HOME ECONOMISTS WORKING WITH LOW-INCOME FAMILIES
AND IMPLICATIONS FOR COLLEGE FOOD AND
NUTRITION CURRICULUM

By

BERNICE HELENE KOPEL

Bachelor of Science
University of Minnesota
St. Paul, Minnesota
1957

Master of Arts
Northern Colorado University
Greeley, Colorado
1961

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the degree of
DOCTOR OF EDUCATION
July, 1970
HOME ECONOMISTS WORKING WITH LOW-INCOME FAMILIES
AND IMPLICATIONS FOR COLLEGE FOOD AND
NUTRITION CURRICULUM.

Thesis Approved:

Elizabeth C. Hills
Thesis Adviser

Helen F. Barbour

Elaine Jorgenson

Donald E. Allen

Dean of the Graduate College
ACKNOWLEDGMENTS

Sincere appreciation is extended to everyone who contributed encouragement and guidance throughout the period of graduate study -- to faculty, family and friends.

Indebtedness is acknowledged to the members of the advisory committee: Dr. Elizabeth Hillier, Professor of Home Economics Education, thesis adviser; Dr. Donald Allen, Professor of Sociology; Dr. Helen Barbour, Professor of Food, Nutrition and Institution Administration; and Dr. Elaine Jorgenson, Head of Home Economics Education. Their generous contributions, interest, and encouragement are greatly appreciated.

Likewise, indebtedness is extended to the home economists in Oklahoma who participated in the study and to the directors of agencies and organizations who contributed valuable information for the study.

Appreciation is also expressed to Dr. Florence McKinney, Professor of Home Management, Equipment and Family Economics, for her sincere interest and capable guidance during the writers' graduate assistantship and studies.

The writer is grateful for a financial grant from the General Foods Fund, Inc., which helped make this study possible.

Sincere appreciation is extended to The Oklahoma State University Library staff who gave invaluable assistance throughout graduate studies and thesis research.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Description of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Objectives of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Assumptions of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>7</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>9</td>
</tr>
<tr>
<td>Procedure</td>
<td>10</td>
</tr>
<tr>
<td>II. REVIEW OF THE LITERATURE</td>
<td>14</td>
</tr>
<tr>
<td>Home Economics and Needs of Low-Income Families</td>
<td>14</td>
</tr>
<tr>
<td>Characteristics of the Life-Style of the Poor</td>
<td>17</td>
</tr>
<tr>
<td>Nutritional Status of Low-Income Groups</td>
<td>24</td>
</tr>
<tr>
<td>Working With Low-Income Families</td>
<td>33</td>
</tr>
<tr>
<td>Training Low-Income Auxiliary Workers</td>
<td>41</td>
</tr>
<tr>
<td>Summary</td>
<td>46</td>
</tr>
<tr>
<td>III. PROCEDURE AND METHODS</td>
<td>48</td>
</tr>
<tr>
<td>Selection of Sample</td>
<td>49</td>
</tr>
<tr>
<td>Development of the Instrument</td>
<td>49</td>
</tr>
<tr>
<td>Pretesting the Instrument</td>
<td>53</td>
</tr>
<tr>
<td>Gathering of Data</td>
<td>54</td>
</tr>
<tr>
<td>Method of Data Analysis</td>
<td>55</td>
</tr>
<tr>
<td>IV. PRESENTATION AND ANALYSIS OF JOB CONCERNS</td>
<td>59</td>
</tr>
<tr>
<td>Characteristics of Respondents</td>
<td>59</td>
</tr>
<tr>
<td>On-The-Job Concerns</td>
<td>64</td>
</tr>
<tr>
<td>Relationship of Variables to On-The-Job Concerns</td>
<td>72</td>
</tr>
<tr>
<td>Summary</td>
<td>81</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>V. RESPONDENTS' SUGGESTIONS AND RECOMMENDATIONS FOR HOME ECONOMICS CURRICULA</td>
<td>84</td>
</tr>
<tr>
<td>Procedure for Analysis of Suggestions and Recommendations from Respondents</td>
<td>85</td>
</tr>
<tr>
<td>Responses to Question</td>
<td>85</td>
</tr>
<tr>
<td>Summary</td>
<td>96</td>
</tr>
<tr>
<td>VI. IMPLICATIONS OF FINDINGS IN THE STUDY FOR COLLEGE FOOD AND NUTRITION CURRICULUM</td>
<td>98</td>
</tr>
<tr>
<td>Commodity and Low-Cost Foods</td>
<td>99</td>
</tr>
<tr>
<td>Field Experience</td>
<td>100</td>
</tr>
<tr>
<td>In-Service Education</td>
<td>101</td>
</tr>
<tr>
<td>Teaching Methods</td>
<td>101</td>
</tr>
<tr>
<td>Behavioral Sciences</td>
<td>102</td>
</tr>
<tr>
<td>Training Low-Income Leaders</td>
<td>102</td>
</tr>
<tr>
<td>Evaluation</td>
<td>103</td>
</tr>
<tr>
<td>Nutrition Education for Elementary Teachers</td>
<td>104</td>
</tr>
<tr>
<td>VII. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>105</td>
</tr>
<tr>
<td>Summary and Findings</td>
<td>106</td>
</tr>
<tr>
<td>Conclusions</td>
<td>108</td>
</tr>
<tr>
<td>Recommendations</td>
<td>110</td>
</tr>
<tr>
<td>SELECTED BIBLIOGRAPHY</td>
<td>111</td>
</tr>
<tr>
<td>APPENDIX A - CORRESPONDENCE FOR OBTAINING SAMPLE</td>
<td>119</td>
</tr>
<tr>
<td>APPENDIX B - INSTRUMENTS USED TO COLLECT DATA FROM HOME ECONOMISTS IN OKLAHOMA WORKING WITH FOOD AND NUTRITION OF LOW-INCOME FAMILIES</td>
<td>121</td>
</tr>
<tr>
<td>APPENDIX C - CHARACTERISTICS OF RESPONDENTS</td>
<td>133</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table                                                                 Page
I. Concerns About Understanding Low-Income Individuals ................. 65
II. Concerns About Planning Programs for Low-Income Groups ............. 66
III. Concerns About Knowledge of Subject Matter ......................... 68
IV. Concerns About Teaching Methods for Low-Income Groups .............. 69
V. Concerns About Evaluation of Programs .............................. 70
VI. Concerns Identified by Fifty Percent or More of the Respondents .................. 72
VII. Employment of Respondents and Degree of Job Concerns .............. 75
VIII. Educational Background of Respondents and Degree of Job Concerns ........ 79
IX. Suggestions and Recommendations in Regard to Understanding Low-Income Families .................. 87
X. Suggestions and Recommendations in Regard to Planning Programs for Low-Income Groups ........ 89
XI. Suggestions and Recommendations in Regard to Teaching Methods for Low-Income Groups .......... 91
XII. Suggestions and Recommendations in Regard to Knowledge of Subject Matter .................. 94
XIII. Age Distribution of Home Economists ............................ 133
XIX. Marital Status of Home Economists ............................ 133
XV. Present and Previous Employment of Home Economists .................. 134
XVI. Residence of Low-Income Families Served by Home Economists ........ 135
TABLE XVIII. Undergraduate Major of Home Economists .......... 136

XIX. Work Experience with Low-Income Families ............. 137

XX. Time Since Respondents Last Enrolled
    for Credit ........................................ 137

XXI. Highest Academic Degree Attained by
     Home Economists .................................. 138

XXII. Extent to Which Home Economics Training
      Qualified Home Economists for Work
      With Low-Income Families ..................... 138

XXIII. Job Involvement of Home Economists .................. 139
CHAPTER I

INTRODUCTION

Description of the Problem

Colleges and universities are being challenged to provide effective and expanded educational programs which will more effectively prepare individuals to work with all segments of society. A need for a broader and expanded educational program has been influenced by technological, sociological, and economical changes in recent years which affect patterns of family living within the United States. Extensive research and study have revealed the plight of the low-income segment of the population in the midst of these changes.

Home economics programs in colleges and universities have an extensive history of responding to the changing needs of individuals and families in society. One of the issues of today which provides challenge for college and university home economics programs is the awakened social consciousness of Americans to the incidence of hunger and malnutrition in the United States. Numerous studies show that poor diets are a likely consequence of poverty and inaccurate or inadequate knowledge of what foods constitute an adequate diet. Many home economists may fail to bring their knowledge of food and nutrition effectively to bear on the lives of low-income individuals and families because they lack the particular skill and ability needed to work with this segment of the population.
Leaders in college home economics curricula development recognize the value of identifying and defining specific roles of their graduates in order to determine the skills and abilities needed in work with low-income families. More specifically, the role of the home economist who is working with food and nutrition problems of low-income families is in need of being identified and defined in order to determine the skills and abilities which might be developed in an educational program at the college level.

Thus, this study was concerned with the following problem:

To investigate on-the-job concerns of home economists who work in some way with food and nutrition needs of low-income families as a basis of identifying implications for college food and nutrition curriculum.

Objectives of the Study

The objectives of the study were fourfold:

1. To review the research related to factors which affect the nutritional status of low-income individuals and those factors which appear to contribute to the success of personnel engaged in work with low-income families.

2. To develop an instrument to identify on-the-job concerns of home economists who are engaged in helping low-income families to meet their food and nutrition needs.

3. To determine the relationship between the degree of on-the-job concerns and employment and educational background of the home economists in the sample.
4. To provide implications for college food and nutrition curriculum based on the findings identified in the study.

Significance of the Study

In the last decade, attention has again been focused on the needs of the low-income population in the midst of an affluent society. Administrators and staff of home economics in colleges and universities recognize the importance of a continuing review of the purposes and the programs of home economics in terms of this emerging social issue.

Recent investigations have been conducted which have identified the existence of malnutrition in the United States. The findings reveal problems which are general in nature but the implications are multitudinal and complex. It has been reported that there is a positive relationship between the level of income and the adequacy of nutritional intake. This is evidenced by the results of the 1965 nationwide survey of food consumption of households in the United States. Selected findings indicate that:

1. Among households with incomes of under $3,000, 36 percent had poor diets; whereas,

2. Among households with incomes of $10,000 or above, only 9 percent had poor diets (U.S.D.A., 1965).

Although food consumption studies do not provide evidences of the prevalence of malnutrition, they nevertheless provide important implications for food and nutrition educators in college and university home economics programs.

The National Nutrition Survey (1968) was the first comprehensive survey to assess the nutritional status of the population in the United States. The sample for this survey was selected mainly from low-income
groups. Analysis of preliminary data clearly indicates that the incidence of malnutrition tends to be highest in the segment of the population with the lowest income. Dr. Arnold Schaefer, director of the study, emphasized the need for improved education in nutrition for all segments of society, especially those with the lowest income (J. Am. Dietet. A., Mar, 1969).

As a result of the findings from the nutritional status studies conducted in the United States, a White House Conference on Food, Nutrition and Health was held in Washington, D. C. on December 2, 3, and 4, 1969. The conference was called by President Nixon for the purpose of advising the President on the best methods of eliminating hunger and malnutrition in the United States, and to develop a national nutrition policy to insure that all Americans, especially the poor, receive an adequate diet. Many of the recommendations from the conference have implications and challenges for nutrition education in colleges and universities. A specific recommendation from the Panel on Advanced Academic Teaching of Nutrition is as follows:

Recommendation 9: TRAINING OF TEACHERS OF HOME ECONOMICS AND OF AGRICULTURAL EXTENSION WORKERS.

Attention should be given to nutrition training at the undergraduate and graduate level within the university units of home economics. Traditionally, such units have been a site of primary importance for the training of nutritional scientists and practitioners. They have been responsible for basic training of dietitians and public health nutritionists and have provided most of the nutrition training for agricultural extension workers and teachers of home economics at the secondary school level. It is this group of teachers who provide nutrition education for the youth of this country. Extension workers bring nutrition directly to the public and are in the foreground of programs designed to combat malnutrition and improve nutritional health... (J. Nut. Educ., Sp., 1970, p. 31).
Adequate preparation for teaching nutrition to youth and adults in all segments of the population requires undergraduate and graduate education in nutrition, as well as in methods of teaching. Because of continuous expansion of knowledge in nutrition and food science, advancements in food technology, and developments in educational techniques, a strong continuing education program must be provided for professionals who work with the food and nutrition needs of individuals and families.

Home economics in colleges and universities is challenged to examine and implement a philosophy and content in the curricula that results in preparing students for relevant and satisfying work with food and nutrition needs of all people, especially those from economically depressed areas. Professor Neige Todhunter (Hunger, U.S.A., 1968) has stated that at present, techniques of teaching nutrition in the schools are outmoded and archaic; techniques for making nutrition education interesting and relevant to students have not been developed and utilized, and teachers are not equipped to give such education. McGrath (1968) states that inadequate preparation of new members hampers every profession in responding to new demands and in demonstrating its competence for new responsibilities, and home economics is no exception. If home economists are to play a significant role in improving American life, then education must prepare them to do so.

The problem is complex. Inadequate nutrition cannot be solved by merely disseminating information on good nutrition and health. The complexity of the issue involves cultural and value differences between the disadvantaged and the middle-class and among people from different educational and social backgrounds.
Many home economists are aware of the problems faced by the low-income families and seek to alleviate them. They are aware that low-income families face special problems in providing an adequate diet for all members of the family and that greater knowledge and effort is needed by this segment of the population in order for them to obtain the best food at the lowest cost. Home economists are convinced that the field of home economics in colleges and universities must play an active role in the preparation of professionals to help low-income families solve their food and nutrition problems. To assist in the solution, home economics in institutions of higher education are extending their goals, expanding their techniques, and altering their educational programs.

It is the belief of the writer that the findings of a study designed to investigate the role of the employed home economist would be of value in identifying implications for developing and implementing college food and nutrition curriculum. A review of the literature has revealed no studies which were related to developing and implementing food and nutrition course(s) in colleges and universities on the basis of the role of the home economist who is helping low-income families meet their food and nutrition needs. For these reasons, the writer chose to identify on-the-job concerns of home economists who are engaged in assisting low-income families to solve their food and nutrition problems.

Assumptions

The study was planned and conducted on the basis of the following underlying assumptions:
1. College food and nutrition curriculum can more effectively prepare students to work with food and nutrition needs of low-income individuals and families.

2. On-the-job concerns of home economists who work with food and nutrition needs of low-income families can provide some basis for implementing food and nutrition course(s) in colleges and universities.

3. An instrument can be developed to identify on-the-job concerns of home economists engaged in helping low-income families meet their food and nutrition needs.

4. Analysis of the findings on a mailed questionnaire can serve as a basis for determining implications for college food and nutrition curriculum in order to be more effective in training home economists to work with low-income families.

Definition of Terms

Definitions were formulated and adapted from the educational literature that was reviewed as background information for conducting the study. For the purpose of this study, the following terms are defined:

Poverty - Lack of access to respected positions in society and lack of power to do anything about it.

Poor - Those who are not now maintaining a decent standard of living--those whose basic needs exceed their means to satisfy them (U.S. Census, 1966).

Low-income families - Families who have an annual income of $3,000 or less. Low-income is often used synonymously with the terms poor and poverty.
Recommended Dietary Allowances - Suggested daily nutrient intakes which are judged to be adequate for maintenance of good nutrition in the population of the United States (Nat'l Academy of Sciences, 1968).

Poor diet - Supplies less than two-thirds of a recommended level for one or more nutrients.

Good diet - Supplies two-thirds or more of the recommended level for all nutrients.

Malnutrition - A generic term encompassing undernutrition, overnutrition, and nutrient imbalance. It is an impairment of health and physiological function resulting from the failure of an individual to obtain all the essential nutrients in proper amount and balance (Schaefer, 1969a).

Hunger - Results from the consumption of an insufficient quantity of food and one or more essential nutrients which results in health impairment. Used synonymously with the term undernutrition (Schaefer, 1969a).

On-the-job concerns - Aspects of a job which are perceived as problems; and/or aspects, or areas, of the job in which assistance could be provided by a particular emphasis in the college home economics curricula.

Home economics - A field of study which synthesizes knowledge drawn from its own research, from the physical, biological, and social sciences, and the arts, and applies this knowledge to improving the lives of families and individuals. It is concerned with all aspects of family living (American Assoc. of State Univ. and Land-Grant Colleges, 1959).

Home economist - A college graduate with a major in home economics who applies this knowledge and skill in a professional home economics
position and/or in her own home. Home economics training prepares for family living and the responsibilities of homemaking, as well as for a career (U. S. Dept. of HEW, 1961).

Curriculum - A specific course of study offered by a department in a school, college, or university.

Nutrition aides - Persons recruited from the area where they would work and from the lower socioeconomic group. They are trained and supervised by a professional person. Synonymous terms are program aides, indigenous nonprofessional, auxiliary workers and home economics aides.

Limitations of the Study

The sample selected for this study was limited to home economists who were identified by directors of agencies and organizations which work to improve the quality of life for low-income families in Oklahoma. The sample was further limited to home economists who are presently employed in some way with helping low-income families to meet their food and nutrition needs. The home economists in the sample were limited to those employed in Oklahoma as: Teachers in Secondary Schools, Extension Home Economists, Public Welfare Home Economists, Dietitians, School Lunch Consultants, Dairy Council Home Economists, and Public Health Nutritionists.

The instrument to obtain the data was developed by the researcher. The data obtained was limited to those instruments which were returned from an initial mailing of the questionnaire and two follow-ups. Data obtained from the home economists through the questionnaire was limited to general information, the degree of their on-the-job concerns, and suggestions for home economics programs.
The on-the-job concerns included in the questionnaire were developed by the researcher from a review of the literature. The statements of on-the-job concerns were limited to those which pertained to understanding and accepting low-income groups, planning food and nutrition programs for low-income audiences, teaching methods for low-income groups, having knowledge of food and nutrition subject matter, and evaluating food and nutrition programs designed for low-income audiences.

Implications for college food and nutrition curriculum to better prepare professionals to work with food and nutrition needs of low-income families were limited to the researcher's interpretation of the responses to the open questions and the results of the data analysis.

Procedure

This section describes the procedures employed in the study to: (1) select the sample, (2) develop the questionnaire, (3) collect the data, and (4) analyze the data.

Selection of the sample. A letter of inquiry was mailed to the directors of agencies and organizations in Oklahoma which were assumed by the researcher, to employ home economists in attempts to improve the quality of living for low-income families. The purpose of the letter of inquiry was to solicit names and addresses of home economists to be included in the sample for the major part of the study. A copy of the letter which was mailed to the directors of agencies and organizations in Oklahoma is included in Appendix A.
Development of the instrument. An objective multiple-choice questionnaire with open questions was prepared by the researcher (see Appendix B). The instrument was developed on the basis of the findings in the literature which pertain to the factors which appear to affect the nutritional status of low-income individuals and those factors which seem to contribute to the success of personnel engaged in work with low-income families.

The questionnaire was designed to obtain three types of information from the sample; namely:

1. **General information** about the respondent; such as, type of employment, length of present employment, degree attained, undergraduate and/or graduate major, length of time since last degree was attained, residence of clientele, age and marital status of respondent.

2. Identified **on-the-job concerns** of the respondents in their work with food and nutrition needs of low-income families. The degree of each concern was obtained by instructing the respondent to check each statement according to whether it was a major concern, moderate concern, minor concern, or that it did not apply. A numerical score was assigned to each degree of concern.

3. **Information** from the respondents in regard to one or two of the major concern(s) which they encounter in their work with food and nutrition needs of low-income families. Suggestions were also solicited from the respondents for undergraduate and/or graduate courses in a home economics training program to better prepare a professional for work with low-income families.
families. Open questions were developed to obtain this information.

For the purpose of pretesting the instrument, the questionnaire was mailed to 14 home economists who represented the professional background of the sample for the major part of the study but were not included in the major part of the study. The pretest sample was instructed to complete the questionnaire and the Questionnaire Check List (see Appendix B), for the purpose of securing an evaluation of the instrument. A tabulation of the responses from the pretest sample was undertaken by the researcher and the questionnaire was refined and revised on the basis of the responses on the instrument and the evaluation check list.

