.2345	-0.7483	0.0063
75	213	1.6044	1.8918	1.3649	0.8913	-0.1012	0.5273
76	213	-3.2795	2.8571	-0.3533	0.0593	-0.9725	-0.4779
77	213	-2.6306	2.2044	1.4505	1.0046	0.0766	0.5135
78	213	1.9588	-1.4264	-0.6499	0.5660	-1.3302	-0.5384
79	213	1.6312	1.4650	-0.4023	0.6717	0.2562	0.3247
80	213	0.5418	1.4774	0.8609	0.3882	0.4253	0.2858
81	213	-3.1497	0.1573	1.8974	0.3033	0.2037	0.6837
82	213	2.4655	-4.0333	-2.7016	0.7996	0.1572	-0.7475
83	213	-3.5425	0.2830	0.8848	-0.6473	0.8044	1.2869
84	213	-1.2100	-1.8195	-0.4099	-1.0076	0.8123	-0.5702
85	213	-0.0433	-1.8057	0.0350	-3.1007	-0.4917	-2.0283
86	213	4.2436	-4.3361	-2.8731	-4.5663	-5.8626	-1.5333
87	213	1.7310	-1.2951	-1.4088	1.5172	-0.3431	0.0924
88	213	0.8576	-0.7609	1.7762	0.1641	-3.8031	1.1770
89	213	-0.0732	1.0962	-0.1323	0.8682	0.8071	0.1135
90	213	3.5647	-1.7791	-3.8958	-0.4071	-1.2995	-6.4197
91	213	-0.0674	-1.4125	0.2411	-0.3352	1.0291	-0.4736
92	213	0.8908	-1.7624	-0.1147	0.5241	0.1846	-5.6145
93	213	-0.0199	1.7049	1.3441	-0.5941	0.9345	0.5102
94	213	-2.5060	-1.1035	0.4797	0.1546	0.3842	0.1003
95	213	1.1672	-3.7119	0.0679	-0.0659	0.6287	-0.1566
96	213	1.3733	-0.1258	0.3384	0.6148	-0.8268	-0.4393
97	213	-4.7739	2.1409	1.9615	1.0223	0.7205	1.6715
98	213	2.9136	-0.4289	-2.2411	0.7116	-0.8376	-1.3678
99	213	0.7401	1.2519	-0.3278	0.7917	0.3241	-0.6888
100	213	2.4291	-0.5885	-3.2482	-1.7033	0.5979	-1.0792
101	213	-0.7747	0.7531	1.3661	-0.1587	1.6332	1.2576
102	213	1.3115	-2.0733	-0.1799	-0.4337	0.3360	0.4615
103	213	-2.0710	-2.3122	-3.4843	-2.4254	-0.8043	1.7103
104	213	0.8853	0.0351	0.7800	0.8547	1.0076	0.8994
105	213	0.6283	2.0385	1.7968	-1.1656	0.6096	0.1828
106	213	0.8843	1.9452	1.2177	0.0538	0.5595	0.5285
107	213	2.6225	-1.6612	-5.9525	-0.1833	-2.1148	-2.0541
108	213	1.5677	-2.3859	-1.2265	-4.0885	-0.8940	-2.0084
109	213	-1.9107	-0.0059	-0.5635	-0.1914	1.4097	0.4630
110	213	-0.7447	1.5613	1.2146	1.4191	0.6845	1.5584
111	213	1.3996	0.5105	0.9056	-1.0693	1.3961	0.0836
112	213	1.8165	-2.3955	-5.0094	0.0587	-0.1966	-1.4468

