Consumer education needs of Georgia Extension Home Economists

Wanda Jean Grogen
Iowa State University

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IOWA STATE UNIVERSITY, PH.D., 1978
Consumer education needs of
Georgia Extension Home Economists

by

Wanda Jean Crogan

A Dissertation Submitted to the
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INTRODUCTION

Need for Study

With the rapid knowledge explosion in recent years, the store of knowledge is doubling every 10 years, thus making it necessary to educate people today in what nobody knew yesterday (Clancy, 1969). Knowles (1976, p. 84) supports the idea of a knowledge explosion by stating that "the era of stability of knowledge, of practice and everything else is over and an era of accelerated change is upon us".

The extension home economist, as well as other professionals, lives and works in an environment which is characterized by rapid change and complexity. The rapid development of new knowledge in all fields and the demands for more specialized assistance emphasize absolute necessity for extension workers to be masters of subject matter and maintain high levels of professional competence (York, 1963). As extension home economists work with individuals and families in the rapidly changing world, high expectations are placed on them to supply information in all subject matter areas encompassed in home economics.

As home economists and other Cooperative Extension personnel help people help themselves, they have a "responsibility for maintaining professional competence in both teaching techniques and in subject matter areas" (Beer, 1969, p. 35). The information which helps extension personnel maintain professional competence may be obtained from research centers and universities, through written materials and/or staff training programs. The extension personnel can only be effective if they possess or have access to knowledge in the disciplines which are represented in
their assignments; therefore, continual training becomes a necessity for keeping staff up-to-date and professionally competent (Beer, 1969). It is imperative that extension home economists have current information and be truly knowledgeable as they assist the clientele in the communities in which they work.

The identification of the content of staff training programs necessary to provide the extension personnel with the information needed to assist the clientele often presents a problem. The current literature on needs assessment of professionals stresses the importance of needs assessment in program planning. It is important for staff development to evolve out of real needs. Often, decisions pertaining to the training for adult education teachers, administrators, and para professionals may be made on administrative instinct from limited observations (Mattran & Lyle, 1976). In order to provide relevant staff training for professionals, the needs of the group must be identified.

Curricula decisions for extension educators are often not based on the essential professional competencies (Findley, 1969). Verma (1971) reported that "Cooperative Extension Services . . . have emphasized in-service training and based such programs on professional needs, evaluated in terms of subject matter, programs and job performance. Intellectual or cognitive ability of extension professionals in relation to job specialization as a means of determining training needs is an area of limited research" (p. 1). Boone and Quinn (1974) also concluded that few states had developed valid methods of appraising the level of knowledge of extension agents.
The subject matter area selected to develop a needs assessment device for identifying real needs of extension home economists in the present study was consumer education. All phases of home economics extension work incorporate consumer education to some extent. Much emphasis has been placed on consumerism in recent years as consumers are becoming more demanding and new products, new knowledge, and new methods are occurring at fast rates. The demand appears to be for more information, better products, more protection and better enforcement of the consumer regulations. Even though today's consumer appears to have more protection than ever before, many do not understand the protection, nor do they understand their role, rights or responsibilities (Boyd & Stovall, 1978). Also, the consumer issues continue to become more important as unemployment and prices have risen (Parker, 1977). The consumer movement can only be as effective as the consumers involved; therefore, it is making it necessary to create an informed and aware public. The extension home economist plays an important role in developing consumer awareness.

The focus of home economics in Cooperative Extension Service has been developed around six broad areas of national concern in the 1970's. Consumer concern is included along with human nutrition, children and families, housing, health and community development. Consumer education was emphasized as a vital need by the task force responsible for developing program emphasis for Focus II (Richert, 1974), a Federal Extension Home Economics document. Among the areas of concern were consumer behavior, living within one's income, consumer credit, financial security, consumer protection and understanding the marketplace.
In the area of consumer protection it was noted that there should be
a better understanding of the new laws, regulations and standards that
affect consumer buying; consumers do not understand consumer protection
laws; there is still fraud and deception in the marketplace; there should
be a better understanding of product-safety, and consumers need help in
interpreting and evaluating information they receive.

In 1976, a survey was conducted with state leaders of home economics
to determine the type, scope and techniques used in evaluation of home
economics programs in the states in Cooperative Extension Service
(Elliott, Boyle & Ralston, 1976). The leaders were asked which two
program areas should have the highest priority for telling the story of
home economics extension's accomplishments to the general public in the
next two to three years. Responses to this question indicated that the
number one program area was consumer concerns.

Following the survey, a workshop was conducted in which the scope,
areas of concern, and program result indicators were designated for each
of the broad areas of home economics. One of the major areas of concern
in family resource management was "to increase consumer competence in
behavior, marketplace performance, and consumer affairs through applied
knowledge of economic and management principles as they relate to con-
sumption of goods and services for personal and household use" (Elliott,

Knauer (Consumer Education Reference Manual, 1976) included in her
definition of consumer education the statement that "consumer education
must help people understand the rights and responsibilities of an informed
consumer in the free enterprise system" (p. iii). Many laymen have only
a superficial knowledge of their rights in the marketplace, and the ques-
tion is raised, 'Do extension home economists have a knowledge of these
rights and responsibilities'?

Statement of Problem

This study was undertaken to determine the educational needs of ex-
tension home economists in the area of consumer rights and responsibili-
ties as an aid in developing effective educational programs for staff
training.

Objectives

The objectives of the study were:

1. To develop a content based group assessment test for determining
   the knowledge levels of the Georgia Extension Home Economists in
   the area of consumer rights and responsibilities.

2. To ascertain consumer education needs by comparing the actual
   levels of performance of the extension home economists on the
   group assessment test with the expected performance as estab-
   lished by performance of students with consumer education learn-
   ing opportunities.

3. To study differences between the knowledge level and the highest
   educational level completed, number of years since obtaining the
   highest degree, years experience with Cooperative Extension
   Service, age, and participation in consumer education seminars,
   workshops, and courses.

4. To make recommendations for content related to consumer rights
   and responsibilities which can be incorporated in extension staff
   development programs.
Definitions of Terms

For purposes of this study, the following definitions were used.

Consumer education: A study to help individuals become responsible consumer citizens through the development and use of skills, concepts, insights and understandings that are required for everyday living to achieve, within the framework of their own values, maximum satisfaction from their resources.

Cooperative Extension Service: A publicly supported, informal, out of school educational organization of the United States Department of Agriculture and the land grant university system.

Educational need: A gap in knowledge identified by comparing what one knows with what one is expected to know.

Extension home economics: A program unit of the Cooperative Extension Service whose mission is to assist people in identifying their needs and improving the quality of their lives and communities.

Extension home economist: A home economist employed by the Cooperative Extension Service to provide information for homemaking and family living.

Needs assessment: A process of ascertaining the discrepancy between what one knows and what one is expected to know.
REVIEW OF LITERATURE

This chapter reviews the literature on the subject of definitions related to educational needs and consumer education, methods of needs assessment for professionals, development of consumer education tests, and conceptual frameworks for consumer education.

There is extensive literature on needs and needs assessment for educational program planning, but research regarding assessing cognitive abilities of professionals as a basis for needs identification is rather limited. Research studies related to the needs of professional home economists are very limited. The available literature on needs assessment of professionals consists largely of the individual's perception of his/her needs and the observations of knowledgeable people rather than conclusions of empirical studies.

The literature review is developed in six major parts: 1) educational needs defined, 2) needs assessment defined, 3) studies related to needs assessment of professionals, 4) consumer education defined, 5) development of consumer education tests, and 6) conceptual frameworks for consumer education.

Educational Needs Defined

Current education theory and practice devote considerable emphasis to the concept of need and there are many approaches to the use of the term. It is commonly used in reference to an individual's 'want', 'desire', or 'felt need'. Kaufman and Harsh (1969), Knowles (1970) and Leagans (1964) perceive a need as the gap between 'what is' and 'what
should be'. Witkin (1976, p. 1) concluded that a need is "the measurable discrepancy between current outcomes and desired outcomes".

Atwood and Ellis (1971) pointed out that the concept of need includes prescriptive, motivational and specialized uses. When one refers to a prescriptive need the following conditions are implied: 1) needs in terms of objectives, 2) needs in terms of requirement or necessity, 3) needs in terms of deficiency, and 4) needs and obligations. Needs in terms of motivational uses refer to a "deficient state that initiates a motive on the part of the individual. It sets up tension in a person causing him to want to do something" (p. 211). Among the specialized needs, the real educational need is one of the most relevant for the adult educator.

The real educational need is somewhat different from the other uses of the term in that it can be satisfied with a learning experience. It is considered to be a "lack, deprivation or deficiency that tells one what to do from an educational standpoint" and refers to "specific understandings, attitudes, and skills that are lacking but required for the attainment of a more desirable condition" (Atwood & Ellis, 1971, p. 212). Characteristics of a real educational need are:

1. It must be required or necessary for a desired state of affairs.
2. It must be lacking, absent or deficient.
3. It must carry a legitimate claim about which something ought to be done.
4. It must be capable of being satisfied by means of a learning experience which can provide appropriate knowledge, attitudes or skills. (Atwood & Ellis, 1971, p. 212)
Monette (1977, p. 122, 123) concluded that an "educational need might be defined either from the point of view of the individual learner, as a desire/want/interest; or from an external perspective, as an objectively determined deficiency in knowledge, skills, or attitudes."

"Educational needs, identified through diagnosis, provide a basis for initiating a program of continuing professional education that is directed toward actual problems which the professional confronts in practice" (Stubblefield, 1973, p. 29). Diagnosing the real educational needs provides a better basis for developing programs which will meet specific needs of the clientele.

A commonality of the definitions of an educational need is the concept of a gap between a present condition, level or feeling and the required condition, level or feeling. This concept is summarized by Knowles, (1970, p. 76) as

\[
\begin{align*}
\text{Required level of competency} & \quad \text{Educational need} \quad \text{Present level of competency} \\
\end{align*}
\]

The adult learner acquires a concern for satisfying the real educational needs only when he becomes aware that he has such needs. A professional's own perception of his needs can provide useful guidelines, but he/she may not be fully aware of the deficiencies. It becomes the responsibility of the adult educator or the person responsible for staff training of professionals to help individuals become aware of their needs. Needs assessment is necessary to identify the educational needs so
programs can be planned in order for the learner to acquire through a learning experience that which is lacking.

Needs Assessment Defined

There are a number of ways in which educational needs of professionals may be assessed. Two of the major methods include determining the self perceived needs by questionnaires and interviews and measuring specific knowledge with objective tests. Using either method, the major purpose of the needs assessment is to develop factual, up-to-date information about the educational needs of a specific group to determine what goals or objectives should be focused on.

Although the literature provides a variety of definitions of needs assessment, there is much commonality. A needs assessment "attempts to validate educational goals and to determine the discrepancy between current attainment and the maximum level of goal attainment desired" (Hershkowitz, 1972, p. 1). A needs assessment helps clarify intent, determine current status and identify areas of strengths and weaknesses. It provides a solid foundation for defining the base of operations, identifying the discrepancies that exist and focusing on the reduction of those discrepancies (Hays & Linn, 1977). The process involved in needs assessment consists of establishing a set of desired conditions or outcomes for an educational system, gathering data on the current state of affairs regarding the desired outcomes, measuring the discrepancies between the two sets of information, and deciding as to which areas shall receive the most attention when planning new programs or modifying programs (Witkin, 1976, p. 1).
The similarity of all of the definitions is that needs assessment is a formal process used to determine the gaps between what is and what should be.

A needs assessment must meet the following criteria:

1. The data must represent the actual world of learners and related people, both as it exists now and as it will, could, and should exist in the future.

2. No needs determination is final and complete; we must realize that any statement of needs is in fact tentative, and should constantly question the validity of our need statements.

3. The discrepancies should be identified in terms of products or actual behaviors, not in terms of processes. (Kaufman, Corrigan & Johnson, 1972, p. 29).

The following section identifies and illustrates the use of a variety of techniques used to assess educational needs of professionals.

Studies Related to Needs Assessment of Professionals

Mattran and Lyle (1976) classified needs assessment techniques into three categories—subjective, objective, and a combination of the two. The subjective assessment allows subjects to indicate perceptions of the adequacy of their previous experiences and needs for further training. The objective assessment is one in which the responses of the group for whom needs are being established are measured against a set of specific criteria and the discrepancies identified. The third method is simply a combination of the objective and subjective techniques. The studies reported in this section will be divided into the three sections: subjective, objective, and a combination of the two.
Subjective needs assessment

The studies of Canei (1976), Chamberlain (1975), Johnson (1971), Hansen, et al. (1973), Moore (1977), and Wright (1976) are samples of types of needs assessment which are conducted most frequently for professionals. These studies are concerned primarily with perception assessments.

The purpose of Canei's study (1976) was to investigate the instructional needs for Vocational Adult Instructor Training Programs in the state of Ohio. The study utilized a descriptive survey method of collecting and interpreting data which were obtained from a selected sample of adult vocational instructors, personnel, and training directors with the business, industrial, and governmental organizations in the state.

Authoritative jury input and evaluation were used in the construction and validation of the questionnaire used in the study. A total population of 670 were included. The major emphasis of the study concerned a six-part question relating to specific adult vocational education instructional needs. The respondents were asked to rank in order of importance six items which dealt with instructional methods.

The administrative training needs of agency administrators was the major focus of Chamberlain's study (1975). An in-depth questionnaire survey was administered to the heads of major service agencies in Milwaukee County, Wisconsin. An unstructured pilot questionnaire was first administered to obtain preliminary insight into key areas of concern. The final instrument, which was more structured and more specific than the preliminary questionnaire, was administered to 568
agency heads. Responses were received from 444. The questionnaire consisted of 58 specific administrative training need items within seven subject area headings. The subject areas included: 1) general management techniques, 2) personnel administration, 3) legal requirements, 4) communication and motivation, 5) program development, 6) finance, and 7) output assessment and evaluation. The respondents were asked to respond to the items as to their perception of helpfulness. Responses indicated that the administrators were aware of needing and desiring additional administrative training.

The major purpose of Johnson's (1971) study was to determine the educational needs of managers of agricultural cooperatives in Omaha, St. Louis, and St. Paul Farm Credit Bank districts. The study was designed as a part of a nationwide project awarded to Iowa State University by the Extension Service, U.S.D.A. The objectives of the study were to: 1) identify the educational needs of managers and directors of agricultural cooperatives, 2) identify which organizations are presently involved in conducting educational programs for cooperatives, 3) identify programs and participant characteristics, 4) analyze the effectiveness of current methods and systems of meeting the educational needs of cooperative leadership, and 5) develop recommendations for alternative educational strategy which will provide educational programs for cooperative leadership most effectively. The randomly selected sample consisted of 238 managers of local agricultural cooperatives in eleven midwestern states. Data were collected from 143 managers.

The mail questionnaire, used to determine education needs, contained 95 specific subject matter items designed so respondents could check the
scale 'strong', 'moderate', or 'none' to indicate the relative value of educational need for their position as a manager of a local agricultural cooperative. The listing of items was developed from textbooks and literature and validated by three agricultural economists and two representatives of regional agricultural cooperatives.

The researcher hypothesized that the variables, number of years of cooperative management responsibility, age, formal education, and gross dollar sales volume of the cooperative in 1970 would be influential on how a manager saw his educational needs. The chi-square was used to determine if a significant difference existed between the independent and dependent variables.

The independent variable of formal education produced far more significant chi-square values when comparing the independent and dependent variables than did the independent variables of age, experience; and gross sales in 1970. Twenty of the 95 subject matter items showed a significant difference to the variable of formal education; therefore, formal education appears to be a significant criterion on which to base the educational needs of the managers.

As a result of the study, Johnson recommended that future studies should attempt to identify both levels of educational need so as to enable educators to first rank the subject matter items in importance of educational need and second, rank the items which are unmet needs. The respondents were only asked to indicate how they saw their educational needs to the subject matter items; therefore, it was impossible to determine if they checked the needs as those for a person employed as a manager of an agricultural cooperative, or as their personal unmet educational needs.
Hansen, Klink, and Kramer (1973) assessed the current adult education personnel needs of administrators and teachers of career supplementary courses in Iowa by surveying 22 administrators, 228 coordinators, 39 teachers, and 662 students. The study was conducted in four phases. Phase one consisted of conducting a workshop for administrators to conduct an assessment of personnel needs and provide programming activities to give the administrators experience with adult topics. The administrators identified the responsibilities, strengths, and needs of administrators, administrative assistants, coordinators, and teachers. The completed lists were distributed to the workshop participants for ranking in order of importance the needs for each category of professional staff.

Using the instrument developed with the administrators, the researchers adapted the device. The final needs assessment questionnaire was developed in three parts which included: 1) demographic data, 2) attitudinal statements which allowed respondents to agree or disagree on needs of teachers and statements relevant to teaching adults, and 3) data regarding the necessity, format, and content for a pre-service training program. The device was mailed to the administrators who were included in the initial workshop. Phase two and three consisted of surveying the needs of teachers and coordinators of career adult education using the needs assessment questionnaire.

In phase four, the consumers of the career supplementary education program were surveyed to examine their opinions and comments about the most recent career education courses they had taken. The instrument used was a mixture of opinion and fact questions.
The identification of continuing education needs of architects registered by Nebraska and making recommendations for professional development programs of the architect was the focus of Wright's study (1976).

