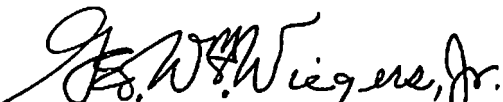


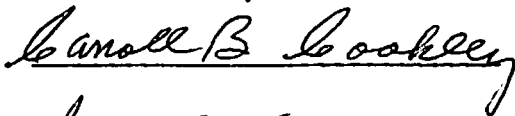
To the Graduate Council:

I am submitting herewith a dissertation written by Homer Ronald Moser entitled "Consumer Education Knowledge Possessed by Selected Four-Year and Community College Students in Tennessee." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Vocational-Technical Education.


George W. Wieggers, Jr., Major Professor

We have read this dissertation
and recommend its acceptance:







Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

CONSUMER EDUCATION KNOWLEDGE
POSSESSED BY SELECTED FOUR-YEAR AND
COMMUNITY COLLEGE STUDENTS
IN TENNESSEE

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

Homer Ronald Moser

June 1981

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Appreciation is also extended to his committee members: Dr. Carroll B. Coakley, Dr. Stanley C. Vance, and Professor George A. Wagoner.

Many thanks are extended the college instructors who generously cooperated in examining their students.

ABSTRACT

The purpose of this study was to construct valid, reliable consumer education objective tests and to determine whether consumer education knowledge of community college students and four-year students who had taken a consumer education course were better informed than those college students who had not taken the course. Also, an effort was made to determine if there were certain variables which influence a student's personal finance knowledge. The variables that were studied were: (a) age; (b) sex; (c) work experience; and (d) major.

Procedures of the Study. As a means of gathering the necessary data, it was necessary to examine 513 community college students and four-year college students in Tennessee. These students were asked to fill out a data sheet and take a 50, four-option, multiple choice items achievement test. The data were analyzed by using the t test and the analysis of variance with Duncan multiple range test.

Findings. Form A and Form B were not equated as indicated by a significant difference at the .05 level. Neither Form A or Form B reached an adequate level of reliability, although the reliability for Form B was greater than for Form A.

No significant difference of personal finance knowledge was found between those students who had and those students who had not taken a course in Personal Finance. No significant difference was found in the scores of community college students and four-year college students who took a course in Personal Finance. When the analysis of variance was applied to the four independent variables, age, work experience and major were significant at the .05 level. The variable, sex, was not significant at the .05 level.

Recommendations. Both Form A and Form B should be consolidated into one test of 50 to 60 questions in order to improve reliability. Considerable effort should be made to improve the quality of instruction and the way consumer education is currently being delivered in Tennessee.

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CHAPTER I

INTRODUCTION

Inflation continues. Consumer products are becoming more complex. Knowledge of consumer economics is more imperative than ever before. Almost every American home is affected by skyrocketing consumer prices.

Tennessee Statewide Consumer Education Program has stated that:

The latest government reports on personal income indicate that one family in five lives in poverty status in Tennessee. This means approximately 902,000 Tennesseans are faced with a constant struggle against financial insecurity and deprivation. In addition, those above the poverty level are faced with an erosion of their buying power due to a prolonged period of inflation.¹

In Tennessee, as in most every other state, in order to increase buying power, we must utilize better consumer prices. Consumers must be educated in ways to cut down costs so they can live on their incomes. Tennesseans find it difficult to reduce their standard of living in order to live within their incomes. Public institutions should assume the responsibility of teaching consumers how to buy and what to buy to avoid the pitfalls of the wasted dollar and a lower standard of living.

English conducted a survey of 273 consumer education teachers in Illinois to determine whether they felt qualified to teach consumer education. The results of this survey revealed that they did not. English concluded that "for many years it has been the goal of business teachers to teach students how to earn money. It is now time to

¹Tennessee Statewide Consumer Education Program, Partially Funded by Higher Education Act of 1965, Title I, Community Service and Continuing Education.

teach students how to spend money."² Teachers in the survey did not feel they had been trained to teach students how to spend money wisely.

Many consumers believe that there is nothing wrong with the way they manage the money they earn. Their problem, they say, is that they do not earn enough. For most consumers, however, the problem is not how much they earn, but the way they manage their money. There are few consumers who do not have to make decisions involving such things as: the use of credit, saving, housing, taxes, life and property insurance, budgeting and other related areas. Government officials, congressmen, businessmen, concerned citizens, and educators, who deal with the average citizen on a daily basis, have spoken out for the need for more and better consumer education.

Senator Moss (D-Utah) has advocated the idea that the community college is an excellent place to provide consumer education, particularly for those in lower income brackets:

Your colleges are capturing the imagination of the nation because you are making the term "community" mean something in higher education and there is no broader community interest to be served than the consumer interest.³

Government officials and other elected officials have called for increased formal and informal education of the American consumer.

Knauer, Special Assistant to President Ford for Consumer Affairs, has made the following comment about the need for consumer education.

²Donald English, "Let's Train Teachers for Consumer Education," Balance Sheet, LV:204, February 1974.

³Frank E. Moss, as quoted by R. Frank Mensel. "Federal Report." Community and Junior College Journal 42:1; October 1971.

Consumer education must help people understand the rights and responsibilities of an informed consumer in the free enterprise system.⁴

During the fall of 1971, several interested institutions of higher education, government agencies, and community groups developed a program that would meet the consumer education needs of Tennesseans. This program was supported by federal funds under HEA Title I. The program was directed to those who work with low-income consumers.⁵

The lack of knowledge concerning consumer education gave rise to some questions: Would a separate course in consumer education at the community college and higher education level help the student increase his knowledge over and above the normal increase in knowledge which would come about by taking other college-level courses and practical experience?

Would college-trained graduates possess the necessary knowledge to deal with the financial problems which confront them as citizens without formal training in consumer education? These questions led to the next discussion of the statement of the problem for the study.

A. STATEMENT OF THE PROBLEM

The purposes of this study were: (1) To construct valid, reliable consumer education objective tests and (2) To determine whether consumer education knowledge of community college and four-year college students in Tennessee who had taken a consumer education course were better informed than those college students who had not taken the course.

⁴Virginia H. Knauer, Consumer Education Reference Manual, Tennessee: State Agency for Title I, July 1976, p. 1.

⁵Ibid.

B. ANALYSIS OF THE PROBLEM

Three null hypothesis were formulated to expedite the analysis of data.

Ho₁: There is no significant difference between the consumer education knowledge of community college students and four-year college students in Tennessee who had taken a course in consumer education and those community college and four-year college students who had not taken a course in consumer education.

Ho₂: There is no significant difference between the consumer education knowledge of community college students and four-year college students who had taken a course in consumer education.

Ho₃: There is no significant difference between the consumer education knowledge of community college and four-year students who had taken a course in consumer education based on the following factors: (a) age; (b) sex; (c) work experience; and (d) major.