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
113	213	0.4180	-2.2958	-0.4202	0.9421	0.7963	-0.3164
114	213	-1.1029	-2.6468	-2.4921	0.9811	-0.0503	-0.6167
115	213	0.7613	0.9279	1.7120	-0.6099	1.3305	1.0289
116	213	2.6680	0.4389	-0.6489	-1.2765	-1.9806	-2.3440
117	213	-2.1792	-1.2609	-0.5798	0.4944	0.7976	0.0783
118	213	1.5607	2.1747	-0.7047	-0.4220	-1.1417	-0.9096
119	213	0.8511	1.9928	1.7582	0.1453	0.5025	1.0283
120	213	0.4631	-2.4266	-0.7677	-3.2881	0.7396	0.2032
121	213	1.8129	-2.6700	0.2638	-1.9111	0.0815	1.5766
122	213	-0.2643	-0.3566	-2.0766	-1.7298	0.8628	0.1320
123	213	0.3610	-1.5337	-5.1410	1.3102	1.0996	0.3339
124	213	-2.9627	2.5718	2.3121	-0.7513	0.8912	0.9998
125	213	1.7796	0.2840	0.0697	-0.3765	1.0910	-0.5158
126	213	-4.4786	0.7146	1.2327	-0.9378	-0.0052	-0.2991
127	213	-0.1279	-0.8063	-0.2103	-1.2829	1.0809	-1.1161
128	213	2.1235	-0.7100	-5.2602	0.1352	-0.4766	-0.3815
129	213	-4.4796	0.3541	0.9616	-0.8236	1.1220	-0.0135
130	213	-0.1320	1.6997	-0.3166	-1.6242	0.5774	-0.8688
131	213	2.2096	1.5220	1.0991	0.5234	-0.0926	0.0818
132	213	3.8896	0.9797	-2.8265	-0.0690	-0.3438	-1.9281
133	213	-0.0090	1.3551	-0.6102	1.1879	-1.9282	-0.2201
134	213	0.8232	1.7679	-1.7914	-3.4550	-1.4994	-0.6622
135	213	3.9720	-3.0120	-0.8599	-0.2939	-0.2103	-1.1926
136	213	-1.4488	-0.4389	1.3668	1.3639	0.0863	1.9923
137	213	1.0879	-1.3688	-2.1134	0.4567	0.2937	0.3402
138	213	1.5752	-2.5535	-0.5753	0.4654	0.5541	0.4021
139	213	1.0426	0.1466	-1.5708	-2.2850	0.3238	1.4546