The survey used for the collection of data was divided into four sections: 1) background information, 2) specific areas of knowledge, 3) professional updating development programs, and 4) personal comments on updating. The 183 question survey instrument included fixed-alternative form informational questions of the multiple-choice and yes-no types, and open-ended questions. The questions were related to the following information in each section:

1. Background information included age, current areas of work, methods used to keep up-to-date, recent continuing education activities, educational level, occupational goals and attitudes toward continuing education.

2. Specific areas of knowledge included questions on job skills needed within the next five years to advance in the architectural profession, education and training perceived as necessary to obtain that advancement. Questions were also included on topics such as management skills, project planning and evaluation, and government processes and policy. A Likert scale was used and included 'should have', 'could use', 'have sufficient knowledge', 'do not need', and 'do not understand' as the discriminating phrases.

3. Professional updating section included questions concerning an individual self-development program for the next five years.
4. Personal comments on updating included open-ended questions concerning perceptions of keeping abreast of the new developments and critical educational needs of architects. Results of the study indicated that the architects did desire continuing education programs and areas of needed programs were identified.

The major focus of Moore's (1977) study was the development of a reliable, valid needs assessment instrument for science teachers at all grade levels and in all science disciplines. The needs were identified by having science teachers respond to a list of validated need statements.

One hundred forty-seven need statements were generated from a review of research in the area of teacher needs and concerns and from other instruments for needs applicable to science teachers. The need statements were validated by science educators and a preliminary draft of 114 statements resulted. The instrument was field tested by 58 science teachers and three additional need statements were included, giving a total of 117. The instrument containing the 117 need statements was structured so that the respondent could indicate whether each statement was perceived as an area of no need, little need, moderate need, or much need. Reliability and validity of the assessment profile MAP (Moore Assessment Profile) were checked by administering the final form to a stratified random sample of 140 science teachers.

Objective needs assessment

Lindsay, Morrison, and Kelley (1974) concluded that there was a deficiency in the literature on needs assessment in relating the assessed
needs to educational program development. The model they developed to assess needs was a content-based group-assessment model, based on the following assumptions:

1. The body of knowledge that an up-to-date group of professionals should possess can reasonably be defined and sampled by having a panel of experts write a series of content test items in their areas of expertise.

2. The educational needs of a target group can be assessed by comparing its performance on the content items with certain established performance expectations or standards.

3. Needs defined by the content items can be used as the content base for educational program development (p. 6).

The model, shown in Figure 1, is divided into six phases, beginning with the group to be assessed and ending with the identification of program needs.

**Phase 1** - The target group as well as the knowledge areas to be assessed are identified.

**Phase 2** - Experts who can write the test items are identified and asked to submit the questions. Standards or expected performance may be established at this stage or at a later stage. They may be established by the experts, or by the research team.

**Phase 3** - An appropriate multiple-matrix sampling plan is selected and content subtests for data collection are prepared.

**Phase 4** - The sampling plan is implemented and data collected.

**Phase 5** - The group's performance is estimated and their performance is compared to the established standards. The gaps or deficiencies are identified.
Figure 1. Content-based group-assessment model (from Lindsay, Morrison, & Kelley, 1974, p. 8)
Phase 6 - Curricula or course outlines are prepared as a result of the identification of the needs of the group.

Kelley (1974) used the model presented in Figure 1 to identify the professional obsolescence of physical education teachers in the state of Pennsylvania. His study was designed to: 1) define empirically what is current knowledge in the field of physical education, 2) develop an instrument and technique for assessing the extent of obsolescence or its obverse, the need for updating, and 3) estimate the parameters of obsolescence in a sample of physical educators.

Current knowledge in physical education was defined by experts in the field who were identified through a process of peer nominations. The experts wrote the test items and established the standards. Each expert was asked to write 30 5-alternative multiple choice test items covering new knowledge in his field. The questions were pretested with 137 teaching professionals who were enrolled in the University's Continuing Education courses. The pretest was evaluated and 260 items were selected and divided into five 52-item subtests. Data were collected from 1,024 physical educators in Pennsylvania. Means, standard deviations, and KR-21 reliability were computed for each of the five subtests. The group's average estimated performance using subtest means was compared with the criterion scores for determining obsolescence. The group means did not equal or exceed the established obsolescence criterion in any of the five content areas. The analysis indicated that a large proportion of the educators were in need of updating; therefore, individual questions were studied to provide clues for areas of need. Kelly established the
criterion level for each item at 80%, thus expecting 80% of the group to answer the item correctly. Those items with fewer than 80% correct response were indicated as areas the physical education teachers were obsolete in.

As a result of the study, Kelley recommended that future studies be undertaken to relate the degree of obsolescence to individual characteristics such as age, motivation, amount of education, etc. He also recommended that further studies be conducted to explore more fully the extent of obsolescence in other professions.

Thirty-seven physicians volunteered to participate in a study to test the physician in the major areas of his practice (Meyer, 1970). In order to develop a test for the physicians, a medical secretary was sent to each office for one week to record all patient contacts. A test bank of 1800 five-option multiple choice items were developed and an individualized 100 item test designed for each physician. The tests were administered by teletype, the physician answered by teletype and received immediate feedback. Thirteen of the participants were asked to immediately review their test print-outs and identify those questions which were not relevant to their practices. One-third of the questions were deemed inappropriate.

Upon completion of the test, a consultant was assigned to each participant. Using the patient data, test results, physician's comments, and information on his practice, the consultant made recommendations for an education program.
Combination of objective and subjective needs assessment

Long (1972) utilized three methods of needs assessment to determine the professional education needs of physical therapists in Nebraska. Long hypothesized there would be no correlation between perceived felt needs and those demonstrated to be real needs.

All actively practicing physical therapists in Nebraska constituted the population for the study. Ten of the therapists were used in the pilot test and data were collected from 77 of the remaining subjects.

Three major approaches were used to assess the needs of the group. These included the situational approach and knowledge test to determine real needs and the course or subject listing to determine perceived needs. Information was collected on what the physical therapist did to continue his professional education and for ranking the activities the therapist thought to be the best method for continuing education. Courses central to the therapist's work were listed and the therapist was asked to indicate his/her perceived need for the courses. The selections made became a need score for the person.

Two established hypothetical job situations for the therapists to react to and a section of multiple-choice questions were included to determine real needs. Need scores were assigned for affirmative answers to the hypothetical situations indicating a lack of knowledge. The multiple-choice test was developed from information related to physical therapy. The questions had been validated by a jury of experts in the field. Indicators of real needs were assigned based on incorrect responses.
A Pearson (r) correlational measure was used to test the hypothesis. There was a non-significant correlation in all but one comparison. Based on the analysis, there appears to be a notable difference in the therapists perceived needs and what is demonstrated as a real need. Correlations between the two methods used to assess the real needs were non-significant in the three categories: basic sciences, clinical sciences, or theory and procedures. This suggests that identifying real needs requires much additional research. Long concluded that it was difficult to maintain that one method of needs assessment is better than others, although the test method of need assessment supported the results of the other two methods.

An objective and subjective method of identifying training need in relation to job specialization of extension agents was utilized by Verma and Pesson (1974). An attempt was made in the study to develop a conceptual framework to be used to evaluate the intellectual ability of extension agents in dairy science and to identify inservice educational needs of the 'specialist-type' area agent and the 'generalist-type' parish extension agent. The expected ability was established by obtaining reaction and/or information from the contemporary world to indicate the degree of specialization and from the discipline-specialist combination to develop concepts in the disciplines of dairy cattle breeding, nutrition, and management.

The present ability of the agents was determined by finding out cognitive ability in terms of a knowledge-evaluative hierarchy, and an indirect evaluation of agent ability was also obtained from state extension specialists to determine work effectiveness. The discrepancy between the
present ability of the agents and the expected ability was used to determine the inservice training needs. The agents also provided information about personal characteristics and work experience and reacted to a series of dairy concepts in relation to job performance. State extension specialists also rated the concepts based on their perception of the importance of each one in the job of the agent and rated the agents on work effectiveness. Data were collected from 20 dairy agents, five state extension specialists, and 86 dairymen.

The results of the study indicated that agent characteristics, as a rule, could not be regarded as reliable indices of cognitive ability of training need. The specialists' rating of agent ability did not entirely correspond with actual agent performance; thereby suggesting that ability ratings by specialists do not appear to be a reliable index of the cognitive ability of agents. Verma and Pesson also concluded that the job importance ratings of dairy science concepts can be another index of educational needs.

The critical incident method of identifying needs of a group is often classified as a subjective technique, but a degree of objectivity can be achieved as the incidents are categorized. Findley (1969) selected the critical incident technique to ascertain what a professional extension agent needs to know and be able to do to perform his function effectively. The method was selected because it "collects actual behavior of respondents, provides more valid data than traditional techniques which merely provide job descriptions and reflect opinions" (p. 3).
A semi-structured interview guide was utilized to collect data from 211 county agents from 30 randomly selected counties in New York. Each agent was interviewed and requested to recall two incidents from his experience of the past three years. One experience involved a behavior which led to an effective outcome and one led to an ineffective outcome. The agents were asked to identify behavior which was critical in both outcomes. A total of 419 critical incidents were described by the respondents.

Interviews were summarized, behaviors grouped, specific behaviors isolated, and a hierarchy of categories was developed. As a result of the interviews, 60 concepts representing a conceptual unit or area were identified. The identified key concepts could either stand by themselves or be grouped with others for teaching/learning units for curriculum purposes.

Consumer Education Defined

This section includes definitions of consumer education, studies related to consumer education tests, and conceptual frameworks for consumer education. The definitions and conceptual frameworks which are presented led to the development of the framework used in the present study. The studies related to consumer education test development provided input for the writing and validation of the test items.

A review of textbooks, curriculum guides, and research studies provided a variety of definitions of consumer education; no one definition is all inclusive. A definition that appeared quite frequently in the
literature came from the President's Committee on Consumer Interests (Suggested Guidelines for Consumer Education, 1970, p. 2) which stated that consumer education is

the preparation of the individual in the skills, concepts and understandings required for everyday living to be achieved within the framework of his own values, maximum utilization of and satisfaction from his resources.

The committee further stated that

the purposes of consumer education are to help each student evolve his own value system, develop a sound decision-making procedure based upon his values, evaluate alternatives in the marketplace and get the best buys for his money, understand his rights and responsibilities as a consumer in our society, and fulfill his role in directing a free enterprise system.

Metzen (1964, p. 68) defined consumer education as the "study of intelligent and effective allocation and expenditure of personal and/or family financial resources, and of any matters that have a bearing upon this activity". Consumer education was defined by the Consumers Union (Consumer Education in Junior and Community Colleges . . . , 1972, p. 1) as "an attempt to equip people to function as responsible consumer citizens in a complex technological society".

The Georgia Consumer Education Resource Guide (Boyd & Cebik, 1973) presented a definition of consumer education as helping individuals develop attitudes, knowledge, and skills necessary to perform the buying, borrowing, investing, protecting, sharing, and saving functions for effective citizenship.

In the Consumer Education Modules developed by Murphy and associates (1974, p. xvi) consumer education was defined as
the process for gaining satisfaction through the considered use of personal and environmental resources. It promotes the development of a system for handling the continuous flow of consumer information while building consumer skills, principles, and understandings. At the same time, it assists the individual in his translation of past experiences into generalizations for future application. Its worth must be measured in terms of its contributions to the improved well-being of present and future generations.

Virginia Knauer (Consumer Education Reference Manual, 1976, p. iii) stated that consumer education is

the process of imparting to an individual his skills, concepts, knowledge, and insights required to help each person evolve his or her own values, evaluate alternative choices in the marketplace, manage personal resources effectively and obtain the best buys for his or her expenditures. In addition, consumer education must help people understand the rights and responsibilities of an informed consumer in the free enterprise system.

The definitions cited are samples of the vast number of definitions of consumer education found in resource materials. These definitions are broad in scope and vary in terms of major emphasis. Some encompass both information and the process of decision making; others include both buyer-manship and the marketplace. Consumer education must encompass more than a knowledge of products and how to purchase them; it must also help prepare individuals to become responsible consumer citizens who have an understanding of how their personal decisions have an effect on the well-being of others in society.

To provide parameters for this study, consumer education is defined as a study to help individuals become responsible consumer citizens through the development and use of skills, concepts, insights, and understandings that are required for everyday living to achieve, within the framework of their own values, maximum satisfaction from their resources.
Studies Related to Consumer Education Tests

The major focus of the research studies reported in this section is on the methodology of the test development. Jelley (1958), Ogden (1964), Stanley (1976), Thompson (1965), McCall (1974), Richardson (1976), and Graf (1975) are among researchers who have developed tests for examining some aspect of consumer education. No research was found which developed a test on consumer rights and responsibilities. The studies of McCall, Graf, Richardson, and Stanley were selected for inclusion in the review of literature for the variety of methodological procedures used and for the various consumer education concepts which were developed. These studies provided a framework for test development and for the construction of test items.

Using the Suggested Guidelines for Consumer Education K-12 as a framework, McCall (1973) developed an instrument to determine the status of consumer competencies at various developmental levels. A comparison was made of achievement in consumer knowledge of rural, urban, and suburban boys and girls in grades six, nine, and twelve, plus a group three years beyond high school.

The test, a true-false format incorporating a 3-point certainty scale, was categorized under four subtopics: 1) the consumer as an individual and family member, 2) the consumer as a member of society, 3) the consumer's alternatives in the marketplace, and 4) the consumer's rights and responsibilities.

McCall developed a pool of 782 items which were validated by two juries; one with consumer competence and one with evaluation competence.
Items which had the approval of 93% of the combined juries were used to develop parallel forms of the test containing 100 items each. The two forms were administered to 62 students enrolled in a Family Financial Management course at Pennsylvania State University. The Pearson product-moment correlation procedure was used to compute the correlations between each item in the subgroup with the subgroup total and with the total test scores. Reliability for each test was computed using the Rabinowitz analysis of variance technique. The analysis of the pilot instruments resulted in reliabilities of .703 and .804 for the two forms. Items with the highest correlation coefficients in each of the four subgroups were selected for the final form of the test.

The final test containing 84 items was administered to 1256 subjects. The reliability was computed using the Rabinowitz and Eikeland method for estimating reliability of tests with clustered items. The reliability for the total test was .83, with reliabilities of .50 for the sixth grade, .77 for the ninth grade and .88 for the twelfth grade. A low return on those subjects who were three years beyond high school prohibited their inclusion in all of the analyses. The item-total score correlations were all positive with a range from .19 to .73. Intercorrelations of the sub-scores for the in-school subjects ranged from .43 to .58.

The purpose of Richardson's study (1976) was to construct valid tests which would measure knowledge and behavior of consumers in purchasing and conserving goods and services. From the December, 1963, Consumer Price Index the major categories of food, housing, apparel, transportation and health, and recreation were used as the framework for the test. The five
major categories were used to develop a 20-page test outline consisting of topics and objectives on purchasing and conserving goods and services. The outline was submitted to five consumer education experts who rated 1) the importance of various topics within each Consumer Price Index group, and 2) the appropriateness of educational objectives chosen.

Two hundred and thirty-eight four-alternative multiple-choice items were constructed. The questions were judged for clarity, grammar, difficulty, and appropriateness by a test expert and two college consumer education professors. Questions were revised and 231 items were selected to be printed in two booklets and administered to 156 college students in six states. The students selected had a course covering purchase and conservation of goods and services. The mean, median, standard deviation, and coefficient of reliability were computed. The difficulty and discrimination indices were figured for each item. The entire test was analyzed to determine if it was reliable and adequate and then was divided into three pairs of tests which were: 1) General Test Form, 2) Home Economics Test Form, and 3) General Business Test Form.

Richardson recommended that tests similar to those in the study should be constructed on other consumer topics such as consumer protection responsibilities, money management, decision-making, and other related areas.

The first step taken by Graf (1975) in the construction of a test to assess subject matter achievement in consumer education for 10, 11, and 12th graders was to identify consumer education course topics. Graf adapted 101 consumer topics to a Rating Sheet to be completed by consumer
assistance agencies in each state. Based on recommendations of 64 participating agencies from 41 states, the list of topics was condensed to 18 topics under 10 broad subject matter areas. The areas included:

1) consumer and the law, 2) shopping for food, 3) management and family income, 4) role of consumer in the economic system/rights and responsibilities, 5) credit, 6) product differences and guarantees; advertising and promotion, 7) shopping for and use of services, 8) legal aspects of housing and shelter, 9) consumer information, and 10) shopping for and purchasing medical services, medicine, and drugs.

A second form entitled Consumer Agency Reply Sheet, using the identified areas, was constructed and submitted to 60 of the participating consumer assistance agencies. The purpose of the Reply Sheet was to have individuals write questions based on what they thought young consumers should know about the identified areas. Thirty-four of the agencies responded with suggestions for questions. Using the agencies' recommendations, Graf developed 206 multiple-choice questions which were submitted to a jury of five consumer educators for validation. The test items were revised according to the juror's recommendations and 187 questions remained. The questions were divided into five forms for the pilot test, each containing subject matter from two of the broad areas.