Collecting the data. The questionnaire was mailed to 181 home economists. A letter was included with the instrument which explained the purpose of the study; and a stamped, self-addressed envelope was enclosed for convenience in returning the questionnaire (see Appendix B).

Two weeks after the initial mailing of the questionnaire, a second letter and questionnaire was sent to those who did not respond to the initial mailing of the instrument. After another two weeks, a reminder postcard was sent to those who had not responded. A total of 70.8 percent of the respondents returned the questionnaire.

Analysis of data. The information obtained from each questionnaire was punched on cards for computer analysis. The frequency of response and response percent was obtained for each item on the General Information section of the questionnaire. A rank order was obtained for the items which were checked by the respondents as job responsi-
bilities. A mean score was calculated for each on-the-job concern on the basis of a numerical score for each possible answer. A score of 3 was assigned if it was a major concern, a score of 2 if a moderate concern, a score of 1 if a minor concern, and a score of 0 if it does not apply to their work with food and nutrition needs of low-income families. The on-the-job concerns were ranked in descending order on the basis of the mean score of each concern. Statistical analysis was employed to determine the relationship of selected factors to the degree of the on-the-job concerns.

Summary

The description of the problem and significance for the study, objectives, procedures, and other information relevant to the development of the problem have been outlined in this chapter. In Chapter II, a study of the related literature and research that served as the theoretical framework for the problem are presented. The procedure employed to collect the data is presented in Chapter III and the findings of the study and the interpretations of these findings are presented in Chapters IV and V. Chapter VI includes the implications of the findings for college food and nutrition curriculum. Presented in Chapter VII will be the summary of the study, conclusions, and recommendations for college food and nutrition curriculum and future related research.
CHAPTER II

REVIEW OF LITERATURE

Home Economics and Low-Income Families

Education is intimately bound to the social trends and rapid changes that characterize our society. Whether or not home economics must adapt to changing social conditions is not a debatable point; the alternative is obvious. Home economists in colleges and universities have the opportunity and major responsibility for developing leadership which will help all individuals and families to meet their needs in a changing society.

An over-all challenge to home economics was set forth in the publication entitled Home Economics in Land-Grant Colleges and Universities--A Statement of Objectives and Future Directions (1959, p. 4). A statement from this publication reads:

Since home economics is concerned with the home and the family as they exist in society, its content and emphasis must constantly take into consideration the effect of the existing culture and the social, economic, educational, and technological developments which have an impact on the family and its members.

One of the existing social issues in the United States today, is the prevalence of poverty in the midst of our nation's general affluence. Home economics in institutions of higher education have responded to the need of preparing professionals to work with low-income families, but more needs to be done.
The Economic Opportunity Act of 1964, the first national action to alleviate poverty, created a comprehensive program aimed at developing the maximum potential and utilization of the nation's human resources. Dr. Sherman, a home economics consultant to the Women's Urban Centers, Job Corps, Office of Economic Opportunity, has stated:

Home economists are needed in all phases of the War on Poverty: to serve as teachers and volunteer workers; to provide proper interpretation to those engaged in the programs, whether served or serving; to execute special training programs for youth and adults who will ultimately work with disadvantaged groups; to interpret community needs to those who are responsible for the initiation, planning, and implementation of anti-poverty projects at all levels; and lastly, to exemplify, through everyday living, belief in the worth and dignity of fellowman (Sherman, 1965, p. 434).

Home economics has a long cherished belief that the nation's strength depends largely upon the quality of its homes and families. Consequently, the success or failure of any great social, cultural, or economic undertaking in our society depends upon families, whose primary responsibility is to foster mental and physical well-being of its members. The Economic Opportunity Act, which encompasses a variety of programs for all age groups, offers a challenge unique to the home economics profession and to each individual home economist, irrespective of occupational pursuit, geographical location, age, race or creed.

AHEA Workshop--Working With Low-Income Families. The home economics profession has accepted the commitment to assist low-income families which was conceived by the Economic Opportunity Act of 1964. The birth of the commitment was realized at the national American Home Economics Workshop, Working With Low-Income Families, March, 1965. The broad purpose of the workshop was to expand and strengthen the
assistance of home economists to low-income families. Specific objectives were: (1) to increase home economists understanding of the problems of poverty, (2) to further their knowledge of the services of various organizations and agencies serving low-income families, (3) to develop an appreciation of the culture of poverty, and (4) to identify the contributions of home economists (Wolgamot, 1967).

The participants in the workshop were leaders in the home economics profession representing extension, health and welfare, education, and business. Their challenge was to return to their respective employment and conduct educational workshops to help their fellow professionals to understand the plight of the poor and the complexity of the social institutions seeking to serve them (AHEA, 1965).

Broad and general outcomes of the workshop have been that home economists have responded to the challenges provided in the national and follow-up low-income workshops in regions, states, and areas of the United States. Programs for low-income families already in progress were intensified and expanded; others were initiated. Other factors have helped to further the expansion of home economics services to low-income families, but the workshops have helped to focus attention of home economics leaders on the area of need early in the development of the antipoverty programs and to provide guidance in planning and implementing the contribution of home economics (Wolgamot, 1967b). It could be assumed that the most important outcome of the national workshop was the increase in awareness, by the members of the profession, of the need for extending the services of home economics to include a greater proportion of the low-income population.
Selected colleges and university programs are designed to prepare home economists to work with low socioeconomic groups. The most successful programs are taught from the premise of the needs of the home economists who are working with low-income families. Administrators and faculty of home economics in colleges and universities are challenged to engage in continual research and study of social changes, needs of individuals and families in a changing society, and the means of strengthening education for the profession. McGrath and Johnson (1968) state that inadequate preparation of professionals hampers every profession in responding to new demands, and home economics is no exception.

Curricula in colleges and universities may need to be modified to insure that students understand and appreciate a wide variety of people and styles of life, including the poor (AHEA, 1965). Basic to understanding and appreciating the low-income segment of the population is an awareness and acceptance of the factors which characterize their style of life.

Characteristics of the Life-Style of the Poor

An objective and subjective review of the life-style of the poor is important to those who are attempting to improve the quality of life for the low-income population. Economic deprivation is a fundamental limitation which permeates all of life, including the nutritional well-being of families.

Annual income is used to describe the level of living or life-style in the United States because income statistics happen to be the only ones currently available on a regular basis (Orshansky, 1969).
Although definitions of the poverty line have varied, the most common one in the literature has been the definition proposed by the Council of Economic Advisors in 1965 (Reagan, 1967). Much of the national planning has been based on the $3,000 income point, below which families are considered to have inadequate resources to meet their needs.

At the same time it was recognized by some authorities that refinement of the definition of low-income was necessary, since an income of $3,000 will not meet the needs of all families in equal degree. Home economists have been among those who criticize the fixed poverty line with no recognition of the varying minimum needs of families of different sizes living in different regions of the country and with no consideration of whether the families live in urban or in rural areas (Reagan, 1967). Leon Kyserling (1964) suggested a deprivation income between $3,000 and $5,000 which he considered a climate of economic insecurity.

The Social Security Administration estimates the poverty lines for various family sizes around $3,130 for a nonfarm family of four, which is close to the invariant point of $3,000. However, the new estimates vary by family size from $4,135 for a nonfarm family of six to $2,050 for a nonfarm young couple, and $1,850 for a nonfarm couple over 65 years of age (Orshansky, 1965). In 1966, Orshansky reported that farm families need 30 percent less cash income than urban families of the same family type (Orshansky, 1966).

Program planning based on income as the only measure of family resources of the poor, should be coupled with data from the most recent income and expenditure surveys so as to appraise the levels of living and problems of the families classified as poor or as having
limited resources. No real appraisal of adequate income can be made without consideration of the wide variation in prices and living cost which exist between regions and between different types of places within regions. Furthermore, the levels of living and problems must be studied separately for each of the various population groups because family resources of the elderly are different from those of young workers or those of migratory farm workers, farmers with inadequate farm units, or mothers with dependent children (Reagan, 1967).

**Definition of Poverty.** It is difficult to define the poor, because poverty is a value judgment; it is not something that one can verify or demonstrate, except by inference and suggestion, even with a measure of error. To say who is poor is to use all sorts of value judgments. The definition of poverty by (Webster, 1966) (Miller, 1966) (Bagdikan, 1964) (Harrington, 1962) (Lewis, 1966) (Riessman, 1964) and (Herzog, 1969); clearly indicates that there is no exact definition or way of measuring poverty. Needs of families depend on many factors, such as the size of the family, ages of family members and condition of health. How well needs are fulfilled depends on money resources available to the family, job opportunities available, experience, training, and ability to move where opportunities are available to family members (Beavers, 1965).

**How Many are Living in Poverty?** Recent statistics show that 25.4 million persons in the United States are classified as poor. They represent 13.0 percent of the population (U. S. Bureau of Census, 1969). When family size and ages of family members are taken into account, it has been estimated that one-fifth of the population, or about 18 percent, are considered to be living in poverty (Sipple, 1968).
Approximately one out of ten (10 percent) white families in the United States were below poverty level in 1969, representing about 17 million people. In comparison, approximately one out of three (33.3 percent) Negro families were below the poverty line, representing 8 million persons (U.S. Bureau of Census, 1969). It is clear that the incidence of poverty is highest among Negro families but there are about twice as many poor white persons in the United States as poor Negro persons.

Poverty is a widely dispersed problem afflicting both cities and rural areas in every state in the nation. However, certain areas in the United States have been identified as "pockets of poverty". Among these are Appalachia, a region from the Ozarks to the Gulf of Mexico and the Atlantic Ocean, and an area in the Southwest (U.S. Department of Agriculture, 1965). Recent income data indicates that the percentage of families reporting incomes under $3,000 ranged from a low of 10 percent in Connecticut to a high of 50 percent in Mississippi (U.S. Department of Agriculture, 1965). Oklahoma reported 30 percent of families with incomes less than $3,000 a year (U.S. Bureau of Census, 1960). Only 11 states had a higher percentage of low-income families than Oklahoma.

Factors Related to Poverty. Certain types of families with whom home economists work are more likely than others to be poor. The low-income families as a group are older, less well educated, and larger than those with higher incomes (U.S. Department of Agriculture, 1965). Almost 50 percent of families headed by a woman (broken homes) are poor, 50 percent of families headed by a person over 65 years of age are poor; over 40 percent of farm families are poor; and among families
where the head had no more than an 8th grade education, 37 percent are poor (Lurie, 1965). The low-income population consists of 6 million children under six years of age, 8 million children six through fifteen years of age, and more than 5 million persons 65 years of age and over (Wolgamot, 1964).

Unemployment and underemployment contribute to the likelihood of being poor. About 50 percent of families with no earners are poor (U.S.D.A., 1965). The rate of unemployment for poverty families is more than three times that among families above the poverty level (Orshansky, 1965).

The indices most often used to indicate the socioeconomic status of families are: income, education, and occupation. Hence, many low-income groups are characterized by meager education, large families, substandard housing, limited job skills, (Wolgamot, 1964) and poor diets (Lurie, 1965) (Wolgamot, 1967a). Other characteristics of low-income people are viewed by Irelan (1968) as: limited opportunities to experience varieties of social cultural settings, practically no bargaining power in the working world, tremendous gap between generally accepted societal goals and the extent to which they can attain them, insecurity due to being at the mercy of life's unpredictability of sickness, injury, loss of work, and legal problems.

Overlooked Characteristics. A great danger of injustice prevails when overgeneralizations are made by home economists relative to negative characteristics of the poor. Effects of limited economic resources vary from family to family, and most certainly, consideration of only the negative factors of poverty tends to distort the humanistic attitude and approach when attempting to communicate and help the
low-income individuals.

Perhaps it is unfortunate that most terms used in reference to lower socioeconomic groups emphasize environmental limitation, such as deprived, handicapped, underprivileged, disadvantaged; all of which have negative connotations. Frank Riessman (1964) states that low-income individuals have made positive efforts to cope with their environment, and that these positive features should be used by middle-class groups who are working with low-income populations.

Essentially, low-income individuals seek and value the same things as other Americans. Since they live in America, they absorb characteristic American values and preferences. The reality of lower socioeconomic status is a constricted but recognizable variant of society-wide goals and standards (Irelan, 1968).

A long-held impression is that the poor place no value on occupational and educational achievement. The findings of sophisticated research has shown that the poor have a more modest absolute standard of achievement than those who are better off, they nevertheless, want more improvement in their condition. Psychologically, they seek the securities that appeal to other Americans. They hold, with little exception, to the same properties of social conduct (Gould, 1941).

Different reasons for improving their status may be possessed by low-income individuals as compared to middle-class individuals. The middle-class American tends to seek advancement on the job, or a better job, for the appeal of achievement. By comparison, the lower-class individual, the urge toward a better, more stable occupation is not so much a drive for achievement as flight from discomfort and deprivation (Gould, 1941).
Empey (1956) states that in reality, expenses of education and training, lack of resources; usually keep less economically advantaged high school students from aspiring to the highest level professions. Perhaps, more than the middle-class, lower-class high school students want better jobs than their fathers'. They are more likely to value increased income. In significantly greater numbers, they are unwilling to enter the same occupations as their father.

A study reported by Robert R. Bell (1965) revealed that most low-income people value advanced education. It was found that up to 65 percent of parents indicated that they want a college education for their children. In another survey, over 70 percent of the lower socioeconomic group studied, responded on an open-ended question that what they desired most in life was education for their children. Middle-class people answered "education" less frequently, perhaps due to the fact that they had an education and hence do not miss it as much (Riessman, 1964).

Probably the most basic value held by the poor is that of security (Irelan, 1968). Joseph Kahl (1959) reported that, even more than getting ahead, the poor value getting by, avoiding the worsening of an already unstable situation. Centers (1949) has written that the lower socioeconomic class are unwilling to take risks, and seek security rather than advancement. This is also a frequent pattern in economically better-off segments of the population.

Low-income homemakers place a high priority on providing good diets for family members (Dahms, 1965). For practical reasons, poor families must first meet fixed expenses such as rent, utilities and taxes. Therefore, poor nutrition is among the more likely consequence of
poverty (Lurie, 1965).

**Nutritional Status of Low-Income Groups**

Home economists can assist low-income families more effectively when they possess information about the nutritional status of low-income groups. In recent years, a number of studies have been designed and conducted to assess the nutritional status of the low-income population in the United States. Malnutrition seems to be most prevalent in the low-income groups of the population, although there is evidence that poor nutrition is not confined to this group. Income alone does not insure nutritional well-being, nor is malnutrition the only handicap of those living in poverty.

Munro (1968) states that the economically disadvantaged are also handicapped by the degradation of poverty, the hopelessness, alienation, poor education, and inadequate housing. She proposes that part of this poverty syndrome can be theoretically explained in terms of malnutrition, as is illustrated below: (Munro, 1968)
Adequate nutrition does not eliminate the syndromes of poverty as previously indicated pictorially. However, one can cope better with physical, social, and psychological stresses of the environment when one is well-nourished.

**Interpretation of Nutrition Survey Data.** Limitations in the interpretation of nutrition survey data have been pointed out by Krehl and Hodges (1965). They propose that a statistically valid sample is not always selected and there is often lack of adequate stratification of the population under study. Family food supply should be interpreted with caution because it gives no definite information as to the intake of the individual within the family group.

Individual records of dietary intake are subject to the inaccuracies of estimating amounts, according to Krehl and Hodges (1965). Only average values for nutrient content of foods are given in the tables, and actual amounts of nutrients in foods are subject to great variation due to season, geographical location, and method of analysis. Also, a record of one week food intake will probably not be representative of the intake for a whole year or more.

Dietary data, however, does provide useful guides for interpreting nutrient intake within reasonable limits. The Recommended Dietary Allowances were set up to be used as goals for planning food supplies and as guides for the interpretation of food consumption records of groups of people. It is important to remember that one individual's nutrient intake may be less than the Recommended Dietary Allowances and yet be adequate to meet his needs. For another individual, the same level of intake might not be sufficient. Scrimshaw (1962) states that even population groups with average intakes well below the
recommended allowances may contain few individuals who are actually
deficient in a single nutrient.

A dietary survey may reflect intake of a nutrient for only one
day or one week of the year, whereas the biochemical evaluation fre-
quently gives information based on a longer period of time. Clinical
signs of a nutritional deficiency do not usually develop until the
nutrient insufficiency has been prolonged which makes it difficult
to identify. It is important to remember that clinical symptoms
cannot always be correlated with biochemical or dietary evaluation
(Kelsay, 1969). Clinical symptoms may be due to other physical
malfunctions.

Review of Selected Nutrition Studies. Regardless of the limitations
in interpretation of nutritional status studies, certain inferences
with reference to the nutritional status of the population do emerge
from the results of studies. A review of studies of vitamin and mineral
nutrition in the United States, 1950-1968, summarized useable dietary
and biochemical data which have appeared in the literature since 1950
on the vitamin/mineral nutrition of Americans (Davis, et.al., 1969).
The review indicates that a limited number of studies have been
conducted to determine the relationship between income and diet.
However, three independent household studies (LeBovit, 1965) (Ohlson,
1956) (Van Syckle, 1958) reported a direct relationship between income
and vitamin C intake.

A study (Murray, 1952) which examined 296 families with incomes
ranging from less than $500 to over $3,000 a year reported a direct
relationship between income and intake of calcium, vitamin A, and
vitamin C, with less clear relationships of other nutrients. Kerrey
found that children from the low-income group received diets providing more iron and thiamine, whereas those of high income group had diets providing more vitamin C and vitamin A.

A dietary study by Filer (1964) reported that infants of low-income families had better intakes than infants of high income families for calcium, vitamin D, thiamine, riboflavin, and vitamin C. The high income group infants had higher intakes of iron, vitamin A and niacin. Food consumption analysis showed those of the low-income group to have a higher intake of milk, but less fruit, cereal, vegetables, and meat than the infants of wealthier families. Eggs were consumed at about the same level by both groups.

A relatively small number of studies examined definable underprivileged groups. A study by Delgado (1961) of migrant Negro families revealed that the percentage of families whose intakes were below various levels of the Recommended Dietary Allowances were significantly higher than those in other household studies. Stine (1967), in a study on underprivileged children in Baltimore, found that mean weight and height were closer to what has been observed for children from underdeveloped countries than to the standard that has been accepted for the United States. On the other hand, Thiele's study (1968) of Negro migrant workers in New York revealed that biochemical indices of nutrition were similar to those found in other studies.

The most comprehensive studies which have examined the relationship between income level and food purchases were the U.S. Department of Agriculture Household Consumption studies in 1955 and 1965. The food consumption of 7,500 households in the United States in 1965 indicated that of the households with incomes of under $3,000, 36
percent had poor diets; whereas, of households with incomes of $10,000 or above, only 9 percent had poor diets (U.S.D.A., 1968). Nutrients most often in short supply in poor diets were calcium, vitamin A, vitamin C, and iron. In contrast to Filer's study, one of the foods most needed to improve diets was milk. Other foods included green and yellow vegetables, citrus fruits, and meat.

The study also revealed that more households in the north central and southern regions of the United States had poor diets than in the northeast and western regions. A comparison of the 1955 and the 1965 surveys showed that in 1955, 60 percent of the households had good diets. Conversely, the proportion of households having poor diets increased from 15 percent in 1955 to 21 percent in 1965 (Swope, 1969). The decline in the quality of the diets from 1955 to 1965 appears to be due to the change in food purchasing patterns of households, particularly in those foods which supply calcium, vitamin A, and vitamin C (Davis, 1969).

Insufficient intake of calcium, vitamin A, and vitamin C was also found from an investigation of food habits of elementary and secondary school students in Oklahoma (1967). The sample of 6,184 boys and girls, 5 to 18 years of age, revealed that 40 percent of them needed additional amounts of calcium, vitamin A, and vitamin C. Twenty percent of the sample needed additional iron. The sample surveyed had an adequate intake of protein, thiamine, riboflavin, and niacin.

The Oklahoma survey also indicated that the five and six year old students in the sample were below all other age groups in the adequacy of their diet. The seven to nine year olds had the lowest percentages of inadequate diets. The adequacy of the diet showed a
gradual decrease through eighteen years of age (School Lunch Division, 1970).

The diets of Oklahoma students in the sample were least adequate among the low-income group, and only slightly better for the middle and high income groups. Selected conclusions from the findings of the study indicate that nutrition education is needed at all age levels and by all economic groups.