140	213	-2.3625	3.0392	0.7076	-0.4832	-0.8853	0.2656
141	213	0.2094	2.0669	0.7019	-0.6347	0.8886	-0.1582
142	213	-2.4538	1.7836	0.3473	0.9955	0.7542	0.3618
143	213	1.5483	-1.8383	0.2946	0.4150	-0.3920	-0.4296
144	213	1.7595	-1.1529	-2.1634	-2.9563	-0.2087	-1.0450
145	213	-2.1107	2.4242	2.3162	-0.6079	0.8549	1.1515
146	213	-2.4144	0.2491	-0.8301	1.4113	-0.5820	1.2745
147	213	1.7730	0.6359	1.3483	-1.0162	1.0976	0.1822
148	213	-4.5984	0.2012	0.8373	0.7075	-0.2466	0.3037
149	213	2.7189	0.4964	0.2423	-0.3907	0.0854	-1.5661
150	213	-0.1428	1.4062	-1.2664	1.4159	0.5521	1.3946
151	213	3.4583	-4.7520	-0.3546	-1.0228	0.1549	-2.0682
152	213	-0.0394	0.0834	-4.2367	1.1987	0.0132	0.0851
153	213	-1.3650	-0.4758	0.8347	1.2521	0.2427	0.6294
154	213	-4.2944	-0.6302	0.8009	0.8199	-3.7125	0.4197
155	213	3.0014	-4.1134	-0.2161	0.4590	-0.4660	-1.6782
156	213	-1.0007	-0.4916	-0.1634	1.0396	0.6802	-0.8867
157	213	2.5396	1.0934	-1.9785	-1.8115	-0.3340	-0.9803
158	213	-1.0939	2.3609	-2.9663	-0.7691	-5.1746	-2.0305
159	213	1.3800	-1.1790	-0.6430	0.9123	0.7332	-1.1351
160	213	-0.3917	1.2204	-2.1354	1.7966	-3.7488	1.2099
161	213	2.6517	-0.1852	0.1987	0.5172	-1.3027	-0.4590
162	213	-0.8451	-0.5379	-0.0290	-1.6250	0.8386	2.0375
163	213	2.2160	-1.2317	1.1171	0.5422	-4.3982	0.2306
164	213	2.6938	-1.8213	-0.0047	0.9205	0.3652	-1.2654
165	213	1.1231	0.0648	-0.3013	0.8832	0.2673	-1.0359
166	213	-0.0564	2.6499	1.1149	-1.1314	0.0932	-1.1657
167	213	-2.6483	-0.2388	0.3751	0.4013	-0.3579	-1.3076
168	213	-0.9361	2.5895	2.3914	-0.8719	0.4621	0.6360