Five hundred seventy-five students from 12 states participated in the pilot testing. Based on the analyses from the pilot testing, the researcher selected 100 questions which were divided into two tests, each containing five questions from each of the 10 consumer topics. Data were collected from 2,207 students enrolled in consumer education courses in
the tenth, eleventh, and twelfth grades in 52 high schools in four geographic areas of the United States. Norms based on raw score, sex of examinee, grade level of examinee, and region of the United States were established. Reliability coefficients of .85 and .84 were computed for the two tests.

Stanley (1976) developed a standardized test to measure the knowledge of Illinois public secondary school students in 14 areas of consumer education. The content listed in the 1972 Illinois Revised Guidelines for Consumer Education provided the basis for the study. Following the identification of 55 performance objectives related to the specified subject matter, the researcher wrote two separate questions for each of the objectives.

The 100 questions were divided into two 55-item tests. The two instruments were pretested, refined, and administered to 8,031 public school students in 12 school districts in Illinois. Four sets of data were obtained from 7,683 students. One set consisted of the scores of the individual students from each school district. The second set of data included the means and standard deviations of 1) all students tested, 2) students with and without courses in consumer education, and 3) subgroups identifiable by grade or sex. Estimates of reliability on both forms of the instrument constituted the third set of data. The fourth set of data included the mean scores, standard deviations, and estimates of reliability. The combined mean score for all students for Form A was 22.635 with a reliability coefficient of .733. The combined mean score on Form B was 23.059 with a reliability coefficient of .738.
Conceptual Framework for Consumer Education

As reported in the previous sections of the review of literature, much work has been done in the area of consumer education, yet the scope and content of consumer education is not consistently defined. Many topics and concepts are included in consumer education, but a review of textbooks and other resource materials revealed a lack of agreement as to what should be included.

Metzen (1964) conducted a study to identify consumer competencies for young women. He used outlines from consumer education textbooks to develop the framework which served as the basis for the 114 consumer competencies used in the study. The major concepts were: 1) general consumer knowledge and practice, 2) consumer frauds and protection, 3) the consumer and the law, 4) banking theory and practice, 5) financial planning, 6) food, 7) clothing, 8) housing, 9) home equipment, 10) automobiles, 11) fraud and recreation, 12) legal and medical services, 13) drugs and cosmetics, 14) education, 15) credit, 16) insurance, 17) savings and investments, 18) estate planning, 19) taxes, 20) economic theory and information, and 21) consumer organization and representation.

The conceptual structure presented in Consumer Education: A Conceptual Structure and Planning Guide for Senior High Schools in Wisconsin (1973) related to: 1) importance of money management, 2) consumer rights and responsibilities, and 3) participation in the business community.

The framework presented by the Joint Council on Economic Education (Teaching Personal Economics in the Home Economics Curriculum, 1971)
incorporated three major categories: 1) the consumer and the American economy, 2) income, expenditures, credit, and borrowing, and 3) saving and investment.

The Pennsylvania State Department of Education (Consumer Education Competencies K-12, 1976) categorized the consumer competencies for K-12 in the following groups: 1) value system for consumer education, 2) decision-making procedures, 3) rights and responsibilities of the consumer, and the role of the consumer in the economic system.

In suggesting a framework for consumer education, the President's Committee on Consumer Interests (Suggested Guidelines for Consumer Education, Grades Kindergarten-12, 1970) alluded to the fact that there are many ways to divide up the course of study. The four interrelated program areas suggested by the committee were: 1) the consumer as an individual, 2) the consumer as a member of society, 3) the consumer's alternatives in the marketplace, and 4) the consumer's rights and responsibilities. McCall (1973) used these four program areas as the basis of the conceptual framework for the development of the Test on Consumer Knowledge. Waicis (1976) also used the four areas as a starting point in the development of the evaluation instrument she used to determine if the Vocational Amendments of 1968 extended and improved consumer education in home economics.

Graf (1975) used the following broad categories as the basis for the construction of a consumer education test to assess subject matter achievement. The categories included: 1) consumer and the law, 2) shopping for food, 3) management and family income, 4) role of the consumer
in the economic system/rights and responsibilities, 5) credit, 6) product differences and guarantees; advertising and promotions, 7) shopping for and use of services, 8) legal aspects of housing and shelter, 9) consumer information, and 10) shopping for and purchasing medical services, medicines and drugs.

Stanley (1976) used the Illinois Guidelines from the Illinois Office of the Superintendent of Public Instruction as the basis for the Test of Consumer Competencies. These included: 1) the individual consumer in the marketplace, 2) money management, 3) consumer credit, 4) housing, 5) food, 6) transportation, 7) clothing, 8) health services, drugs, and cosmetics, 9) recreation, 10) furnishings and appliances, 11) insurance, 12) savings and investments, 13) taxes, and 14) the consumer in society.

The conceptual structures of the many consumer education materials have some commonalities, but few really show the relationships of the concepts. Based on the definition of consumer education being used in this study, and an extensive review of a vast number of resources in consumer education, the following framework was developed as the basis for the study. The framework, which incorporates most of the major concepts identified in other studies, served as an organizational tool for identifying concepts and was not intended to represent mutually exclusive concepts.
Consumer Education

is the
development and use of

skills, concepts, knowledge, understandings and insights
to help the individual

As he/she seeks to

MAXIMIZE SATISFACTION FROM
the
UTILIZATION OF RESOURCES

A further examination of the concepts presented in the framework indicated a lack of empirical research in the area of rights and responsibilities, thus this area was delineated as the focus for the present study. The selection was also based on the need to develop a greater awareness in consumers of the rights and responsibilities that should be exercised as they seek to maximize satisfaction from the utilization of resources.

The four basic consumer rights presented by President Kennedy (1962) provided the basis for further development of the rights and responsibilities of consumers. The four rights with the accompanying responsibilities were used to develop the competencies and the Test on Consumer Rights and Responsibilities. The four basic rights are:

Right to safety This right provides the consumer protection against the marketing of goods which are hazardous to health or life.
Right to be informed  The consumer has the right to be protected against fraudulent, deceitful, or grossly misleading information, advertising, labeling, or other practices, and to be given the facts needed to make an informed choice.

Right to choose  The consumer is to be assured, wherever possible, access to a variety of products and services at competitive prices, and in those industries in which competition is not workable and government regulation is substituted, an assurance of satisfactory quality and service at a fair price.

Right to be heard  This right implies that consumer interests will receive full and sympathetic consideration in the formulation of government policy, and fair and expeditious treatment in its administrative tribunals.

Gordon and Lee (1972) and Ahler and Wojak (1976) have pointed out that certain consumer responsibilities accompany each of the four basic consumer rights. The following incorporates the responsibilities they have identified.

Right to safety  The consumer has the responsibility to look for safety features, read instructions before buying and using products, report products and services that give poor performance, be familiar with safety ratings, use products safely, and be familiar with regulations that protect their safety.

Right to be informed  The consumer's responsibility is to analyze advertising and other consumer information, understand performance claims, read use and care instructions before buying, and to seek
recent information about performance ratings of goods and services.

**Right to choose** The consumer should be honest, use comparative shopping, use the correct decision-making process, recognize resource limitations, resist pressure, refuse products that waste resources, and avoid exploitations of those in the labor force who supply goods and services.

**Right to be heard** The consumer's responsibilities are to write letters to manufacturers when satisfied or dissatisfied, offer suggestions for product development, know where to seek help, contact Congressmen and suggest legislation, call attention to errors, protest when appropriate, and become aware of the role and function of the consumer in the economy.

These responsibilities and the four basic rights to which they correspond provided the concepts for the questions included in the Test on Consumer Rights and Responsibilities.
A review of the literature indicated that a needs assessment technique using a test to assess the cognitive level of professional home economists had not been developed or used. The present study was designed to develop a test for assessing the educational needs of Cooperative Extension Home Economists in the area of consumer rights and responsibilities.

This chapter contains a statement of the objectives and hypothesis of the study, the assumptions and limitations, a description of procedures used in the development of the concepts, competencies, and test, a description of the sample, and a delineation of the methods used to pilot test the instrument, set the standards, collect, and analyze the data.

Objectives

The objectives of this study were:

1. To develop a content based group assessment test for determining the knowledge levels of the Georgia Extension Home Economists in the area of consumer rights and responsibilities.
2. To ascertain consumer education needs by comparing the actual levels of performance of the extension home economists on the group assessment test with the expected performance as established by performance of students with consumer education learning opportunities.
3. To study differences between the knowledge level and the highest educational level completed, number of years since obtaining the highest degree, years experience with Cooperative Extension Service, age, and participation in consumer education seminars, workshops, and courses.
4. To make recommendations for content related to consumer rights and responsibilities which can be incorporated in extension staff development programs.

Hypothesis

The hypothesis of the study was there will be no significant difference between knowledge levels indicated by scores on the Test on Consumer Rights and Responsibilities and the highest education level completed, number of years since obtaining the highest degree, years experience with Cooperative Extension Service, age, participation in programs with consumer education emphasis, and completion of courses with consumer education emphasis.

Assumptions and Limitations

The test was not monitored; therefore, it was assumed that the home economists responding did not receive any assistance in completing the test. It is also assumed that the needs identified by the scores on the assessment test can be used as a part of the content base for consumer education program development.

This study was limited to extension home economists in Georgia and the findings cannot be extended to other states or other professional groups. The study does not measure the extent to which the knowledge of consumer rights and responsibilities is utilized accurately, appropriately, and effectively, thus implications cannot be made that the person scoring highest on the test or having the smallest amount of educational need is the most effective home economist.
The home economists were allowed to take the test at home; therefore, there was no control over the testing conditions.

Development of Concepts and Competencies

Using textbooks, curriculum guides and other resource materials, concepts relating to the major areas in the consumer education conceptual framework were identified. The major areas of concepts included quality of life, financial management, decision-making, consumer in the marketplace, economic environment, and consumer rights and responsibilities. Sub-concepts were identified for each of the major areas.

Fourteen experts in the area of consumer education were identified by their peers and invited to participate in the study (see Appendix A). The list of concepts was submitted to the 14 experts with instructions to review the six broad areas and indicate if they believed they were appropriate for including based on the definition being used for consumer education. Twelve of the 14 responded.

Revisions were made in the definition and more refinement of the concepts occurred based on the comments received from the reviewers (see Appendix B for revised list). Because of the total number of concepts and comments from jurors, the area of consumer rights and responsibilities was delineated as the focus of the study.

The next stage of the process was to identify competencies, related to rights and responsibilities of consumers, that a professional home economist employed by Cooperative Extension should have. Competencies were identified for each of the following areas: right to safety, right
to choose, right to information, right to be heard, and consumer responsibilities. Forty-nine competency statements were selected to include for reactions from a selected group of state specialists with Cooperative Extension Service (see Appendix C). The list of competencies was mailed to 12 state specialists with a request for them to review the competencies and evaluate each one in terms of being representative of the concept and degree of importance for an extension home economist (see Appendix D). The specialists were asked to use a 9-point scale for rating the importance of each competency, with 9 being very important, 5 somewhat important, and 1 not important. Specialists were also asked to indicate by yes or no if the competency was representative of the major concepts identified.

Seven specialists responded and five did not. Of those not responding, one was on sabbatical, one changed positions, and three failed to respond after a follow-up letter was mailed.

Means were computed for each of the competencies and those with a mean greater than 6, meaning above somewhat important, and approaching very important, were selected. Based on the ratings and the suggestions that were made, some competencies were consolidated from the original list, others discarded, and new ones written. The revised list (see Appendix E) of 39 competencies was used as the basis for the development of the test to assess the knowledge of the extension agents in the area of consumer rights and responsibilities. The competencies related to the responsibilities of consumers were merged with the four basic rights, thus giving four major areas.
Development of Test

Using the selected competencies as a guide, an objective test was developed to be used to ascertain the knowledge of the extension home economists on consumer rights and responsibilities. Criteria for selection of content for the questions to use to measure the competency were based on four considerations: 1) information should be current, 2) information should be relevant in Georgia, 3) information should be what a home economist should know, and 4) information would be helpful for a consumer.

The test was developed in two parts. Part one contained content questions; part two contained demographic data. A pool of 114 test items, including 93 multiple-choice and 21 true-false items was developed. Content validity was established by a jury of consumer education experts (see Appendix F) who had responded to the original consumer education framework. The preliminary form of the test was mailed to 12 consumer education experts plus two faculty members of L.S.U. Family Environment Department; a response was received from seven. The jurors were asked to evaluate the test items for accuracy, structural problems, and sufficiency for measuring specific concepts related to rights and responsibilities of consumers. Also, an evaluation specialist reviewed the questions to determine if proper test writing principles had been followed. Comments of the jurors were used in evaluating the test items, thus some questions were deleted, others revised, and some new questions written. Ninety questions were selected to use in the pilot testing.

Part two of the test included information related to selected demographic variables. These variables included age, years experience with
Cooperative Extension Service, highest level of formal education, date of last degree, participation in consumer education workshops, seminars or conferences, completion of consumer education courses, clientele group served, and awareness of consumer assistance in Georgia.

Population and Sample

The population in the study was defined as the 206 home economists employed as county extension agents for the Georgia Cooperative Extension Service.

Pilot Testing

The Test on Consumer Rights and Responsibilities was pilot tested with 14 extension home economists who were employed by the Iowa Cooperative Extension Service. The purpose of the pilot test was to determine the usability of the test, evaluate the clarity of the items, and determine if any items should be rewritten or deleted.

The home economists selected for the pilot testing represented a cross section of those with varying years of experience and educational levels, as well as being representative of rural and urban sections of the state. They were identified by the Iowa Extension State Leader, Dr. Elizabeth Elliott. A letter (see Appendix G) was mailed with the test to the selected home economists on January 12, 1978, asking them to respond by January 23.

The quality of the test was studied by computing an item analysis on the responses from the 14 home economists to determine the difficulty of the questions, the discrimination between the upper and lower groups, and the attractiveness of the stem and alternates. Criteria, therefore, used
to evaluate the items included the function of the distractors, item difficulty, and item discrimination.

Due to the fact that fewer than 50 people had responded to the items, it was difficult to adequately evaluate the function of the distractors. The Student Counseling Service (1973) recommended that in a group of 50 subjects, all distractors should be chosen at least once. After studying the response pattern on the test, changes were made in distractors which had not been selected.

The difficulty of each item was studied. The percent of correct responses to a test should range from near zero to near 100%, with the majority of the items being of medium difficulty and ranging from 30-70% correct. Inspection of the difficulty index indicated that the majority of the items did meet this criterion.

The discrimination factor is the major factor to be considered when evaluating the quality of the item. This is indicated by the correlation of the item with the total test. Recommendations are for a range of .20-.40 for a good item, or if the correlation is more than .40, the standard deviation must be greater than .20 (Student Counseling Service, 1973). A correlation of below .05 or negative, or a correlation of more than .40 and a standard deviation less than .20 would indicate a poor item. The pilot test contained 90 items; 25 were deleted and 12 new items added in the final format. The new items were related to the subject matter of the deleted ones. Of the 64 items retained from the pilot test, nine items with 100% correct response and 13 items with a reverse discrimination were included. These items were retained due to the small
number of subjects and the importance of the content. Minor changes were made to many of these 22 items to improve their quality in the final format. All other items were within the range of acceptability on discrimination.

Revisions were made in the test for the completion of the final format. Comments from the home economists participating in the pilot test were considered in making the test more usable, changing words, and distractors. An evaluation specialist and consumer education expert reviewed the revised questions to give recommendations for structure and content.

The final format of the test contained 76 items, 57 multiple-choice and 19 true-false (see Appendix II). Of the total number of items, 16 related to the Right to Safety, 18 to the Right to Information, 22 to the Right to Choose, and 20 to the Right to be Heard (see Table 1 for items in each category).

Setting Standards

The test was administered to 54 senior home economics education majors at Iowa State University, Georgia Southern College, and the University of Georgia. The tests were scored and the mean score for the total test computed. The mean score of the student group, plus the criterion of 80% correct response per item established by Kelley (1975) on a test to determine obsolescence of physical education teachers were used as a guide to establish standards for the expected mean score and correct response for each item.
Table 1. Items relating to subgroups

<table>
<thead>
<tr>
<th>Subgroups</th>
<th>Test items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right to safety</td>
<td>1, 9, 10, 12, 18, 20, 22, 28, 33, 35, 52, 56, 59, 60, 63, 66</td>
</tr>
<tr>
<td>Right to be heard</td>
<td>4, 7, 17, 21, 27, 32, 34, 36, 37, 38, 39, 43, 48, 50, 51, 64, 72, 73, 74, 76</td>
</tr>
<tr>
<td>Right to information</td>
<td>2, 8, 11, 14, 15, 19, 24, 29, 30, 40, 42, 44, 46, 53, 54, 55, 61, 67</td>
</tr>
<tr>
<td>Right to choose</td>
<td>3, 5, 6, 13, 16, 23, 25, 26, 31, 41, 45, 47, 49, 57, 58, 62, 65, 68, 69, 70, 71, 75</td>
</tr>
</tbody>
</table>

Collection of Data

In February, 1978, six staff training meetings in textiles were scheduled for the extension home economists in Georgia. The one day sessions were scheduled on February 1, 14, 16, 21, 23, and 28. Permission was granted by the Director of the Georgia Cooperative Extension Service and the Home Economics State Leader for the researcher to attend the staff training sessions to explain the research and request participation from the home economists. The researcher attended the last five meetings and distributed the test. The Georgia Extension Program Area Leader-General Home Economics met with the group at the first meeting and provided information for completion of the test to be received by mail. The home economists were asked not to use a resource to obtain answers for the questions. Also, an effort was made to assure them of anonymity to help alleviate fear when taking the test.
The total invited sample included 206 extension home economists. Of this number, 45 attended the first meeting and received the test by mail, 77 attended the meetings and received personal instructions from the researcher, and 54 did not attend the staff training meetings, therefore, received all information by mail (see Appendix G for correspondence). The home economists were allowed one week to complete the test and return it to the Georgia State Extension Office in a self addressed envelope.