C. LIMITATION OF THE STUDY

A factor that should be accepted as a limitation of the study was the sample used. The majority of the students were concentrated in the schools of business. One cannot necessarily generalize the result of one school to other schools such as Humanities, Mathematics and Science, Allied Health, etc. Another limitation was the number of topics covered in a college class. Some of the classes that were tested were on the quarter system while others were taught on the semester system.

No specific criteria were established in advance for validity, reliability, and equality for the two tests that were developed. Equating

of the two forms of the test was not accomplished because they were not given to the same students. The use of dissertation abstracts instead of the original sources for many studies also means the limitations of procedural ideas.

D. DEFINITION OF TERMS

The following terms used in this study are defined here for the purpose of clarification.

Vocational Education - Specialized education which is organized to prepare the learner for entrance and progressing in the world of work. This specialized education should be designed to develop specific skills, knowledge, and attitudes in a given occupational area.

Consumer Education - Learning how to gain satisfaction by using personal and environmental resources to achieve the lifestyle preferred.⁶

Consumerism - A social movement to inform consumers so that they can make knowledgeable judgements regarding purchases of private and public goods.⁷

Consumer - An individual who purchases, or has the capacity to purchase, goods and services offered for sale by marketing institutions in order to satisfy personal or household needs, wants, or devices.⁸

⁶Benjamin M. Trooboff and Fannie Lee Boyd, Personal Finance for Consumers (New Jersey: General Learning Press, 1976), p. 13.

⁷Daniel A. McGowan, Consumer Economics (Chicago: Rand McNally College Publishing Company, 1978), p. 6.

⁸Glenn C. Walters, Consumer Behavior (Illinois: Richard D. Irwin, 1974), p. 5.

Community College - Is a two-year institution which grants an Associate degree that is financed by public funds.

Inflation - This term refers to the high cost of living. If money and credit exceed goods and services, there is a general level of price increase.

Knowledge - The ability to understand and remember facts.

Generalization - The process of forming a general conclusion to a class or situation based on a number of specific instances.

E. METHODS OF PROCEDURE

The various stages in the development and administration of the consumer education test were:

1. Selection of category areas
2. Identification of objectives
3. Selection of jury members
4. Validation of objectives
5. Construction of consumer tests
6. Administration of tests
7. A computer analysis of the test data

Selection of Category Areas

A review of the community colleges in Tennessee showed that eight schools offered a course in Consumer Education or Personal Finance. A course syllabus was requested from each of these eight community colleges which indicated the text and topical areas that were taught. After reviewing these outlines, five category tests were identified as being commonly taught in a consumer or personal finance course at the eight community colleges. These five topic areas were:

1. Transportation
2. Housing
3. Food
4. Clothing
5. Credit

Identification of Objectives

After scrutinizing the syllabi of the eight community colleges to determine the textbooks and content of the curriculum, 200 behavioral objectives were written. Each objective was written to be a specific and unambiguous statement.

After the objectives were developed, they were submitted to dissertation committee members for review and refinement.

Selection of Jury Members

A jury of teachers was needed to validate the objectives that were written for the five units on consumer education. Due to the limited number of four-year schools agreeing to participate in the study, only teachers from the eight community colleges were asked to serve as jury members.

Validation of Objectives

Validation of objectives was accomplished by instructing the jury members to rate the objectives on a scale that was partitioned into six places on a rating scale. The members were asked to circle one number on the scale for each objective. Instructions and a sample objective were shown as follows:

Please evaluate each objective by using the following scale:

5 = Essential; a must

4 = Important; should be included

3 = Nice to include, but its omission would not be serious

2 = Could be included, but does not add much to the content of the unit

1 = Omit, unnecessary

0 = Do not understand the objective

(Question #6 from Clothing Unit)

	Es- sen- tial					Un- nes- es- ary	Do not under- stand
6. Be able to identify the kind of information that FTC requires for permanent labels on textile products.	5	4	3	2	1		0

At the end of each set of objectives, the jury members were asked to add any objectives that they felt had not been included.

Construction of Consumer Tests

After a review of these objectives, a try-out consumer test was constructed having 130 questions with each having four alternative, multiple choice answers. This test was based on the rating of objectives by the consumer teachers. Objectives with an average rating of 4.50 or above were accepted for use in developing the questions. If a unit did not contain enough objectives rated 4.50 or above to complete a test, the next highest rated objectives were used in order to have the number of objectives needed for the test. The questions that were used on the try-out test were questions that had been used in previous studies and those written by the researcher. After the construction of the try-out test, it was administered to a pilot group of 115 randomly selected students to determine the difficulty and discrimination indices of the test items. Those questions within the range of 20 to 80 percent degree of difficulty with discrimination indices of 20 or above were used.

The consumer try-out test was also judged for clarity, grammar, difficulty, and appropriateness by four college consumer education professors. Some of the questions were eliminated and others revised. The questions were retyped, and the same four college consumer education

professors were asked to answer the questions to get agreement on the correct answer. Again, the questions were revised and some eliminated, leaving 100.

Administration of Tests

After analyzing the data to determine the most appropriate questions, a pre-test and post-test were constructed and printed in two booklets that were administered to 314 community college and four-year college students who were enrolled in a Consumer Education or Personal Finance course in Tennessee. A second group of students who had not taken a course in consumer education was also tested.

A Computer Analysis of the Test Data

Data generated by this study were treated by statistical method from the Statistical Analysis System (SAS). The population consisted of second-year business majors in community colleges and four-year institutions enrolled in a Consumer Education or Personal Finance course in the state of Tennessee. A pre-test and a post-test were given to the students using questions pertaining to the objectives and validated in previous studies. A second group of students who had not taken a course in consumer education was also tested.

A t test was used to compare community college students' scores on the achievement test with norms established for the four-year college students. A t test was also used to compare the similarities of those students who had not taken nor were they presently enrolled in a consumer course. Both groups were tested at the .05 level of significance. These students were tested with the constructed achievement test at the beginning

of the quarter. An analysis of variance with Duncan multiple range test was used to analyze the scores of those community college and four-year students who took a course in consumer education based on the following factors: (a) age; (b) sex; (c) work experience; and (d) major.

F. ORGANIZATION OF THE STUDY

The study was organized in the following manner:

Chapter I contains the introduction to the problem, statement of the problem, purpose of the study, analysis of the problem, limitation of the study, definition of terms, methods of procedure, and organization of the study.

Chapter II presents a review of the related literature and research.

Chapter III presents the methodology and research procedures used in the study.

Chapter IV presents an analysis of the data.

Chapter V contains the findings, conclusions, and recommendations.

The bibliography includes those books, periodicals, and unpublished dissertations which are referred to directly in the dissertation.