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
169	213	2.4665	0.2781	0.7574	0.5525	0.3732	-0.0173
170	213	-3.1270	1.0617	1.5021	0.2877	1.1461	0.9153
171	213	0.0206	2.3719	1.6331	-0.8661	0.5997	0.1817
172	213	1.8875	-2.0257	1.0067	0.6738	0.3796	0.4543
173	213	1.1705	0.6831	0.8036	0.2879	-0.5360	-0.4469
174	213	0.4392	-3.2152	-2.7572	0.9819	0.7664	-4.2934
175	213	1.1080	0.7490	1.4165	0.1744	0.9683	0.9291
176	213	0.7912	1.7361	1.5605	0.9679	0.3818	1.3296
177	213	1.3963	1.3663	1.2946	0.6000	0.3904	0.8841
178	213	0.4719	2.0095	-1.2938	1.6689	-0.1810	0.6366
179	213	1.3722	-1.9056	-3.2918	1.3986	-0.1065	-1.0458
180	213	4.3875	-1.4454	-0.5362	0.1338	-0.3802	-1.5631
181	213	1.5848	0.4664	-2.0649	0.1064	0.2563	-0.0225
182	213	2.0265	0.4985	-1.4552	-0.0643	0.5681	-1.2635
183	213	-1.9309	-0.5628	1.1048	1.3194	0.9498	1.7782
184	213	4.0238	-2.0475	-0.1411	-1.4606	0.6237	-2.7592
185	213	0.6649	0.3754	0.1922	-0.9352	1.6045	-0.3017
186	213	1.3963	1.3663	1.2946	0.6000	0.3904	0.8841
187	213	0.4297	1.5274	1.3107	-3.2240	0.5666	2.2503
188	213	1.2683	-1.1520	0.8065	0.9462	0.9508	0.5523
189	213	-1.4624	1.9982	2.0937	0.8117	0.4622	1.6399
190	213	0.3027	0.3394	0.8721	-0.8925	0.9706	1.6046
191	213	1.9891	1.8623	0.5112	-1.2665	0.5044	-1.1192
192	213	2.1478	-1.2906	-0.4491	-3.6926	0.8568	-0.0420
193	213	-0.7447	1.5613	1.2146	1.4191	0.6845	1.5584
194	213	0.7912	1.7361	1.5605	0.9679	0.3818	1.3296
195	213	2.0539	0.6095	0.3104	0.7999	-0.0439	-0.8192
196	213	-1.4622	-1.9082	0.5558	0.8391	0.5782	0.0924
197	213	-0.6783	1.4660	0.1336	1.2362	0.7985	0.5590
198	213	-0.4192	2.3417	2.2714	-0.7363	0.7842	1.0826
199	213	-2.9385	2.0801	1.9456	0.4403	0.8856	1.5673
200	213	-4.7365	1.5979	1.3032	-0.8527	0.6561	0.0857
201	213	2.0737	-1.6075	0.3211	-1.1544	0.7351	-1.1479
202	213	0.0937	-1.3172	0.7313	1.2101	1.3436	1.0678
203	213	-2.5203	1.8788	1.4283	1.1785	0.6401	1.3613
204	213	1.0194	-1.3377	-0.0626	1.3269	-3.3501	0.3676
205	213	2.3882	-7.1026	-3.9519	1.1985	-3.8635	-3.0951
206	213	0.3919	0.3779	-0.4036	1.1887	0.7813	-0.3425
207	213	0.2317	-1.1947	1.6157	-1.2121	0.5767	-0.3456
208	213	0.1723	-0.6193	-2.0314	-0.1884	-0.9289	-1.0263
209	213	-2.9883	-1.2319	-2.0806	0.5852	-2.4030	-5.8604
210	213	1.5531	1.2084	-0.5024	-3.6642	0.1161	-0.2837
211	213	-1.2088	-1.0171	-0.2337	0.7482	1.1718	-0.5299
212	213	1.8096	-0.7041	1.8413	-0.7560	-0.7562	-0.3897
213	213	3.0955	-0.9768	-4.3219	-0.4217	-0.9651	-1.5764
214	213	2.2096	1.5220	1.0991	0.5234	-0.0926	0.0818
215	213	0.5161	-0.5857	0.2194	-0.9820	1.1847	-0.2853
216	213	-2.2561	0.4559	1.4201	0.5782	1.0658	1.1110
217	213	1.3321	0.1001	-6.0554	-2.1534	-5.7376	0.5580
218	213	-1.6009	0.4855	0.5889	-0.0513	1.2339	0.0686
219	213	0.9814	-1.7276	-1.9821	-0.7749	-1.3905	-0.3941
220	213	0.1539	-0.3803	-4.1900	0.7532	-2.3987	0.0175
221	213	2.4002	-1.6392	1.1407	0.0104	-2.5458	0.2525
222	213	-2.5847	0.7746	-1.3450	-2.4476	-1.8480	1.7521
223	213	-2.0472	2.1015	2.4367	-1.2359	-0.4851	-0.3471
224	213	-0.0550	-2.2784	0.7586	1.1634	0.9238	1.0842