Names of the home economists were placed in the upper left hand corner of the return envelope to allow for a follow-up of those who did not respond. On approximately the eighth day after the home economists received the test, a follow-up letter was mailed with a carbon copy of the letter going to the district agent and state leader. Eighty-seven follow-up letters were mailed. A total of 174 or 84% of the group responded. Twenty of the tests were discarded because of incomplete data, giving a response rate of 75% usable tests.

Analysis of Data

Demographic information was coded and transferred with responses to individual items to IBM answer sheets for analysis. The demographic characteristics were indicated by frequencies and percentages. An item analysis was computed for the individual items in the test. The mean score was computed by subgroup areas and for the total test. The Kuder Richardson Formula 20 was used to compute reliability of the instrument.

The actual performance designated by test scores was compared to the expected performance to determine areas of need using a need index formula which was adapted from Mali's (1970) obsolescence index.
Need Index (NI) = \frac{\text{Proportion of correct responses}}{\text{Proportion of expected correct responses}}

Six one-way analyses of variance were computed to determine if differences in mean scores on the test were a function of differences in age, highest education level completed, number of years since obtaining the highest degree, years experience with Cooperative Extension Service, participation in programs with consumer education emphasis, and completion of courses with consumer education emphasis.

Summary

This chapter has presented a detailed overview of the procedures used to develop and utilize an instrument to assess the educational needs of the extension home economists in Georgia in the area of rights and responsibilities of consumers. The steps used in developing the needs assessment device and in determining needs are presented in Figure 2, which is an adaptation of the model presented by Lindsay, Morrison, and Kelley (1974) and described in Chapter 2.
Figure 2. Model for needs assessment of professionals (Adapted from Lindsay, Morrison, & Kelley, 1974).
FINDINGS

The Test on Consumer Rights and Responsibilities was developed to assess the educational needs of home economists employed by the Cooperative Extension Service in Georgia. The findings of this study are presented as follows: 1) demographic information, 2) analysis of test, 3) identification of needs, 4) variables affecting total knowledge scores, and 5) a discussion of the findings.

Demographic Information

Respondents were asked to provide information related to characteristics about themselves. Information included: age, highest level of formal education, year of last degree, number of years employed by the Cooperative Extension Service, clientele served, participation in consumer education activities, courses taken in consumer education, and awareness of consumer assistance available in Georgia. Demographic data were summarized from 154 respondents.

Age of extension home economists

One of the major variables of the study, age, was subdivided into five categories: 1) 20-29, 2) 30-39, 3) 40-49, 4) 50-59, and 5) over 59. Figure 3 contains the frequency and percent of home economists in each of the age groups. The majority of the home economists were younger than 29, with 69 or 45% of the group reporting in this age range. Seventy-one percent of the home economists were under age 40 and 15% of the respondents were over age 50.
Figure 3. Number and percent\(^a\) of home economists by age (n = 154)

\(^a\)Percentage rounded to nearest 100.

Highest level of formal education

Findings provided in Table 2 indicate that 125 or 81% of the home economists reported an undergraduate degree as their highest degree with 29 or 19% holding a master's degree. No agent reported holding a degree higher than the master's. Fewer than one of five home economists had earned an advanced degree.
Table 2. Highest level of formal education (n = 154)

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate degree</td>
<td>125</td>
<td>81</td>
</tr>
<tr>
<td>Master's degree</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>Specialist in Education degree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>154</td>
<td>100</td>
</tr>
</tbody>
</table>

Year received last degree

Data presented in Table 3 indicate that 61 or 40% of the home economists received their last degree between 1973-77. Thirty-seven or 24% received their last degree prior to 1958.

Table 3. Year received last degree (n = 154)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Percent^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-1977</td>
<td>61</td>
<td>40</td>
</tr>
<tr>
<td>1968-1972</td>
<td>32</td>
<td>21</td>
</tr>
<tr>
<td>1963-1967</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>1958-1962</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Prior to 1958</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>154</td>
<td>100</td>
</tr>
</tbody>
</table>

^aPercentages rounded to nearest 100.
Years experience with Cooperative Extension Service

Respondents were asked to check the number of years experience with the Cooperative Extension Service. The findings reported in Table 4 indicate the largest percentage of the home economists had four years experience or less with 39% reporting in this category. Only 15% of the home economists have over 20 years of experience with the Cooperative Extension Service.

Table 4. Years experience with Cooperative Extension Service (n = 154)

<table>
<thead>
<tr>
<th>Years</th>
<th>Number</th>
<th>Percent</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 years</td>
<td>60</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>5-9 years</td>
<td>38</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>10-14 years</td>
<td>18</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>15-19 years</td>
<td>14</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>20 and over</td>
<td>24</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

aPercentages rounded to nearest 100.

Participation in consumer education activities

The home economists were asked to list activities with consumer education, family finance or consumer economic emphasis they had attended in the last three years. Seminars, workshops, conferences or staff training programs were included. Fifty-eight percent of the home economists reported no activity; 42% reported attending at least one activity.
The most frequently listed activity was the annual Extension subject matter update which was listed by 16. Others listed by more than one person include: family finance, energy conservation, budgeting, clothing and textiles, funeral planning, estate planning, Food and Drug Administration workshop, metric system, Gulf Oil Effective Consumerism, and J. C. Penney's training program. Among others which were listed by only one respondent were food buying, making home repairs, shoplifting clinic, teenage nutrition conference, labeling, effective consumerism, interior design, consumer education update, and medical quackery.

It appears that there are inconsistencies in the responses. Apparently, some home economists did not identify certain programs as having consumer education emphasis, if it were not identified as such by the title. Without knowing the content of the programs, it is difficult to determine if all of the listed programs did have a consumer education emphasis.

Participation in consumer education courses

The respondents were also asked to list courses, graduate or undergraduate, they had been enrolled in with consumer education, family finance or consumer economic emphasis. Data presented in Table 5 indicate that a large proportion of the home economists, 45%, reported no participation in a course with consumer education, family finance or consumer economic emphasis. Thirty-one percent of the group reported participation in one course and 24% reported more than one.
Table 5. Participation in consumer education courses (n = 154)

<table>
<thead>
<tr>
<th>Number of courses</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>69</td>
<td>45</td>
</tr>
<tr>
<td>One</td>
<td>48</td>
<td>31</td>
</tr>
<tr>
<td>Two or more</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100</td>
</tr>
</tbody>
</table>

The list of courses was varied. Family finance was the most frequent response with 22 home economists naming it. Others listed by more than 10 respondents included consumer education, family economics, and home management. Other courses listed by more than one included economics, personal finance, consumer in the marketplace, family economics, methods of teaching consumer education, consumer economics, managing personal finances, housing and equipment, and consumer legislation.

Clientele served

Table 6 provides information on the primary clientele group the home economists work with. Thirty-nine percent of the group work with both adults and youth, while 22% work with adults, youth and the Expanded Food and Nutrition Program (EFNEP).

Awareness of consumer assistance

The home economists were asked if they were aware of the consumer assistance available from several sources in Georgia. The findings
Table 6. Clientele served (n = 153)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults only</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Youth only</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>EFNEP only</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>All of the above</td>
<td>34</td>
<td>22</td>
</tr>
<tr>
<td>Adults and youth</td>
<td>60</td>
<td>39</td>
</tr>
<tr>
<td>Youth and EFNEP</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Adults and EFNEP</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>100</td>
</tr>
</tbody>
</table>

reported in Table 7 indicate that fewer than 50% of the respondents were aware of the assistance available from the small claims court and the attorney general. Sixty-two percent or more of the group were aware of the assistance available from the others.

Table 7. Awareness of consumer assistance (n = 154)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Claims Court</td>
<td>75</td>
<td>49</td>
</tr>
<tr>
<td>Attorney General</td>
<td>56</td>
<td>36</td>
</tr>
<tr>
<td>Federal Trade Commission</td>
<td>96</td>
<td>62</td>
</tr>
<tr>
<td>Food and Drug Administration</td>
<td>120</td>
<td>78</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>121</td>
<td>79</td>
</tr>
<tr>
<td>Consumer Affairs Office</td>
<td>103</td>
<td>69</td>
</tr>
<tr>
<td>Better Business Bureau</td>
<td>136</td>
<td>88</td>
</tr>
</tbody>
</table>
Analysis of Test

The analysis of the test data consisted of measuring the quality of the instrument by computing the mean, standard deviation, standard error of measurement, reliability coefficient, and an item analysis. The raw scores on the 76 item test ranged from 34 to 65 with an estimated mean of 49.56 and a standard deviation of 6.40. The frequency distribution of the raw scores is shown in Figure 4.

Figure 4. Distribution of total correct responses

The range of correct responses on individual items was 4 to 151 with the average correct response of 100.43. The number of persons answering each item correctly is shown in Figure 5. No question was answered correctly or incorrectly by all respondents.
Figure 5. Distribution of total correct responses by item
Reliability

The reliability of test scores, reported by means of a reliability coefficient, refers to the consistency of the measurement. The length of the test, spread of scores, difficulty of the test, objectivity of the test, and the discrimination level of the items are factors influencing the reliability (Gronlund, 1976).

Using the Kuder-Richardson Formula 20, the estimated reliability of the scores on the Test on Consumer Rights and Responsibilities was .68. The Kuder-Richardson Formula 20, which is based on the proportion of respondents answering each item correctly and the total score standard deviation, is a measure of internal consistency (Gronlund, 1976).

The reliability of a test may vary from 0.0 to 1.0, with the higher value indicating that more confidence can be put in the results. If a test is to be used to form part of the basic decision process for evaluating an individual the reliability should be above .80 (Student Counseling Service, 1973). The specific degree of reliability depends largely on the decision that is to be made as a result of administering a measurement device. When the decision is to be made based on a total group, a lower reliability may be acceptable, thus the reliability of .68 on the Test on Consumer Rights and Responsibilities was acceptable (Borg & Gall, 1971).

Standard error of measurement

The standard error of measurement is used to indicate the amount of variation one might expect to find in an individual's score a certain percentage of the time. The standard error of measurement on the Test on
Consumer Rights and Responsibilities was 3.60; therefore, a person receiving a raw score of 50 would score between 46.40 and 53.60 sixty-eight percent of the time when repeating the test.

**Item analysis**

An item analysis refers to a study of individual test items to appraise their quality. The item analysis was computed to ascertain whether: 1) the items had adequately discriminated between the high and the low groups of respondents, 2) if the items were of appropriate difficulty, and 3) if the distractors were effective. In Table 8, the item difficulty, item discrimination, standard deviation and distractor analysis for each of the 76 items in the test may be found.

**Item difficulty** The item difficulty represents the percentage of respondents who answered each question correctly. The difficulty index should vary from almost zero to near 100%, with most of the items within the 30-70% range (Student Counseling Service, 1973). The item difficulty found in Table 8 ranged from 3 to 98%; the average item difficulty was 65.5%. Using the suggested computation of Gronlund (1976), the ideal difficulty level of the Test on Consumer Rights and Responsibilities should be 66.5; thus indicating that the actual item difficulty of 65.5 was acceptable.

The difficulty index of 34 items was in the 30-70% range; 36 items had a difficulty index above 70% indicating the items were too easy. Six items had a difficulty index below 30% indicating the items that were too difficult.
Table 8. Difficulty, discrimination, standard deviation and distractor analysis

<table>
<thead>
<tr>
<th>Item number</th>
<th>Difficulty index</th>
<th>Discrimination index</th>
<th>Standard deviation</th>
<th>Distractor analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>95</td>
<td>.33</td>
<td>.22</td>
<td>146¹</td>
</tr>
<tr>
<td>2 ³</td>
<td>42</td>
<td>.23</td>
<td>.49</td>
<td>64¹</td>
</tr>
<tr>
<td>3 ³</td>
<td>49</td>
<td>.23</td>
<td>.50</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>74</td>
<td>-- ⁵</td>
<td>.44</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>54</td>
<td>.14</td>
<td>.50</td>
<td>82¹</td>
</tr>
<tr>
<td>6 ³</td>
<td>69</td>
<td>.44</td>
<td>.46</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>98</td>
<td>-- ⁵</td>
<td>.14</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>58</td>
<td>.09</td>
<td>.49</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>75</td>
<td>.15</td>
<td>.43</td>
<td>1</td>
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<tr>
<td>10</td>
<td>68</td>
<td>.06</td>
<td>.47</td>
<td>8</td>
</tr>
<tr>
<td>11 ³</td>
<td>64</td>
<td>.28</td>
<td>.48</td>
<td>0</td>
</tr>
<tr>
<td>12 ³</td>
<td>30</td>
<td>.25</td>
<td>.46</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>26</td>
<td>.06</td>
<td>.44</td>
<td>8</td>
</tr>
</tbody>
</table>

¹Correct response.
²NA--not applicable.
³Items that meet the three achievement test criteria:
  --difficulty index between 30-70 percent.
  --discrimination index between .20-.40 or over .40 with standard deviation > .20.
  --all distractors functioning.
⁴Item meeting difficulty and discrimination criteria.
⁵Correlation below 0.05 or negative.
Table 8 (Continued)

<table>
<thead>
<tr>
<th>Item number</th>
<th>Difficulty index</th>
<th>Discrimination index</th>
<th>Standard deviation</th>
<th>Distractor analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>14</td>
<td>44</td>
<td>.31</td>
<td>.50</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>--^e</td>
<td>.16</td>
<td>121</td>
</tr>
<tr>
<td>16</td>
<td>95</td>
<td>.15</td>
<td>.21</td>
<td>4</td>
</tr>
<tr>
<td>17^c</td>
<td>49</td>
<td>.38</td>
<td>.50</td>
<td>43</td>
</tr>
<tr>
<td>18</td>
<td>88</td>
<td>.09</td>
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<td>.39</td>
<td>29^a</td>
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<td>20</td>
<td>58</td>
<td>.09</td>
<td>.49</td>
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<tr>
<td>21</td>
<td>80</td>
<td>.24</td>
<td>.40</td>
<td>2</td>
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<td>22</td>
<td>91</td>
<td>.24</td>
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<td>1</td>
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<td>23^c</td>
<td>39</td>
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<td>24</td>
<td>96</td>
<td>.15</td>
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<td>148^a</td>
</tr>
<tr>
<td>25</td>
<td>71</td>
<td>.22</td>
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Item discrimination  A part of the item analysis included a study of the discriminatory ability of each item. The item discrimination, the most important statistic for indicating the quality of an item, refers to the degree to which an item discriminates between the respondents from the high and low scoring groups. A positive discrimination index indicates that more respondents in the higher group got the item correct; a negative discrimination index indicates that the reverse is true (Gronlund, 1976). The Student Counseling Service (1973) suggests that an item is good if the discrimination index is in the .20 to .40 range. If the correlation is above .40 and the standard deviation is greater than .20, the item is also considered good. If the correlation is below .05, or negative, the item is considered poor.

Thirty-six items fell in the range of .20 to .40 and four items were above .40 with a standard deviation above .20. Therefore, 40 items met the criteria for discrimination. Twenty-nine items fell within the range of .05-.19, and seven items had a negative correlation. The discrimination indices of the test items are reported in Table 8.

Gronlund (1976, p. 270) suggested that "a low index of discriminating power does not necessarily indicate a defective item". If the item with a low discrimination index is measuring an important learning outcome, it should not be removed from the test. The test developer should study carefully those items with the low discrimination to determine if important learning outcomes are being evaluated.

Distractor analysis  For optimum functioning, all distractors in a multiple-choice test should be selected by at least one person in a
group of 50 respondents. Likewise, both true and false options should be selected by the respondents responding to true-false items. The correct answer should be chosen more than any of the other distractors.

Twelve items in the Test on Consumer Rights and Responsibilities had a non-functioning distractor. A distractor was chosen by more respondents than the correct answer for 13 items. Information regarding the functioning of the distractors in the test is provided in Table 8.

**Best items** Items which are identified as best items should meet the three measurement criteria of: 1) difficulty index of 30-70%, 2) discrimination index of .20-.40, or above .40 with a standard deviation above .20, and 3) all distractors selected by one person in a group of 50 respondents.

The items in the Test on Consumer Rights and Responsibilities which met the criteria are 2, 12, 17, 23, 27, 29, 30, 45, 46, 49, 59, and 63. Items which met the first two criteria, but failed to have all distractors functioning are 3, 6, 11, 14, 29, 38, and 56. Of the remaining 58 items, 11 failed to meet any of the criteria, 19 met one criteria, and 28 met two criteria.

A summary of the test analysis is provided in Appendix J, Table 12.