The appendices contain the correspondence and participants resulting in the process of developing the study:

Appendix A. Letter sent to jury members.

Appendix B. Directory of participating community and four-year schools.

Appendix C. Objectives used for unit tests.

Appendix D. Participating consumer jury members.

Appendix E. Consumer try-out test - difficulty and discrimination indices.

Appendix F. Sources of try-out questions.

- Appendix G. Consumer pre and post-tests
- Appendix H. Consent form.
- Appendix I. Data sheet.
- Appendix J. Answer sheet.
- Appendix K. Variable codes.
- Appendix L. Assignment of test items to subtopical areas.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter was to present a review of literature related to the areas of consumer education and personal finance. The resources of the libraries of The University of Tennessee, Knoxville; The University of Tennessee, Nashville; Vanderbilt University (Nashville, Tennessee); Peabody College (Nashville, Tennessee); and Volunteer State Community College (Gallatin, Tennessee) were used in the gathering of the material for this study.

Various researchers had written on topics dealing with different areas of consumer education. Some had developed and validated tests on topics dealing with such areas as money management, audit, insurance, housing, saving and investment. The reserach found that there was an increasing number of studies at the high school level dealing with the high school students' basic knowledge of business, but there had been few at the community college and four-year college level. There were thirteen studies that used college or adult people as subjects.

While the knowledge of consumer education at the high school level may be different from that at the community college or four-year school, it was valuable to know the extent of the students' consumer knowledge as they leave high school or enter college. For this reason, a number of studies that dealt with high school students were analyzed. There had been a number of studies that suggest the need for additional knowledge or secondary school students in consumer education.

The procedures used in conducting this study were described under the following headings: (A) research dealing with high school populations,

(B) research dealing with the general adult population, (C) research dealing with the community and four-year college populations.

A review of the literature appropriate to each of the three listed procedural steps was included within the chapter.

A. RESEARCH DEALING WITH THE HIGH SCHOOL POPULATION

General Knowledge. Jelly conducted a study to determine the money management knowledge of second-semester high school seniors. A test with 60 items was administered to 603 seniors in five high schools in the Cincinnati, Ohio area. The students were divided into three socio-economic classes by using the Minnesota Scale for Paternal Occupations. The students were also divided into three academic achievement groups on the basis of grade-point average which they earned during their last three years in high school. The test results and interview results indicated that of the seniors who participated in the study no significant difference existed between the performance of students from the upper and middle socio-economic groups on the section of the test which measured managing personal finances, but there were significant differences between the scores of the middle and lower groups. The study suggested that the lower socio-economic groups and lower academic achievement groups needed special teaching and training in consumer education to give them the understanding of good money management necessary to prevent their being exploited.⁹

⁹Herbert Mahlow Jelley, A Measurement and Interpretation of Money Management Understandings of Twelfth-Grade Students. Doctor's Thesis. (Cincinnati: University of Cincinnati, 1958), Dissertation Abstracts 19: 2295.

Yacyk conducted a study to determine what investment understandings corporate executives, investment bankers, investment company representatives, securities dealers, securities exchange representatives, and teachers of business and social studies believe should be included as a part of every student's general high school education and to determine the amount of this knowledge already possessed by twelfth grade students.

The underlying hypothesis tested in this study was that high school students are deficient in certain competencies of personal investment. The validity of the test was established by the preparation of two tests (each of which contained 50 items in a four-option multiple test arrangement) which were given to 58 students exposed to those investment understandings tested to develop discriminating test items. The reliability for each test was .86 using Kuder-Richardson's formula 20. From these two tests, questions for the final test were prepared. This test contained 47 questions and required one class period of 50 minutes for its administration. It was given to 2,320 seniors in 12 public high schools in Delaware County, Pennsylvania during May, 1964.

It was concluded as a result of the study:

Within the limits of this study, the hypothesis that high school students are deficient in certain competencies of personal investments was supported. Although ninety-one per cent of the students were exposed to an average of 2.5 courses which included some of the investment information tested, they scored low on a test which measured their knowledge in this area. The mean understanding score was 14.21; the median score 13.46.¹⁰

Roberts conducted a study designed to elicit information about consumer education materials, teacher perception of their ability, methodologies

¹⁰Peter Yacyk, A Study of Personal Investment Information at the Secondary School Level. Doctor's Thesis. (Philadelphia, Pennsylvania: Temple University, 1965), Dissertation Abstracts 26: 5106.

used to employ them, as well as information about the nature of the course and its design.

Questionnaires were sent to all consumer education and economics teachers in the state of Kansas (72 and 85 respectively). Responses were obtained from 78 percent of the consumer education teachers and 75 percent of the economics teachers. It was concluded:

Based upon the results of the questionnaires, consumer education appears to emphasize practical knowledge with almost equal emphasis on skills and experience-centered content. One could conclude that those involved in teaching consumer education view it as an applied discipline with somewhat less emphasis on theoretical content analysis, or what has come to be known as structure.¹¹

Hawkins conducted a study to determine the amount of knowledge high school graduates retain in a consumer education class. The population for this study was 396 students randomly selected from 1972 graduating classes from ten schools in the state of Kansas. These students were divided into two groups. Group I included those students who had taken a consumer education course as a high school senior. Those who had not taken the consumer education course were assigned to Group II. It was concluded:

It appears that a consumer education course had little significant effect upon the responses given by graduates two years after completing the course when compared with the responses given by a similar group who had not taken the course.

During the two years following high school graduation, those who did not enroll in a consumer education course managed their money, used credit, borrowed money, and made purchases very much like those who had been given instruction in those areas.¹²

¹¹Dean Breckenridge Roberts, Consumer Education in Kansas Secondary Schools. Doctor's Thesis. (Lawrence: University of Kansas, 1974), Dissertation Abstracts 35-A: 5789-90.

¹²Calvin H. Hawkins, A Follow-up Study to Determine the Use of Selected Consumer Education Concepts by High School Graduates. Doctor's Thesis. (Greeley: University of Northern Colorado, 1975), Dissertation Abstracts 36-A; 2580-81.