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
225	213	-3.3240	2.5622	2.0414	-0.5640	0.8010	0.7131
226	213	1.4836	-0.8848	0.4969	-0.4982	-1.7753	-1.3255
227	213	0.4678	-3.7046	-0.5610	0.5657	0.6266	-0.3444
228	213	4.0657	1.1085	-5.1162	-3.1508	-2.3805	-1.3704
229	213	2.1293	-2.3169	-0.8765	-1.2820	0.3728	-0.0557
230	213	2.6206	0.0849	-0.7246	-0.5169	0.4269	-0.7720
231	213	-0.3310	2.2197	2.1255	-1.2398	0.4707	0.1905
232	213	-0.2992	-2.8920	0.9272	0.9455	-0.0186	-0.5572
233	213	0.5708	2.0765	0.9727	-0.8220	0.9788	0.1286
234	213	0.9109	2.2496	1.9559	-0.6774	0.6232	0.7269
235	213	-4.3293	2.8656	0.7477	0.9676	-1.2878	0.7775
236	213	1.6905	-1.9545	0.2758	0.1497	0.2635	-2.8289
237	213	1.5781	0.4804	-1.6271	-1.1692	-1.0398	-1.6525
238	213	-1.0355	1.5694	-0.1141	0.5510	0.2798	-0.8860
239	213	-1.0807	1.5012	0.2544	0.4020	0.6115	-0.1981
240	213	3.2022	-3.3318	0.2250	-4.0477	-0.5713	-0.2576
241	213	-4.3310	1.2106	2.1857	0.2912	0.7845	1.0231
242	213	0.5043	2.1717	2.0536	-0.6391	0.8647	1.1280
243	213	1.7935	-4.4302	0.2701	-3.5648	0.1448	0.5445
244	213	-1.4954	0.7224	1.2596	0.9820	0.9546	1.1477
245	213	-1.0785	2.9189	-0.0756	-1.5825	-1.1459	-1.4535
246	213	1.3963	1.3663	1.2946	0.6000	0.3904	0.8841
247	213	-0.6773	0.3155	0.3711	0.0459	1.3144	0.1141
248	213	-0.5050	2.3545	-1.0579	1.5659	-1.2736	1.0058
249	213	0.3846	1.6583	1.6582	1.0062	0.6233	1.7308
250	213	2.7174	2.3662	-3.4108	0.6504	-2.1278	-1.5300
251	213	1.9640	2.4673	-3.0176	-0.0956	-1.5241	-1.0291
252	213	-1.6188	0.2593	1.3842	-0.2847	-0.1017	-0.4382
253	213	0.1076	1.2073	-0.8761	-0.9323	0.9244	-0.4429
254	213	1.5898	0.7730	-1.6857	-2.0048	0.0151	0.9473
255	213	0.3846	1.6583	1.6582	1.0062	0.6233	1.7308
256	213	-3.4756	0.0444	-0.0536	-1.5569	0.5603	1.4928
257	213	-3.8793	-0.9585	-0.6392	1.4225	0.3273	1.1222
258	213	-1.6084	1.9879	1.6300	0.4992	0.7246	1.2116
259	213	-4.3293	2.8656	0.7477	0.9676	-1.2878	0.7775
260	213	-4.3009	2.1235	0.7828	0.8010	0.5931	0.2709
261	213	4.6629	-4.3150	-5.9777	-0.1650	-6.3124	-2.1259
262	213	1.0566	0.9197	1.4548	-0.9251	0.2212	-0.8522
263	213	1.5161	1.8798	1.6900	-1.0453	0.6318	0.2814
264	213	3.4655	-5.1026	-3.6471	0.2445	-5.9469	-1.9623
265	213	0.7199	1.1947	1.0828	-0.8983	0.8824	-0.3717
266	213	1.7237	-0.5728	1.0055	-0.2694	0.0915	-0.2477
267	213	-3.8861	1.9821	1.8547	1.1426	0.7427	1.7701
268	213	-1.9300	-0.2023	1.3759	1.2052	-0.1774	1.4926
269	213	0.6640	-2.1251	0.5166	0.0172	0.2431	0.2282
270	213	1.6985	0.1907	0.5845	0.7781	0.5246	0.0970
271	213	-2.9874	0.7178	1.4074	0.6665	0.1483	0.8867
272	213	-2.5203	1.8788	1.4283	1.1785	0.6401	1.3613
273	213	0.2501	0.8151	-1.4166	-2.7302	-1.0047	0.4605
274	213	2.3973	-0.9091	-0.3494	0.8547	0.1427	-0.3695
275	213	0.1948	1.8784	0.1358	0.3369	0.4362	-0.5447
276	213	0.8659	-2.2461	1.1844	0.8798	-2.0877	0.7422
277	213	-2.5203	1.8788	1.4283	1.1785	0.6401	1.3613
278	213	0.6710	2.0703	0.9988	-1.0850	0.2766	-0.9517
279	213	0.8853	0.0351	0.7800	0.8547	1.0076	0.8994
280	213	-0.0732	1.0962	-0.1323	0.8682	0.8071	0.1135