Nutritional status and dietary studies in the United States which were conducted during a ten year period from 1957-1967 indicated that the quality of nutrition was generally related to economic status and level of education. The poorest diets were those of people in rural communities in Puerto Rico, Indians on reservations in the West, Eskimos, Aleuts and Indians in Alaska, Negro migrant agricultural workers, and teenagers from low-income families in urban areas in the Northeast (Kelsay, 1969).

Infants and children from lower socioeconomic families, such as Negro migrant families in the South and inhabitants of rural areas of Puerto Rico, tended to be below average in height and weight which is suggestive of undernutrition, or malnutrition. Another manifestation of malnutrition may be obesity which was observed in 15-20 percent of the adolescents studied and was also prevalent in the older population (Kelsay, 1969).

Only a few studies in the ten year period involved biochemical analysis of protein nutrition status. There was an indication that protein malnutrition does exist in some of the population with low incomes, however, it is not extensive. Five cases of Kwashiorkor were reported in the South and some evidence of marasmus was noted in
children of Negro migrant families (Kelsay, 1969).

Within the past two years it has been reported in newspapers and other popular media that there is a considerable amount of malnutrition in the United States, particularly in certain areas of the population. The report of the Citizens' Board of Inquiry into Hunger and Malnutrition in the U.S. was published in *Hunger, U.S.A.* (1968). In this highly subjective report it was concluded that an emergency situation exists in many parts of the United States in terms of hunger and malnutrition.

**National Nutrition Survey.** The first comprehensive study conducted in the United States to assess the nutritional status of low-income populations was the National Nutrition Survey in 1968-1969. The initial phase of the survey consisted of a sample in ten states which were judged to represent most of the broad demographic variations in the United States. A random selection of people was made from districts where the largest percentage of the families were living in poverty. The majority of the families studied had incomes of less than $3,000 per year (Schaefer, 1969b).

The design of the study included clinical examinations, biochemical measurements, dietary assessment, dental examinations, and collection of data such as socioeconomic status, food sources, and level of education. The survey is not completed and correlations and projections can only be made after results are compiled for the entire survey. However, preliminary results indicate that there is malnutrition in this country; and it occurs in an unexpectedly large proportion of the low-income population in the sample.
Selected preliminary findings of the National Survey are:

1. Four-five percent of the subjects showed protein-calorie malnutrition.

2. About 16 percent of the overall population had serum protein levels less than acceptable.

3. One-third of the children under 6 years of age had blood hemoglobin levels in an unacceptable range.

4. Almost 40 percent of the adolescents and older age group consumed less than half the desired amount of vitamin A.

5. One-third of the children under 6 years of age had serum vitamin A levels which were unacceptable.

6. Iron intake was low in over 60 percent of the young children.

7. A relatively large number of individuals consumed 50 percent or less than the levels considered adequate for calories, iron, vitamin A, and vitamin C.

8. Ninety-six percent of the sample had an average of 10 teeth either decayed, missing, or filled.

9. The adults examined had 6 times as many decayed, unfilled teeth as the national average. (Schaefer, 1969a)

Dr. William Darby has stated that the National Nutrition Survey can establish a continuing program designed to monitor the nutrirture of the United States population if the survey can be extended to include all economic levels. The survey should also give important information on the relationships between nutrition and income, educational background, ethnic background, area of residence and other variables. Up to now, very few studies have attempted to survey these relationships (J. Nut. Educ., 1969).
The White House Conference on Food, Nutrition and Health, December 1969, was the most intensive drive ever undertaken to help eradicate hunger and malnutrition in the United States. In a message to Congress, President Nixon stated, "We must put an end to malnutrition among the poor." (Briggs ed., 1969). The Conference brought together the nation's leading food and nutrition experts and representatives of all segments of the population, for the purpose of:

1. Advising the President of the United States on the current nutritional status and needs of the population.

2. To develop a national nutrition policy to insure that all Americans, especially the poor, receive an adequate diet.

3. To create an awareness by the public so that recommendations will be put into action. (Mayer, 1969a p. 247).

Home economists could serve to help implement the recommendations of the Conference because of their commitment to the well-being of families and family life. The greatest long-range implications for home economists appear to focus on nutrition education. Preparation of teachers for nutrition education, of additional dietitians and nutritionists for hospitals, schools, health programs, and social agencies; and of supportive personnel to extend the services of the professional will require a greatly expanded and accelerated educational effort (Briggs, 1970). Through creative approaches in consumer education and nutrition education, home economists can and must become more involved in this area of social concern of obtaining optimum nutrition for everyone.
Home economics in colleges and universities has traditionally been responsible for basic training of dietitians, public health nutritionists, extension home economists, and teachers in secondary schools. The home economist in the secondary school provides nutrition education for youth in this country, and Extension home economists bring nutrition directly to the public (Briggs, 1970). Extended services of organizations, agencies, and educational institutions require a concerted effort to coordinate existing and emerging nutrition education programs and services at the state and local levels. This will require effective communication between all those who are interested in nutrition research, teaching, teacher education, public health, and school feeding. Home economists have a unique contribution to make to the programs which currently exist to help improve conditions of malnutrition and in the training of people to work directly with needy persons.

Work With Low-Income Families

A basic premise is that home economics in colleges and universities could and should play a major role in preparing professionals who will be effective in helping low-income families to meet their food and nutrition needs. Research studies are limited in regard to the most effective methods to employ in work with low socioeconomic segments of the population. Home economists in colleges and universities who are responsible for program and curriculum development can gain some insight into the principles of working with low-income families from their own experiences and from experiences reported by others.
Experiences With Life and Work of Low-Income. An endeavor to permit home economists responsible for program and curriculum development in colleges and universities to gain a first-hand experience into the needs and problems of low-income families was initiated by the American Home Economics Foundation in 1968. The Foundation granted five fellowships in 1968 and twenty fellowships in 1969 to home economists in leadership roles in colleges and universities for an intensive one month experience in inner-city settings. A professional home economist employed by an agency serving low socioeconomic families was responsible for coordinating the activities and experiences of the fellowship recipients (AHEA, 1969).

Several general recommendations for undergraduate curriculum were proposed for students who are oriented to work with low-income families. These are:

1. Provide opportunities for students to have direct experiences with low-income families.

2. Provide a special course on basic skills and problem-solving of low-income families for students who have not had this instruction as part of their background.

3. Offer elective courses in the social sciences and also in health and welfare.

4. Require certain courses in anthropology, family life patterns, communications, bureaucracy, adoption and diffusion of ideas.

5. Provide seminars which include topics related to social issues of our times.

6. Emphasize the importance of adapting teaching methods, and instructional materials to the needs of low-income groups (AHEA, 1969, p. 343).
Programs in colleges and universities to help students learn about life-style of low-income families have been mostly on a volunteer basis for those who elect the experience. Student teaching is a long established required experience that is built into the curriculum which provides an avenue for students to relate subject matter to the realities of the world.

An experience with the life and work of the disadvantaged for the preservice education of home economics teachers has been reported by East and Bolertz (1968). The purpose of the study was to evaluate the feasibility of providing experiences for increasing the awareness of the future home economics teachers for work with low-income families. The sample consisted of a small number of college sophomores and juniors who volunteered to take part in an experimental practicum. During six, 11 week periods, the students participated in pre- and post-seminars and living-working experiences. The findings of the study support the feasibility of an experience that provides students with in-depth relationships with people who are different from themselves as a part of the curriculum for all future teachers (East and Bolertz, 1968).

A study to provide helpful suggestions for home economics in colleges and universities in the planning and adapting of programs for the preparation of students who choose to work in poverty areas was conducted by Pauline Garrett at the University of Missouri (1967). One phase of the study entailed designing and carrying out an inter-disciplinary pilot training program to supplement the educational and experience background of the professional home economist to work in the emerging positions where programs serve the needs of persons
handicapped by socioeconomic status differences. Findings of the study suggest that experiences to supplement areas of study in course work could be provided by (1) field trips to locations to observe and participate in educational programs for the disadvantaged, and (2) seminar and group discussions might be structured to follow-up the field trips (Garrett, 1967).

**Attitudes and Personal Characteristics of Professionals** engaged in work with low-income families is a legitimate concern to those who are responsible for directing a training program. Webster (1966) formulated a number of hypotheses concerned with the importance of personality variable in teaching the disadvantaged. Inferring from studies of teacher self-concept, he concluded that the task of teaching the disadvantaged is a demanding task, and one which cannot be done well by a person who feels himself inadequate.

A study to investigate the effects of a specialized and intensive 15-week training program on the attitudes and personal values and constructs of the novice (student) teacher of disadvantaged youth was conducted by Mazer (1969) at Western Michigan University. The 15 week training period was divided into two distinct 7½ week phases. During the first phase, the art of teaching and process experiences were combined in a deliberate effort to shape attitudes as well as to facilitate learning. During the second phase the teachers were engaged in paid internships serving migrant children. Results from the study showed that the training program resulted in the tendency of the teachers to evaluate disadvantaged children more favorably and that they tended to become more self-actualized adults in personal orientation through the training program (Mazer, 1969). Conclusions
reached by the researcher were that the attitudes and personal values of student teachers can be significantly modified through training programs and that these changes were appropriate to their work with disadvantaged youth.

In reference to the relationship of the attitude of those who work with poverty groups and the success of the program, Cornely and Bigman (1963, p. 28) have stated:

It is the fashion these days to talk rather glibly about the hard-to-reach segment of the low-income population. If this attitude persists among those working with low-income groups, programs developed for such groups are likely to fail.

Wilbur Hoff (1966) supports the importance of a positive attitude on the part of the professional who is working with low-income families. He proposes that one of the reasons why health agencies fail to reach certain lower socioeconomic groups of people is because of negative attitudes on the part of health professionals.

Certain individuals are subjectively considered by teachers, supervisors, colleagues, or co-workers, to hold attitudes and possess skills that make them successful with low-income clientele. Specific attitudes and skills possessed by an individual who is successful in her work with low-income families are difficult to determine. Selected studies display some objectivity in identifying some of the factors which are related to successful job performance.

A study by North and Buchanan (1967) to assess the favorability disposition and content of teachers' views of poverty children showed that the teachers' age, childhood economic background, and the proportion of poverty children in their present teaching assignment were unrelated to favorability or content of view of these children.
Utilizing Gough's Adjective Check List to determine the views of teachers toward poverty children, the successful teachers used the words: affectionate, friendly, and talkative. These adjectives carry tones of benevolence and kindness toward these children. Unsuccessful teachers invoked the words: dispondent, indifferent, inhibited, nervous, slipshod, sulky, and unstable. This grouping of adjectives seem to carry the notion that something is wrong, sick, or crippled about poverty children (North and Buchanan, 1967).

Wolgemot (1964) discloses that effective work with low-income families involves adaptability of present programs to the needs of low-income audiences, a cooperative spirit with other organizations and agencies, a willingness to investigate and experiment, and possession of imagination and integrity. This clearly indicates a need to awaken the interest of home economists in community and public affairs and to educate them to make substantial contributions to all families including low-income families.

Communication with low-income individuals is basic to working effectively with low-income families, according to Naomi Brill (1966). The foundation of satisfactory communication lies in establishing an understanding and acceptance of self and the low-income families we attempt to serve. A sincere desire to help the low-income individuals to help themselves and recognition that people have a right to participate in decisions which affect their welfare, will also foster communication with low-income individuals. Those who work with low-income families will communicate more effectively if they exhibit compassion, patience, imagination, flexibility, and humility (Brill, 1966).
Underlying assumptions exist to indicate that some people are not personally adapted to work with low-income people. However, there are no concise or isolated characteristics for an individual to possess which will guarantee effective work with low-income families. A combination of desirable traits seem to be recommended for the most satisfactory job performance.

Training Home Economists to Work with Low-Income Families. Preparation of home economists for work with low-income families requires an examination of goals, content, and organization of college and university programs. Simpson (1968) states that challenges in curriculum development in home economics are found at all levels and in all aspects of the program. Challenges exist with respect to social conditions of the time; student needs; local situations; the content and structure of home economics as a field of study; and problems, trends, and developments in the total field of education and in the realm of the philosophical foundations. McGrath and Johnson (1968, p.14) propose "... if home economists are to play a significant role in improving American life, then education must prepare them to do so."

A study concerned with the evaluation of the educational programs with low-income families as planned and implemented by 84 home demonstration agents (Extension home economists) in Louisiana revealed that:

Among half or more of all agents there appeared to be an awareness of the need for additional training in the areas of developing leadership; program development; evaluation methods; and teaching methods, particularly as they relate to the needs of low-income families (Alexander, 1968, p. 91).
Aker (1965) and Beavers (1965) indicate that those who work with low-income families must adapt subject matter to fit the needs and abilities of the people and that the principles of developing effective programs for low-income groups are the same as those for developing programs for the middle-class groups. The approach in working with low-income clientele may differ and the result from the application of these principles may be strikingly different from the ones which are developed for middle-class audiences.

Chilman's (AHEA, 1965) reference to devising programs for the poor indicates that it is important to recognize that the usual home economics subject matter has a strong middle-class bias. Many home economists who have been trained in this traditional approach to subject matter will need considerable imagination and flexibility to adapt it to families of the poor. In this adaption it is important to avoid the implication that the casual and impulsive approach often exhibited by low-income individuals is inherently wrong (AHEA, 1965).

Particular emphasis on curriculum in nutrition education resulted from the White House Conference on Food, Nutrition and Health, 1969. Three general recommendations are:

1. That a comprehensive and sequential program of nutrition education be included as an integral part of the curriculum in every state of the United States and its territories.

2. That the proposed conceptual framework be used as a resource in developing new curriculums and evaluating existing ones.

3. That a national interdisciplinary study group be appointed to give further study to the proposed conceptual framework, to assess the current status of nutrition education in
the schools, to prepare curriculum guides and resource materials for use by the state and educational agencies, and to suggest pilot programs to test, evaluate, and revise materials (Briggs, ed., 1970, p. 26).

The Food and Nutrition Section of the American Home Economics Association proposed a two-fold role for home economists in college and university training programs: (1) the preparation of specialists in nutrition originating within home economics with a family point of view, and (2) the preparation of generalists who can relate nutrition health to health in other areas such as child development (AHEA, 1970).

There is a shortage of home economists to carry out present responsibilities. Projections for the future show great difficulty in ways to provide staff for expanded services; therefore it is appropriate to consider the selection, training, and supervision of auxiliary personnel to enlarge potential for service.

Training the Low-Income Auxiliary Worker

Expanding needs for home economics personnel in teaching, dietetics, extension, business, industry; and agencies and community organizations have been projected by McGrath and Johnson (1968). They propose that unlimited opportunities exist for home economists, both individually and as members of teams, to improve and enhance the lives of those who have been denied the full educational, economic, and social benefits of American society (McGrath and Johnson, 1968).

An expanded need for personnel has also been projected by Dr. Catherine Chilman, a Social Science Analyst for the Welfare Administration of the United States Department of Health, Education
and Welfare. She has stated that:

Home economics is one of a group of professions that has an important part to play in helping the very poor move out of poverty. There is an oversupply of individuals and families who need what the various professions have to give, and an undersupply of professionals to serve them. (AHEA, 1965, p. 56).

Home economists trained in food and nutrition, as well as in other areas, may serve as supervisor, trainer, and recruiter of auxiliary personnel to expand potential of service to families. A number of titles appear in the literature to identify auxiliary personnel. These are: indigenous workers (Hoff, 1966), nutrition aides (Barney, 1970) (Mallory, 1968) (Phillips, 1969), program aides (Spindler, 1969), nonprofessionals (Riessman, 1965), home economics aides (Barney, 1970), home health aides (Barney and Egan, 1968), paraprofessionals and subprofessionals (Mallory, 1968) (Barney, 1970). Whatever the title, the auxiliary worker performs essentially the same functions. They are:

1. jobs which were formerly done by professionals but for which full professional training is not required, or
2. new jobs that expand professional service (Mallory, 1968, p. 623).

Auxiliary workers are usually recruited from the low-income neighborhood where they work, and are selected because it is believed that they know how to communicate with professionals and also with the poor. This is an important linkage between the professional and the low-income audience. Further selection of the auxiliary worker is based on the interest and ability of the auxiliary worker in helping other low-income families with special needs (Mallory, 1968).
Auxiliary workers are employed under supervision of a professional, and the training programs, guidance and support given to them is continuous. The home economist develops a program with the need of the auxiliary worker in mind, as well as the objectives of the particular program. In addition, the home economist may assist in training programs for other community agencies that offer services of auxiliary personnel (Preston, 1965).

In regard to the extent of utilizing auxiliary workers in service-oriented professions, Frank Riessman (AHEA, 1965, p. 197) has stated:

... there is the possibility that hiring the poor to serve the poor will take place on a gigantic scale. Far from what has taken place in the past, there is a possibility that 4-6 million jobs might be developed in health, education, and welfare; in the public sectors, in the areas where there are tremendous manpower shortages; ... and where there are strong possibilities of providing employment. For the first time, a significant feature of the use of nonprofessionals is to provide meaningful employment.

The utilization of auxiliary personnel provides a means of entry into productive employment for some of the people who are now outside the labor market. Once employed, they should have opportunities to move up the career ladder and progress to positions of increasing responsibility, satisfaction, and reward (Phillips, 1969) (Mallory, 1968) (Riessman, 1965).

**Auxiliary Workers in Home Economics.** Home economists have been utilizing the services of auxiliary workers in a variety of ways to help low-income families improve the quality of their living. In 1968, federal funds were allocated to the Cooperative Extension Service for hiring and training aides to help improve the diets of low-income families (Spindler, 1969). The program which was developed to educate the poor to improve their diets through the employment of nutrition
aides is known as the Expanded Nutrition Program. It is being carried out in rural and urban areas of selected cities and counties in the United States. The greatest number of aides are located in Louisiana, Mississippi, Texas, California, and New York; states which have the largest number of low-income families. A report issued in June, 1969, indicated that 4,000 county home economists had expanded their services to low-income families with approximately 5,000 nutrition aides who were helping 200,000 poor families to improve their diets (Spindler, 1969). As the program grows, many more aides are expected to be receiving training and supervision from home economists to help a much greater number of low-income families.

In Oklahoma, June, 1969, five extension home economists were training and supervising 88 program aides who were employed full-time or part-time in helping 2,848 program families in 11 counties.

Characteristics of program families in Oklahoma with respect to the national picture of program families, is shown below:

<table>
<thead>
<tr>
<th>Characteristics of Program Families*</th>
<th>Oklahoma (%)</th>
<th>National (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>32.8</td>
<td>53.4</td>
</tr>
<tr>
<td>Rural, nonfarm</td>
<td>56.2</td>
<td>35.8</td>
</tr>
<tr>
<td>Farm</td>
<td>11.0</td>
<td>10.8</td>
</tr>
<tr>
<td>Welfare</td>
<td>46.0</td>
<td>29.0</td>
</tr>
<tr>
<td>Participation in School Lunch</td>
<td>78.0</td>
<td>64.0</td>
</tr>
<tr>
<td>Homemakers with less than 8th grade education</td>
<td>22.6</td>
<td>34.2</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predominately white</td>
<td>39.4</td>
<td>29.3</td>
</tr>
<tr>
<td>Negro</td>
<td>36.9</td>
<td>54.5</td>
</tr>
<tr>
<td>Spanish American</td>
<td>0.2</td>
<td>14.0</td>
</tr>
<tr>
<td>Oriental</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Indian</td>
<td>23.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>0.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*Program families are defined as families for whom specified socio-economic data has been obtained by the program aide (nutrition aide). (U.S.D.A., 1969b)
Evaluation of the Expanded Food and Nutrition Education Program of the Federal Extension Service was conducted in January-July, 1969. Selected conclusions and recommendations of this evaluation include:

1. A generalized acceptance of the program by the clientele.
2. There are many signs that the program is in a position to achieve stated objectives, and some signs that objectives are being achieved.
3. The use of indigenous people as program aides has worked well and has great potential for the future.
4. Commitment to and prior experience of the Extension home economist in working with low-income families is helpful (U.S.D.A., 1969a, p. 3).