**Analysis of test by subgroups**

Data presented in Table 9 provide a summary of the difficulty indices and mean scores for each of the four subgroups within the test. Items relating to the right to safety, choice, and to be heard were less difficult than those related to the right to information. The difficulty of the questions included in the right to information subgroup was more
appropriate for the group. Overall, the respondents performed better on the section related to the right to safety, and poorer on the section entitled right to information.

Table 9. Analysis of test items by subgroups

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<tr>
<th>Subgroup</th>
<th>Possible score</th>
<th>Mean</th>
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<th>Optimum</th>
<th>Too difficult</th>
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</table>

The items identified as too difficult were examined to determine if they were actually too difficult or if there was a misconception represented. Upon further investigation of the items, question 15 was deleted from further analysis of needs, due to ambiguity in the distractors. The remaining five items were retained for analysis.

Identification of Needs

Kelley (1975) established an expected performance of 80% correct responses for each item on the test used to assess the educational needs of physical education teachers. Based on this criterion and the mean scores of 49.56 for the home economists and 48.33 for the group of senior home economics education students, the expected mean for the Test on Consumer Rights and Responsibilities was established at 54. An expected
correct response on each item for the minimum level of performance on this test was set at 70%.

The individual scores of 66% of the group were below the expected mean of 54, indicating there were educational needs. To identify the specific areas of need, a need index was computed for each item. The need index formula, adapted from Mali's (1973) obsolescence index is:

\[ NI = \frac{\text{Proportion of correct responses}}{\text{Proportion of expected correct responses}} \]

The proportion of expected correct responses was .70. Needs were inferred from the indices of less than one for the group's performance on specific items. Indices greater than one indicated no evidence of need. Each of the need items were identified as representing content that should be included in staff development programs.

Information in Table 10 identifies 39 items with a need index of less than one. The smaller indices indicate areas of greatest need, and therefore could be used to prioritize the needs. For grouping of concepts, the questions will be discussed as they relate to each of the four basic subgroups of the test.

**Right to choose**

Questions 3, 5, 6, 13, 23, 45, 47, 49, and 69 were missed by more than 70% of the respondents, thus yielding a need index of less than one as reported in Table 10. These questions are related to the following competencies (see Appendix E for corresponding competencies):

11. Identifies some of the major laws and regulations which ensure the right to information.
Table 10. Items indicating areas of need by need index

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<th>Item number</th>
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<th>Need index</th>
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*Items with need index less than 1.*
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<td>.70</td>
<td>.77</td>
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<td>70</td>
<td>.72</td>
<td>.70</td>
<td>1.03</td>
</tr>
<tr>
<td>71</td>
<td>.97</td>
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<td>1.39</td>
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<td>.70</td>
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<td>.94</td>
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<td>75</td>
<td>.79</td>
<td>.70</td>
<td>1.13</td>
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<tr>
<td>76&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.16</td>
<td>.70</td>
<td>.23</td>
</tr>
</tbody>
</table>
20. Explains the decision-making process to use when making a choice in the marketplace.

21. Applies the decision-making process when selecting goods or services.

23. Recognizes fraud, deception, and unfair business practices.

24. Describes how price fixing, monopolies, and unfair and deceptive practices may affect the choice in the marketplace.

25. Clarifies the implications of market concentration on breadth of production selection.

34. Identifies ways consumers can initiate change through individual actions.

Right to information

Questions with a need index of less than one in the subgroup related to the right to information are 2, 8, 11, 14, 19, 29, 30, 40, 42, 44, 61, and 67. The questions are related to the following competencies:

8. Comprehends the consumer's right to information.

10. Gives examples of the benefits of using information.

15. Points out sources of information about products and services (specifically, catalogs and Better Business Bureau).


17. Identifies the functions of the following in relation to the consumer's right to information:

a. Fair Credit Reporting Act

39. Distinguishes between product failure and misuse of product.
Right to safety

The questions related to the subgroup on the right to safety which had a need index of less than one were 10, 12, 20, 35, 56, 59, and 63. These questions are related to the following competencies:

1. Comprehends the consumer's right to safety.
4. Identifies standards and regulations governing consumer safety.
5. Identifies governmental and business responsibilities for consumer safety.
7. Identifies the functions of the following in providing for or protecting the safety of consumers
   a. Consumer Product Safety Act
   b. Flammable Fabrics Act
   c. Wholesome Meat Act
   d. Poison Prevention Packaging Act

Right to be heard

The subgroup of questions on the right to be heard had the following questions with a need index of less than one: 17, 37, 38, 64, 73, 74, and 76. These questions are related to the following competencies:

19. Demonstrates understanding of small claims court.
26. Comprehends the right to be heard and the associated responsibilities.
28. Explains consumer protection procedures which are appropriate to specific problems associated with the right to be heard.
30. Demonstrates understanding of consumer grievances and the redress of grievances.
Variables Affecting Knowledge Scores

The null hypothesis was that there would be no significant difference in knowledge levels indicated by scores on the Test on Consumer Rights and Responsibilities and age, highest education level completed, number of years since obtaining the highest degree, years experience with Cooperative Extension Service, participation in programs with consumer education emphasis, and the number of courses with consumer education emphasis. The six hypotheses were tested using one-way analyses of variance.

F values and associated means for each variable are presented in Table 11. Inspection of Table 11 shows there was a significant difference between total scores on the Test on Consumer Rights and Responsibilities and age, date of last degree, and the completion of consumer education courses. The analyses also showed that the mean scores were not significantly different for degree, work experience with Cooperative Extension Service, and participation in consumer education activities.

Based on an inspection of the means, it would appear that those home economists in the 30-39 age group, those who received their last degree in the time period from 1968-72, and those who have had two or more courses with consumer education emphasis scored higher than those in other groups. Although other differences were not significant, the mean scores for other groups suggest a trend toward higher scores for those home economists who have a master's degree, have worked with Cooperative Extension Service 10-14 years, and have participated in a consumer education activity.
Table 11. F-ratios for six independent variables and corresponding mean scores for groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Mean score</th>
<th>F-ratio</th>
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<tbody>
<tr>
<td>Age</td>
<td></td>
<td>3.95**</td>
</tr>
<tr>
<td>20-29</td>
<td>50.14</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>51.35</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>46.18</td>
<td></td>
</tr>
<tr>
<td>Over 50*</td>
<td>47.96</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
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<td>2.89</td>
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<tr>
<td>Undergraduate</td>
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<td>Master's</td>
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<td></td>
</tr>
<tr>
<td>Date of last degree</td>
<td></td>
<td>2.56**</td>
</tr>
<tr>
<td>1973-77</td>
<td>50.18</td>
<td></td>
</tr>
<tr>
<td>1968-72</td>
<td>51.50</td>
<td></td>
</tr>
<tr>
<td>1963-67</td>
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<td></td>
</tr>
<tr>
<td>1958-62</td>
<td>50.71</td>
<td></td>
</tr>
<tr>
<td>Prior to 1958</td>
<td>47.00</td>
<td></td>
</tr>
<tr>
<td>Work experience with Cooperative Extension</td>
<td></td>
<td>1.36</td>
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<tr>
<td>1-4 years</td>
<td>49.87</td>
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<td>5-9 years</td>
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<td>10-14 years</td>
<td>51.11</td>
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<td>15-19 years</td>
<td>47.71</td>
<td></td>
</tr>
<tr>
<td>Over 20 years</td>
<td>47.50</td>
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Participation in consumer education activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended program</td>
<td>50.56</td>
</tr>
<tr>
<td>Have not attended program</td>
<td>48.86</td>
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</tbody>
</table>

Completion of consumer education course

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>No course</td>
<td>48.22</td>
</tr>
<tr>
<td>1 course</td>
<td>50.10</td>
</tr>
<tr>
<td>2 or more courses</td>
<td>51.37</td>
</tr>
</tbody>
</table>

*aTwo respondents who were over 59 are included in this category.*

*p ≤ .01.

**p ≤ .05.
Discussion and Limitations of Findings

Interpretations of the findings of this study must be done with care due to the fact that the analysis is based on data obtained from 75% of the invited sample. By design, the findings of the study can only be projected to the population of the Georgia Extension Home Economists. Furthermore, the study does not measure the extent to which the knowledge of consumer rights and responsibilities is utilized accurately, appropriately, and effectively, thus, implications cannot be made that the persons scoring highest on the test or having the smallest amount of educational need are the most effective extension home economists. The test administration was not monitored; therefore, it was assumed that the respondents did not use resources to obtain answers.

The group assessment device, the Test on Consumer Rights and Responsibilities, was designed to include only one major area in consumer education. The item analysis (see Table 8) gave indications that the 76 item test was generally too easy for the group. The item analysis also provided insight into areas of needed improvement in the test. Rewriting of the distractors which were not functioning would improve the overall quality of the test. Those items which had a negative or low correlation should be reviewed to determine if there is misrepresentation of the subject matter, since the low or negative correlation indicates that the high scorers missed the items, and the low scorers got the items correct. Also, the items which had a difficulty index of less than 30% were studied to determine if there was a misrepresentation of subject matter or ambiguity in the answers.
Even though the test was considered elementary based on the fact that 36 of the questions were above the 70% level of difficulty, 66% of the group failed to score above the expected mean score of 54. The low scores suggest there are areas of need. An investigation of the questions missed by 70% or more of the group provided clues for recommendations for content for programs.

It appeared that the home economists were lacking in areas related to legislative acts and the impact they have on the rights and responsibilities of consumers. Although legislation changes frequently, it is important for home economists to stay current on those acts which have an affect on the consumer who is seeking to maximize satisfaction from available resources. Other general areas of need identified were related to decision-making procedures, fraud, deception and unfair business practices, seeking and evaluating sources of information, individual actions of consumers, right to information, right to safety, and redress of grievances. These concepts could form the basis for staff development programs and/or materials.

Tests of the cognitive ability of professionals have not been widely used, but they can be a useful diagnostic tool for identifying specific areas of deficiencies and need. A test may be a threat to professionals who are unsure of the material included; therefore, careful administration of the test would help eliminate the uncertainty.

The test utilized in this study is only one of many techniques which may be useful for the assessment of educational needs. Although the study was not designed to test different needs assessment techniques, there
were some findings which support using different methods. For example, respondents were asked to indicate awareness of consumer assistance available from various agencies in Georgia. Eighty-eight percent of the respondents indicated awareness of the assistance available from the Better Business Bureau, yet more than 65% missed the questions related to that agency. On the other hand, 51% of the group indicated lack of awareness of the assistance from the small claims court and more than 65% missed these questions. The differences indicate that a person's perception of needs and the real needs as identified by an assessment of cognitive ability can be the same, or can be different.

The findings indicated, also, that only 36% of the respondents were familiar with the assistance from the attorney general, and fewer than 70% were aware of the assistance available from the Federal Trade Commission and the Consumer Affairs Office. These data support the need for a program to familiarize the home economists with the consumer assistance available in the state.

It was hypothesized that six variables would make a significant difference on how home economists scored on the test. The hypothesis was rejected on the variables age, date of last degree, and completion of courses with consumer education emphasis. The hypothesis was accepted for variables degree, work experience with Cooperative Extension Service, and participation in consumer education programs.

The variable of age produced a far more significant F value than did the other variables. Those home economists who were over 40 years of age had a lower mean score than those in the younger group. This
difference may be partially explained by the fact that consumer rights, as such, were not introduced until 1962 and consumer courses prior to that time would not have included the four basic rights.

The significant values also indicated that there was a difference in the scores according to the date of the last degree and the number of consumer education courses completed. Those who received their last degree prior to 1958 scored lower than those who had received their degree more recently. The content of the questions was based on current information and if the home economists had not been involved in consumer education programs since receiving their last degree, there would more likely be less exposure to current information.

As one might expect, those home economists who had not completed a course with consumer education emphasis did not do as well as those who had a course with the consumer education emphasis. This finding would support the need for including consumer education courses in the curriculum for home economics education majors.

In conclusion, the findings of the study do indicate a need for providing consumer education programs for the extension home economists. Programs related to the needs identified by the need index and the lack of awareness of assistance from specified agencies should be provided for those home economists who received their degrees more than 20 years ago and those who have not had a consumer education course.
SUMMARY AND RECOMMENDATIONS

Summary

The major purpose of the study was to determine the educational needs of extension home economists in the area of consumer rights and responsibilities as an aid in developing effective educational programs for staff training. The objectives of the study which contributed to the achievement of the major purpose were:

1. To develop a content based group assessment test for determining the knowledge levels of the Georgia Extension Home Economists in the area of consumer rights and responsibilities.
2. To ascertain consumer education needs by comparing the actual levels of performance of the extension home economists on the group assessment test with the expected performance as established by performance of students with consumer education learning opportunities.
3. To study differences between the knowledge level and the highest educational level completed, number of years since obtaining the highest degree, years experience with Cooperative Extension Service, age, and participation in consumer education seminars, workshops, and courses.
4. To make recommendations for content related to consumer rights and responsibilities which can be incorporated in extension staff development programs.

In order to accomplish the objectives of the study, a conceptual framework for consumer education was developed by the researcher and evaluated by a jury of educators with consumer education expertise. Based on comments of the jurors and further investigation of the major concepts, the area of consumer rights and responsibilities was delineated as the focus of the study.
Competencies related to the rights and responsibilities of consumers which were important for an extension home economist to possess were written by the researcher and validated by a jury of extension specialists. The ratings and comments of the jurors were used to further refine the competencies which served as the basis for developing test items for the Test on Consumer Rights and Responsibilities.

The instrument used for the collection of data consisted of 76 objective test items and 9 questions related to demographic data. Two hundred and six home economists in Georgia were invited to participate in the study; 174 returned the instrument, but due to incomplete data only 154 were used in the analyses.

Data were coded and analyzed in the following ways. Frequencies and percentages were obtained for each of the demographic variables. An item analysis was computed for the 76-item test. Also, the reliability, standard error of measurement, standard deviation, raw scores, and estimated mean were computed for the total test. The mean was computed for each of the four subgroups. Six one-way analyses of variance were computed to determine if differences in mean scores on the test were a function of differences in the six independent variables. A need index was computed for each item on the test to determine the areas of deficiencies.

Examination of demographic data showed that the typical respondent was under 29 years of age, held an undergraduate degree as the highest degree, obtained the last degree between 1973-1977, had four years experience or less with the Cooperative Extension Service, and worked with both youth and adults.
In response to the question on attendance in the last three years of activities with consumer education, a family finance or consumer economic emphasis, 58% of the respondents reported no activity. The activities identified were varied with many having little consumer education emphasis. Based on the type response received on the consumer education activities, consumer education is perceived differently by the home economists. Also, 45% of the group reported no participation in a course with consumer education, family finance or consumer economic emphasis.

Fewer than 50% of the respondents were aware of the consumer assistance available from the small claims court and the attorney general, while 62% or more of the group were aware of the assistance from the Federal Trade Commission, Food and Drug Administration, Department of Agriculture, Consumer Affairs Office, and Better Business Bureau. Eighty-eight percent of the group reported awareness of the assistance available from the Better Business Bureau, yet more than 65% of the group missed the questions on the test related to the Better Business Bureau.

An item analysis was computed on the 76-item test. The range of raw scores was 34-65 with a mean of 49.56, a standard deviation of 6.40, and a standard error of measurement of 3.60. The estimated reliability coefficient using the Kuder-Richardson Formula 20 was .68. Findings indicate that the instrument had a satisfactory reliability coefficient but was generally too easy.

An expected mean score for the Test on Consumer Rights and Responsibilities was established at 54. The estimated mean of the home economists
was 49.56, which was below the expected mean. A further inspection of the scores showed that 66% of the group scored lower than 54, thus indicating there were areas of need. To identify specific areas of need, an expected correct response on each item for the minimum level of performance was set at 70%, thus indicating an expected proportion of correct responses of .70 for each item. A need index was computed for each item and those items with a need index of less than one were identified as content for inclusion in staff training programs.

After a more careful investigation of the questions with a need index of less than one, and the related competencies, the needs of the home economists were basically identified as the following areas:

1. Legislative acts relating to the consumer's rights and responsibilities.
2. Decision-making processes related to the right to choose goods and services.
3. Consumer fraud identification and elimination, and the impact it has on the right to information and choice.
4. Identification and evaluation of sources of information.
5. Differentiation between product failure and misuse of products.
6. Redress of grievances.
8. Function of small claims court.

The independent variables of degree, work experience with Cooperative Extension Service, and participation in consumer education activities did not appear to make a significant difference between total scores of the
respondents. There was a significant difference between total scores on the Test on Consumer Rights and Responsibilities and age, date of last degree, and the completion of consumer education courses.

Recommendations

The findings indicated that the Test on Consumer Rights and Responsibilities could be used to identify needs of the cooperative extension agents. It is recommended that the test be revised and case studies be added to improve the quality of the test. The test could then be used as one means of determining the needs of newly employed extension home economists in the area of consumer rights and responsibilities.

Because this study focused on consumer rights and responsibilities, it is recommended that additional tests be developed for use in ascertaining the educational needs in other areas identified in the consumer education conceptual framework.

The model used in this study could be used for developing needs assessment instruments for other home economists and in other subject matter areas. It could also be used with other professional groups.