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
281	213	0.8758	-1.7337	1.3703	1.0801	0.6125	1.3009
282	213	2.1231	0.3198	-2.4409	0.7725	0.5878	-0.3340
283	213	-2.0398	0.8158	1.4982	-0.0358	0.2912	0.6839
284	213	0.7335	1.6038	0.9509	0.1520	0.3308	0.0092
285	213	2.3957	1.9402	0.4135	-1.3048	0.2629	-1.5204
286	213	2.6027	-1.9818	-1.1120	0.7849	-5.8895	-5.6786
287	213	-4.1811	2.6369	1.1782	-0.8442	0.8345	-0.3318
288	213	1.7475	-0.3275	-0.7268	0.3823	0.7892	0.3316
289	213	2.3405	-1.2905	1.5694	-0.5035	0.7340	-0.4676
290	213	-2.1213	0.0663	1.8775	0.9055	-0.4676	1.3859
291	213	-4.2843	0.7623	1.1824	0.5161	0.3663	0.7427
292	213	2.2686	-1.7870	-0.8096	0.1845	-0.2954	-1.4837
293	213	2.3739	2.3303	-0.9003	-0.4986	-1.6247	-1.7119
294	213	2.0010	-1.7085	0.2309	0.5742	-3.4381	-0.3300
295	213	-0.2424	-0.5359	-0.9691	1.4441	0.1307	0.1685
296	213	1.6643	2.1485	1.5626	0.0687	0.0195	0.2260
297	213	0.6533	-0.7736	0.4885	-0.5649	1.4005	-0.4358
298	213	2.7234	-0.9657	0.4158	0.5816	0.8390	-0.1165
299	213	1.6742	-3.2492	-0.0208	0.7614	-5.0315	0.4949
300	213	0.9435	-2.8079	-5.0115	0.9579	0.1657	-0.3431
301	213	-3.0807	0.7669	0.6941	1.0332	0.4591	0.8856
302	213	-1.5103	-1.8825	0.9771	0.9278	0.4801	1.4022
303	213	1.5161	1.8798	1.6900	-1.0453	0.6318	0.2814
304	213	1.1361	2.8828	-2.7130	-1.0385	-1.4256	-1.4290
305	213	-2.6458	0.8251	1.4930	0.4463	1.4098	1.4150
306	213	-0.1930	2.1020	0.8227	-1.4689	0.7015	-0.9152
307	213	-1.8126	-0.4487	-2.2946	0.7767	0.7999	1.3571
308	213	0.9435	-2.8079	-5.0115	0.9579	0.1657	-0.3431
309	213	-0.0591	-2.6481	-0.1534	-0.2206	0.8317	1.1456
310	213	0.5004	-1.2394	0.6336	1.1718	1.1021	0.6667
311	213	-0.0550	-2.2784	0.7586	1.1634	0.9238	1.0842
312	213	0.5668	-1.3346	-0.4474	0.9889	1.2162	-0.3328
313	213	1.8151	-1.5213	1.5429	1.0659	-0.3931	0.2507
314	213	1.9243	-3.5157	-0.9593	-3.6525	-2.9686	1.0377
315	213	0.1838	-0.1476	-0.4739	0.8974	1.2729	0.0143
316	213	0.8943	-2.4888	-3.6793	-3.0256	0.1761	0.6298
317	213	3.1870	-3.2397	-0.8251	-1.8022	0.4703	-3.5195
318	213	2.2167	-2.3770	-2.3700	0.4988	0.1784	-0.5585
319	213	-2.2205	-0.7251	0.1299	1.1545	1.4047	0.3167
320	213	1.7251	1.0146	-1.7612	-1.6586	-0.2901	1.8870
321	213	4.3325	0.0494	-2.6023	-0.8001	-0.2799	-2.5765
322	213	0.7026	0.0121	0.1773	0.8800	0.9651	1.6780
323	213	0.1020	-3.2764	0.6295	1.4287	0.4806	-3.3704
324	213	-2.3982	1.0741	-0.8503	0.8678	0.3920	1.4541
325	213	2.9259	-0.0073	-4.9176	0.1395	-1.9534	-5.6257
326	213	-0.1802	-1.9747	0.6616	0.9868	0.3192	1.0465
327	213	0.3682	2.0357	-3.5612	1.1783	-1.3422	-0.4989
328	213	-1.3467	-0.8995	1.0691	0.9774	0.9410	0.5758
329	213	-2.4420	-2.4521	-0.6291	-1.9373	0.2155	1.4796
330	213	-0.6601	-1.9086	1.0244	1.5313	0.9152	1.5297
331	213	-3.5095	-0.3688	0.9919	0.5666	0.0270	0.8045
332	213	2.6983	-2.9300	-1.0450	-1.0826	-0.0736	-5.9573
333	213	-4.5877	2.5591	1.2760	-0.8059	1.0760	0.0693
334	213	0.3516	-2.2005	0.6608	1.1251	0.6823	0.6830
335	213	2.7340	-1.9176	0.2706	0.5058	-0.0464	-0.8478
336	213	-3.7172	0.3944	2.0091	0.1881	-0.2178	1.1003