Stanley developed a valid and reliable standardized test consisting of two equivalent forms to measure the knowledge of Illinois public secondary school students in the 14 areas of consumer education, as outlined in the Illinois Revised Guidelines for Consumer Education, 1972. On Form A, students who had completed a course in consumer education had a mean score of 26.012, with a standard deviation of 7.128, and a reliability coefficient of .795. Students who had not completed a course in consumer education had a mean score of 21.064, with a standard deviation of 6.173, and a reliability coefficient of .747. After testing 7,683 students in grades 8-12, he concluded that:

The test is valid when used to measure the knowledge outlined in the Illinois Guidelines for Consumer Education, revised edition, 1972. Reliability coefficients for the groups tested range from .70 to .86. Both forms are equivalent measuring instruments and measure equivalent growth in student mean scores as students progress from one grade level to another. Data also indicate that students in Illinois are not mastering the key concepts outlined in the 1972 Illinois Guidelines.¹³

Dalaba developed a criterion-referenced test for 18 content areas of consumer education units of instruction as suggested in the state of Illinois publication, Consumer Education in Illinois Schools: Grades 8-12. This study was conducted for the purpose of designing tests that could be used as measuring devices applicable to consumer education in Illinois.¹⁴

Strunk constructed two valid and reliable insurance tests to be used as pre-tests and post-tests by high school general business teachers,

¹³Thomas O. Stanley, The Development of the Test of Consumer Competencies. Doctor's Thesis. (DeKalb: Northern Illinois University, 1976).

¹⁴Barry Arnold Dalaba, The Validation of Objectives and Development of Criterion-Referenced Tests for Eighteen Units in Consumer Education. Doctor's Thesis. (DeKalb: Northern Illinois University, 1978).

and to assist teachers in evaluating their effectiveness and their students' achievement.

Validity for the tests was established by presenting 226 test items to a jury of two general business textbook authors, two insurance agents, and two educators.

The validity of the tests was to be at least .87 and the criteria were met for both tests. The reliability for Form X was .92 and for Form Y was .93.¹⁵

Work Experience Variable. Educational researchers have been interested to learn whether a student in a high occupational skill class would possess a greater knowledge of personal finance than a student who was in a lower occupational skill class. Beattie gathered data to determine the relationship between information possessed and the direction of one's attitude toward personal finance. The population for this study was composed of over 500 pupils enrolled in 23 consumer education classes in Minnesota high schools. The reliability coefficient for the total Consumer Information Test was estimated to be .78 with a range of .44 to .57 on the four scales. It was concluded that: "The students of higher socio-economic classes have more useful information in both credit, insurance, saving and investment than those of lower socio-economic status."¹⁶ Inacker confirmed Beattie's study after conducting a similar study of 286 twelfth-grade students in Camden County, New Jersey to determine the extent of personal finance information possessed by selected students and

¹⁵Flonnie Strunk, "The Development of Valid and Reliable Insurance Tests for Secondary School General Business Classes," Unpublished Doctoral dissertation. (The University of Tennessee, Knoxville, 1967).

¹⁶Arthur Donald Beattie, Relationships Between High School Pupils' Information and Attitudes Toward Personal Finance. Doctor's Thesis. (Minneapolis: University of Minnesota, 1962), Dissertation Abstracts 23: 491.

its relationship to their personal finance attitudes and their socio-economic status. The null hypothesis for this study was tested:

That no significant relationships exist between selected high school students' attitudes toward and understandings of four areas of personal finance (money management, credit, insurance, saving and investments) and their socioeconomic status.¹⁷

Based on the finding of the study the null hypothesis was rejected in all cases.

Sex Variable. Educational researchers have also been eager to learn whether males or females were better prepared to handle their personal finances. Thompson conducted a study dealing with the consumers' understanding of credit. He constructed a valid, reliable instrument for the measurement of consumer credit knowledge of high school seniors. This instrument was to aid in the improvement of the teaching and the learning of consumer credit. He concluded that:

1. The test written for this research study is more difficult than the typical teacher-made test.
2. The computation of interest charges remains the most difficult topic in the study of consumer credit.
3. More emphasis should be placed on the teaching of consumer credit knowledges in the high school, with specific attention to the problem of computing interest charges.
4. The consumer credit knowledge of males and females do not differ significantly.¹⁸

Beattie noted that: "The males were better prepared than females in both insurance and in saving and investments."¹⁹

¹⁷Charles John Inacker, Jr., Personal Finance Attitudes and Understandings of Selected Camden County, New Jersey High School Seniors: A Comparative Study. Doctor's Thesis. (Philadelphia, Pennsylvania: Temple University, 1973), Dissertation Abstracts 34-A: 1483.

¹⁸Norman S. Thompson, The Measurement of Consumer Credit Knowledges. Doctor's Thesis. (Greely: Colorado State College, 1965).

¹⁹Beattie, op. cit.

B. RESEARCH DEALING WITH GENERAL ADULT POPULATION

General Knowledge. There have been several studies that used the adult population as samples. Wellman tried to determine the extent of managers' and nonmanagers' understanding of personal economics. The study was an attempt to identify deficiencies in personal economic understandings of managers and nonmanagers, and to evaluate the significance in the difference in the mean performance of managers and nonmanagers as measured by Forkner's Achievement Test of Personal Business Knowledge and Understanding, Form A. He concluded that:

1. Managers, generally, in their personal economic understandings in all content areas, had a lower per cent deficiency than nonmanagers.
2. All managers and nonmanagers exhibited some deficiencies in all content areas of personal economic understandings of (a) budgeting, (b) wise buying, (c) wise use of goods and time, (d) using bank facilities, (e) consumer credit, (f) thrift, (g) insurance and pensions, (h) housing, (i) legal information, (j) understanding tax forms, and (k) vocational information.
3. Both managers and nonmanagers had greater deficiencies in question content areas of insurance, credit, buying, and vocational information.²⁰

Benson used adult population to determine ways to improve the content of consumer education offerings through a study of consumers' reasons for returning goods. Also, he wanted to determine the real difficulties consumers have with the task of intelligent product selection. The investigator interviewed 100 consumers, 17 sales clerks, five managers, 11 teachers, and two school officials. Returns were audited during a period of one week at two stores in the chain store systems.

After an examination of the data on returns, it was concluded:

1. There are many opportunities for educators in secondary schools to be more helpful to consumers.

²⁰Ora Max Wellmann, A Comparative Study of Personal Economic Understandings of Management and Nonmanagement Personnel in Business and Industrial Firms. Doctor's Thesis. (Norman: University of Oklahoma, 1975), Dissertation Abstracts 36-A: 1990-91.

2. The rate of returns could be greatly reduced if consumers had access to certain basis buying information.
3. Ready-to-wear merchandise resulted in the largest proportion of returns.
4. Courses embodying consumer education content were primarily available on an elective basis.
5. There was varied content in the units on consumer education offered in the general business and home economic classes.²¹

Baxley sought to determine what the consumer knows about certain aspects of consumer preference and his expectations in complaint processes. The major focus of this research is based on three questions: 1. What type of problems lead to complaints? 2. What are the preferences of consumers as to procedures to follow in the complaint process? 3. What are the preferable action expectations of consumers in the complaint process? It was concluded that "consumers are unaware of the existence of public and private agencies as parties to whom a complaint may be directed."²²

Arbaugh conducted a research project to determine the influence of consumer and product characteristics on the usage of the care label information. Data was coded and analyzed from 770 store interviews, 402 mail questionnaires, and 383 telephone interviews. She concluded that:

The low awareness and usage rates should not be considered as evidence against the long-term usefulness of Permanent Care Labeling. Rather, the need for increased promotional efforts to inform consumers of the availability of care information should be evident.²³

²¹Earnest Benson, Improving Consumer Education in Louisiana High School Through Analysis of Returned Goods in the Shreveport Metropolitan Area. Doctor's Thesis. (Fayetteville: University of Arkansas, 1972), Dissertation Abstracts 33-A: 2066.