Since there was a discrepancy in what the group said about awareness of consumer assistance available in the state and response to questions related to the sources of assistance, a variety of needs assessment techniques should be used in planning staff development programs. Program planners should not rely on one method.

Based on responses related to attendance in the last three years at programs with consumer education, family finance or consumer economic
emphasis, there appears to be a need for providing the home economists with more opportunities to attend such activities.

The completion of courses with consumer education, family finance or consumer economic emphasis appeared to be an influential variable on how home economists scored on the test; therefore, it is recommended that consumer education courses be included in the program of study for home economics education majors. The course should help prepare individuals to become responsible consumer citizens.

The lack of awareness of consumer assistance available in Georgia supports the need for developing programs to familiarize the extension home economists with the services which are available in the state. Specific emphasis should be placed on the Better Business Bureau, small claims court, Federal Trade Commission, and the office of the Attorney General.

Based on the areas of need identified by evaluating the questions missed, it is recommended that the following areas as related to consumer rights and responsibilities be incorporated in staff training programs for the Georgia Extension Home Economists, specifically for those who have not had a course in consumer education.

Meaning of the four basic consumer rights.

Consumer legislation.

Decision-making in the marketplace—a consumer responsibility.

Consumer fraud—identification and elimination.

Consumer information—identification and evaluation.

Consumer grievances—what to do about them.
The findings from this study should be made available to the Georgia Extension Specialists so that recommended areas of content may be incorporated into staff development programs.

Atwood, H. Mason, & Ellis, Joe. The concept of need: An analysis for adult education. Adult Leadership, 1971, 19, 210-212; 244.


Johnson, Clarence Dean. Educational needs of managers of agricultural cooperatives. (Doctoral dissertation, Iowa State University, 1971). Dissertation Abstracts, 1972, 32, 5524A. (University Microfilms No. 72-12, 559)


Meyer, Thomas. A feasibility study in determining individual practice profiles of physicians as a basis for continuing education as those physicians utilizing a post graduate perceptor technique. Wisconsin: Wisconsin University, 1970. (ERIC Document Reproduction Service No. ED 052 299)


Schira, Norma Jean McNabb. Professional education needs of teachers of health occupations programs - a survey of teachers and employers. (Doctoral dissertation, University of Illinois at Urbana-Champaign,


Dissertation Abstracts International, 1977, 38, 75A. (University Microfilms No. 77-14, 703)

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--Delta Kappa Gamma Society for the Margaret Boyd Scholarship for 1976-1977; American Vocational Association for the AVA-HEE Graduate Fellowship for 1978; College of Home Economics and Graduate College at Iowa State University for financial assistance,

--Dr. Irene Beavers, major professor, for her guidance, understanding, and support throughout the graduate program,

--Dr. Alyce Fanslow for her assistance and encouragement,

--Dr. Gordon Bivens, for assisting with the development of the test,

--Dr. Roger Hiemstra, Dr. Ruth Hughes, and Dr. Mary Winter for serving on my graduate committee,

--Iowa Extension Home Economists for pilot testing the instrument and the Georgia Extension Home Economists who were the subjects of the study,

--Georgia Cooperative Extension Service for providing staff support and allowing for the collection of data,

--my many friends and colleagues for their interest and encouragement,

--those "special people" in Ames who have helped make my two years in Ames and my experiences in graduate school very pleasant,

--my family, both real and adopted, for their love, support, and encouragement.
APPENDIX A: JURY FOR VALIDATION OF CONCEPTUAL FRAMEWORK
Jury for Validation of Conceptual Framework

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Corvallis, Oregon 97330

Dr. Helen F. McHugh, Dean  
College of Home Economics  
Colorado State University  
Fort Collins, Colorado 80521
APPENDIX B: CONCEPTUAL FRAMEWORK FOR CONSUMER EDUCATION
General Information

For purposes of this research, consumer education is being defined as a study to help individuals become responsible consumer citizens through the development and use of skills, concepts, insights and understandings that are required for everyday living to achieve, within the framework of their own values, maximum satisfaction from their resources.

The broad areas designated as 1) quality of life, 2) financial management, 3) decision-making, 4) economic environment, 5) rights and responsibilities, and 6) consumer in the marketplace are being viewed as the major areas for the development of skills, concepts, knowledge, understandings and insights. The sub-concepts listed are very broad at this time, but will be broken down further after reactions are received.

Directions

I. Please review the following six broad concepts and indicate if you believe they are appropriate for including based on the definition that is being used for the study, by placing a check in the column to the right of the concept. If you believe any should be added, please indicate this under OTHERS TO BE ADDED.

<table>
<thead>
<tr>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. QUALITY OF LIFE</td>
</tr>
<tr>
<td>B. FINANCIAL MANAGEMENT</td>
</tr>
<tr>
<td>C. DECISION-MAKING</td>
</tr>
<tr>
<td>D. ECONOMIC ENVIRONMENT</td>
</tr>
<tr>
<td>E. CONSUMER RIGHTS AND RESPONSIBILITIES</td>
</tr>
<tr>
<td>F. CONSUMER IN THE MARKETPLACE</td>
</tr>
<tr>
<td>G. OTHERS TO BE ADDED</td>
</tr>
</tbody>
</table>

II. Please review the following list of sub-concepts. If you agree that each of the sub-concepts is important to include as a part of the broad concept, please check opposite the sub-concept. If you prefer to rename any, please do so. If you have additional sub-concepts, or believe that any listed should be changed to another category, list them under OTHERS TO BE ADDED.
QUALITY OF LIFE

Values
Goals
Needs and wants
Level of living desired
Level of consumption
OTHERS TO BE ADDED

FINANCIAL MANAGEMENT

Financial goals
Purchasing power
Principles of money management
Financial planning
Economic security
Credit
Financial crises
Tax management: Income, Social Security, property
Buying habits
Selection of goods and services
OTHERS TO BE ADDED

DECISION-MAKING

Choice making in the marketplace
Types of choices
Factors influencing choices
Assessment of information
Economic principles in decision-making
OTHERS TO BE ADDED
ECONOMIC ENVIRONMENT

Forces influencing supply and demand
Market competition
Role of producers and sellers in economic environment
Taxes and fees for government services
Economic role of consumer
Strengths and weaknesses of market system and private enterprise
Inflation and unemployment
OTHERS TO BE ADDED

CONSUMER RIGHTS AND RESPONSIBILITIES

Right to safety
Right to be heard
Right to information
Right to choose
Ethical behavior as a consumer
Consumer responsibilities
OTHERS TO BE ADDED

CONSUMER IN THE MARKETPLACE

Marketing processes
Types of stores
Types of services
Principles of buymanship
Information: location, evaluation and processing
Product quality
Effects of the marketplace on the consumer
Relationship between product, price and quality
OTHERS TO BE ADDED
APPENDIX C: JURY OF STATE EXTENSION SPECIALISTS
Jury of State Extension Specialists

Ms. Georgia L. Stevens
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COMPETENCIES FOR EXTENSION HOME ECONOMISTS
IN THE AREA OF
CONSUMER RIGHTS AND RESPONSIBILITIES

Five major concepts in consumer rights and responsibilities have been selected for the development of the attached list of competencies. The competency statements imply not only knowledge of specific information, but also the ability to use the information pertaining to rights and responsibilities. The major concepts used are

A. RIGHT TO SAFETY
B. RIGHT TO INFORMATION
C. RIGHT TO CHOOSE
D. RIGHT TO BE HEARD
E. CONSUMER RESPONSIBILITIES

DIRECTIONS FOR RESPONDING

Representative of concept: Please read each competency statement carefully. In the left column, indicate if you believe the competency is representative of the broad concept it is identified with by placing a Y (yes) in the column. If it is not representative, place an N (no) in the space provided. If it would be more appropriate in another section, please indicate this with a statement after the competency. (Example: Change to Section B)

Importance of competency: Indicate the extent of importance of each competency for an extension home economist by placing a number from 1 to 9 in the space in the right column. Use a 9 to indicate very important; a 5 for somewhat important, and a 1, not important. If you believe the competency is moderately important use numbers 2-4 or 6-8. The following illustration shows the scale.

Not Important Somewhat Important Very Important
1 2 3 4 5 6 7 8 9

If you would like to suggest changes in the wording, or if you have additions to recommend, please do so in the space after the competency or at the end of the section.
## A. Right to Safety

<table>
<thead>
<tr>
<th>Represents The Concept</th>
<th>Competency</th>
<th>Degree of Importance</th>
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</thead>
<tbody>
<tr>
<td>1. Comprehends the consumer's right to safe products and services.</td>
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<tr>
<td>2. Identifies criteria for safe products and services.</td>
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<tr>
<td>3. Judges the safety features of products.</td>
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<tr>
<td>4. Differentiates between safe and unsafe products and services.</td>
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<tr>
<td>5. Explains the need to read instructions for operating products.</td>
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<tr>
<td>6. Explains the need to operate products correctly and safely.</td>
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<tr>
<td>7. Identifies standards and laws governing consumer safety.</td>
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<tr>
<td>8. Explains consumer protection procedures which are appropriate to specific problems.</td>
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<tr>
<td>9. Identifies governmental and business responsibility for consumer safety.</td>
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<tr>
<td>10. Identifies the functions of the following in providing for or protecting the safety of consumers.</td>
<td></td>
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</tr>
<tr>
<td>a. Consumer Product Safety Act</td>
<td></td>
<td></td>
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<tr>
<td>b. Flammable Fabrics Act</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Hazardous Substance Act</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Poison Prevention Packaging Act</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Refrigerator Door Safety Act</td>
<td></td>
<td></td>
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<tr>
<td>f. Highway Traffic Safety Administration</td>
<td></td>
<td></td>
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<tr>
<td>g. Wholesome Meat Act</td>
<td></td>
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<tr>
<td>h. Natural Gas Pipeline Safety Act</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Radiation Control for Health and Safety Act</td>
<td></td>
<td></td>
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<tr>
<td>j. Comprehensive Occupational Safety and Health Act</td>
<td></td>
<td></td>
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<tr>
<td>k. Others you would like to add</td>
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</tbody>
</table>

Other Competencies you would like to add:
### B. RIGHT TO INFORMATION

<table>
<thead>
<tr>
<th>Represents the Concept</th>
<th>Competency</th>
<th>Degree of Importance</th>
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</thead>
<tbody>
<tr>
<td>11.</td>
<td>Comprehends the consumer's right to information</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Analyzes consumer information to be used when making consumer decisions.</td>
<td></td>
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<tr>
<td>14.</td>
<td>Identifies the major laws and regulations which insure the right to information.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Identifies government agencies responsible for enforcing and regulating information relating to a. full disclosures b. labeling c. advertising and promotions</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Identifies criteria to use in evaluating information.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Judges the value of advertising using specified criteria.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Points out sources of information about differing products and services.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Establishes criteria for judging the sources of information.</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Recognizes fraud, deception and unfair business practices.</td>
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</tr>
<tr>
<td>21.</td>
<td>Demonstrates correct usage of practices to eliminate fraud, deception and unfair business practices.</td>
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<tr>
<td>22.</td>
<td>Differentiates between a warranty and guarantee.</td>
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<tr>
<td>23.</td>
<td>Describes laws affecting price fixing, monopolies, unfair and deceptive practices.</td>
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<tr>
<td>24.</td>
<td>Explains the effects of concentration of market power on amount and kinds of information provided consumers including price information.</td>
<td></td>
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</tbody>
</table>
25. Identifies the functions of the following in relation to the consumer's right to information.
   a. Truth in Lending
   b. Truth in Packaging
   c. Consumer Federation of America
   d. Consumer Financial Testing Agencies
   e. Unfair Trade Practices
   f. Cease and Desist
   g. Fair Credit Act
   h. OTHERS YOU WOULD LIKE TO ADD

C. RIGHT TO CHOOSE

26. Comprehends the consumer's right to choose.

27. Explains the decision making process to use when making a decision in the marketplace.

28. Applies the decision making process when selecting goods or services.

29. Justifies comparative shopping before making a purchase decision.

30. Comprehends the universality of the principle of opportunity costs in decision making.

31. Clarifies the implications of market concentration on breadth of product selection.

32. Identifies ways of protecting personal and public interests in the marketplace.

OTHER COMPETENCIES YOU WOULD LIKE TO ADD:
### D. RIGHT TO BE HEARD

<table>
<thead>
<tr>
<th>REPRESENTS THE CONCEPT</th>
<th>COMPETENCY</th>
<th>DEGREE OF IMPORTANCE</th>
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</thead>
<tbody>
<tr>
<td>33.</td>
<td>Comprehends the right to be heard.</td>
<td></td>
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<tr>
<td>34.</td>
<td>Distinguishes between satisfaction and dissatisfaction with a given product or service.</td>
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<tr>
<td>35.</td>
<td>Identifies appropriate persons or places to communicate satisfaction or dissatisfaction.</td>
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<tr>
<td>36.</td>
<td>Identifies agencies, organizations, and resource persons in the community for handling consumer complaints or problems.</td>
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<tr>
<td>37.</td>
<td>Demonstrates correct procedure for registering complaints with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. businesses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. local and state complaint bureaus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Federal agencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. arbitration boards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. courts</td>
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<tr>
<td></td>
<td>f. OTHERS YOU WOULD LIKE TO ADD</td>
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<tr>
<td>38.</td>
<td>Demonstrates correct procedure for redressing grievances through</td>
<td></td>
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<tr>
<td></td>
<td>a. voluntary action</td>
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<td></td>
<td>b. small claims court</td>
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<tr>
<td></td>
<td>c. individual and class action</td>
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<tr>
<td></td>
<td>d. Chamber of Commerce</td>
<td></td>
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<tr>
<td></td>
<td>e. Better Business Bureau</td>
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<tr>
<td>39.</td>
<td>Identifies enforcer of consumer protection laws in the state.</td>
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<tr>
<td>40.</td>
<td>Comprehends role of consumer organizations in making consumer's view heard.</td>
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</table>

**OTHER COMPETENCIES YOU WOULD LIKE TO ADD:**
### E. CONSUMER RESPONSIBILITIES

<table>
<thead>
<tr>
<th>Represents the concept</th>
<th>Competency</th>
<th>Degree of Importance</th>
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</thead>
<tbody>
<tr>
<td>41.</td>
<td>Chooses appropriate procedures for carrying out consumer responsibilities.</td>
<td>___</td>
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<tr>
<td>42.</td>
<td>Distinguishes between ethical and non-ethical consumer behavior</td>
<td>___</td>
</tr>
<tr>
<td>43.</td>
<td>Distinguishes between misuse of products and product failure.</td>
<td>___</td>
</tr>
<tr>
<td>44.</td>
<td>Identifies ways that consumers can initiate change through individual actions, such as voting, product choice and communication.</td>
<td>___</td>
</tr>
<tr>
<td>45.</td>
<td>Identifies consumer's responsibility for calling attention to errors.</td>
<td>___</td>
</tr>
<tr>
<td>46.</td>
<td>Describes the consumer's responsibility for improving the marketplace.</td>
<td>___</td>
</tr>
<tr>
<td>47.</td>
<td>Explains the responsibility the consumer has to business.</td>
<td>___</td>
</tr>
<tr>
<td>48.</td>
<td>Identify ways of protecting personal and public interests in the marketplace.</td>
<td>___</td>
</tr>
<tr>
<td>49.</td>
<td>Comprehends the need for consumer activation.</td>
<td>___</td>
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</table>

**Other Competencies You Would Like to Add:**

Would you like to have a validated list of competencies?  __yes, __no

---

Signature
APPENDIX E: REVISED LIST OF COMPETENCIES
1. Comprehends the consumer’s right to safety and the responsibilities this right carries. (10, 28, 33, 60)

2. Identifies criteria for safe products and services. (59)

3. Explains the need to use products correctly and safely. (1)

4. Identifies standards and regulations governing consumer safety. (59, also questions related to number 7.

5. Identifies governmental and business responsibility for consumer safety. (18, 63)

6. Explains the need to read instructions for using products. (1)

7. Identifies the functions of the following in providing for or protecting the safety of consumers. (9, 12, 20, 22, 35, 52, 56, 66)
   a. Consumer Product Safety Act
   b. Flammable Fabrics Act
   c. Hazardous Substances Act
   d. Poison Prevention Packaging Act
   e. Wholesome Meat Act
   f. Food and Drug Administration

8. Comprehends the consumer’s right to information and the responsibilities this right carries. (2, 11, 42)

9. Analyzes consumer information to be used when making consumer decisions. (8)

10. Gives examples of the benefits of using consumer information. (2)

11. Identifies some of the major laws and regulations which ensure the right to information. (55)

12. Identifies government agencies or legislative acts responsible for enforcing and regulating information relating to full disclosures, labeling, and advertising. (24)

13. Identifies criteria to use in evaluating information. (8)

14. Judges the value of advertising.

15. Points out sources of information about different products and services. (14, 19, 29, 46)


17. Identifies the functions of the following in relation to the consumer’s right to information. (15, 30, 44, 53, 54, 67)
   a. Truth in Lending
   b. Fair Packaging and Labeling Act
   c. Fair Credit Reporting Act
18. Comprehends the consumer's right to choose and the responsibilities this right carries. (7)