OBS	I	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
337	213	1.3204	-1.0090	0.1565	1.0254	-1.3958	0.4069
338	213	-1.8297	1.2930	1.9303	-0.8691	0.1567	-4.2483
339	213	0.7557	-0.1968	-0.2423	0.4785	-2.5639	-0.5279
340	213	0.2383	-1.5467	0.3371	-0.5724	0.5700	-1.0437
341	213	0.9211	-0.8187	-4.8858	0.1467	-0.9699	-0.2558
342	213	-1.1489	-0.7604	-0.0361	-0.0744	1.2925	-0.8313
343	213	-1.8539	0.3740	0.4166	0.5063	-0.7137	0.2270
344	213	-0.7747	0.7531	1.3661	-0.1587	1.6332	1.2576
345	213	2.1107	1.5491	-3.3370	-0.2403	-1.6219	-1.9760
346	213	2.6501	-1.6619	-0.9770	-0.6462	0.8710	-2.3275
347	213	1.6308	-0.6772	0.0969	-0.4233	0.6711	-0.4995
348	213	2.0737	-1.6075	0.3211	-1.1544	0.7351	-1.1479
349	213	0.4153	-3.6384	-2.7143	0.7833	0.4473	-2.2503
350	213	-0.2950	-2.5227	-0.3567	-1.1835	0.4326	1.7511
351	213	-1.5172	-1.8338	0.1612	1.2511	0.9487	0.4848
352	213	0.8824	-2.4055	-3.8723	1.1132	0.2898	-0.3895
353	213	0.3516	-2.2005	0.6608	1.1251	0.6823	0.6830
354	213	-2.4584	-2.4954	1.6335	1.3063	-0.0716	1.1010
355	213	-0.9628	0.5835	-2.0471	0.9638	0.7919	1.0529
356	213	1.6533	0.1225	0.9530	0.6291	0.8562	0.7850
357	213	0.9378	-0.6636	0.2114	1.2623	-0.8353	-1.2351
358	213	1.3282	-0.8952	1.0042	0.1236	1.0715	0.2509
359	213	0.7481	1.7923	1.5170	-0.8197	0.7831	0.3958
360	213	-0.3633	-3.1458	-0.4507	1.1075	0.2316	-4.0064
361	213	-1.1513	1.4834	1.3124	1.4574	0.9260	1.9596
362	213	-2.2020	1.9446	1.6556	-0.7964	1.1316	0.7142
363	213	-2.5585	1.8536	1.1096	1.1332	0.5804	0.9678
364	213	-1.5003	-0.0617	0.9641	1.4798	1.0273	-0.6661
365	213	-1.1809	-1.3718	-0.8325	0.6844	0.9907	0.0162
366	213	-0.9700	1.5705	0.8237	0.0399	0.7902	0.2664
367	213	-4.8485	1.4966	1.2186	-1.5627	0.4225	2.7938
368	213	2.2605	0.0006	-0.8222	-1.1240	-0.6119	-1.6572
369	213	-0.6683	1.2333	-3.4271	1.0112	-1.7842	-0.5811
370	213	-2.6217	1.0930	1.8016	-0.3532	1.4721	1.1668
371	213	1.7251	1.0146	-1.7612	-1.6586	-0.2901	1.8870
372	213	-4.8559	-1.7171	0.3910	-1.7186	0.1056	2.2277