²²Edwin Cooper Baxley, Jr., An Exploratory Analysis of Consumer Preferences and Expectations of Complaint Processes. Doctor's Thesis. (Baton Rouge: The Louisiana State University and Agricultural and Mechanical College, 1975), Dissertation Abstracts 36-A: 8162.

²³Joyce Eileen Arbaugh, Profiling the Textile/Apparel Consumer: A Study of the Usage of Care Label Information. Doctor's Thesis. (Columbus: The Ohio State University, 1974), Dissertation Abstracts 35-B: 2296.

Tucker concluded after conducting a study to determine consumers' knowledge of concepts related to beef quality, nutritive value of beef, and preparation of it "that the consumers' knowledge of the concepts presented was rather low."²⁴

Knowledge of Insurance. Do adults understand the basic concept of life or home insurance? A limited number of studies have been conducted to determine the consumer's understanding of insurance. Watson studied the problem. The purpose of the study was to provide a basis for improving buyer understanding of life insurance and home buying. He concluded that:

1. There appears to be a distinct and extensive body of life insurance information--and understanding of which buyers should have.
2. The general level of buyer understanding of life insurance is lower than it should be to assure efficient consumership.
3. It appears that background experiences of adults--both school and nonschool--have not adequately prepared them for effective consumership in the area of life insurance.
4. Opportunities for high school students to acquire life insurance understanding are inadequate if not entirely lacking.²⁵

Myrold also conducted a study to determine the consumer's knowledge of personal insurance in Crookston, Minnesota.²⁶

Knowledge of Housing. Few have sought to identify consumer knowledge of home buying. Everard collected data through interviews with 45 housing

²⁴Duana H. Tucker, The Relationship of Selected Variables to Consumer Knowledge of Beef in Selected Areas of Mississippi. Doctor's Thesis. (Baton Rouge: The Louisiana State University and Agricultural and Mechanical College, 1975), Dissertation Abstracts 36-A: 8162.

²⁵Jewel Watson, Buyer Understanding of Life Insurance. Doctor's Thesis. (Blomington: Indiana University, 1963), Dissertation Abstracts 24: 5102.

²⁶Donald D. Myrold, An Analysis of the Knowledge Possessed By A Random Population in the City of Crookston, Minnesota, Relative to the Fundamental Principles of a Minimum Program of Personal Insurance, Its Purchase and Use. Master's Thesis. (Grand Forks: The University of North Dakota, 1962).

specialists, 26 real estate brokers, 11 home-loan offices, and eight attorneys in Bloomington and Columbus, Indiana seeking to identify the area of knowledge about which home buyers needed understanding. For his study he was able to make the following recommendations:

From buyers' lack of knowledge and understanding pertaining to home buying, it would seem that any attempts to educate home buyers have been relatively ineffective. Educational institutions, particularly the secondary school and adult education programs; the housing industry; and home buyers themselves, are key groups which should assume the responsibility for home-buyer education and take concerted action for its improvement.²⁷

VandeBerg also tried to ascertain the educational needs of prospective homeowners.²⁸

Knowledge of Credit. There have been a few researchers who sought to determine consumers' knowledge of credit. Healey concluded after a study of young married people (18-24) in Lansing and East Lansing, Michigan to determine their understanding and use of credit that: "There is a significant use of installment credit by young married people, but there is also a significant lack of credit knowledge existing on the part of the consumer and the suppliers."²⁹

McHugh investigated the extent to which young urban couples use consumer credit in establishing the households. She studied the socio-economic status of consumers and the use they made of credit. She concluded

²⁷Kenneth Eugene Everard, An Identification of Areas of Knowledge About Which Home Buyers Needed Understanding. Doctor's Thesis. (Bloomington: Indiana University, 1962).

²⁸Loyd Wallace VandeBerg, Educational Needs of Prospective Homeowners Concerning the Acquisition and Ownership of a House. (Columbia: University of Missouri, 1955), Dissertation Abstracts 16: 491-2.

²⁹Philip Basil Healey, The Knowledge and Use of Consumer Installment Credit By Young Married People of the Lansing, Michigan Area. Doctor's Thesis. (East Lansing: Michigan State University, 1963), Dissertation Abstracts 24: 1867-68.

that: "Generally, people of high socioeconomic status used credit more frequently, for more purposes, but for shorter durations than those of low status."³⁰

Preston concluded a study in Denver, Colorado to determine the rationale of the wage earner and bankruptcy petitioners concerning their financial problems and their choice of either the wage earner plan or bankruptcy to solve them. Forty-eight wage earners and 48 bankrupts especially selected for their potential as successful wage earner candidates were included in this study. He concluded that:

1. Denver area merchants lost at least \$1,000,000 during the twelve months covered by this study to petitioners choosing bankruptcy who were as financially capable of filing a wage earner plan as those who actually chose that option.
2. Credit granting institutions using aggressive advertising and credit selling techniques are partially to blame for financial difficulties of the petitioners included in this study.
3. A majority of the bankrupts in this study were not aware of the wage earner plan.
4. With few exceptions, petitioners interviewed were ashamed of the fact they had to resort to the bankruptcy court to solve their financial problems.
5. Attorneys were often the influencing factor in the petitioner's decision to choose the wage earner plan.
6. The majority of petitioners would willingly accept instruction in financial management.³¹

Sex Variable. Spitze concluded after investigating a selected group of women at the Knoxville Adult Education Center to determine their knowledge and use of consumer credit that:

1. Women make or participate in many decisions regarding credit use.
2. Women's knowledge about consumer credit is rather meager.

³⁰Helen Frances McHugh, Differentials in Uses of Consumer Credit By Young Urban Families. Doctor's Thesis. (Ames: Iowa State University of Science and Technology, 1965), Dissertation Abstracts 26: 5754.

³¹William J. Preston, A Comparison of the Rationale and Socio-Economic Characteristics of Straight Bankruptcy and Chapter XIII Petitioners in the Denver, Colorado Area. Doctor's Thesis. (Greeley: Colorado State College, 1969), Dissertation Abstracts 30-A: 4078-79.