Selected recommendations were:

1. There is a need for improved techniques in reaching low-income people.
2. Assistance in developing realistic expectations is needed by program aides and agents.
3. The program needs improvement in working effectively with other agencies, although the current non-integrative nature of community services places severe limits on accomplishment.
4. Career opportunities for the program aide should be provided (U.S.D.A., 1969a, p. 4).

Recently published was the 5-Year Report: Pilot Project Involving Young Homemakers in Low-Income Rural Areas of Alabama (U.S.D.A., 1969b). This pilot project was a cooperative effort between the Alabama Cooperative Extension Service and the Federal Extension Service, United States Department of Agriculture. One of the major purposes of the project was to test the feasibility of using subprofessionals (program assistants), working under the direct supervision of a professional home
economic, in an educational program with young homemakers in low-income areas. The findings can be summarized as follows:

1. Paid program assistants who work under the direct supervision of Extension home economists can teach the hard-to-reach young homemakers in low-income areas.

2. The use of paid, subprofessionals, is a practical way to expand and include more of the hard-to-reach families in extension programs.

3. Program assistants need much supervision by a capable extension home economist.

4. Program assistants need encouragement and reassurance that some progress has been made and that change is slow to occur (U.S.D.A., 1969b, p. 136).

The effective use of auxiliary personnel is not new on the scene. The health and social welfare fields have employed the services of aides or auxiliary workers prior to the passage of the Social Security Act in 1935 (Lurie, 1965). Subsequent amendments of the Act have aided in the development and expansion of health and medical care programs for mothers and children, and provided additional job opportunities for aides and supportive personnel. The 1967 amendments specify that by the 1970's, state plans "... will provide for training and use of paid subprofessional staff with emphasis on employment of persons from low-income, as community service aides..." in programs of service to families and children (Barney, 1970, p. 114).

Summary

Home economists in colleges and universities are being challenged to adequately prepare professionals to work with all segments of the population, including low-income families. In order to help low-
income families to improve their nutritional status, professionals need to be aware of the factors which are related to poverty and how these factors affect the nutritional well-being of the population.

Economic deprivation is a limitation which affects the nutritional well-being of families, although income alone does not assure an adequate diet. The nutrients which were revealed in the literature to be most often in short supply in diets of low-income families were calcium, iron, vitamin A and C. Adequate nutrition may help alleviate symptoms of poverty, such as lack of ambition, low educational level, and marginal employment.

Home economists who work with food and nutrition needs of low-income families have many different responsibilities which include: understanding low-income families, planning food and nutrition programs for low-income groups, identifying methods of teaching low-income groups, having sufficient food and nutrition information and evaluation of programs designed for low-income groups. To meet these different responsibilities, home economists will be required to apply the basic principles of program planning to low-income audiences. Home economics in colleges and universities could more effectively prepare professionals for work with low-income families.
CHAPTER III

PROCEDURE AND METHOD

This study was conducted to investigate on-the-job concerns of selected home economists in Oklahoma who work with food and nutrition needs of low-income families in order to identify implications for college food and nutrition curriculum. To accomplish the objectives of the study as outlined in Chapter I, the procedure and methods described in this chapter were followed.

The following aspects were included in the study: (1) a review of literature to identify the factors which appear to affect the nutritional status of low-income families and those factors which seem to contribute to the success of personnel engaged in work with low-income families, (2) an investigation to determine on-the-job concerns of home economists who work with food and nutrition needs of low-income families, (3) an analysis of data to determine the relationship of selected independent variables and the identified on-the-job concerns of home economists in the sample. Variables selected for investigation included: type and length of employment of the home economists, job responsibilities encountered by the home economists, educational attainment of the home economists, personal characteristics of the home economists, and the degree of on-the-job concerns which relate to present employment of the home economists, (4) identification of implications for college food and nutrition course(s)
based on findings of the study. It is the belief of the writer that these findings could provide a basis for determining selected components of college food and nutrition curriculum.

Selection of Sample

The population for the study was identified as home economists in Oklahoma who were engaged in work with food and nutrition needs of low-income families.

To select a sample for the study, a letter of inquiry was mailed to 71 state directors of educational institutions, agencies, and organizations in Oklahoma who worked with low-income families. This inquest identified home economists who were working in some way with food and nutrition needs of low-income families and secured permission to contact the home economists for data necessary for the study. Of the 40 (56.3 percent) directors who responded, 36 of them (90 percent) contributed names and addresses of home economists who work with low-income families in helping them to meet their food and nutrition needs. The total number of home economists suggested by the directors of educational institutions, agencies, and organizations in Oklahoma was 181. This number of home economists was thus identified as the sample for the study and was contacted to obtain the necessary data. The employment of the home economists included the areas of: teaching, extension, social welfare, school lunch programs, dietetics, public health departments, utility companies, and Dairy Council.

Development of the Instrument

The data needed for the study was obtained by a questionnaire
developed by the researcher. The instrument (see Appendix B) was
designed to obtain three types of information from the respondents.
These were:

1. General information about the respondent
2. On-the-job concerns of the respondent
3. Their suggestions and recommendations for home economics curricula.

Each type of information desired from the respondents was included in
a separate section on the questionnaire for ease and accuracy of
tabulation and analysis. (see Appendix B).

Section 1. General Information: Objective, multiple-choice
type questions were developed to obtain information about the respon­
dents. The following general information was solicited from the home
economists in the sample:

a. type of present and previous employment
b. length of present and previous employment
c. residence of clientele
d. age and marital status
e. educational attainment
f. extent of work experience with low-income families
g. extent to which home economics training has helped
in their employment.

In addition to the above list of general information, twelve job
involvements were developed by the researcher on the basis of the type
of employment in which the home economist might be engaged in work
with food and nutrition needs of low-income families (see questionnaire
in Appendix B). The participants were asked to respond to each job
involvement by checking (✓) each of the statements which pertained to
their present employment. Space was provided on the questionnaire
for the respondents to list other job responsibilities that they have, which were not included in the list on the questionnaire.

Section 2. On-the-Job Concerns. Statements of on-the-job concerns of home economists who work with food and nutrition needs of low-income families were developed by the researcher on the basis of literature investigation. The previous chapter has pointed out factors which tend to affect the nutritional status of low-income families (White House Conference on Food, Nutrition and Health, 1969) (Wolgamot, 1965) (U.S.D.A., 1965) and those factors which seem to relate to the success of personnel engaged in work with low-income groups (Ford, 1966) (Alexander, 1967) (Dahms, 1965). The findings from the literature served as a basis for the development of five categories of on-the-job concerns. They are:

1. Developing an understanding of low-income individuals.
2. Planning food and nutrition programs for low-income groups.
3. Teaching methods for low-income audiences.
4. Having sufficient food and nutrition knowledge.
5. Evaluating results of food and nutrition programs planned for low-income groups.

Incorporating the use of the five categories (above) as guidelines, the researcher developed 32 statements of on-the-job concerns which home economists could encounter in work with food and nutrition needs of low-income families. The respondents were instructed to respond to each of the 32 statements of on-the-job concerns by checking the appropriate space on the questionnaire which described the degree of their concern in regard to the statement. The home economists in the sample were asked to place a check (✓) if:
A the statement was a major concern to them in their work with food and nutrition needs of low-income families.

B the statement was a moderate concern to them in their work with food and nutrition needs of low-income families.

C the statement was a minor concern to them in their work with food and nutrition needs of low-income families.

D the statement does not apply to their work with food and nutrition needs of low-income families.

Suggestions for the framework of the check-list of on-the-job concerns were obtained from (Thompson, 1967) and (Mooney Problem Check-List, 1950). The check-list of the statements of on-the-job concerns which was developed by the researcher appeared on the questionnaire as shown in Appendix B.

A statement was included on the questionnaire which gave the respondents an opportunity to list other on-the-job concerns which they had, that were not included in the list of 32 concerns developed by the researcher.

Section 3. Suggestions and Recommendations from Respondents. Two subjective questions were identified by the investigator and included on the questionnaire to go beyond factual material into the area of underlying attitudes, interests, problems, and preferences of the respondents. One of the questions was designed to obtain a description of one or two major on-the-job concerns of the home economist in work with food and nutrition needs of low-income families. The other question provided an opportunity for the respondents to suggest undergraduate and/or graduate courses to be included in home economics curricula to assist and better prepare a professional for the kinds of concerns they have encountered on-the-job. Suggestions for course
content were also solicited by the researcher.

Pretesting the Instrument

Before the final form of the questionnaire was prepared for distribution to the sample chosen for the major part of the study, a pretest of the instrument was conducted by the researcher. It was assumed that a pretest of the questionnaire would result in revision of certain questions, deletion of useless questions, and addition of other items.

Fourteen home economists were chosen to participate in the pretesting of the questionnaire. The major criteria for selection of the pretest sample was that the persons selected be distributed in the same fields of interest as those who would participate in the major study. The pretest sample was represented by home economics teachers of adolescents and adults, school lunch consultants, public health dietitians, and extension home economists in Oklahoma.

The pretest sample was mailed a copy of the cover letter and the questionnaire which were developed for the major study (see Appendix B). In addition, this sample was mailed a Questionnaire Check-List (see Appendix B), for the purpose of soliciting an evaluation of the following aspects of the instrument:

1. phraseology of the questions
2. clarity of directions
3. sufficiency of space provided to answer open-end questions
4. significance of statements of on-the-job concerns
5. avoidance of overlapping of the statements of on-the-job concerns
6. ease of responding to questions
7. length of the questionnaire.

The sample selected for the pretest was requested to complete the questionnaire and to make any comments and suggestions they felt would improve the instrument. Tabulation and analysis of the fourteen responses (100 percent return) from the pretest sample was undertaken by the researcher to determine whether the responses could be tabulated and analyzed satisfactorily and whether answers to the major questions were forthcoming.

From the pretest returns, revisions were made in format and wording of selected questions, three general information questions were added to Section 1 of the questionnaire, and two statements of on-the-job concerns were added to Section 3 on the instrument.

Gathering of Data

The data for the study was obtained from a mailed questionnaire to 181 home economists in Oklahoma who work with food and nutrition needs of low-income families. The home economists in the sample included home economics teachers of adolescents and adults, extension home economists, school lunch consultants, dietitians of public health departments, social welfare home economists, and home economists representing utility companies and the Dairy Council.

A cover letter to explain the purposes of the study was mailed with the questionnaire (See Appendix B) and with a self-addressed, stamped envelope. Each questionnaire was identified by a code number to avoid mailing follow-up reminders to those who had returned the instrument. A return of 39.6 percent was realized after two weeks, at the time the first follow-up was sent to those who had not responded to the initial
mailing of the questionnaire. The first follow-up included a reminder letter (see Appendix B) and another copy of the instrument.

An additional 21.2 percent return of the questionnaire was achieved after another two weeks, as a result of the first follow-up. This represented a total response of 60.8 percent at the time of the mailing of the second follow-up to the questionnaire. A postcard was sent to those who had not returned the first or second questionnaire which had been previously mailed to them. A total of 129 questionnaires were returned which represented a 70.8 percent response to 181 instruments.

Method of Data Analysis

The data secured from the respondents was punched on cards for computer analysis. The frequency of response and response percent was obtained for each item on the general information section of the questionnaire. These items pertained to type and length of present employment, personal characteristics of the respondent, type and length of previous employment, educational attainment, degree of experience in work with low-income families, and the degree to which the respondents felt that their home economics training had helped them in their work with low-income families.

Job Involvement. The statements on the questionnaire which identified job involvement were analyzed by frequency of response. A rank order was obtained to identify those jobs in which the respondents were most frequently involved to those in which they were least involved. The job involvements were reported in descending order with the job most frequently mentioned by the respondents listed first. Subsequently lower ranks were designated to less frequently identified job
involvements.

**On-the-Job Concerns.** Statements developed to determine on-the-job concerns of home economists in their work with food and nutrition needs of low-income families were included in the questionnaire. Each statement was answered by the respondents as being a major concern, a moderate concern, a minor concern, or did not apply in their work with low-income families. A mean score of the responses to each statement was calculated on the basis of an assigned numerical value to each degree of concern. The scores were designated as follows:

- 3 = major concern
- 2 = moderate concern
- 1 = minor concern
- 0 = does not apply

The statements of on-the-job concerns were organized for analysis by assigning each statement to one of the five categories identified on page 51. Statements within each category were ranked in descending order according to the mean score of the statement.

**Relationship of selected variables to on-the-job concerns.** To determine the relationship between selected variables and on-the-job concerns, answers to the following questions were sought:

1. Is there a relationship between the type of employment of the home economists and on-the-job concerns?
2. Is there a relationship between the length of employment of the home economists and on-the-job concerns?
3. Is there a relationship between personal characteristics of the home economists and on-the-job concerns?
4. Is there a relationship between educational attainment and on-the-job concerns of the home economist?

5. Is there a relationship between the home economist's degree of work experience with low-income families and on-the-job concerns?

In order to attempt to answer the questions posed, it was necessary to arrange the data into categories on the basis of the different types of questions on the instrument. Two categories of response were designated for type of employment, length of employment, academic degree attained, undergraduate major, age and marital status, and work experience with low-income families. To analyze this data, statistical procedures were used.

The Mann-Whitney U test was the statistic used to test the difference between any two categories of the sample. This test was valuable for determining if the on-the-job mean scores for any two categories of the sample were significantly different. If so, the null hypothesis of no relationship was rejected and it was concluded that on-the-job concerns were determined, in part, by the categories tested.

Siegel (1956, p. 126) states:

When at least ordinal measurement has been achieved, the Mann-Whitney U test may be used to test whether two independent groups have been drawn from the same population. This is one of the most powerful of the nonparametric tests, and it is a most useful alternative to the parametric t test when the researcher wishes to avoid the t test's assumptions, or when the measurement in the research is weaker than the interval scale.

For the Mann-Whitney U analysis, the .05 level of confidence was selected as the level which the z score must equal in order for the difference found between any two variables to be significant. The data was processed on an IBM 360-50 computer. The writer assumed the responsi-
bility of interpreting the computer computations.

**Analysis of Suggestions & Recommendations.** The responses to the subjective question were hand tabulated and analyzed by the researcher. The question solicited suggestions and recommendations from the respondents concerning courses and course content to be included in home economics curricula to better prepare a professional for the kinds of concerns they encountered in their work with low-income families. Analysis of the responses to the question were made in regard to suggestions by the respondents for implementations to existing home economics curricula and food and nutrition curriculum.

**Implications for Home Economics Curricula.** Major findings from the study were summarized and conclusions were made on the basis of major on-the-job concerns of the respondents, the relationship which was present between selected variables and on-the-job concerns, and suggestions and recommendations from respondents for home economics curricula. On this basis, implications were formulated with respect to components for college food and nutrition curriculum to better prepare individuals for work with food and nutrition needs of low-income families.
CHAPTER IV

PRESENTATION AND ANALYSIS OF JOB CONCERNS

This chapter is concerned with a brief description of the respondents and identification of job concerns of the home economists in the study. In addition, the third objective of the study will be presented, which was to determine the relationship between the degree of job concerns and selected employment and educational variables of the home economists in the sample.

Characteristics of Respondents

Analysis of information about the respondents may reveal characteristics which are important for meaningful interpretation of the job concerns reported by home economists who work with food and nutrition needs of low-income families. Since implications for implementing college food and nutrition curriculum was one of the desired outcomes of the study, a thorough investigation of on-the-job concerns of home economists who work with low-income families should include information about the respondents.

The information about the respondents was made available from the responses to the mailed questionnaire. The number of responses analyzed was 108 (59.7 percent) out of 129 questionnaires returned (70.8 percent). The difference between the number of responses which were analyzed and the number of returns was due to the fact that only the returns from
the home economists who work with food and nutrition needs of low-income families were considered for analysis.

Discussion of characteristics concerning the respondents consisted of pertinent information to this study which was disclosed by the home economists on the returned questionnaires. The information about the respondents will be discussed according to age, marital status, employment, educational background and job involvement of the home economists who work with food and nutrition needs of low-income families.

**Age.** One of the factors which could influence the degree of on-the-job concerns of home economists who work with food and nutrition needs of low-income families is the age of the home economist. Over 50 percent of the respondents in the study were over forty years of age but all age groups were represented on the returns (Table XIII, Appendix C). Only about one-fourth of the respondents were under thirty years of age.

**Marital Status.** The respondents' sensitivity to the needs of special groups and their ability to accept values and standards which differ from their own, may be influenced by marital status. It might also be assumed that the degree of job concerns of married home economists may be greater than for single home economists because of the amount of time and energy involved for home and job responsibilities. Over three-fourths (87.9 percent) of the home economists in this study were married, widowed, or divorced. Only 11 out of 108 were single (Table XIV, Appendix C).

**Employment.** The type of job may determine the kind of competence needed by the home economists who work with food and nutrition needs of low-income families. All of the home economists who responded to
the questionnaire were engaged in employment directly related to home economics. A large majority of the respondents had present and previous employment as home economics teachers in secondary schools (Table XV, Appendix C). Other types of employment were represented by 28 percent of the home economists in the study. These were: extension, dietetics, school lunch consultant, social welfare, public health and business.

A large percent of the respondents (93.5 percent) indicated that they had at least some work experience with low-income families. Only 6 out of 108 of the home economists who responded to the questionnaire reported that they had little or no work experience with low-income families (Table XIX, Appendix C).

The length of employment with various income groups may have helped the home economists in this study to acquire some competencies needed to work effectively with food and nutrition needs of low-income families. Of the 108 home economists who participated in the study, 66 of them (61.1 percent) had been employed in their present work for less than ten years (Table XVII, Appendix C). However, the length of previous work experience of the home economists in the study showed a reversed situation. Approximately one-fourth (25.9 percent) of the respondents had less than ten years of previous work experience.

Residence of Clientele. Low-income families who reside in an urban area have somewhat different problems in meeting their food and nutrition needs than do low-income families who reside in a rural area. Approximately 70 percent of the home economists in the study work with low-income families who reside in an urban area (Table XVI, Appendix C).
This finding was likely to have had some effect on the job concerns reported by home economists who responded to the questionnaire.

Educational Background: An influential factor on the type of employment of the home economists who responded to the questionnaire was undoubtedly their undergraduate major. As shown in Table XVIII (Appendix C), approximately three-fourths of the home economists who work with food and nutrition needs of low-income families had an undergraduate major in home economics education. This finding was consistent with previously stated data which indicated that the majority of the respondents in the study were home economics teachers in secondary schools. A noticeably smaller number of home economists who responded to the questionnaire had an undergraduate major in general home economics and food and nutrition.

If college curricula is relevant to the present and future needs of students, it can be assumed that there is a positive relationship between the amount of college education and the competencies of the student for the job. Data in Table XXI (Appendix C) revealed that one-third of the home economists who work with food and nutrition needs of low-income families had earned a master's degree. However, the majority of the respondents (84.3 percent) had enrolled for college credit within the past three years. These findings indicate that the respondents in the study were highly qualified to provide data of on-the-job concerns and opinions in regard to home economics curricula which would better prepare professionals to work with food and nutrition needs of low-income families.

Out of 108 respondents, 90 of them indicated much or some assistance from college home economics training for the kinds of concerns
they encountered on-the-job. Only 13.9 percent of the home economists who responded to the questionnaire indicated that they had received little or no assistance from their home economics training to enable them to work with food and nutrition needs of low-income families (Table XXII, Appendix C).

Job Involvement. In order to obtain a basis for meaningful interpretation of on-the-job concerns reported by the home economists in the study, it was important to become aware of some of the responsibilities of the job of the home economists (see questionnaire in Appendix B). Over 50 percent of the respondents in this study identified the following items as job involvement:

- Teaching food and nutrition to adolescent girls and/or boys from low-income families. (82.4 percent)
- Teaching the effective use of commodity or plentiful foods. (64.8 percent)
- Cooperating with other agencies and groups who also work with low-income families. (60.2 percent)
- Making visits to the homes of low-income families. (55.6 percent)
- Identifying food habits (patterns) of low-income families. (53.7 percent)
- Using various media to help the community to become aware of the need for food and nutrition education. (53.7 percent)

It was observed from the findings that home economists who work with food and nutrition needs of low-income families have a variety of different job involvements (Table XXIII, Appendix C). Thus, home economics curricula should provide a variety of experiences which would
help prepare students to work with food and nutrition needs of low-income families.