19. Demonstrates the correct usage of practices to eliminate fraud, deception and unfair business practices. (3, 57, 75)

20. Explains the decision making process to use when making a choice in the marketplace. (45)

21. Applies the decision making process when selecting goods or services. (23, 47)

22. Justifies the need for comparative shopping before making a purchase decision. (16, 26)

23. Recognizes fraud, deception and unfair business practices. (3, 13, 62, 61)

24. Describes how price fixing, monopolies, unfair and deceptive practices may affect the choice in the marketplace. (6, 58, 65)

25. Clarifies the implications of market concentration on breadth of product selection. (5)

26. Comprehends the right to be heard and the associated responsibilities. (4, 73)

27. Identifies appropriate persons, agencies and organizations to register complaints with. (21, 27, 37, 50)

28. Explains consumer protection procedures which are appropriate to specific problems associated with the right to be heard. (43, 74)

29. Distinguishes between types of consumer problems which are handled by business, federal agencies, court, voluntary action, and Better Business Bureau. (36)

30. Demonstrates understanding of consumer grievances and the redress of grievances. (32, 38, 64, 76)

31. Identifies enforcer of consumer protection laws in the state. (34, 39)

32. Demonstrates understanding of small claims court. (17, 48)

33. Chooses appropriate procedures for carrying out consumer responsibilities. (51)

34. Identifies ways consumers can initiate change in the marketplace. (7, 31, 49)

35. Identifies ethical and non-ethical consumer behavior. (69)

36. Explains the responsibility the consumer has to business. (7, 41)

37. Identifies ways of protecting personal and public interests in the marketplace. (25, 70)

38. Comprehends the need for consumer activation. (68, 71)

39. Distinguishes between product failure and misuse of product. (40)

(Numbers in parentheses indicate related test questions.)
APPENDIX F: JURY FOR VALIDATION OF TEST ITEMS
Jury for Validation of Test Items

Dr. E. Thomas Garman  
Department of Management, Housing  
and Family Development  
College of Home Economics  
VPI  
Blacksburg, Virginia  24061

Dr. Stewart Lee  
Department of Economics and Business Administration  
Geneva College  
Beaver Falls, Pennsylvania  15010

Dr. Sarah Manning  
Family Economics Department  
Purdue University  
West Lafayette, Indiana  47907

Dr. Gerry Olson  
Department of Home Economics  
Oregon State University  
Corvallis, Oregon  97330

Dr. Helen F. McHugh  
Dean, College of Home Economics  
Colorado State University  
Fort Collins, Colorado  80521

From ISU:

Dr. Gordon Bivens  
Head, Department of Family Environment  
Iowa State University

Dr. Naheel Jeries  
Department of Family Environment  
Iowa State University

Dr. Alyce Fanslow (Evaluation Specialist)  
Department of Home Economics Education  
Iowa State University
APPENDIX G: CORRESPONDENCE
April 1, 1977

Wanda Grogan, a doctoral student in Home Economics Education at Iowa State University, is conducting a study in the area of consumer education. The study concerns "Consumer Education Needs of Extension Home Economists".

The first step of the study involves the identification of consumer education concepts a professional home economist should have some knowledge of. The subject matter will serve as a basis for identifying competencies and the development of an objective test which will be used to assess the knowledge of the home economist and to identify educational needs.

You have been suggested as one who has expertise in the area of consumer education and we would like to ask you to react to the list of concepts. Would you please review the enclosed list of concepts and sub-concepts and react to them following the instructions given with the list. Your comments and suggestions will be appreciated.

At a later date we would like to have your reaction to the test that is developed. If you would be willing to review the test, would you please indicate this on the last page of the concepts.

May we ask that you return the material by April 21. If you are unable to react to the list of concepts, would you please return them in the self addressed envelope as soon as possible.

Thank you for your assistance in this study.

Sincerely,

Irene Beavers
Professor
Home Economics Education

Wanda Grogan
Graduate Student

Enclosures
Wanda Grogan, a doctoral student in Home Economics Education at Iowa State University, is conducting a study in the area of consumer education. The study concerns "Consumer Education Needs of Extension Home Economists".

The enclosed list of competencies relating to consumer rights and responsibilities will serve as the basis for developing an objective test to be used to determine the needs of a selected group of extension home economists.

You have been suggested by someone in the Cooperative Extension Service as one who has expertise in the area of consumer education. We would like to ask you to assist with the validation of the competencies by helping us decide on the degree of importance of each of the competencies for the home economist employed by Cooperative Extension Service. We are also concerned that the competency be representative of the major concept it is identified with. The instructions are provided with the list. Please feel free to make any comments or suggestions. Your assistance will be greatly appreciated.

May we ask that you return the material by October 14. If you are unable to react to the competencies, would you please return them in the self addressed envelope as soon as possible. If you have questions, please call 515-294-3991 and leave a message for your call to be returned.

Thank you for your assistance in this study.

Sincerely,

Irene Beavers
Professor
Home Economics Education

Wanda Grogan
Graduate Student
Recently we mailed to you a list of competencies for extension home economists in the area of consumer rights and responsibilities. Since we believe it is very important to have input in the study being conducted from people like you, we would appreciate your reactions to the competencies.

If your response is in the mail, please disregard this letter. If not, could we please ask you to fill out the enclosed post card so that we will know if you will be able to assist with the study.

Thank you for your assistance.

Sincerely,

Irene Beavers
Professor
Home Economics Education

Wanda Grogan
Graduate Student
Card

I have not received the list of competencies. _____________
I will be unable to react to the competencies. _____________
I will react to the list, but cannot do so until _____________.
Please send another copy of the competencies. _____________

________________________________________
signature
We would like to thank you for reacting to the consumer education concepts several months ago. After receiving reactions from you and others who are involved in consumer education, a decision was made to focus the present study on the rights and responsibilities of consumers.

The enclosed list of competencies relating to the rights and responsibilities of consumers was developed from the concepts which were judged important. These competencies have been validated by a group of state extension specialists and have served as the basis for developing the test which is enclosed. The numbers after each competency indicates the questions relating to that particular competency.

You indicated earlier that you would be willing to review the test items and your assistance would be greatly appreciated at this time. We would like to ask you to read through each question and its potential responses. The correct answer is circled or indicated by T-F to make the intentions clearer. Your comments would be appreciated in the following areas.

a. Correction of structural errors you believe would enhance each question.

b. Correction of faults in clarity of the question and the corresponding answers.

c. Your judgment of the selection of each question as pertinent to the rights and responsibilities of consumers.

Feel free to comment directly on the test or on alternate sheets of paper. If you have questions you believe more appropriate than some used, and would be willing to share them, they would be welcome.

The major focus of the present study is to determine the needs of a selected group of extension home economists as based on the test. The test will be administered to home economists who are presently working in a county extension program and who have varying degrees of background in consumer education. The final test will have sixty five items, but for pilot test purposes, the number would be almost doubled to add to the reliability and validity of the test.
Your assistance is greatly appreciated. We realize that you may soon be out of school for the holiday season, but would like to have your reactions by January 2, or if possible, earlier. A self addressed, stamped envelope is enclosed for your convenience.

Thank you again for giving your time.

Sincerely,

Irene Beavers
Professor
Home Economics Education

Wanda Grogan
Graduate Student

Enclosures
January 12, 1977

Dear Extension Home Economist:

We have been asked by the Home Economics Education Department to field test an instrument which will be used by Extension Agents in another state to identify educational needs in the area of consumer rights and responsibilities. So you are one of sixteen Iowa Extension home economists being asked to participate in the field test.

This is an opportunity for you to assist in the development of a questionnaire which may also be useful in Iowa for determining needs. I therefore request your assistance and would appreciate your promptness in filling out the questionnaire.

The test will take approximately one hour of your time. You are requested to answer the questions without using a reference. Please complete all items, even though you may be uncertain of the answer. Feel free to make any comments on the test regarding unclear questions, ambiguous statements, etc. One of the major purposes of field testing the instrument is to make the questions clearer and more readable; therefore, your suggestions for improving the items would be appreciated.

Please return the completed test in the self addressed, stamped envelope by January 23rd. Your anonymity is guaranteed. Results will be analyzed for the total group selected to participate in the field testing.

Again, thank you for your valuable assistance.

Sincerely,

Elizabeth A. Elliott
Assistant Dean and State Leader
Home Economics Programs

Enclosures
MEMO TO: Central District Home Economists

Enclosed is the instrument for your participation in Wanda Grogan's research. As was explained to you on January 31 in Macon, the directions are on the outside of the instrument. Please read the letter carefully so you will understand the purpose. Let me assure you again that we are not interested in individual scores but only in total group scores. Your anonymity is assured.

Please set aside time to complete the questions and return to my office in the enclosed envelope by Feb. 23.

Your prompt attention is greatly appreciated.

Sincerely,

Alva H. Youngner
Program Area Leader
General Home Economics

AHY/abc
enclosure

CC: Dr. Nan Preas
Miss Janice Wood
Recently at the Clothing and Textiles training, the home economists were asked to participate in a research study being conducted by Wanda Grogan. Wanda is presently on study leave from her position as Coordinator of Continuing Education in Home Economics at the University of Georgia, doing graduate work at Iowa State University.

Since you were unable to attend the textiles training, we would like to include you in the study. The study is being conducted to develop a model that can be used for identifying educational needs of professional groups. I encourage you to read the letter on the outside of the enclosed instrument and the directions for completing each section.

Please do not use a reference to answer any of the questions.

I want to assure you that we are not interested in individual scores but only in total group scores. Your anonymity is assured. Your name is on the return envelope only for the purpose of identifying which instruments have not been returned.

Please set aside time to complete the questions and return to my office in the enclosed envelope in one week. I have discussed this research with your District Agent-Home Economics, and you have her approval to participate.

Your prompt attention is greatly appreciated.

Sincerely,

Alva H. Youngner
Program Area Leader
General Home Economics

AHY/abc
enclosures

CC: Dr. Nan Preas
APPENDIX H: TEST ON CONSUMER RIGHTS AND RESPONSIBILITIES
Dear Extension Home Economist:

You have been selected to participate in a research study to identify some needs of professional home economists in the area of Consumer Rights and Responsibilities. A part of the study is to develop a model that can be used for identifying needs of professional home economists in all subject matter areas. Your participation will be appreciated.

Do not open the test until you are ready to complete it. It will take approximately one hour of your time. May we ask that you complete the test and return it in the self addressed envelope you received within one week of the time you receive it. You will note that your name is on the return envelope, but this is only for purposes of checking the return. We are not interested in individual scores, but interested in the total group scores. Your anonymity is assured!

Directions for completing the test are included with each section. Please be sure to answer all questions. Thank you for your participation!

Sincerely,

Irene Beavers
Professor
Home Economics Education

Wanda Grogan
Graduate Student
SECTION I

Multiple Choice: Read each item carefully. Choose the BEST ANSWER FOR EACH ITEM and indicate your answer by circling the letter corresponding to the correct alternative. Circle only one answer for each question. Please complete all items even though you may be uncertain of the answer. Please do not use a reference.

1. The consumer is protected to a degree by law in all of the following situations EXCEPT
   a. consumer errors in use of product
   b. safety hazards in product
   c. illegal and fraudulent business practices
   d. deception in labeling, advertising and selling

2. As consumers in the marketplace are more informed
   a. competition becomes more effective
   b. competition is less effective
   c. truth in advertising is of concern
   d. detailed regulations of distributors are needed

3. A business firm is guilty of a bait and switch scheme when
   a. newspaper ad states the number of items for sale
   b. the advertised item is of poor quality
   c. a like item is offered in place of sold out sale item
   d. consumer is encouraged to purchase higher priced item

4. Jim bought a new bicycle. After riding it for only two days, the bicycle fell apart. What consumer right should he exercise?
   a. To choose
   b. To be informed
   c. To be heard
   d. To safety

5. Firms selling differentiated products have
   a. many unlike products
   b. several like products
   c. similar products packaged differently
   d. few products which are different

6. Where monopoly power is present, prices
   a. shift with supply and demand
   b. are lower than if monopoly were not present
   c. remain constant regardless of supply and demand
   d. are higher than if monopoly were not present

7. Product improvement is best facilitated by consumers
   a. throwing away faulty products
   b. warning friends about poor products
   c. complaining about poor products to the seller and producer
   d. demanding faster service

8. Mr. and Mrs. Smith are planning to purchase a new washing machine. Bill, a neighbor, is a salesman for Brand X in a small town nearby. He tells them about a new model washer which has been very satisfactory and has had few mechanical problems. Which of the following questions would NOT help Mr. and Mrs. Smith evaluate the information Bill provided?
   a. Does Bill have access to information that is reliable?
   b. How many machines have been purchased from the store?
   c. Does Bill receive a commission on his sales?
   d. How does the cost compare with that of other models?

9. Sue bought some body lotion that listed lanolin as the major ingredient. After using the lotion, she became sensitive to it even though she had not been allergic to lanolin before. If she cannot get satisfaction from the retailer or manufacturer in identifying other ingredients, she should seek help from the
   a. Federal Trade Commission
   b. American Medical Association
   c. Food and Drug Administration
   d. Consumer Product Safety Commission

PLEASE CONTINUE TO NEXT PAGE
10. A consumer's right to safety involves all of the following EXCEPT
   a. manufacturers' and retailers' responsibility to provide adequate instructions
   b. the removal from the marketplace of products frequently involved in accidents
   c. a willingness on the part of consumers and businesses to pay for built-in product safety
   d. testing product for safety and performance prior to marketing

11. Sue bought a new mixer for a Christmas present for her mother. She was in a hurry at the time of purchase and told the salesperson what she wanted. She did not open the box the salesperson brought out and did not ask any questions. What consumer right did she fail to exercise in her purchase of the appliance?
   a. Right to safety
   b. Right to be informed
   c. Right to choose
   d. Right to be heard

12. The Consumer Product Safety Act has as its major function for certain products
   a. eliminating all risk of injury
   b. reducing all risk of injury
   c. reducing all unreasonable risk of injury
   d. testing all products for risk of injury

13. Which of the following would not be identified as consumer fraud?
   a. bait and switch
   b. chain referral sales plans
   c. charity gyps
   d. puffery in advertisements

14. The source offering the most detailed information on a variety of products is a
   a. newspaper
   b. television
   c. Better Business Bureau
   d. mail order catalog

15. The Fair Packaging and Labeling Act provides all of the following EXCEPT
   a. cutting down the proliferation of sizes
   b. making labels more informative
   c. listing of specific food product ingredients
   d. making labels easier to read

16. The best buys are obtained through shopping at
   a. discount stores
   b. stores that give stamps
   c. mail order catalogs
   d. different types of stores

17. A consumer with a suit in a small claims court is
   a. often told to retain a lawyer
   b. required to hire a lawyer
   c. never required to hire a lawyer
   d. provided with a free lawyer

18. A firm, in assuming the responsibility of safety for consumers, should make products which are
   a. safe for any use
   b. tested before being placed on the market
   c. consistent with standards of quality set by other firms
   d. repaired free of charge within year of purchase

19. The poorest source of information on buying a specific brand of appliance is
   a. Better Business Bureau
   b. Changing Times
   c. Consumer Reports
   d. salesperson

20. The Flammable Fabrics Act requires that flame retardant fabrics be used in
   a. children's clothing and bedding items
   b. children's pajamas, other garments and some interior furnishings
   c. wearing apparel and outer garments
   d. clothing garments and household textiles

21. Sam saw an ad in the paper for a free radio if he sent in wrappers from a particular kind of candy. He mailed the wrappers and subsequently received the radio and 24 bars of the candy. Later a bill for $50.00 was sent. He offered to send both items back, but the company refused to accept them and threatened to take court action if he did not pay. What action should be recommended for Sam to take?
   a. Hire a lawyer.
   b. Contact Federal Trade Commission.
   c. Write Federal Communication Commission.
   d. Contact the State Office of Consumer Affairs.
22. Government agencies that provide consumer safety protection through regulation are
a. manufacturers, retailers and wholesalers
b. Better Business Bureau, Chamber of Commerce
c. Food and Drug Administration, Federal Trade Commission
d. local, state and national consumer organizations

23. An early step in the decision making process when preparing to make a choice in the marketplace is to
a. ascertain alternative choices
b. identify goods or services
c. determine goals
d. compare prices

24. A consumer who is evaluating an advertisement should know that law forbids advertising that
a. makes untrue claims of quality
b. is puffing rather than factual
c. compares products on TV
d. promotes foreign products

25. Consumers are protected by Federal Government Agencies which
a. receive complaints from consumers
b. enact new laws to enforce agency rules
c. send department representatives out to police businesses
d. regulate and inspect within agency jurisdictions

26. Comparative shopping is done to help the consumer
a. decide what to do with his income
b. make a decision on using credit
c. analyze personal and family values and goals
d. determine how products, services, prices and stores differ

27. The Major Appliance Consumer Action Panel (MACAP) is a group
a. one may call or write about a home appliance complaint
b. of appliance firm presidents conducting product research
c. that works to pass laws to protect consumers
d. which has legal power to uphold appliance safety laws

28. A consumer's right to safety in a consumer product carries with it the major responsibility to
a. honor obligations
b. voice complaints
c. follow directions
d. obtain information

29. A consumer contacting the Better Business Bureau for the name of a reliable laundry may receive
a. the name of the most popular laundry in town
b. facts about laundries which have had complaints made against them
c. a list of laundries which are members of Chamber of Commerce
d. facts about laundries which have had no complaints made against them