3. Those with higher educational levels have greater knowledge of credit.
4. Those with greater credit knowledge pay lower rates for their credit.
5. The amount of credit that women use is greatly influenced by their attitude toward credit use.
6. Those with little credit knowledge tend to hold extreme attitudes.
7. The majority of women want to learn more about credit.
8. About half of the women have no idea where to get more information.³²

C. RESEARCH DEALING WITH COLLEGE POPULATION

General Knowledge. Several reseachers have attempted to use community colleges and four-year colleges as subjects for their studies. Ogden constructed an achievement test at Colorado State College in 1964 to measure financial understandings, knowledges possessed by selected college students. The test was administered to 833 coeducational students at eight state supported colleges and universities located in eight different states in the Midwest and Rocky Mountain areas. The achievement test was constructed from approximately 100, four option, multiple choice items. During the two pre-tryouts of the test at Colorado State College and the University of Colorado, test items were re-edited, reconstructed, and revised as the need was indicated. The final test form consisted of 60, four option, multiple choice items to be administered in a 50-minute class period. The reliability of the test was .74 using Kuder-Richardson 20 formula. Among his conclusions were the following:

1. It is believed that the college Achievement Test in Personal Finance is a valid and reliable measuring instrument and can be used within the limitations prescribed in this study.

³²Hazel Taylor Spitze, The Relation Between Selected Women's Knowledge and the Use of Consumer Credit: A Basis for Adult Education Program Planning. Doctor's Thesis. (Knoxville: The University of Tennessee, 1961).

2. It is believed that this test may be used as a means of permitting students to "test out" of a personal finance course with the local college or university using their judgment as to the proper cut-off point for "passing or failing" the test.
3. The College Achievement Test in Personal Finance might be used to prove or disprove a need for enlarging or diminishing the offerings of such a course as personal finance on the college or university level.
4. The College Achievement Test in Personal Finance might supplement local evaluation instruments in the final evaluation of students enrolled in a course in personal finance.³³

Curtis used the Ogden test to measure personal finance achievement of students in nine states at 15 community colleges. From the findings, he drew the following conclusions:

Although the course Personal Finance does not significantly increase the personal-finance knowledges of business majors in the participating community colleges, it appears that it does not bring the students up to a minimal level of achievement.³⁴

Bernardi also used the Ogden test to compare the knowledge of personal finance possessed by students completing a formal course with that possessed by a similar group of students who had not taken a formal course. The study was conducted in the spring, 1969 semester at the University of Oklahoma. There were two groups of subjects used for the research:

1. Students enrolled in a personal finance course.
2. Students enrolled in education classes who were not enrolled in personal finance.

The following conclusions were generalized from the study.

1. While it is generally recognized that education relating to business at the collegiate level is at present almost entirely devoted to

³³Russell L. Ogden, The Construction and Standardization of An Achievement Test Designed to Measure Personal Financial Knowledge, Understandings, and Applications Possessed By Selected College Students. Doctor's Thesis. (Greeley: Colorado State College, 1964).

³⁴Alan Robert Curtis, A Study of the Personal Finance Knowledge Possessed By Selected Community College Business Majors as Related to Certain Factors. Doctor's Thesis. (Storrs: The University of Connecticut, 1978).

education classified as either vocational or professional, evidence in this study indicates that certain personal aspects of finance and business can make a substantial contribution to the general education of all college students.

2. Students who participate in a collegiate-level personal finance course acquire considerable practical knowledge about the meaning of money and its uses in modern-day living. They gain the potential ability required to better administer their own personal finances and eventually to reach the goals of financial stability.

3. This investigation corroborates the conclusions of other researchers that students can more significantly increase their basic knowledge and understanding of money management in actual classroom situations than in their normal everyday experiences.³⁵

Bibb designed a multiple-choice consumer information test with 65 items with a reliability coefficient of .80 and administered it to 1,058 university freshmen in Indiana, Illinois, and Wisconsin. One conclusion was that:

When personal data is used as the criterion for grouping university freshmen, high school graduating class rank most frequently influences scores on the total test, followed by suburban or small city residence, when compared with large city residence.³⁶

Richardson also constructed consumer education tests as The University of Tennessee with alternate forms to meet selected criteria for measuring knowledge and possible behavior of consumers in purchasing certain goods and services. Richardson constructed a 20-page outline using major Consumer Price Index categories and sent the outline to a jury of five consumer education experts who rated each topic on importance and appropriateness. Two booklets were constructed with a reliability

³⁵Ray Dee Bernardi, The Collegiate Course in Personal Finance: Measurement of Learning Accomplished By Selected College Students. Doctor's Thesis. (Norman: The University of Oklahoma, 1969).

³⁶Frances Gloria Bibb, A Comparative Study of the Knowledge of Three Aspects of Consumer Education Possessed By Selected Indiana, Illinois, and Wisconsin University Freshmen. Doctor's Thesis. (DeKalb: Northern Illinois University, 1971).

coefficient of .78 for Booklet No. 1 and a reliability coefficient of .98 for Booklet No. 2. She recommended that:

1. All final test forms should be administered to samples of experienced, educated adult consumers and comparisons made between people of various groups on the basis of age, geographical location, income bracket, insurance, and credit.
2. Tests similar to those resulting from this study should be constructed on other consumer topics such as consumer protection, responsibilities, money management, decision-making, savings, investments, taxes, insurance, and credit.
3. The procedures used in administering the initial test should be replicated for each final test, using the alternate forms for test-retest to establish measures of equivalence and reliability. The t test should be used to determine whether there is a significant difference between the difficulty of the two forms. Standard scores and percentile norms could be established.
4. Alternatives of some items should be revised to improve their difficulty and discriminatory power. After trial use, difficulty and discrimination indices should be recalculated to see if pairs of tests yield the results expected.³⁷

Price stated in a study on the status of consumer education courses in colleges and universities that:

A limited amount of research has been done with consumer education at the college level and there are very few studies with which the data collected in this investigation may be compared. However, the important studies and literature related to the secondary level have definite implications for the college courses, particularly at the junior college level.³⁸

Work Experience Variable. Smith conducted a study at the University of Rhode Island to determine the effect of certain attitude and achievement variables on the consumer finance scores of 346 female college students. She found that:

Work experience has an effect on attitudes and achievement. Since students who had worked always performed better on both

³⁷Lovella Stoll Richardson, Construction of Valid Consumer Education Tests for Adults on Purchasing and Conserving Goods and Services. Doctor's Thesis. (Knoxville: The University of Tennessee, 1976).