APPENDIX B

SUMMARY OF THE STEPWISE AND PRESCRIBED REGRESSION

EQUATIONS FOR THE ANOMIE, SATISFACTION I,

SATISFACTION II AND HEDONISTIC INDICES

Table 32. Stepwise Regression Equation for the Anomie Index

Variables	Standardized Coefficients	T For H_o: $B = 0$	Prob. $> |T|$
Education	-0.30	-5.19	< 0.01
$(Age)^2$	0.19	3.39	< 0.01
Hired Help	-0.15	-2.90	< 0.01

$R^2 = 0.115$ F Statistic = 10.94   Prob. $> |F| = 0.01$

Table 33. Prescribed Regression Equation for the Anomie Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> |T|$
Age	-5.21	-2.94	< 0.01
Number of Children	-0.11	-2.33	< .02
Off-farm work	-0.16	-2.34	< .01
$(Age)^2$	5.51	3.08	< .01

$R^2 = 0.155$ F Statistic = 3.53   Prob. $> |F| = 0.01$

Table 34. Stepwise Regression Equation for the Satisfaction I Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> |T|$
Skill at Farming	0.11	2.13	< 0.03
Percent of Land Owned	0.15	3.10	< 0.01
Agricultural Agency Dealings	0.16	3.16	< 0.01
Education and Income	0.10	1.96	< 0.05
Farming Efficiency	0.10	2.00	< 0.04

$R^2 = 0.168$ F Statistic = 8.43   Prob. $> |F| = 0.01$

Table 35. Prescribed Regression Equation for the Satisfaction I Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> |T|$
Age	3.32	1.82	< 0.06
Percent of Land Owned	0.08	1.74	< 0.08
Skill at Farming	0.10	1.75	< 0.07
$(Age)^2$	-3.35	-1.82	< 0.06

$R^2 = 0.102$ F Statistic = 2.19   Prob. $> |F| = 0.01$

Table 36. Stepwise Regression Equation for the Satisfaction II Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> |T|$
Disabled Respondents	-0.22	-4.46	< 0.01
Black Respondents	-0.16	-3.20	< 0.01
Reside on Place	0.18	3.71	< 0.01
Education	0.14	2.84	< 0.01

$R^2 = 0.184$ F Statistic = 12.62   Prob. $> |F| = 0.01$

Table 37. Prescribed Regression Equation for the Satistication II Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> |T|$
Age	4.83	2.72	< 0.01
Black Respondents	-0.15	-3.14	< 0.01
Disabled Operators	-0.13	-2.75	< 0.01
In-Kind Assistance	-0.15	-2.99	< 0.01
Age x Income	-0.27	-1.95	< 0.05
Cropland	-0.11	-2.17	< 0.03
Off-farm Work	0.16	2.46	< 0.01
$(Age)^2$	-4.90	-2.79	< 0.01

$R^2 = 0.186$ F Statistic = 4.38   Prob. $> |F| = 0.01$

Table 38.   Stepwise Regression Equation for the Hedonistic Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> \lvert T \rvert$
Farm Income	0.27	5.30	< 0.01
Off-Farm Work	0.26	5.06	< 0.01

$R^2 = 0.139$ F Statistic = 18.15   Prob. $> \lvert F \rvert = 0.01$

Table 39.   Prescribed Regression Equation for the Hedonistic Index

Variables	Standard Coefficient	T for H_o: $B = 0$	Prob. $> \lvert T \rvert$
Black Operators	-0.09	-1.94	< 0.05
Ratio of Farm to Total Income	0.11	2.30	< 0.02
Off-Farm Work	0.21	3.06	< 0.01

$R^2 = 0.162$ F Statistic = 3.17   Prob. $> \lvert F \rvert = 0.01$

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VITA

Cheryl Elaine Rogers

Candidate for the Degree of

Master of Science

Thesis: MEASURING THE PERCEIVED QUALITY OF LIFE OF EAST CENTRAL OKLAHOMA FARMERS

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