On-the-Job Concerns

Statements of on-the-job concerns were developed with consideration for: (1) aspects of the job which would be perceived as problems by the home economists who work with food and nutrition needs of low-income families, and/or (2) aspects of the job in which assistance could be provided by a particular emphasis in college food and nutrition curriculum. Home economists rated the statements as major, moderate, or minor concern, or that they did not apply; whichever was in accordance to their present work with food and nutrition needs of low-income families.

The job concerns were analyzed according to rank order of major concern in one of the five categories: understanding, planning programs, teaching methods, subject matter, or evaluation. Moderate and minor concerns identified by the home economists in the study were included to obtain further information about the degree of concern they had about aspects of their work with low-income families.

Understanding Low-Income Individuals. Four of the statements on the questionnaire were interpreted by the researcher as relative to understanding low-income individuals. The degree of concern reported by the respondents to each of the statements are presented by rank order in Table I. It was observed that over 50.0 percent of the respondents indicated a major concern for having an understanding of the people with whom they work, 28.7 percent indicated that it was a moderate concern to them. Gaining access into the homes of low-income
families did not apply for 30.6 percent of the home economists and was a minor concern for 27.8 percent of the respondents. It could be assumed that an understanding of low-income individuals would promote some ability to talk with them in terms they understand and to interpret their comments about food problems; thus, gaining access into their home should not cause a great deal of concern.

### TABLE I

**CONCERNS ABOUT UNDERSTANDING LOW-INCOME INDIVIDUALS**

<table>
<thead>
<tr>
<th>Job Concerns</th>
<th>Degree of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Understanding clientele</td>
<td>57 .52</td>
</tr>
<tr>
<td>Communication</td>
<td>46 .42</td>
</tr>
<tr>
<td>Interpretation</td>
<td>32 .30</td>
</tr>
<tr>
<td>Visiting homes</td>
<td>17 .15</td>
</tr>
</tbody>
</table>

N = number (rows total 108).

P = proportion (rows total 1.00).

**Planning Programs for Low-Income Groups.** This category consisted of ten statements relative to planning food and nutrition programs for low-income groups. The statements appear in Table II according to rank order of major concern. Getting low-income homemakers to come to learn how improved nutrition will affect their family's health was
a major concern for 50.0 percent of the group. Close to one-half of the home economists had major concern for finding enough time to develop the kind of food program they felt would be most effective for low-income families, as well as for knowing how to plan food and nutrition lessons which would be realistic to the low-income families. Of minor concern (26.9 percent) or not applicable (38.8 percent) to the home economists who responded to the instrument was locating a meeting place where families feel free to come (Table II). Further investigation is necessary to establish the relationship between the location of the food and nutrition program and the attendance of low-income homemakers.

TABLE II
CONCERNS ABOUT PLANNING PROGRAMS FOR LOW-INCOME GROUPS

<table>
<thead>
<tr>
<th>Job Concerns</th>
<th>Major</th>
<th>Moderate</th>
<th>Minor</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>P</td>
<td>N</td>
<td>P</td>
</tr>
<tr>
<td>Getting homemakers to attend</td>
<td>54</td>
<td>.50</td>
<td>20</td>
<td>.19</td>
</tr>
<tr>
<td>Enough time to plan</td>
<td>52</td>
<td>.48</td>
<td>23</td>
<td>.21</td>
</tr>
<tr>
<td>Planning realistic programs</td>
<td>52</td>
<td>.48</td>
<td>30</td>
<td>.28</td>
</tr>
<tr>
<td>Knowing food habits</td>
<td>45</td>
<td>.42</td>
<td>39</td>
<td>.36</td>
</tr>
<tr>
<td>Knowing barriers to good diets</td>
<td>41</td>
<td>.39</td>
<td>36</td>
<td>.33</td>
</tr>
<tr>
<td>Food buying practices</td>
<td>39</td>
<td>.36</td>
<td>36</td>
<td>.33</td>
</tr>
<tr>
<td>Assistance from community agencies</td>
<td>38</td>
<td>.35</td>
<td>36</td>
<td>.33</td>
</tr>
<tr>
<td>Publicizing program</td>
<td>36</td>
<td>.34</td>
<td>35</td>
<td>.32</td>
</tr>
<tr>
<td>Securing help from clientele</td>
<td>29</td>
<td>.26</td>
<td>30</td>
<td>.28</td>
</tr>
<tr>
<td>Locating meeting places</td>
<td>14</td>
<td>.13</td>
<td>23</td>
<td>.21</td>
</tr>
</tbody>
</table>
Two of the factors to be considered when planning realistic food and nutrition programs for low-income families are: (1) knowing the barriers of good diets such as superstitions, lack of education, and low-income; and (2) knowing the food habits of low-income individuals. These factors were a major concern for 38.0 and 41.7 percent of the respondents as indicated in Table II.

Knowledge of Subject Matter concerns are presented by rank order in Table III. Four of the nine job concerns in this category were identified by more than 50.0 percent of the respondents as a major concern. These were: knowing possible ways for low-income families to obtain good nutrition with limited money (65.7 percent); helping low-income homemakers to know food needs of each family member (60.2 percent); knowing how to help low-income families to recognize unwise spending for food (57.4 percent); and having imagination in ways of preparing foods which are available and acceptable by low-income families (55.6 percent). It was observed that 23.1 percent of the respondents identified the kind and amount of food storage available to low-income families as a major concern, and 40.7 percent indicated it to be a moderate concern. Hence, this item on Table III received the lowest rank by major concern, but would have received the highest rank if analyzed according to moderate concern.

Low percentages were observed for all of the nine job concerns in Table III in regard to minor concerns and/or did not apply to their work with low-income families. This finding indicated that the job concerns of subject matter applied to 86.0 percent of the home.
economists who work with food and nutrition needs of low-income families.

TABLE III
CONCERNS ABOUT KNOWLEDGE OF SUBJECT MATTER

<table>
<thead>
<tr>
<th>Job Concerns</th>
<th>Degree of Concern</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major N P</td>
<td>Moderate N P</td>
<td>Minor N P</td>
<td>None N P</td>
<td></td>
</tr>
<tr>
<td>Nutrition of low-cost foods</td>
<td>71 .65 18 .17 12 .11 7 .07</td>
<td>65 .60 24 .22 12 .11 7 .07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food needs of family members</td>
<td>62 .57 30 .28 10 .09 6 .06</td>
<td>60 .55 30 .28 13 .12 5 .05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizing unwise spending</td>
<td>51 .47 29 .27 14 .13 14 .13</td>
<td>43 .40 30 .28 23 .21 12 .11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of low-cost foods</td>
<td>42 .39 26 .24 31 .29 9 .08</td>
<td>38 .36 23 .21 36 .33 11 .10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyday food problems</td>
<td>43 .40 30 .28 23 .21 12 .11</td>
<td>38 .36 23 .21 36 .33 11 .10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obtaining and using commodity foods</td>
<td>42 .39 26 .24 31 .29 9 .08</td>
<td>38 .36 23 .21 36 .33 11 .10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of good nutrition</td>
<td>43 .40 30 .28 23 .21 12 .11</td>
<td>38 .36 23 .21 36 .33 11 .10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of commodity foods</td>
<td>42 .39 26 .24 31 .29 9 .08</td>
<td>38 .36 23 .21 36 .33 11 .10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food storage available</td>
<td>25 .23 44 .41 24 .22 15 .14</td>
<td>25 .23 44 .41 24 .22 15 .14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = number (rows total 108).
P = proportion (rows total 1.00).

Teaching Methods for Low-Income Groups. Rank order of job concerns in regard to teaching low-income groups are included in Table IV. The degree of concerns show that motivation of families to improve their
diet was a major concern for 64.8 percent of the respondents.

### TABLE IV
CONCERNS ABOUT TEACHING METHODS FOR LOW-INCOME GROUPS

<table>
<thead>
<tr>
<th>Job Concerns</th>
<th>Major N</th>
<th>Major P</th>
<th>Moderate N</th>
<th>Moderate P</th>
<th>Minor N</th>
<th>Minor P</th>
<th>None N</th>
<th>None P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techniques of motivation</td>
<td>70</td>
<td>.64</td>
<td>19</td>
<td>.18</td>
<td>6</td>
<td>.06</td>
<td>13</td>
<td>.12</td>
</tr>
<tr>
<td>Gaining confidence of clientele</td>
<td>51</td>
<td>.47</td>
<td>29</td>
<td>.27</td>
<td>13</td>
<td>.12</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>Securing educational materials</td>
<td>49</td>
<td>.45</td>
<td>31</td>
<td>.29</td>
<td>18</td>
<td>.17</td>
<td>10</td>
<td>.09</td>
</tr>
<tr>
<td>Training low-income leaders</td>
<td>48</td>
<td>.44</td>
<td>22</td>
<td>.21</td>
<td>12</td>
<td>.11</td>
<td>26</td>
<td>.24</td>
</tr>
<tr>
<td>Sufficient educational resources</td>
<td>40</td>
<td>.37</td>
<td>28</td>
<td>.26</td>
<td>21</td>
<td>.19</td>
<td>19</td>
<td>.18</td>
</tr>
<tr>
<td>Techniques of adult learning</td>
<td>34</td>
<td>.32</td>
<td>36</td>
<td>.33</td>
<td>16</td>
<td>.15</td>
<td>22</td>
<td>.20</td>
</tr>
<tr>
<td>Using limited equipment</td>
<td>32</td>
<td>.30</td>
<td>39</td>
<td>.36</td>
<td>21</td>
<td>.19</td>
<td>16</td>
<td>.15</td>
</tr>
</tbody>
</table>

N = number (rows total 108).

P = proportion (rows total 1.00).

Over 40.0 percent of the respondents identified major concern for knowing how to gain the confidence of low-income persons, for themselves as individuals and for the program that was being offered; locating suitable educational materials (45.4 percent); and training low-income individuals as leaders (44.4 percent). The later, training leaders, did not apply to almost one-fourth of the respondents. Knowing how
to create a relaxed atmosphere to promote adult learning did not apply for 30.4 percent of the respondents. This observation was expected since the majority of the respondents were teachers of secondary school students (see Table XV, Appendix C).

**Evaluation of Programs.** The degree of concern for aspects of evaluating food and nutrition programs planned for low-income groups are identified by rank order in Table V.

**TABLE V**

**CONCERN ABOUT EVALUATION OF PROGRAMS**

<table>
<thead>
<tr>
<th>Job Concerns</th>
<th>Degree of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major N</td>
</tr>
<tr>
<td>Evaluating own work</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>.58</td>
</tr>
<tr>
<td>Progress of clientele</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>.48</td>
</tr>
<tr>
<td>Determining understanding of clientele</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>.46</td>
</tr>
<tr>
<td>Satisfied with limited progress</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>.30</td>
</tr>
</tbody>
</table>

N = number (rows total 108).

P = proportion (rows total 1.00).

Data in Table V shows that over 50.0 percent of the respondents indicated a major concern for being able to determine how much they
have really helped low-income individuals to improve their diets. Almost the same percentage of respondents indicated major concern for ways of determining if low-income individuals understand food and nutrition teachings (46.3 percent) and helping low-income individuals to recognize that they are making progress toward improving their diets (48.1 percent).

Being satisfied with limited accomplishments as evidence of progress toward improved nutrition for low-income families was a major concern for 30.6 percent of the respondents.

A small percentage of the respondents indicated a minor concern or checked the column, did not apply, in regard to evaluating their work with food and nutrition needs of low-income families. It can be concluded from this finding that evaluation was perceived by the respondents as a necessary component of programs planned for low-income groups.

Major Concerns. The job concerns which were identified by 50.0 percent or more of the respondents as major concerns are listed by rank order in Table VI. These major concerns represent all of the five catagories by which the job concerns were previously analyzed.
TABLE VI
CONCERNS IDENTIFIED BY FIFTY PERCENT OR MORE OF THE RESPONDENTS

<table>
<thead>
<tr>
<th>Job Concern</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing ways for low-income families to obtain good nutrition with limited money.</td>
<td>71</td>
<td>.66</td>
</tr>
<tr>
<td>Knowing ways low-income families can be motivated to want to do something about improving their diets.</td>
<td>70</td>
<td>.65</td>
</tr>
<tr>
<td>Helping low-income homemakers to know food needs of each member of the family.</td>
<td>65</td>
<td>.60</td>
</tr>
<tr>
<td>Knowing how to help low-income families to recognize unwise spending for food.</td>
<td>62</td>
<td>.57</td>
</tr>
<tr>
<td>Being able to determine how much work I am doing is really helping them to improve their diets.</td>
<td>62</td>
<td>.57</td>
</tr>
<tr>
<td>Having imagination in ways of preparing foods which are available and acceptable to low-income families.</td>
<td>60</td>
<td>.56</td>
</tr>
<tr>
<td>Having an understanding of the people with whom I work.</td>
<td>57</td>
<td>.53</td>
</tr>
<tr>
<td>Getting low-income homemakers to come to learn how improved nutrition will affect their family's health.</td>
<td>54</td>
<td>.50</td>
</tr>
</tbody>
</table>

1 Each entry based on 108 respondents.
2 Each entry based on 1.00.

Relationship of Variables to On-The-Job Concerns

Reported in this part of the chapter was the relationship between employment and education of the home economists who work with food and
nutrition needs of low-income families and the degree of concern they had about the job. Answers to the following questions were sought:

Employment Variables:

1. Is there a direct relationship between type of present employment of the home economists and degree of on-the-job concerns?

2. Is there a direct relationship between length of present employment and degree of on-the-job concerns?

3. Is there a direct relationship between type of previous employment and degree of on-the-job concerns?

4. Is there a direct relationship between length of previous employment and degree of on-the-job concerns?

5. Is there a direct relationship between extent of work experience with low-income families and degree of on-the-job concerns?

Education Variables:

1. Is there a direct relationship between undergraduate major and degree of on-the-job concerns?

2. Is there a direct relationship between length of time since last enrolled for college credit and degree of on-the-job concerns?

3. Is there a direct relationship between extent to which home economics training has qualified the home economists to work with food and nutrition needs of low-income families and degree of on-the-job concerns?

Presented in this part of the chapter is the statistical analysis of the data which pertained to these basic questions.
Employment Variables

In order to attempt to answer the questions pertaining to the five aspects of employment of the home economists who work with food and nutrition needs of low-income families, the Mann-Whitney U statistic was calculated. Data used to analyze aspects of employment were obtained from selected items on Section I of the questionnaire. Data pertaining to on-the-job concerns were secured from mean scores of the responses on Section II of the questionnaire (see Appendix B).

Each employment variable was grouped into two separate categories for statistical analysis. The general design for the Mann-Whitney U test was to compare the degree of on-the-job concerns to the following: (1) present and previous employment of home economics teachers to other types of employment, (2) present and previous employment of less than ten years to more than ten years, and (3) much/some work experience with low-income families to little/no work experience with low-income families. Presented in Table VII are the z-scores from the Mann-Whitney U computations and the associated probabilities.

**Present Employment.** It can be noted in Table VII that the degree of on-the-job concerns in regard to understanding low-income families was significantly effected by the type of present employment of the respondents at the .03 level of probability. The data indicated that the degree of on-the-job concerns in regard to planning programs for low-income groups, teaching methods for low-income families, knowledge about subject matter, and evaluation of programs were not significantly effected by the type of present employment of the home economists.
TABLE VII
EMPLOYMENT OF RESPONDENTS AND DEGREE OF JOB CONCERNS
(One-Tailed Tests)

<table>
<thead>
<tr>
<th>Employment Variables</th>
<th>N</th>
<th>Understand</th>
<th>Plan</th>
<th>Teach</th>
<th>Knowledge</th>
<th>Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Employment</td>
<td></td>
<td>z</td>
<td>p</td>
<td>z</td>
<td>p</td>
<td>z</td>
</tr>
<tr>
<td>Teacher</td>
<td>78</td>
<td>2.08</td>
<td>*0.02</td>
<td>0.70</td>
<td>0.25</td>
<td>0.95</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>66</td>
<td>0.77</td>
<td>0.27</td>
<td>1.37</td>
<td>0.08</td>
<td>0.87</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>54</td>
<td>1.15</td>
<td>0.12</td>
<td>0.96</td>
<td>0.33</td>
<td>0.92</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Previous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>28</td>
<td>-0.25</td>
<td>0.39</td>
<td>0.40</td>
<td>0.34</td>
<td>0.65</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience Work with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-Income Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Much/Some</td>
<td>101</td>
<td>1.44</td>
<td>0.07</td>
<td>1.87</td>
<td>*0.02</td>
<td>1.81</td>
</tr>
<tr>
<td>Little/None</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant results

Length of Present Employment. It can be concluded on the basis of the findings, that the degree of job concerns in regard to evaluation were significantly greater for home economists who had held their present position for ten years or more than for those who had held their present position for less than ten years. Data in Table VII shows that a significant z-score value was obtained for length of present employment in relation to degree of job concerns related to
evaluation of programs designed for low-income families. The z-score of 1.78 was significant at the .03 level of probability.

The length of present employment had no significant relationship to the degree of job concerns for understanding low-income families, planning programs for low-income groups, teaching methods for low-income audiences, or knowledge of subject matter.

**Type of Previous Employment.** The result of the Mann-Whitney U test of the degree of on-the-job concerns and the type of previous employment was significant at the .04 level for evaluation of programs designed for low-income audiences (see Table VII). Therefore, the type of previous employment had a significant effect on the degree of job concerns in regard to evaluation of programs at less than the .05 level of probability. Data indicated that previous employment as a teacher of home economics resulted in less concern for evaluation of programs than when previously employed in other positions.

The results of the Mann-Whitney U test were not significant for the type of previous employment in relation to job concerns which pertained to understanding low-income families, planning programs for low-income groups, teaching methods for low-income audiences, and knowledge of subject matter. Thus, the type of previous employment of the respondents had no significant effect on the degree of on-the-job concerns with the exception of evaluation of programs designed for low-income audiences.

**Length of Previous Employment.** Table VII reveals that previous employment for less than ten years or for more than ten years had no significant effect on the degree of on-the-job concerns for any of the five categories. Although the home economists previously employed
for more than ten years indicated greater concern for understanding low-income families than those who had been employed for less than ten years, the z-score value of -0.25 was not significant. It must be concluded that the degree of on-the-job concerns was not significantly effected by the length of employment prior to the home economists' present position.

Extent of Work Experience with Low-Income Families. Analysis of the relationship between the extent of work experience with low-income families and the degree of job concerns is shown in Table VII. An obtained z-score value of 1.87 and 1.18 in the categories of planning programs and teaching methods for low-income groups was significant at the .02 and .03 level of probability respectively. Thus, the extent of work experience with low-income families had an effect on the degree of job concerns which pertained to planning programs and teaching methods. No significant relationship between work experience with low-income families and the degree of job concerns was found for job concerns which pertained to understanding low-income families, knowledge of subject matter or evaluation of programs designed for low-income audiences.

Education Variables

The data to analyze the relationship between educational background of the respondents and the degree of on-the-job concerns was secured from questions 1.8, 1.9, and 1.11 on Section I of the questionnaire; and the mean scores of Job Concerns from Section II on the questionnaire (see Appendix B). Data on education variables were designed so that two separate categories for each variable resulted. They were:
undergraduate major: home economics education and other; time since enrolled for college credit: less than ten years and ten or more years; home economics training assisted: much/some and little/none.

Analysis of education variables also was conducted by using the Mann-Whitney U test. The z-scores and their associated probabilities appear in Table VIII.

Undergraduate Major. Data in Table VIII shows that the degree of job concerns in regard to knowledge of subject matter and evaluation of programs was significantly effected by the undergraduate major of the home economists. A z-score of -1.73 with an associated probability of .04 was obtained for the relationship of undergraduate major and job concerns which pertained to knowledge of subject matter. Therefore the undergraduate major had a significant effect on knowledge of subject matter concerns at the .04 level of probability. A z-score of -1.79 with an associated probability of .03 resulted from the analysis of undergraduate major and degree of job concerns related to evaluation of programs designed for low-income audiences. This analysis was significant at the .03 level of probability indicating that the degree of job concerns with respect to evaluation was also significantly effected by the undergraduate major of the respondents. A high degree of significance was not obtained for either of the relationships discussed above.