³⁸Wilmoth C. Price, The Status of Consumer Education Courses in Colleges and Universities. Doctor's Thesis. (Minneapolis: University of Minnesota, 1953), p. 10. Dissertation Abstracts 13: 1048-49.

surveys, then it would appear to be desirable for students to have employment in order to improve their understanding and their appreciation of personal finance.³⁹

Knowledge of Credit. Buswell sought to determine the credit knowledge of 400 college students at the University of Iowa. Among her conclusions were:

1. Personal traits exhibited a weak relationship with consumer credit behavior.
2. Consumer credit behavior is related to age, place of student residence, marital status, income, and level of education attained.
3. More objective sources of credit information and guidance are needed by applicants and debtors to counteract vested interests.
4. Students are mobile and tend to use credit.⁴⁰

D. SUMMARY

This chapter has presented a review of the literature in the field of consumer education. The literature was viewed from different standpoints. A limited number of research studies had been conducted at the four-year level and only one study was conducted at the community college level. Most of the studies conducted at four-year colleges found a significant lack of consumer knowledge. It was found that a course in consumer education or personal finance significantly increased students' knowledge, but there were not enough studies to reach a conclusion that there is a significant increase in knowledge or consumer education by students who took consumer education courses over those students who did not take such courses.

³⁹Kathleen Frances Smith, Consumer Finance Attitudes and Achievement of College Students. Doctor's Thesis. (Boston: Boston University, 1973), p. 82. Dissertation Abstracts 13: 1048-49.

⁴⁰Henrietta Arlene Buswell, An Analysis of Consumer Credit Behavior of a College Market. Doctor's Thesis. (Iowa City: The University of Iowa, 1975), Dissertation Abstracts 36-A: 7821.

Based on a study conducted at the community college level, it was concluded that a course in consumer education caused a significant increase in consumer knowledge. This study indicated that a course in consumer education was very worthwhile for community college students. It was recommended that every community college should offer a course in Personal Finance or Consumer Education as an elective, if not as a requirement. There were also a number of studies completed at the high school level. A number of these studies indicated deficiency in consumer or personal finance knowledge.

CHAPTER III

PROCEDURES OF THE STUDY

The purpose of this study was to construct valid, reliable consumer education objective tests and to determine whether consumer education knowledge of community college and four-year college students in Tennessee who had taken a consumer education course were better informed than those college students who had not taken the course. To answer the basic questions relating to the purpose, the following procedures were used: (A) three basic hypotheses were developed; (B) the selecting of community and four-year colleges; (C) the cooperation of seven community colleges and four four-year colleges; (D) the selection of consumer category areas; (E) the identification of consumer objectives; (F) the selection of jury members; (G) the validation of consumer objectives; (H) the construction of consumer tests; (I) the administration of the tests; and (J) the collection and organization of the data.

A. HYPOTHESES OF THE STUDY

The basic hypotheses of this study, stated in null form, are as follows:

Ho₁: There is no significant difference between the consumer education knowledge of community college students and four-year college students in Tennessee who had taken a course in consumer education and those community college and four-year college students who had not taken a course in consumer education.

Ho₂: There is no significant difference between the consumer education knowledge of community college students and four-year college students who had taken a course in consumer education.

H₀₃: There is no significant difference between the consumer education knowledge of community college and four-year students who had taken a course in consumer education based on the following factors: (a) age; (b) sex; (c) work experience; and (d) major.

B. SELECTION OF COMMUNITY COLLEGES AND FOUR-YEAR SCHOOLS

The task of selecting the community colleges and four-year schools to be included in the study was accomplished by reviewing catalogs to determine whether:

1. The colleges in Tennessee offered a course in Consumer Education or Personal Finance.
2. The college offered concentrations within the business major in at least four of the following areas: (a) Accounting; (b) Secretarial; (c) Banking or Finance; (d) Marketing or Retailing; and (d) Management.
3. The college provided opportunity to take elective courses in the five majors.

A review of the community colleges and four-year schools in Tennessee showed that eight community colleges and 17 four-year schools offered a course in Consumer Education or Personal Finance.

C. SECURING COLLEGE COOPERATION

Letters were mailed to these 25 colleges in Tennessee, all of which met the above three criteria, explaining the purpose of the study and requesting the opportunity to examine their students (Appendix A). Many ^{no, this is not the letter in Appendix A!} telephone calls were also made to answer questions pertaining to the study. Only one community college refused to participate in the study. The reason stated on the return letter was that Personal Finance was in

the catalog, but would not be offered in 1979-80. At the beginning of the fall quarter, 1979, seven community colleges and four four-year colleges agreed to participate in the project. The 11 schools examined were:

- * 1. Austin Peay State University, Clarksville, Tennessee
- 2. Columbia State Community College, Columbia, Tennessee
- 3. Dyersburg State Community College, Dyersburg, Tennessee
- * 4. Johnson Bible College, Knoxville, Tennessee
- 5. Jackson State Community College, Jackson, Tennessee
- 6. Motlow State Community College, Tullahoma, Tennessee
- * 7. Middle Tennessee State University, Murfreesboro, Tennessee
- 8. Roane State Community College, Harriman, Tennessee
- * 9. Tennessee Technological University, Cookeville, Tennessee
- 10. Volunteer State Community College, Gallatin, Tennessee
- 11. Walters State Community College, Morristown, Tennessee

*Participating Four-Year Schools

See Appendix B for the complete listing of the names and addresses of cooperating faculty members.

D. SELECTION OF CATEGORY AREAS

A review of the community colleges in Tennessee showed that eight schools offered a course in Consumer Education or Personal Finance. A course syllabus was requested from each of these eight community colleges which indicated the text and topical areas that were taught. After reviewing these outlines, five category areas were identified as being commonly taught in a consumer or personal finance course at the eight community colleges. These five topic areas were:

1. Transportation
2. Housing
3. Food
4. Clothing
5. Credit

E. IDENTIFICATION OF OBJECTIVES

After scrutinizing the syllabi of the eight community colleges, the textbooks and contents of the curriculum, 200 behavioral objectives were written. Each objective was written to be a specific unambiguous statement.

After the objectives were developed, they were submitted to dissertation committee members for review and refinement. Many of the objectives were rewritten one or more times to enhance their acceptability. A complete list of objectives is shown in Appendix C.

F. SELECTION OF JURY MEMBERS

A jury of teachers was needed to validate the objectives that were written for the five units on consumer education. Due to the limited number of four-year schools agreeing to participate in the study, only teachers from the eight community colleges were asked to serve as jury members. A list of participating consumer educators is shown in Appendix D.

G. VALIDATION OF OBJECTIVES

Validation of objectives was accomplished in the following way:

1. A topical analysis of college Personal Finance or Consumer Education textbooks was undertaken to determine the topic areas that were taught in the majority of the eight cooperating community colleges.

2. To verify the consumer education topics taught, as indicated by the textbooks, community college instructors who were teaching or who had taught a course in consumer or personal finance were asked to check the importance of the subtopical areas in each of the five major categories.