30. The right to be informed of a credit rating investigation is established by
a. Truth-in-Lending Act
b. Fair Credit Reporting Act
c. Truth-in-Credit Billing Act
d. Federal Trade Commission

31. Better products appear on the market when consumers do all of the following EXCEPT
a. learn how to take action for personal complaints
b. join with others for group pressure
c. learn more about products
d. refuse to discern differences in quality

32. A consumer should initially seek redress from
a. the product manufacturer
b. retailer or dealer
c. small claims court
d. Trade Association such as MACAP

33. The consumer responsibility which does NOT necessarily accompany the right to safety is
a. reporting unsafe products
b. studying safety ratings of products
c. doing comparative shopping
d. following use and care instructions

PLEASE CONTINUE TO NEXT PAGE . . . . . . . . . . .
34. A person who lives in Georgia and fails to receive a mail order from a business in New York should
   a. write a complaint letter to the business with a carbon copy to the New York Attorney General’s office
   b. wait six months and make a collect call to the business
   c. write to the post office for help in finding the package
   d. write to the New York Attorney General’s Office for help

35. The Wholesome Meat Act requires that all meat is inspected
   a. and graded
   b. but not necessarily graded
   c. only before slaughtering
   d. only after slaughtering

36. Mrs. Jones picked her coat up from the cleaners and found the zipper was broken in the lining and the fur collar was ruined. She had recently purchased the coat for $200.00. Although the cleaner was at fault, it refused to do anything about the damage. Mrs. Jones should
   a. contact the store where the coat was purchased
   b. write to the manufacturer of the coat
   c. file a class action suit against the cleaner
   d. file suit in small claims court against the cleaner

37. If a person receives a letter from a charity which is suspected to be a fraud, contact should be made with
   a. Chamber of Commerce
   b. Postal Service
   c. Congressman
   d. Police

38. Redress may be provided in all of the following ways EXCEPT
   a. replacement of product
   b. letter from retailer
   c. provision of a substitute product
   d. in-kind reparation

39. The Attorney General’s office in your state has all of the powers listed EXCEPT
   a. right to pass laws that protect people
   b. legal right to summon people and firms to court
   c. mediation between consumer and business
   d. rulings that would outlaw certain business policy

40. Mary purchased fabric for her daughter’s dress. The clerk gave a fabric care label with the fabric which specified “Dry Clean Only”. She washed the dress which faded and shrank so that the child could not wear it. Mary should first
   a. present the sales slip and request a refund
   b. have read the label before purchasing the fabric
   c. have read the label before washing the dress
   d. complain that she was not informed on care of fabric

41. Consumers can have the most effect on the price of products by
   a. making informed choices
   b. purchasing items with price ceilings
   c. encouraging federally enforced grading
   d. buying items irrespective of price

42. A person’s right to be informed includes the right to
   a. read specific ingredients on food labels
   b. have access to products at competitive prices
   c. know secrets that involve national defense
   d. know the amount of profit a store makes on products

43. An error on a monthly bill is reported by
   a. tearing the bill in half so it cannot be read into the computer
   b. enclosing a note along with the bill calling attention to the error
   c. calling the store collect and stating the complaint over the phone
   d. refusing to pay the bill and waiting until the store calls or writes

44. The Truth in Lending Act states that the annual percentage rate is
   a. written in large print on the contract
   b. printed on the back of the contract
   c. quoted aloud to the person before he buys
   d. printed in newspaper ads and not on the contract

45. Ed has recently received an inheritance of $5000.00. He is interested in purchasing a car. What does Ed need to clarify before making a final decision?
   a. What car should he buy?
   b. What did he learn in college about spending money?
   c. Should he invest in stocks?
   d. Does he already have sufficient transportation?

PLEASE CONTINUE TO NEXT PAGE . . . . . . . . . . .
46. A consumer attempting to select a business to perform a roof repair service should first
   a. ask the Better Business Bureau to identify the best firm
   b. ask businesses for names of customers and check for satisfaction
   c. obtain price estimates and select the business with the lowest price
   d. request a recommendation from the Chamber of Commerce

47. The correct order for the decision making process when one is preparing to make a purchase is
   a. recognizing problem, predicting consequences, considering alternatives, analyzing alternatives, ordering
      alternatives
   b. recognizing problem, considering alternatives, predicting consequences, analyzing alternatives, ordering
      alternatives
   c. considering alternatives, recognizing problem, predicting consequences, analyzing alternatives, ordering
      alternatives
   d. predicting consequences, recognizing problem, considering alternatives, analyzing alternatives, ordering
      alternatives

48. A small claims court is best able to handle a case that involves
   a. $1200.00 lost in a real estate swindle
   b. pain and suffering damages resulting from an auto accident
   c. a criminal charge of petty theft
   d. a refund of a $300.00 apartment security deposit

49. Dollar votes by people have the greatest effect on amounts of goods produced
   a. where there are few products
   b. in a planned economy
   c. in a free market economy
   d. where there are many products

50. The Director of the Office of Consumer Affairs in Washington, D.C. has authority to
   a. start class action suits
   b. rewrite proposed consumer laws
   c. defend people in court actions
   d. handle consumer complaints

51. Dissatisfaction with a product cannot be resolved if the
   a. product is faulty
   b. product is not repaired or replaced
   c. consumer and seller do not communicate
   d. consumer does not have lawyer

52. Protection to children through regulations requiring safety closures for hazardous substances is provided by
   a. Poison Prevention Packaging Act
   b. Hazardous Substances Act
   c. Child Protection Act
   d. Federal Trade Commission

QUESTIONS 53 THROUGH 57 ARE RELATED TO THE FUNCTIONS OF THE FOLLOWING AGENCIES AND LEGISLATIVE ACTS. SELECT THE
CORRECT AGENCY OR ACT FOR EACH FUNCTION AND WRITE THE LETTER REPRESENTING YOUR CHOICE IN THE SPACE AT THE END OF
EACH STATEMENT.

   a. Federal Trade Commission
   b. Food and Drug Administration
   c. Consumer Product Safety Commission
   d. Truth in Lending Act
   e. Fair Credit Reporting Act

53. Requires creditors to give full disclosure of charges. _____
54. Allows consumers to know contents of personal file at credit bureau. _____
55. Monitors false and deceptive advertisements. _____
56. Bans products from commerce if cautionary labeling cannot adequately protect consumers. _____
57. Monitors unfair competition and deceptive trade practices. _____

PLEASE CONTINUE TO NEXT PAGE . . . . . . . . . . . .
True-False: Read the following statements and circle either T for true or F for false.

T F 58. A consumer becomes a victim of deceptive practices in the marketplace when lower priced items are purchased.

T F 59. The UL seal on the cord of an electric appliance assures the consumer that the entire appliance has met specified safety standards.

T F 60. The consumer's right to safety carries with it the responsibility of reporting faulty products to proper authorities.

T F 61. Distortion of the truth in advertising is always fraud.

T F 62. Fraudulent intention on the part of a seller is difficult to prove.

T F 63. Business and trade associations establish and legally enforce standards of safety for specific categories of products.

T F 64. Government agencies are weak channels for individual redress.

T F 65. Monopolies and other anticompetitive practices restrict consumer choices.

T F 66. The Federal Hazardous Substances Act protects the safety of the consumer by regulating all substances which are toxic or strong sensitizers.

T F 67. The Fair Credit Reporting Act states that a person may see his/her credit report if credit has not been refused.

T F 68. Responsible consumers will recognize that one person can have little or no impact in the marketplace.

T F 69. Removing an item from a store without paying for it is a type of consumer fraud.

T F 70. A broad variety of products and services in the marketplace helps to protect consumer rights.

T F 71. Volunteer consumer groups may provide an effective voice in conveying consumer interests.

T F 72. A consumer dissatisfaction that has not been communicated is a complaint.

T F 73. The right to be heard implies that a consumer should have an impact on government policy.

T F 74. A consumer whose rights have been violated under the Fair Credit Reporting Act should report it to the FTC.

T F 75. Anti-trust regulations help insure a fair marketplace for buyers and sellers.

T F 76. Full redress for a consumer grievance consists of correcting the condition causing the problem.

PLEASE CONTINUE TO NEXT PAGE . . . . . . . . . .
SECTION II

This section contains demographic items which will be used for group analysis of the results. Complete it by filling in the response requested or by checking the correct answer. Please answer each question.

1. Check the space corresponding to your age group.
   1. 20-29  
   2. 30-39  
   3. 40-49  
   4. 50-59  
   5. over 59  

2. Check the space corresponding to the highest level of formal education you have attained at this time.
   1. Undergraduate Degree  
   2. Master's Degree  
   3. Specialist in Education  
   4. Other  
      (please specify)  

3. In what year did you receive your last degree?  

4. Check the space corresponding to the number of years experience you have had with Cooperative Extension Service.
   1. 1-4 years  
   2. 5-9 years  
   3. 10-14 years  
   4. 15-19 years  
   5. over 20 years  

5. List other home economics positions and the total number of years in the position.

<table>
<thead>
<tr>
<th>Position</th>
<th>Total Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

6. Do you work primarily with
   1. Adults  
   2. Youth  
   3. EFNEP  
   4. All of the above  

7. List activities with CONSUMER EDUCATION, FAMILY FINANCE OR CONSUMER ECONOMIC EMPHASIS you have attended in the last 3 years. Include seminars, workshops, staff training programs or conferences. Give the approximate number of days in each program. If you have NOT attended a program, please check here.  

<table>
<thead>
<tr>
<th>Program</th>
<th>Approximate Length in Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

8. List courses you have had with CONSUMER EDUCATION, FAMILY FINANCE OR CONSUMER ECONOMIC EMPHASIS. Include undergraduate and graduate courses. If you have not taken a course with consumer education or consumer economic emphasis, please check here.  

<table>
<thead>
<tr>
<th>Courses (Approximate name)</th>
<th>Approximate Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

9. Are you aware of the consumer assistance available from the following in Georgia?

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Claims Court</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney General</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Trade Commission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and Drug Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Affairs Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better Business Bureau</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE BE SURE YOU HAVE ANSWERED ALL QUESTIONS . . . . . .

THANK YOU FOR PARTICIPATING IN THIS STUDY!
APPENDIX I: ANSWER KEY AND CODING PLAN FOR ANALYSIS
### Multiple Choice

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>a</td>
<td>10.</td>
<td>c</td>
<td>19.</td>
</tr>
<tr>
<td>2.</td>
<td>a</td>
<td>11.</td>
<td>b</td>
<td>20.</td>
</tr>
<tr>
<td>3.</td>
<td>d</td>
<td>12.</td>
<td>c</td>
<td>21.</td>
</tr>
<tr>
<td>4.</td>
<td>c</td>
<td>13.</td>
<td>d</td>
<td>22.</td>
</tr>
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<td>5.</td>
<td>a</td>
<td>14.</td>
<td>d</td>
<td>23.</td>
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<td>6.</td>
<td>d</td>
<td>15.</td>
<td>c</td>
<td>24.</td>
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<td>7.</td>
<td>c</td>
<td>16.</td>
<td>d</td>
<td>25.</td>
</tr>
<tr>
<td>8.</td>
<td>c</td>
<td>17.</td>
<td>c</td>
<td>26.</td>
</tr>
<tr>
<td>9.</td>
<td>c</td>
<td>18.</td>
<td>b</td>
<td>27.</td>
</tr>
<tr>
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<td></td>
<td>19.</td>
<td></td>
<td>28.</td>
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<td></td>
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<td>20.</td>
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### True-False

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</thead>
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<td>b</td>
<td>39.</td>
<td>a</td>
<td>48.</td>
<td>d</td>
</tr>
<tr>
<td>31.</td>
<td>d</td>
<td>40.</td>
<td>b</td>
<td>49.</td>
<td>c</td>
</tr>
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<td>32.</td>
<td>b</td>
<td>41.</td>
<td>a</td>
<td>50.</td>
<td>d</td>
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<td>33.</td>
<td>c</td>
<td>42.</td>
<td>a</td>
<td>51.</td>
<td>c</td>
</tr>
<tr>
<td>34.</td>
<td>a</td>
<td>43.</td>
<td>b</td>
<td>52.</td>
<td>a</td>
</tr>
<tr>
<td>35.</td>
<td>b</td>
<td>44.</td>
<td>a</td>
<td>53.</td>
<td>d</td>
</tr>
<tr>
<td>36.</td>
<td>d</td>
<td>45.</td>
<td>d</td>
<td>54.</td>
<td>e</td>
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<tr>
<td>37.</td>
<td>b</td>
<td>46.</td>
<td>b</td>
<td>55.</td>
<td>a</td>
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<td>38.</td>
<td>b</td>
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<td>a</td>
<td>56.</td>
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<td>57.</td>
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<td>49.</td>
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<td>58.</td>
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# Coding Plan for Analysis

<table>
<thead>
<tr>
<th>Column Number</th>
<th>Meaning of code</th>
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<tbody>
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<td>Card I</td>
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<tr>
<td>1-40</td>
<td>Blank</td>
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<tr>
<td>41-80</td>
<td>Answers to test items--same as 1-39 on test.</td>
</tr>
<tr>
<td>Card II</td>
<td></td>
</tr>
<tr>
<td>1-36</td>
<td>Answers to test items--same as 40-76 on test.</td>
</tr>
<tr>
<td>37</td>
<td>Age--same as 1 on Section II.</td>
</tr>
<tr>
<td>38</td>
<td>Highest level of formal education--same as 2 on Section II.</td>
</tr>
<tr>
<td>39</td>
<td>Year received last degree:</td>
</tr>
<tr>
<td></td>
<td>1. 1973-77</td>
</tr>
<tr>
<td></td>
<td>2. 1968-72</td>
</tr>
<tr>
<td></td>
<td>3. 1963-67</td>
</tr>
<tr>
<td></td>
<td>4. 1958-62</td>
</tr>
<tr>
<td></td>
<td>5. Prior to 1958</td>
</tr>
<tr>
<td>40</td>
<td>Number of years experience with Cooperative Extension Service--same as 4 on Section II.</td>
</tr>
<tr>
<td>41</td>
<td>Work primarily with adults--same as 6.1 on Section II.</td>
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<tr>
<td></td>
<td>1. yes</td>
</tr>
<tr>
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<td>2. no</td>
</tr>
<tr>
<td>42</td>
<td>Work primarily with youth--same as 6.2 on Section II.</td>
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<tr>
<td></td>
<td>1. yes</td>
</tr>
<tr>
<td></td>
<td>2. no</td>
</tr>
<tr>
<td>43</td>
<td>Work primarily with EFNEP--same as 6.3 on Section II.</td>
</tr>
<tr>
<td></td>
<td>1. yes</td>
</tr>
<tr>
<td></td>
<td>2. no</td>
</tr>
<tr>
<td>44</td>
<td>Work primarily with all of the above--same as 6.4 on Section II.</td>
</tr>
<tr>
<td></td>
<td>1. yes</td>
</tr>
<tr>
<td></td>
<td>2. no</td>
</tr>
</tbody>
</table>
45 Attendance at activities with consumer education, family finance or consumer economic emphasis—related to 7 on Section II.
   1. attendance of at least 1 program
   2. no attendance of program

46 Courses with consumer education, family finance or consumer economic emphasis—related to 8 on Section II.
   1. 1 course
   2. more than 1 course
   3. no course

47-53 Awareness of consumer assistance—same as 9 on Section II.
APPENDIX J: TABLE
Table 12. Summary statistics of the analysis of the Test on Consumer Rights and Responsibilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of items</td>
<td>76</td>
</tr>
<tr>
<td>Mean raw score</td>
<td>49.56</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.40</td>
</tr>
<tr>
<td>Reliability coefficient</td>
<td>.68</td>
</tr>
<tr>
<td>Range of item difficulty values</td>
<td>3-98%</td>
</tr>
<tr>
<td>Percent below 30%</td>
<td>8%</td>
</tr>
<tr>
<td>Percent within 30-70%</td>
<td>45%</td>
</tr>
<tr>
<td>Percent above 70%</td>
<td>47%</td>
</tr>
<tr>
<td>Average item difficulty</td>
<td>65.5%</td>
</tr>
<tr>
<td>Range of correlation values of items</td>
<td>0.06-0.48</td>
</tr>
<tr>
<td>Percent above 0.40</td>
<td>5%</td>
</tr>
<tr>
<td>Percent within 0.20-0.40</td>
<td>47%</td>
</tr>
<tr>
<td>Percent 0.05-0.19</td>
<td>38%</td>
</tr>
<tr>
<td>Percent below 0.05 or negative</td>
<td>9%</td>
</tr>
<tr>
<td>Average item correlation</td>
<td>0.21</td>
</tr>
</tbody>
</table>
APPENDIX K: REFERENCES USED FOR IDENTIFYING CONCEPTS, WRITING COMPETENCIES, AND CONSTRUCTING TEST ITEMS
References Used to Identify Concepts, Write Competencies and Test Items


Management and consumer education curriculum guide--advanced semester. 
Clemson, South Carolina: Clemson University, 1972.


Mouat, Lucia. The consumer fights back. Massachusetts: The Christian 

Troelstrup, Arch W. The consumer in American society. New York: 

Additional references used are listed in the references cited. Permission 
was granted by Graf (1975) to adapt selected questions from his 
instrument.