The direction of the significant relationships between undergraduate major and degree of on-the-job concerns (Table VIII) indicated that home economists with an education major had a higher degree of concern for aspects of the job which pertained to knowledge of subject matter and evaluation of programs than did home economists with other majors.
TABLE VIII
EDUCATIONAL BACKGROUND OF RESPONDENTS AND DEGREE OF JOB CONCERNS
(One-Tailed Tests)

<table>
<thead>
<tr>
<th>Education Variables</th>
<th>Understand</th>
<th>Plan</th>
<th>Teach</th>
<th>Knowledge</th>
<th>Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>z</td>
<td>p</td>
<td>z</td>
<td>p</td>
</tr>
<tr>
<td>Undergraduate Major</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. E. Education</td>
<td>77</td>
<td>1.34</td>
<td>0.08</td>
<td>-1.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Since Last Enrolled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for College Credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>44</td>
<td>1.71</td>
<td>*0.04</td>
<td>1.71</td>
<td>*0.04</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent to Which Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assisted with Job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Much/Some</td>
<td>90</td>
<td>0.11</td>
<td>0.42</td>
<td>-1.62</td>
<td>*0.05</td>
</tr>
<tr>
<td>Little/None</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant results

Length of Time Since Last Enrolled for College Credit. Data obtained from the Mann-Whitney U analysis of the relationship between the number of years since last enrolled for college credit and degree of on-the-job concerns is presented in Table VIII. The findings indicated that the length of time since last enrolled for college credit significantly effected the degree of job concerns which pertained to understanding low-income families, planning programs for low-income groups and knowledge of subject matter. Significance was obtained at the .04 level of probability or less for all cases (Table VIII). The
length of time since last enrolled for credit did not significantly
effect the degree of on-the-job concerns in regard to teaching methods
and evaluation of programs designed for low-income audiences. The
data findings indicated that the respondents who were last enrolled
for college credit ten years ago or more had a greater degree of concern
for aspects of the job related to understanding low-income families,
planning programs for low-income groups and knowledge of subject matter.

Extent to Which Home Economics Training Assisted with Job Concerns.
The results of the Mann-Whitney U analysis of the relationship between
the extent of assistance from home economics training and degree of
on-the-job concerns is given in Table VIII. A significant relationship
was identified between the variable and the degree of job concerns
related to planning programs, knowledge of subject matter and evaluation
of programs for low-income groups. A z-score value of -1.62 was obtained
from the calculation of the effect of home economics training on
the degree of job concern for planning programs for low-income groups.
The table value of a z-score of -1.62 had a one-tailed probability of
.05 which was the level of probability established for significance.

A z-score value of -2.01 with an associated probability of .02
established a significant effect of home economics training assistance
on the degree of on-the-job concerns in regard to knowledge of subject
matter. Significance was obtained for the effect of the variable on
the degree of job concerns related to evaluation of programs for
low-income groups as a result of a z-score value of -1.73 with an
associated probability of .04.

No significant relationship was found between the extent of home
economics training assistance and the degree of job concerns with
regard to understanding low-income families and teaching methods for low-income groups.

With respect to planning programs, knowledge of subject matter and evaluation of programs the data provided evidence to conclude that a higher degree of job concern was identified by the respondents who indicated that home economics training had assisted them much/some in their work with low-income families, than was identified by the respondents who indicated little/no assistance from home economics training.

Summary

The majority of the home economists in the study worked indirectly with food and nutrition needs of low-income families; as teachers in secondary schools. Most of them were over thirty years of age, married, and had earned college credit within the past three years. One-third of the group had attained a master's degree.

The aspect of the job which was identified most frequently by the respondents as major concern pertained to having knowledge of food and nutrition relative to the needs of low-income families, such as (1) how to obtain good nutrition with limited money, (2) recognizing unwise spending for food and (3) having imagination in ways of preparing low-cost and commodity foods.

Respondents who had majored in home economics education at the undergraduate level had a significantly greater concern for aspects of the job which related to knowledge of food and nutrition than did those who had majored in other areas, such as food and nutrition or general home economics. Other groups who had significantly greater concern for more information about food and nutrition were those who
were last enrolled for college credit more than ten years ago and those who reported that home economics training had assisted much/some in qualifying them to work with low-income families.

Also mentioned frequently by the home economists in the study was concern for how to teach low-income audiences. A great deal of concern was expressed by the group in regard to motivating low-income individuals to improve their diets and to attend food and nutrition programs planned for them. A significant relationship was found between the amount of concern for methods of teaching food and nutrition and the extent of work experience with low-income families. The home economists who identified little/no work experience with families of limited income had the greatest concern for how to teach food and nutrition to low-income groups.

Understanding low-income individuals seemed to be important to the home economists in the study. Over one-half of the respondents identified major concern for understanding people with whom they work which is one of the primary aspects of effective work with low-income families. Only a few of the home economists in the study (less than 10 percent) indicated that understanding and communicating with low-income families did not apply to them in work with the low-income segment of the population.

The group of home economists who were employed as teachers in secondary schools had significantly less concern for understanding low-income individuals than those who were employed in other kinds of jobs such as extension, dietetics and school lunch consultation. Likewise, significantly less concern for understanding low-income
individuals was indicated by those who had been enrolled for college credit within the past ten years as compared to those who had been enrolled more than ten years ago.

The least concern was expressed by the respondents for evaluation of programs designed for low-income groups, although one-half of the group had major concern for being able to determine how much the work they were doing was really helping them to improve their diets. It is important to remember that food habits are difficult to change and that good nutrition is a life-long process, hence, professionals may have to be satisfied with limited progress toward good diets.

The respondents who had an undergraduate major in home economics education had significantly greater concern for evaluation of programs than did those who had majored in food and nutrition or general home economics. In addition, a significantly greater concern was identified for the group who had indicated that home economics training had qualified them for work with low-income families as compared to those who indicated that they received little/no assistance from the college home economics curricula.

Implications for college food and nutrition curriculum can be drawn from the findings of the study reported in this chapter. However, further investigation of these implications will be made in Chapter V and Chapter VI will report the implications for curriculum based on a composite of the findings of the study.
CHAPTER V

RESPONDENTS' SUGGESTIONS AND RECOMMENDATIONS FOR HOME ECONOMICS CURRICULA

The fourth objective of the study was: To make suggestions and recommendations for implementing college food and nutrition curriculum on the basis of the findings identified in the study. The findings in regard to on-the-job concerns of home economists who work with food and nutrition needs of low-income families were presented in Chapter IV. This chapter presents the respondents' suggestions and recommendations for home economics curricula which were obtained from the home economists who responded to an open-end question on the mailed questionnaire. The question was stated as follows:

What undergraduate and/or graduate courses in home economics would you suggest to be included in a training program to assist and better prepare a professional for the kinds of concerns you have encountered on the job? Include suggestions for course content.

It is believed by the researcher that all of the responses to the question were valuable and each one deserved serious consideration. The reasons for this belief are based on selected findings, previously stated, which concern characteristics of the respondents. These were: (1) the majority of the respondents had some work experience with low-income families, (2) almost half of them had been employed on their present job for over ten years, (3) about fifty percent have had ten years or more of previous work experience, (4) about one-third have
attained a master's degree, and (5) over three-fourths of them have earned college credit within the last three years. Thus, the employment and educational background of the home economists who responded to the questionnaire, gave substantiation to their suggestions and recommendations for home economics curricula.

Procedure for Analysis of Suggestions and Recommendations from Respondents

Data from the home economists who responded to the subjective question were tabulated and analyzed according to commonalities of the suggestions and recommendations. It was found that the responses from the group were similar to the job concerns which were presented and analyzed in Chapter IV. Thus, the basis for analyzing the responses to the question were the same five categories which provided the basis for analyzing the data in Chapter IV. All of the five categories were represented by the suggestions and recommendations for home economics curricula which were made by the group who responded to the question. For clarity of analysis and reporting, the suggestions of the group were tabulated and analyzed in relation to only one of the five categories. However, some of the replies had implications for more than one category.

Responses to Question

The majority of the home economists who responded to the mailed questionnaire provided suggestions and recommendations for curriculum (75 out of 108). Most of the responses were brief and direct. However, serious attention was given to the fact that all of the respondents were professional home economists, employed full-time and
the majority of them were married, hence, they had many demands on their time and energy.

**Understanding Low-Income Families.** Over a third of those who responded to the subjective question suggested curriculum emphasis which help to provide a better understanding of low-income families (Table IX). Eleven of the respondents in the group suggested course emphasis to help students to understand the cultural background of all segments of society, including the low-income. Examples of these responses which were representative of the group were: course content to promote an understanding of the racial background of the Negro, Spanish American, and Indian; understanding of cultures of various nationalities; an appreciation of people regardless of race, color or creed; understanding of children and teenagers in the urban society; and an understanding of those who appear to be deprived, according to 'our' standards.

Other suggestions from the respondents to the question were directed to specific courses which would promote an understanding of low-income people with whom they work. Five home economists suggested more courses in psychology, sociology and anthropology. The same number of respondents (five) suggested home economics courses which would assist student's understanding of low-income families. This group recommended more courses in family living and human relationships.

It is a widely accepted assumption that an understanding and acceptance of individuals will promote better communication with all segments of society, including low-income groups. Seven out of 75 home economists who responded to the question (9.33 percent), suggested that home economics course content could include an emphasis on
learning how to communicate with all people. One of the seven respondents suggested a means to this end. The home economist stated that professionals need to learn how to listen to those with whom they work, and learn to guide them, rather than lecture or tell them what they should do to improve their family's food and nutrition intake.

**TABLE IX**

**SUGGESTIONS AND RECOMMENDATIONS IN REGARD TO UNDERSTANDING LOW-INCOME FAMILIES**

<table>
<thead>
<tr>
<th>Suggestions from Respondents</th>
<th>¹ Number</th>
<th>² Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>More courses which promote a better understanding of all segments of society.</td>
<td>11</td>
<td>.15</td>
</tr>
<tr>
<td>Course emphasis which promotes ability to communicate with low-income families.</td>
<td>7</td>
<td>.09</td>
</tr>
<tr>
<td>More courses in psychology, sociology and anthropology.</td>
<td>5</td>
<td>.07</td>
</tr>
<tr>
<td>More courses in family living and human relationships.</td>
<td>5</td>
<td>.07</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>28</strong></td>
<td><strong>.38</strong></td>
</tr>
</tbody>
</table>

¹ Based on 75 responses.
² Based on 1.00.

Planning Programs for Low-Income Groups. Suggestions and recommendations for curriculum emphasis on planning programs for low-income
groups represented 33.34 percent of the home economists who answered the question (Table X). An analysis of replies to the question indicated that all of the responses pertained to planning programs for low-income groups in one way or another. However, only the responses which were most pertinent to planning programs will be discussed at this time.

The majority of the suggestions which had connotation for low-income program planning advocated help from home economics curriculum related to information about sources of assistance (12.0 percent). The focus of the suggestions identified the importance of knowing organizations and agencies in the community which also work with low-income families as a means of obtaining assistance in planning effective programs. Two of the suggestions proposed course content that provides an acquaintance with the services of the Community Action Centers and the Social Welfare Department. Another respondent identified the value of some acquaintance with community groups as an avenue in getting low-income homemakers to come to programs planned for them. This particular home economist had greatest help from the minister of the Indian church in the community where she worked.

Course emphasis on planning programs which help the low-income families to know more about community resources and how to utilize the services available to them was submitted by one respondent, however, the same emphasis was implied by a number of other respondents.

Planning adult education programs for low-income groups was suggested by four of the home economists who responded to the question. These respondents recommended home economics curriculum emphasis on how to introduce and execute adult education classes for low-income
### TABLE X

**SUGGESTIONS AND RECOMMENDATIONS IN REGARD TO PLANNING PROGRAMS FOR LOW-INCOME GROUPS**

<table>
<thead>
<tr>
<th>Suggestions from Respondents</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securing help in planning programs from community resources.</td>
<td>9</td>
<td>.12</td>
</tr>
<tr>
<td>Planning adult education courses</td>
<td>4</td>
<td>.05</td>
</tr>
<tr>
<td>Planning comprehensive food and nutrition programs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Education</td>
<td>8</td>
<td>.11</td>
</tr>
<tr>
<td>Equipment</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Sanitation</td>
<td>3</td>
<td>.04</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>25</td>
<td>.33</td>
</tr>
</tbody>
</table>

1. Based on 75 responses.
2. Based on 1.00.

families. Course content which conveys food and nutrition needs of particular groups of adults in the community also deserves consideration in the home economics curricula. One of the respondents submitted the following observation:

> Retired people, living on fixed incomes and without commodities, have the biggest problem in our community.

Suggestions for home economics curricula were also given relative to specific course emphasis in planning comprehensive food and nutrition programs for low-income groups. Eight of the respondents in the group stressed the inclusion of more consumer education in college food and nutrition courses. All of the recommendations concerned course
emphasize on food budgeting and meal planning for low-income families. One of the respondents advised special attention be given to purchasing and preparing low-cost meats, fruits and vegetables.

Other suggestions were made in regard to some course emphasis on sanitation practices in homes of low-income families. Three of the home economists in the group felt that teaching sanitation of food was often slighted in college food and nutrition curriculum.

Some consideration to ways of improvising equipment for various types of food preparation was suggested by one of the respondents. Even though mentioned by only one respondent, this suggestion merits attention in planning a comprehensive food and nutrition program for low-income families.

Methods of Teaching Low-Income Groups. Most (69.33 percent) of the suggestions and recommendations for home economics curricula were given by the respondents in regard to teaching methods for low-income groups (Table XI). Since most of the respondents were teachers in secondary schools, this finding was not entirely unexpected by the researcher.

General suggestions were given by a fourth of the group (19 out of 75) in relation to methods of teaching nutrition to all people, including the low-income. Recurring recommendations of the respondents were toned to a need for professionals to know how to teach nutrition in a knowledgeable and stimulating manner. Home economics curriculum emphasis on procedures and methods of teaching nutrition were strongly recommended by most of the respondents. Based on this finding, implications can be drawn to include teaching methods in college programs for dietitians as well as other home economics students who might be involved in working with low-income families.
Other general suggestions for home economics curricula in regard to teaching methods related to learning techniques of motivation which represented the suggestions made by others in the group. The suggestion is quoted as follows:

This would be a psychology course combined with teaching methods. The student should learn how to be relevant with those with whom she works. The student would learn individual and group methods of "drawing out" people so that education can start where people are. No two people have the same concerns or background. This is important especially with low-income people.

Effectiveness and relevancy depend on psychological skills. Approach, appearances and manner must change when working with different groups. Understanding people is vital.

### TABLE XI

**SUGGESTIONS AND RECOMMENDATIONS IN REGARD TO TEACHING METHODS FOR LOW-INCOME GROUPS**

<table>
<thead>
<tr>
<th>Suggestions from Respondents</th>
<th>(^1) Number</th>
<th>(^2) Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods of teaching low-income individuals</td>
<td>19</td>
<td>.25</td>
</tr>
<tr>
<td>Field work and other kinds of classroom experiences</td>
<td>16</td>
<td>.21</td>
</tr>
<tr>
<td>Motivation techniques</td>
<td>6</td>
<td>.08</td>
</tr>
<tr>
<td>Developing teaching aides, such as visual aids</td>
<td>11</td>
<td>.15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>52</strong></td>
<td><strong>.69</strong></td>
</tr>
</tbody>
</table>

\(^1\) Based on 75 responses.

\(^2\) Based on 1.00.
Mentioned by only one respondent, yet felt by the writer to be very important, was course emphasis on training leaders of low-income groups to work with other low-income families in helping them to meet their food and nutrition needs. As previously stated in Chapter II, extensive and successful food and nutrition programs have been conducted with the assistance of low-income individuals. Hence college home economics curricula should give serious attention to helping professionals to train low-income individuals.

Some specific recommendations for curriculum were made by over one-third of the home economists who responded to the question. Sixteen of the replies recommended planned and supervised work experiences with low-income families as a requirement of the home economics program. Most of the responses from the group implied a field work experience with various community agencies as a means for students to become aware of food and nutrition problems of low-income families and how to alleviate the problems. One home economist suggested that more experiences could be designed for limited income situations as part of the home management residence course. Another reply recommended that home economics curriculum provide opportunities for students to make home visits with a welfare worker to homes of low-income families. The replies of the group inferred that primary consideration should be given in home economics curricula to providing students with real and practical experiences in working with low-income families. Second in importance was the specific kind of work experience and the particular course(s) in the curriculum which would provide the experience.

Other specific suggestions relative to teaching methods for low-income groups were given by eleven of the home economists who answered
the question (14.67 percent). This group of respondents recommended home economics training which would help prepare a professional to develop and use a variety of teaching aids in their work with low-income families. The development and use of visual aids, literature and pamphlets, and commodity food recipes were recommended for aspects of home economics curriculum. [Specific suggestions from the respondents were:

1. A course or workshop on how to write and use materials in a nutrition education program for low-income families.
2. How to make food and nutrition needs known to them at their educational level by pictures, charts, and cartoon books.
3. Courses to develop teaching aids which tell the story of good nutrition.
4. How to set up demonstrations and visual aids for low reading ability and other languages (Spanish).
5. Making a larger variety of commodity food recipes available to low-income families.

Knowledge of Subject Matter. Second to suggestions and recommendations for teaching methods for low-income groups, the respondents to the question most frequently proposed suggestions for home economics curricula which pertained to aspects of college food and nutrition curriculum (64.0 percent). The group expressed suggestions and recommendations for food and nutrition curriculum in two ways. Some responded in terms of food and nutrition courses to be included in college curricula, others made suggestions for specific course content for food and nutrition courses. Thus, the responses to the question were analyzed according to these two classifications -- suggested food
and nutrition courses and suggested course emphasis in food and nutrition curriculum (Table XII).

**TABLE XII**

**SUGGESTIONS AND RECOMMENDATIONS IN REGARD TO KNOWLEDGE OF SUBJECT MATTER**

<table>
<thead>
<tr>
<th>Suggestions from Respondents</th>
<th>¹Number</th>
<th>²Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggested food and nutrition courses</td>
<td>8</td>
<td>.11</td>
</tr>
<tr>
<td>More courses in nutrition for elementary majors</td>
<td>5</td>
<td>.07</td>
</tr>
<tr>
<td>More courses in nutrition for home economics education majors.</td>
<td>3</td>
<td>.04</td>
</tr>
</tbody>
</table>

Suggested course emphasis in food and nutrition

| Commodity and low-cost foods emphasis                                  | 21      | .28         |
| General emphasis                                                      | 11      | .15         |

**TOTAL**                                                              | 48      | .65         |

¹Based on 75 responses.

²Based on 1.00.

Slightly less than a fourth of the group offered recommendations relative to courses in food and nutrition. All of the suggestions had reference to more information about nutrition. Fifty percent of the replies were general recommendations for basic nutrition courses in the curriculum. Two of the respondents suggested a workshop on
nutrition as a means of updating nutrition knowledge. Others in the group advocated more courses in basic nutrition. One of the respondents mentioned a course in experimental nutrition related to physiology [interpreted to mean bioassay (animal study) approach to experimental nutrition].

More specific recommendations were given by the other 50 percent of the home economists who offered recommendations relative to courses in food and nutrition. Specific recommendations were made in regard to more required nutrition courses for particular groups of people. Some background in nutrition for elementary teachers was suggested by five of the respondents. Selected recommendations were:

1. All elementary teachers should be required to have a minimum of two hours of college credit in nutrition education for certification. Effective methods should be the major emphasis.

2. To promote good food habits, students planning to be elementary teachers should not only have the basic nutrition course, but should be furnished with ideas and helps to motivate children to taste and learn to like and accept a wide variety of foods.

3. Nutrition education should be required for all teachers, especially elementary teachers.

Three of the recommendations for food and nutrition curriculum proposed that home economics teachers need to be well-informed about nutrition. One of the respondents conveyed that more courses in nutrition should be required for home economics education majors. Another of the group recommended a minimum of fifteen credit hours in food and nutrition for home economics teachers.
Evaluation of Programs. Only two of the suggestions from the group were relative to evaluation of food and nutrition programs designed for low-income groups. An underlying reason for the very slight response may be the make-up of the group. The majority of the respondents were teachers in secondary schools; thus, they did not work directly with low-income families, rather, indirectly through students who came from low-income families. Nevertheless, evaluation is a vital aspect of the food and nutrition program designed for low-income groups.

Summary

It was found that the majority of the home economists who responded to the question made suggestions for curriculum emphasis on teaching methods for low-income groups. The replies from the group (52 out of 75) suggested real and practical experiences in the curriculum to provide students with insight into ways of (1) motivating low-income individuals, (2) teaching food and nutrition information in an interesting and vital manner, and (3) developing teaching aids which will stimulate changed behavior by low-income individuals.

Mentioned almost as frequently by the group were suggestions and recommendations for curriculum emphasis on knowledge of subject matter. Most of the group proposed an emphasis in food and nutrition curriculum in regard to nutritive value and preparation of commodity and low-cost foods. A number of the respondents recommended more required courses in nutrition, especially for elementary teachers and home economics education majors.

Valuable suggestions for home economics curricula were also made by the respondents relative to planning programs for low-income groups.
Mentioned most often by the group were suggestions in regard to securing help in program planning from organizations and agencies who also work with low-income families. Consumer education emphasis in food and nutrition curriculum was suggested by a considerable number of the respondents.

Analysis of the replies to the question indicated a predominant relationship between major on-the-job concerns identified by the home economists and the suggestions and recommendations for home economics curricula. However, there was one exception to this finding. Mentioned less often than was expected by the researcher were suggestions for emphasis in the curriculum in regard to evaluation of programs designed for low-income audiences. Approximately half of the respondents to the questionnaire identified evaluation of programs as a major on-the-job concern (see Chapter IV). By comparison, only two home economists suggested a curriculum emphasis on evaluation of food and nutrition programs.
CHAPTER VI

IMPLICATIONS OF FINDINGS IN THE STUDY FOR COLLEGE FOOD AND NUTRITION CURRICULUM

Based on the principle that investigations can be made which will provide information and knowledge useful in identifying implications for college food and nutrition curriculum, this study was made to determine on-the-job concerns of home economists who work with low-income families. The sources of information which guided the implications drawn from the findings of the study were adapted from Tyler (1950), Basic Principles of Curriculum and Instruction. These were:

1. philosophy,
2. societal needs,
3. authorities in the field, and
4. job concerns of home economists.

Implications for college food and nutrition curriculum were guided by the comprehensive philosophy of home economics -- to meet the needs of all families in a changing and challenging society (New Directions, 1959). In addition, implications were based on the assumption that college home economics curricula should prepare professionals to help all families meet their needs (McGrath, 1968). Emphasis in food and nutrition curriculum should reflect this philosophical base.

One segment of society to which attention has been focused in the past few years, is the low-income segment of the population. Emphasis in college food and nutrition curriculum can be suggested by an investigation of the characteristics of low-income individuals; such
as their practices, their problems, their concepts, ideas and values. The details of this investigation were reported in Chapter II.

Authorities in the field have identified specific problems of the low-income population relative to meeting their food and nutrition needs (Schaefer, 1969) and (Mayer, 1970). Thus, home economists have a unique opportunity and responsibility, based on their commitment of service to all families, to help low-income families to meet their food problems most effectively.

Home economists who teach food and nutrition at the college level could reexamine the program and course offerings to incorporate an emphasis which would better prepare professionals to work with the low-income segment of the population. From the results of this study, certain implications seemed to be of particular importance to such an emphasis in college food and nutrition curriculum. Faculty and administrators in college food and nutrition programs might consider these implications when identifying aspects of the curriculum.

Commodity and Low-Cost Foods

An emphasis in college food and nutrition curriculum on the nutritive value and preparation of low-cost and commodity foods was supported by the findings of the study. The study revealed that the majority of the respondents had major concern for (1) knowing ways of obtaining good nutrition with limited money, and (2) having imagination in ways of preparing foods which are available and acceptable to low-income families. Suggestions and recommendations made by home economists in the study were consistent with this finding.
Further investigation showed that home economists who had majored in home economics education at the undergraduate level had greater concern for aspects of the job which related to knowledge of food and nutrition than did those who had majored in other areas, such as food and nutrition or general home economics. Hence, an emphasis on the nutritive value and preparation of low-cost and commodity foods should be included for all home economics majors, especially home economics education majors and those who are particularly interested in working with low-income families.

Field Experience

The findings of the study implied the importance of curriculum emphasis on how to adapt food and nutrition subject matter to low-income groups and also an opportunity for students to have some experience in putting these adaptations into practice. One of the ways this experience could be provided is by means of a field work experience in the community. Other findings of the study revealed that those who had some work experience with low-income families had less concern for how to teach food and nutrition to low-income groups and planning food and nutrition programs than did those who had little or no experience with low-income families. These findings suggest the value of a field work experience as a planned part of the undergraduate and/or graduate curriculum for students preparing to work directly or indirectly with low-income families.
In-Service Education

Implications for in-service education in food and nutrition curriculum relative to work with low-income families were also identified by findings of the study. It was found that those who had been enrolled for college credit more than ten years ago had a greater concern for food and nutrition information, planning programs for low-income groups, and understanding low-income individuals than those who had been enrolled more recently. Further identification of curriculum emphasis was made from the suggestions and recommendations from respondents in the study in regard to refresher courses or workshops on aspects of food and nutrition.

Teaching Methods

An emphasis in college food and nutrition curriculum on methods of teaching nutrition in a knowledgeable and stimulating way to all groups of people, including low-income families, was supported by findings of the study. Specific findings implied an emphasis in the curriculum on (1) techniques of motivation, (2) gaining confidence of clientele, and (3) using effective educational materials, as important considerations for all income groups in the population. Major concerns of the respondents relative to food and nutrition teaching methods were consistent with the suggestions and recommendations from the home economists for home economics curricula.

The findings of the study also implied the value of some emphasis in the curriculum on developing educational aids such as, literature (pamphlets, booklets, leaflets) and visual aids (charts, posters) which
would be appropriate for teaching food and nutrition to low-income audiences. Selected courses in Communications with visual aids and popular writing emphasis, could be considered as required or recommended elective courses for undergraduate and/or graduate students.

Further investigation of the findings of the study suggested the importance of an emphasis in curriculum on learning theories and methods of teaching for all students preparing for professions which involve indirect as well as direct teaching. The fact that no significant relationship was found to exist between the type of employment of the home economists in the study and the degree of their concern for food and nutrition teaching methods, lends support to this emphasis.

Behavioral Sciences

Carefully selected courses in the behavioral sciences are a means for students to become more understanding of all people, including low-income groups. Attention to required and elective courses in the behavioral sciences for students preparing to work with food and nutrition needs of low-income families was suggested by the respondents which supports the degree of concern they indicated for understanding the people with whom they work.

Training Low-Income Leaders

Findings of the study implied the need for college food and nutrition faculty to give serious attention to an emphasis in the curriculum on preparing professionals to train members of low-income groups to become leaders in food and nutrition programs. Although the findings from analysis of data did not strongly support such an emphasis in
college food and nutrition curriculum, findings from the review of literature evidenced the importance of the role of the home economist in selecting, training and supervising nutrition aides to more effectively reach low-income families and to extend the services of professionals (Spindler, 1969) (Barney and Egan, 1968) (AHEA, 1965) and (USDA, 1968a,b). It should be recognized that the analysis of data findings of the study were based on the responses from a particular group of home economists, the majority of whom were teachers in secondary schools. The respondents may not have been involved in training low-income leaders for food and nutrition programs, hence, this particular concern would not occur or they may not have been sensitive to the need to be concerned about the situation if it actually existed.

Evaluation

Evaluation is a vital aspect of food and nutrition programs planned for low-income groups, thus, deserves attention in the college food and nutrition curriculum. Selected findings of the study suggested the inclusion of an evaluation course in the plan of study for students preparing to work directly or indirectly with all segments of the population, including low-income families. Other findings of the study suggested course emphasis. For example, techniques of identifying food habits and intake of low-income individuals and those factors which interfere with obtaining good diets, such as income, education and superstitions, might be included in an evaluation course or in some traditional aspect of college food and nutrition curriculum.
Nutrition Education for Elementary Teachers

The findings of the study suggest some emphasis in college food and nutrition curriculum focused on providing a nutrition background for elementary teachers. Similar recommendations have come from other studies and conferences. For example, one of the implications from the Oklahoma Food Habits Survey, 1970, was that an intense effort should be made to include nutrition education as a requirement for certification of elementary school teachers (School Lunch Division, Okla., 1970). The White House Conference on Food, Nutrition and Health, 1969, closed with a number of recommendations relative to preparing teachers in nutrition education, including elementary teachers. One of the recommendations was stated as follows:

State Departments of Education should encourage individual universities and colleges to incorporate appropriate nutrition units in existing courses for all elementary teachers, school nurses, and at the secondary level, all teachers of health education, biology, chemistry, home economics, and physical education. (Mayer, 1969-70, p. 27).

In summary, it is important to consider that only the most prominent implications from the findings of the study were reported in this chapter. No reference was made to any particular institution or college food and nutrition curriculum because it was believed that the findings of the study have implications for most college home economics programs, even though the sample for this particular study was limited to home economists in Oklahoma which is in the southwestern region of the United States. In addition, the findings of the study may suggest other implications which have not been reported in this chapter, but nevertheless may be pertinent to a specific college or university food and nutrition curriculum.
CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the findings of the study undertaken to investigate on-the-job concerns of home economists in Oklahoma who work with low-income families as a basis for arriving at implications for college food and nutrition curriculum. A review of the literature revealed factors which were most relevant to the work of the home economists with food and nutrition needs of low-income families. These factors served as a basis for identifying on-the-job concerns. The job concerns which were identified related to: understanding low-income individuals, planning programs for low-income groups, teaching methods for low-income clientele, knowledge of subject matter and evaluation of programs designed for low-income groups. These five categories provided the organization for developing the questionnaire and analyzing the data.

The responses were analyzed from 108 home economists. Three types of information were collected from the respondents for analysis: (1) general information about the respondents such as employment, educational background, extent of work experience with low-income families and the extent to which home economics training had assisted them in their work; (2) the degree of concern in regard to aspects of the job in which the home economists were engaged; and (3) suggestions and recommendations relative to home economics curriculum.
The degree of on-the-job concerns was obtained by the respondents' rating of job concerns as major, moderate, minor, or that they did not apply to the job. Numerical rank was assigned to each of the categories of response as a basis of determining a mean score which was used for (a) ranking the job statements according to degree of concern and (b) statistical analysis of the relationship between selected variables and the degree of on-the-job concerns.

The suggestions and recommendations for home economics curricula from the respondents were tabulated and analyzed by the researcher in relation to the degree of on-the-job concerns identified by the respondents and the relationship between selected variables and the degree of job concerns.

Findings obtained from the study may be summarized as follows:

**Summary of Findings**

The home economists in the study were presently engaged in some way with helping low-income families to meet their food and nutrition needs. A variety of different job involvements were reported by the group, although most of them were involved in teaching food and nutrition to adolescent girls and/or boys from low-income families. The majority of the respondents had at least some previous work experience with the low-income segment of the population.

The quantity of education attained by the home economists was above average as evidenced by selected findings of the study. No attempt was made to assess the quality of their educational background.

Major job concerns were expressed by the home economists in regard to different aspects of their work with low-income families. The
aspects of the job which were of greatest concern to the group pertained to (1) understanding low-income individuals, (2) information about foods which are available and acceptable to low-income families, (3) planning realistic food and nutrition programs for low-income groups and (4) how to teach food and nutrition to all segments of the population, especially low-income groups.

The majority of the suggestions and recommendations for home economics curricula from the respondents were similar to the aspects of the job which they reported as of greatest concern to them in their work, with one exception. Only a few of the home economists suggested an emphasis in curriculum on aspects of evaluating food and nutrition programs designed for low-income groups, whereas, about one-half of the group identified major concern for this aspect of their job.

Although the evidence is not conclusive and the relationships between selected variables and degree of job concerns identified in the study were not highly significant, it seemed as though educational background of the respondents had a greater effect on the degree of job concern than did employment factors of the home economists. In general, those who had earned college credit more than ten years ago had greater concern for some aspects of the job than those who had been enrolled more recently. The respondents who had majored in home economics education at the undergraduate level had less concern for selected aspects of the job than did those who had majored in general home economics for food and nutrition. The employment variable which was found most often to have a significant effect on the degree of job concern was: work experience with low-income families. The home economists who reported much/some experience with low-income groups
had less concern for aspects of the job than those who had little/no work experience with the low-income segment of the population.

The major findings of the study provided the basis for identifying implications in regard to home economics curricula in general, and more specifically for college food and nutrition needs of low-income families. The results of the study implied an emphasis in the undergraduate and/or graduate curriculum on how to adapt food and nutrition information and teaching methods to low-income groups. Implications for experiences which might be provided for the students included field work with agencies and organizations in the community and in-service education. In addition, a behavioral science emphasis was implied from the findings of the study as an important aspect of the curriculum, as well as an emphasis on preparing home economists to train low-income leaders to extend their services to low-income families.

Conclusions

The results of the study lead to the conclusion that the instrument which was developed by the researcher is one means of identifying job concerns of home economists working with food and nutrition needs of low-income families. In addition, it can be concluded that the job concerns identified by the respondents and the suggestions and recommendations for home economics curricula that the home economists reported, provided a basis on which implications can be drawn for emphasis in college food and nutrition curriculum.

The findings of the study showed that a professional group of home economists in Oklahoma have job concerns which have implications for the over-all home economics curricula as well as food and
nutrition curriculum in most colleges or universities with a home economics program. The review of literature revealed similar responsibilities and aspects of job concerns for home economists working with food and nutrition needs of low-income families, no matter what section of the country they were located. Thus, aspects of work with food and nutrition needs of low-income families are the same for home economists in Oklahoma as they are in other regions of the United States, although, specific responses in the study may reflect a regional difference. For example, Oklahoma at this time participates in the Commodity Distribution Program for low-income families whereas other states may be involved in the Food Stamp Program for low-income families.

There was some evidence from the findings in the study that home economics training had assisted the group in their work with food and nutrition needs of low-income families, however, the concerns which were expressed by the home economists caused the writer to conclude that more could be done. This conclusion was supported by the suggestions and recommendations for home economics curricula from the respondents in the study which indicated that concerns which they encountered in working with low-income families could be assisted by an emphasis in curriculum. It can also be concluded from this finding of the study that a minimum of new courses need to be added to home economics curricula and/or food and nutrition curriculum to better prepare students to work with food and nutrition needs of low-income families.

The major concerns identified by the respondents and the suggestions of the home economists in the study were relative to all of the
five categories studied -- (1) understanding low-income individuals, (2) planning programs for low-income groups, (3) teaching methods for low-income audiences, (4) knowledge of subject matter and (5) evaluation of programs planned for low-income groups. On this basis, the researcher concluded that a broad, general training of students for work with low-income families is warranted in contrast to specialization in a particular subject matter area on the undergraduate level.

Recommendations

On the basis of the findings of the study and previously reported conclusions, the following recommendations are proposed by the researcher:

1. Faculty and administrators of college food and nutrition programs accept and adopt the dimension in curriculum of better preparing students to work with food and nutrition needs of low-income families.

2. Faculty and administrators in all fields of home economics, other educational areas, and agencies and organizations in the community work cooperatively together in order to make significant contributions to helping students work with all families, including the low-income segment of the population.

3. Faculty and administrators of college food and nutrition curriculum engage in research and adapt research findings as approaches to the solution of nutrition education problems encountered in work with low-income families.

4. Further study of the job in which home economists are engaged in work with low-income families to identify competences which are needed by home economists on the job.

5. Further study with administrators of agencies and organizations who also work with low-income families to determine the competencies they expect of home economists.
SELECTED BIBLIOGRAPHY

Aker, George. "Implications of Learning Principles for Teachers of Adults and Adult Learners." Working with Low-Socioeconomic Families and Groups, Florida State University, State Home Demonstration Office (April, 1964), 57.


Garrett, Pauline G. "Interdisciplinary Approach to Preparing Home Economics Leaders for Emerging Programs Serving Disadvantaged Youth and Adults." Missouri University, College of Agriculture, 1967. (Micro Fiche).


Preston, Nathalie D. "Home Economists Have Much To Contribute to Homemaker Service Programs." Journal of Home Economics, LVII (February, 1965), 103-106.


APPENDIX A

CORRESPONDENCE FOR OBTAINING SAMPLE

Dear Administrator:

Your program is one which has vital concern for one of the most contemporary and complex issues of our times, namely, low-income populations. The home economics profession, in addition to others, has long been committed to giving service to families. My teaching experience and graduate studies in Home Economics Education at Oklahoma State University have developed my interest and concern for the role of the home economist in aiding low-income families.

College and university home economics programs need to be as effective as possible in preparing home economists to extend their service to low-income families. For this reason I have chosen to investigate the on-the-job concerns of home economists in Oklahoma who are presently employed in some way with helping low-income families to meet their nutritional needs.

Your help in providing the names of the home economists who are employed in some way with helping low-income families in your program of work would be greatly appreciated. With your permission, I would like to contact them for information about their on-the-job responsibilities. A form and self-addressed stamped envelope are enclosed for your convenience.

The results of the investigation can be made available to you upon compilation and completion of the study.

Your kind consideration of this request will be appreciated.

Sincerely,

Bernice H. Kopel

Please return the enclosed form to me by November 10, 1969.
APPENDIX A CONT'D

To be returned by November 10, 1969

Name of home economist/Employment Address/Home Address/Telephone No. (Home)

You have my permission to contact the home economists listed above.

__________________________________________ (Signature)

__________________________________________ (Title)
APPENDIX B

INSTRUMENTS USED TO COLLECT DATA FROM HOME ECONOMISTS
IN OKLAHOMA WORKING WITH FOOD AND NUTRITION
NEEDS OF LOW-INCOME FAMILIES

March 13, 1970

Dear Fellow Home Economist:

At Oklahoma State University it is believed that graduates who are professionally employed can offer valuable suggestions for improving and updating college curriculum. Your knowledge, experience, and interest as a home economist enables you to provide information and suggestions for evaluating college home economics courses in relation to contemporary problems and developments.

This study is being conducted to identify on-the-job concerns of home economists who are working with food and nutrition needs of low-income families. The findings will help home economists faculty in colleges to aid low-income families in meeting their food and nutrition needs. Your participation will be greatly appreciated.

We know how busy professional home economists are. For this reason the enclosed questionnaire has been designed to take a minimum of your time. The responses will be analyzed and reported collectively and under no circumstance will the study identify individuals or departments. Since the worth of the findings of the study is dependent upon the maximum number of questionnaires returned, please complete and return it in the enclosed self-addressed stamped envelope by March 25, 1970.

Thank you for your cooperation.

Yours very truly,

Bernice H. Kopel
Doctoral Candidate
Home Economics Education

Dr. Elizabeth C. Hillier
Advisor
APPENDIX B CONT'D

March 28, 1970

Dear Fellow Home Economist:

A few days ago you were mailed a questionnaire inquiring about on-the-job concerns in your work with food and nutrition needs of low-income families. If you have already completed and returned the form, please accept my thanks for your cooperation.

If you have not as yet completed and returned the form, may I urge you to do so at your earliest opportunity. Your response is important to be included with those of other Oklahoma home economists. A duplicate copy of the questionnaire is enclosed for your convenience. Please return the form to:

Department of Home Economics Education
School of Home Economics
Oklahoma State University
Stillwater, Oklahoma 74074

Thank you again for your help.

Very truly yours,

Bernice Kopel
Doctoral Candidate
Home Economics Education
APPENDIX B CONT'D

Second Follow-up Post Card

April 14, 1970

!!MISSING!!

A COPY OF A QUESTIONNAIRE entitled: ON-THE-JOB CONCERNS OF OKLAHOMA HOME ECONOMISTS WORKING WITH FOOD AND NUTRITION NEEDS OF LOW-INCOME INDIVIDUALS.

Your knowledge and experience is important for improving and updating college home economics curriculum. Your response will be included with other home economists from Oklahoma and will be very valuable in the study. Could you take time now to complete the questionnaire which was mailed to you on March 13?

If you have completed and mailed the questionnaire, please disregard this notice.

Thank you for your help.

Yours very truly,
Bernice Kopel
Home Economics Education
Oklahoma State University
Stillwater, Oklahoma 74074
Questionnaire Check List (Pretest)

**DIRECTIONS:** Please be sure you have completed the questionnaire before doing this page.

Indicate your response to each of the questions listed below by checking YES or NO in the proper column. Clarify your response, if necessary, by making suggestions for changes in the space provided for specific COMMENTS.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>COMMENTS (Be Specific)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IN GENERAL:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Do the questions contain difficult or unclear phraseology?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the wording of the questions objectionable in any way?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Can the directions be understood?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Would you prefer to have questions 3.1 and 3.2 on a separate page?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IN RELATION TO JOB CONCERNS: (Section 2, page 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Do the statements of on-the-job concerns adequately cover all the significant concerns?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the wording of the on-the-job concerns clear?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is there overlapping of the statements of on-the-job concerns?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Is the form of the responses to the statements easy, adequate, and clear?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Is the list of on-the-job concerns reasonable in length?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there other comments you wish to make? Please feel free to do so.

We sincerely thank you for your help.
APPENDIX B CONT'D

SECTION 1. GENERAL INFORMATION

PLEASE CHECK (✓) OR FILL IN ALL OF THE ITEMS WHICH APPLY TO YOUR SITUATION.

1.1 Your present employment is:

- Teacher - Secondary Schools
- Teacher - Adults
- Extension Home Economist
- Dietitian
- School Lunch Consultant
- Head Start Consultant
- Public Welfare Home Economist
- Public Health Dietitian
- Other (specify)

1.2 Length of your present employment

- 1 year or less
- 1-3 years
- 4-6 years
- 7-9 years
- 10-14 years
- 15-19 years
- 20-29 years
- 30 years or more

1.3 The majority of the families with whom you work, come from:

<table>
<thead>
<tr>
<th>Town</th>
<th>Town</th>
<th>Town</th>
<th>Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>over 50,000</td>
<td>10,000</td>
<td>1,000</td>
<td>non-farm</td>
</tr>
<tr>
<td>300,000</td>
<td>20,999</td>
<td>49,999</td>
<td>9,999</td>
</tr>
<tr>
<td>under 1,000</td>
<td>farm</td>
<td>1,000</td>
<td>Rural</td>
</tr>
<tr>
<td>30 years or more</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.4 What is your age?

- Under 30
- 30-39
- 40-49
- 50-59
- 60 and over

1.5 What is your marital status?

- Married
- Single
- Widowed
- Divorced

1.6 Do you have children?

- Yes
- No

1.7 What is the last degree you have obtained?

- Bachelors
- Masters
- Doctorate
- Specialist
- Other (specify)

1.8 Length of time since last degree was obtained

- 1 year or less
- 1-3 years
- 4-6 years
- 7-9 years
- 10-14 years
- 15-19 years
- 20-29 years
- 30 or more
1.9 Length of time since you have been enrolled for workshops, courses, etc., for college credit?

<table>
<thead>
<tr>
<th></th>
<th>10-14 years</th>
<th>15-19 years</th>
<th>20-29 years</th>
<th>30 years or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled at present time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-9 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.10 Type of Institution Attended:

Undergraduate | Graduate
--------------|--------------
               | Land-Grant University (such as Oklahoma State University)
               | Public University (such as University of Okla.)
               | State College (such as Central State College, Southwestern State College)
               | Church-Supported Liberal Arts College (such as Oklahoma Christian College)
               | State-Supported Liberal Arts College (such as Okla. College of Liberal Arts)
               | Professional School (such as O.U.-School of Public Health)

1.11 What was your undergraduate major(s)?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Economics Extension</td>
<td>Food and Nutrition</td>
<td>Home Econ. Extension</td>
<td>Food and Nutrition</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>Other (specify)</td>
<td>Other (specify)</td>
<td>Other (specify)</td>
</tr>
</tbody>
</table>

1.12 What was your graduate major(s)?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Economics Extension</td>
<td>Food and Nutrition</td>
<td>Home Econ. Extension</td>
<td>Food and Nutrition</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>Other (specify)</td>
<td>Other (specify)</td>
<td>Other (specify)</td>
</tr>
</tbody>
</table>

1.13 List professional positions you have held: (If more space is needed, use bottom of page)

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Years Held</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.14 To what extent have you had experience in working with low-income individuals and/or families?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>Some</td>
<td>Little/None</td>
<td></td>
</tr>
</tbody>
</table>

1.15 To what extent do you feel that your home economics training has qualified you to work with food and nutrition needs of low-income individuals and/or families?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>Some</td>
<td>Little/None</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B CONT'D

1.16 Place a check (✓) to the left of each of the statements listed below which pertain to your employment.

My job involves:

___ Teaching food and nutrition to adolescent girls and/or boys from low-income families.
___ Teaching low-income adults.
___ Making home visits to the homes of low-income families.
___ Teaching the effective use of surplus commodity foods or plentiful foods.
___ Teaching low-income homemakers how to use their food money wisely.
___ Identifying food habits (patterns) of low-income families.
___ Developing goals (objectives) for food and nutrition programs for low-income families.
___ Judging the most appropriate food and nutrition educational materials and teaching methods for low-income groups.
___ Evaluating results of food and nutrition programs designed for low-income groups.
___ Selecting and training leaders from low-income groups.
___ Cooperating with other agencies and groups who also work with low-income families.
___ Using various media to help community become aware of the need for food and nutrition education.
___ Please list others:

SECTION 2. JOB CONCERNS

For the purpose of this study, on-the-job concerns are defined as those aspects of the job which are perceived as a problem(s). More specifically, on-the-job concerns might be defined as aspects, or areas, of the job in which assistance could have been provided you, if needed, by a particular emphasis in the college home economics curriculum.

DIRECTIONS: Read carefully each of the statements listed below. Check ONE (and ONLY ONE) of the four columns - A, B, C, or D - to the right of each statement.

Place a check (✓) in:

A if this is a major concern to you in your work with food and nutrition needs of low-income families.

B if this is of moderate concern to you in your work with food and nutrition needs of low-income families.

C if this is a minor concern to you in your work with food and nutrition needs of low-income families.
APPENDIX B CONT'D

D if the statement does not apply to your situation.

<table>
<thead>
<tr>
<th>Statements of on-the-job concerns</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Knowing how to help low-income families to recognize unwise spending for food.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Finding out what commodity foods are available to low-income families in the community.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Discovering the problems which the homemaker encounters in obtaining and using commodity foods which are available to her.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Knowing the kind and amount of food storage which is available to low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Helping low-income homemakers to know food needs of each member of the family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6 Knowing possible ways for low-income families to obtain good nutrition with limited money.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7 Having imagination in ways of preparing foods which are available and acceptable to low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.8 Finding out the everyday food problems of the low-income families in the community.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of on-the-job concerns</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2.9 Being able to interpret comments about food from the people with whom I work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.10 Gaining access into the homes of low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.11 Being able to talk with the people in terms they understand.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.12 Having an understanding of the people with whom I am working.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.13 Securing help from other agencies and groups who also work with low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.14 Finding low-income individuals in the community who are willing to help me plan and carry-out a food program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.15 Finding enough time to develop the kind of food program that I think would be most effective for low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.16 Locating a meeting place where families feel free to come.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.17 Getting low-income homemakers to come to learn how improved nutrition will affect their family's health.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.18 Knowing the barriers between low-income families and good diets, such as, income, superstitions, education, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of on-the-job concerns</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2.19 Finding out how low-income families spend their food money.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.20 Knowing the food habits (patterns) of low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.21 Knowing ways in which the low-income families can be motivated to want to do something about improving their diets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.22 Knowing how to develop the low-income persons' confidence in me and in the food and nutrition program planned for them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.23 Locating educational materials suitable for informing low-income families about food and how it contributes to health.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.24 Having sufficient knowledge about food and nutrition information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.25 Knowing where and how to publicize the food and nutrition program so that low-income families are aware of its availability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.26 Knowing how to create a relaxed atmosphere to encourage low-income adults to want to learn about food and nutrition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.27 Knowing how to help low-income homemakers to use limited pieces of equipment they have available for food preparation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of on-the-job concerns</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2.8 Having sufficient food and nutrition educational resources available to me in my work with low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.29 Knowing how to plan food and nutrition lessons which will be realistic to the low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.30 Knowing how to train members of low-income groups to become leaders in food and nutrition programs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.31 Being satisfied with limited accomplishments as evidence of progress toward improved nutrition for low-income families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.32 Finding ways of determining if low-income individuals understand what I am trying to teach them about food and nutrition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.33 Being able to determine how much the work I am doing is really helping them to improve their diets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.34 Helping low-income individuals to recognize that they are making some progress toward improving their diets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OTHER CONCERNS:** Please list other on-the-job concerns which you have that are not included in the above list.
SECTION 3. DESCRIPTION OF CONCERN(S) AND SUGGESTIONS

3.1 Choose one or two on-the-job concern(s) which is (are) a major concern to you in your work with food and nutrition needs of low-income families. Fully describe the specific concern(s).

3.2 What undergraduate and/or graduate courses in home economics would you suggest to be included in a training program to assist and better prepare a professional for the kinds of concerns you have encountered on the job? Include suggestions for course content.

If you would like a copy of the summary of this questionnaire, check here ________________

Send to: Your name ________________________________

Address ________________________________________

________________________________________________

Zip Code ___________

I wish to extend my sincere appreciation for your cooperation and assistance.
### APPENDIX C

CHARACTERISTICS OF RESPONDENTS

#### TABLE XIII

**AGE DISTRIBUTION OF HOME ECONOMISTS**

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>(^1)Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30 years of age</td>
<td>22</td>
<td>.20</td>
</tr>
<tr>
<td>30-39 years of age</td>
<td>22</td>
<td>.20</td>
</tr>
<tr>
<td>40-49 years of age</td>
<td>30</td>
<td>.28</td>
</tr>
<tr>
<td>50-59 years of age</td>
<td>26</td>
<td>.24</td>
</tr>
<tr>
<td>60 years of age and over</td>
<td>7</td>
<td>.07</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>108</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\(^1\)Based on Total Group

#### TABLE XIV

**MARITAL STATUS OF HOME ECONOMISTS**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Number</th>
<th>(^1)Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>78</td>
<td>.73</td>
</tr>
<tr>
<td>Single</td>
<td>11</td>
<td>.10</td>
</tr>
<tr>
<td>Widowed</td>
<td>9</td>
<td>.08</td>
</tr>
<tr>
<td>Divorced</td>
<td>8</td>
<td>.07</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>.02</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>108</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\(^1\)Based on Total Group
### TABLE XV

**PRESENT AND PREVIOUS EMPLOYMENT OF HOME ECONOMISTS**

<table>
<thead>
<tr>
<th>Employment</th>
<th>Present</th>
<th>Previous</th>
<th>Present</th>
<th>Previous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Proportion</td>
<td>Number</td>
<td>Proportion</td>
</tr>
<tr>
<td>Teacher-Secondary Schools</td>
<td>78</td>
<td>.73</td>
<td>54</td>
<td>.51</td>
</tr>
<tr>
<td>Extension Home Economist</td>
<td>8</td>
<td>.07</td>
<td>8</td>
<td>.07</td>
</tr>
<tr>
<td>Dietitian</td>
<td>1</td>
<td>.01</td>
<td>0</td>
<td>.00</td>
</tr>
<tr>
<td>School Lunch Consultant</td>
<td>9</td>
<td>.08</td>
<td>3</td>
<td>.03</td>
</tr>
<tr>
<td>Public Welfare Home Economist</td>
<td>1</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Public Health Dietitian</td>
<td>2</td>
<td>.02</td>
<td>0</td>
<td>.00</td>
</tr>
<tr>
<td>Business</td>
<td>0</td>
<td>.00</td>
<td>9</td>
<td>.08</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>.08</td>
<td>4</td>
<td>.04</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>.00</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
<td>.00</td>
<td>27</td>
<td>.25</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>108</td>
<td>1.00</td>
<td>107</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1 Based on Total Group
### TABLE XVI

**RESIDENCE OF LOW-INCOME FAMILIES SERVED BY HOME ECONOMISTS**

<table>
<thead>
<tr>
<th>Type of Residence</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town over 300,000</td>
<td>16</td>
<td>.15</td>
</tr>
<tr>
<td>Town 50,000-299,999</td>
<td>9</td>
<td>.08</td>
</tr>
<tr>
<td>Town 10,000-49,999</td>
<td>7</td>
<td>.07</td>
</tr>
<tr>
<td>Town 1,000-9,999</td>
<td>12</td>
<td>.11</td>
</tr>
<tr>
<td>Town under 1,000</td>
<td>5</td>
<td>.05</td>
</tr>
<tr>
<td>Both Urban &amp; Rural, mainly Urban</td>
<td>26</td>
<td>.24</td>
</tr>
<tr>
<td>Both Urban &amp; Rural, mainly Rural</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>Rural, non-farm</td>
<td>7</td>
<td>.07</td>
</tr>
<tr>
<td>Rural, farm</td>
<td>3</td>
<td>.03</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>110</td>
<td>.84</td>
</tr>
</tbody>
</table>

1. Less than 108 indicates that not all of the respondents answered the question.

2. Based on Total Group.
### TABLE XVII
LENGTH OF EMPLOYMENT OF HOME ECONOMISTS

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>Present Number</th>
<th>Proportion</th>
<th>Previous Number</th>
<th>lProportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year or less</td>
<td>17</td>
<td>.16</td>
<td>5</td>
<td>.05</td>
</tr>
<tr>
<td>1-3 years</td>
<td>22</td>
<td>.20</td>
<td>13</td>
<td>.12</td>
</tr>
<tr>
<td>4-6 years</td>
<td>16</td>
<td>.15</td>
<td>8</td>
<td>.07</td>
</tr>
<tr>
<td>7-9 years</td>
<td>11</td>
<td>.10</td>
<td>2</td>
<td>.02</td>
</tr>
<tr>
<td>10-14 years</td>
<td>11</td>
<td>.10</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>15-19 years</td>
<td>7</td>
<td>.07</td>
<td>14</td>
<td>.13</td>
</tr>
<tr>
<td>20-29 years</td>
<td>15</td>
<td>.14</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>30 years or more</td>
<td>1</td>
<td>.01</td>
<td>8</td>
<td>.07</td>
</tr>
<tr>
<td>No answer</td>
<td>7</td>
<td>.07</td>
<td>28</td>
<td>.26</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>107</strong></td>
<td><strong>1.00</strong></td>
<td><strong>108</strong></td>
<td><strong>1.00</strong></td>
</tr>
</tbody>
</table>

1Based on Total Group

### TABLE XVIII
UNDERGRADUATE MAJOR OF HOME ECONOMISTS

<table>
<thead>
<tr>
<th>Major</th>
<th>Number</th>
<th>lProportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Economics Education</td>
<td>77</td>
<td>.70</td>
</tr>
<tr>
<td>General Home Economics</td>
<td>18</td>
<td>.17</td>
</tr>
<tr>
<td>Food and Nutrition</td>
<td>5</td>
<td>.05</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>.06</td>
</tr>
<tr>
<td>No Answer</td>
<td>2</td>
<td>.02</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>108</strong></td>
<td><strong>1.00</strong></td>
</tr>
</tbody>
</table>

1Based on Total Group
APPENDIX C CONT'D

TABLE XIX
WORK EXPERIENCE WITH LOW-INCOME FAMILIES

<table>
<thead>
<tr>
<th>Extent of Work Experience</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>46</td>
<td>.42</td>
</tr>
<tr>
<td>Some</td>
<td>55</td>
<td>.51</td>
</tr>
<tr>
<td>Little/None</td>
<td>6</td>
<td>.06</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>108</strong></td>
<td><strong>1.00</strong></td>
</tr>
</tbody>
</table>

1 Based on Total Group

TABLE XX
TIME SINCE RESPONDENTS LAST ENROLLED FOR CREDIT

<table>
<thead>
<tr>
<th>Time Since Enrolled</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>enrolled at present time</td>
<td>8</td>
<td>.06</td>
</tr>
<tr>
<td>1-3 years</td>
<td>18</td>
<td>.17</td>
</tr>
<tr>
<td>4-6 years</td>
<td>10</td>
<td>.09</td>
</tr>
<tr>
<td>7-9 years</td>
<td>8</td>
<td>.07</td>
</tr>
<tr>
<td>10-14 years</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>15-19 years</td>
<td>18</td>
<td>.17</td>
</tr>
<tr>
<td>20-29 years</td>
<td>20</td>
<td>.19</td>
</tr>
<tr>
<td>30 years or more</td>
<td>7</td>
<td>.07</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
<td>.04</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>108</strong></td>
<td><strong>1.00</strong></td>
</tr>
</tbody>
</table>

1 Based on Total Group
### APPENDIX C CONT'D

**TABLE XXI**

HIGHEST ACADEMIC DEGREE ATTAINED BY HOME ECONOMISTS

<table>
<thead>
<tr>
<th>Highest Degree Attained</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>71</td>
<td>.66</td>
</tr>
<tr>
<td>Masters</td>
<td>36</td>
<td>.33</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>108</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1 Based on Total Group

**TABLE XXII**

EXTENT TO WHICH COLLEGE HOME ECONOMICS TRAINING QUALIFIED HOME ECONOMIST FOR WORK WITH LOW-INCOME FAMILIES

<table>
<thead>
<tr>
<th>Amount of Assistance</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>35</td>
<td>.32</td>
</tr>
<tr>
<td>Some</td>
<td>55</td>
<td>.51</td>
</tr>
<tr>
<td>Little/None</td>
<td>15</td>
<td>.14</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>.03</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>108</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1 Based on Total Group
TABLE XXIII
JOB INVOLVEMENT OF HOME ECONOMISTS

<table>
<thead>
<tr>
<th>Job Involvement</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching students from low-income families</td>
<td>89</td>
<td>.83</td>
</tr>
<tr>
<td>Teaching use of commodity and plentiful foods.</td>
<td>70</td>
<td>.65</td>
</tr>
<tr>
<td>Cooperating with community agencies.</td>
<td>65</td>
<td>.60</td>
</tr>
<tr>
<td>Making visits to homes of low-income families.</td>
<td>60</td>
<td>.56</td>
</tr>
<tr>
<td>Identifying food habits of low-income families.</td>
<td>58</td>
<td>.54</td>
</tr>
<tr>
<td>Informing community of need for good nutrition.</td>
<td>58</td>
<td>.54</td>
</tr>
<tr>
<td>Teaching low-income adults</td>
<td>54</td>
<td>.50</td>
</tr>
<tr>
<td>Developing goals for food and nutrition program.</td>
<td>53</td>
<td>.49</td>
</tr>
<tr>
<td>Choosing educational materials and methods.</td>
<td>53</td>
<td>.49</td>
</tr>
<tr>
<td>Teaching use of food money.</td>
<td>52</td>
<td>.48</td>
</tr>
<tr>
<td>Evaluating food and nutrition programs.</td>
<td>33</td>
<td>.31</td>
</tr>
<tr>
<td>Selecting and training low-income leaders.</td>
<td>23</td>
<td>.21</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
<td>.15</td>
</tr>
</tbody>
</table>

1 Each entry based on total number of respondents (108).

2 Each entry based on 1.00.
VITA

Bernice Helene Kopel

Candidate for the Degree of

Doctor of Education

Thesis: HOME ECONOMISTS WORKING WITH LOW-INCOME FAMILIES AND IMPLICATIONS FOR COLLEGE FOOD AND NUTRITION CURRICULUM

Major Field: Home Economics Education

Biographical:

Personal Data: Born in Olivia, Minnesota, March 25, 1934, the daughter of Joseph B. and Theodora H. Kopel.

Education: Graduated from University of Minnesota in 1957, with a Bachelor of Science degree; received the Master of Arts degree from Northern Colorado University in 1961, with a major in General Home Economics; completed the requirements for the Doctor of Education degree at Oklahoma State University in 1970, with a major in Home Economics Education.