3. These jury members were asked to rate the objectives on a scale that was partitioned into six places on a rating scale. These jury members were asked to circle one number on the scale for each topical area objective on "5-4-3-2-1" basis. The jury members were asked to weigh the topical areas on the basis of the following scale:

5 - Essential; a must

4 - Important; should be included

3 - Nice to include, but its omission would not be serious

2 - Could be included, but does not add much to the content of the unit

1 - Omit; unnecessary

0 - Do not understand the objectives

At the end of each set of objectives, the jury members were asked to add any objectives that they felt had not been included. Appendix C gives the mean rating of each objective as determined by the eight community college teachers. The average rating was obtained by taking the average of the 1 to 5 rating of each teacher. If the zero was marked, which indicated that the jury member did not understand the objectives, a different N was used for that objective. Tables 1 through 5 report the ratings for all objectives by jury members for the five topic areas.

TABLE 1
RATINGS FOR ALL OBJECTIVES BY JURY MEMBERS
FOR THE AREA OF TRANSPORTATION

Ratings	Percent of Objectives	Number of Objectives
4.51 - 5.00	7%	3
4.01 - 4.50	22%	9
3.51 - 4.00	22%	9
3.01 - 3.50	34%	14
3.00 and Below	15%	6

TABLE 2
RATINGS FOR ALL OBJECTIVES BY JURY MEMBERS
FOR THE AREA OF HOUSING

Ratings	Percent of Objectives	Number of Objectives
4.51 - 5.00	5%	2
4.01 - 4.50	23%	9
3.51 - 4.00	34%	14
3.01 - 3.50	23%	9
3.00 and Below	15%	6

TABLE 3
RATINGS FOR ALL OBJECTIVES BY JURY MEMBERS
FOR THE AREA OF FOOD

Ratings	Percent of Objectives	Number of Objectives
4.51 - 5.00	0%	0
4.01 - 4.50	23%	9
3.51 - 4.00	50%	20
3.01 - 3.50	25%	10
3.00 and Below	2%	1

TABLE 4
RATINGS FOR ALL OBJECTIVES BY JURY MEMBERS
FOR THE AREA OF CLOTHING

Ratings	Percent of Objectives	Number of Objectives
4.51 - 5.00	0%	0
4.01 - 4.50	10%	4
3.51 - 4.00	28%	11
3.01 - 3.50	40%	16
3.00 and Below	22%	9

TABLE 5
RATINGS FOR ALL OBJECTIVES BY JURY MEMBERS
FOR THE AREA OF CREDIT

Ratings	Percent of Objectives	Number of Objectives
4.51 - 5.00	21%	8
4.01 - 4.50	63%	25
3.51 - 4.00	15%	6
3.01 - 3.50	0%	0
3.00 and Below	0%	0

The mean rating for the unit on Transportation ranged from a high of 4.55 for two objectives to a low of 2.55 or below for three objectives. The average rating for all of the objectives in this unit was 3.29.

The mean rating for the unit on Housing ranged from a high of 4.78 for one objective to a low of 2.44 or below for three objectives. The average rating for all the objectives in this unit was 3.63.

The mean rating for the unit on Food ranged from a high of 4.44 for one objective to a low of 2.89 for one objective. The average rating for all the objectives in this unit was 3.62.

The mean rating for the unit on Clothing ranged from a high of 4.11 for two objectives to a low of 2.66 or below for four objectives. The average rating for all the objectives in this unit was 3.37.

The mean rating for the unit on Credit ranged from a high of 4.77 for one objective to a low of 3.56 for one objective. The average rating for all objectives for this unit was 4.27.

H. CONSTRUCTION OF CONSUMER TESTS

After a review of the consumer objectives, a try-out consumer test was constructed having 130 questions with four alternative multiple choice answers (Appendix E). This test was based on the rating of objectives by the consumer teachers. Objectives with an average rating of 4.50 or above were accepted for use in developing the questions. If the unit did not contain enough objectives rated 4.50 or above to complete a test, the next highest rated objectives were used in order to have the number of objectives needed for the test. The questions that were used on the try-out test were questions that had been used in previous studies and those written by the researcher (Appendix F). Four college professors, who were teaching or had taught consumer education, were asked to review the objective of the five topical areas to determine if those objectives matched the questions on the try-out test. Some of the consumer try-out questions were rewritten to conform with topical objectives.

The four college professors were:

1. Dr. Betty Brown, The University of Tennessee, Knoxville, Tennessee
2. Dr. Lovella Richardson, Johnson Bible College, Knoxville, Tennessee
3. Mr. George Wagoner, The University of Tennessee, Knoxville, Tennessee
4. Mr. Paul McClellan, Volunteer State Community College, Gallatin, Tennessee

After the construction of the try-out test, it was administered to a pilot group of 115 randomly selected students at Volunteer State Community College, Gallatin, Tennessee. Appendix E indicates the difficulty and discrimination indices for the 130 multiple choice questions. Those items having a difficulty index between .20 and .80 and a discrimination index of .20 or above were used to prepare the final forms of the test.

The consumer try-out test was also judged for clarity, grammar, and difficulty by the four college consumer education professors named above. Some of the questions were eliminated and others revised. The questions were retyped, and the same four professors were asked to answer the questions to get agreement on the correct answers. Again, the questions were revised and some eliminated, leaving 100. Appendix L shows the questions in test A and B by category and the discrimination and difficulty index of each item.

I. ADMINISTRATION OF THE TEST

After analyzing the data to determine the most appropriate questions, a pre-test and post-test (Appendix E) were constructed and printed in two booklets. These pre and post-tests were administered to 314 students of community or four-year colleges who were enrolled in a Personal Finance course in Tennessee. A second group of students who had not taken a course in consumer education was also tested in Tennessee.

Table 6 reports the name of schools, the number of tests given, pre-tests or post-tests, and the date of the administration. There were two attachments to the pre-test and post-test. Attachment A contained the consent form (Appendix H) for each student participating in the study. The definition of the consent form is as follows:

"Informed consent" means the knowing consent of an individual or his legally authorized representative, so situated as to be able to exercise free power of choice without undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion.⁴¹

⁴¹U.S. Federal Register, Vol. 40, No. 50, (46.3c), Thursday, March 13, 1975.

TABLE 6

ADMINISTRATION OF PRE AND POST-TEST FORM BY COLLEGE
FOR STUDENTS TAKING PERSONAL FINANCE

Name of School	Date Administered	Pre-Test And Form	Pre-Test And Form
Austin Peay	Winter 1980	34-B	28-A
Dyersburg State	Winter 1980	37-A	27-B
Johnson Bible College	Winter 1980	50-B	43-A
Jackson State	Winter 1980	19-A	16-B
Motlow State	Winter 1980	14-A	12-B
Middle Tenn. State	Winter 1980	35-B	33-A
Roane State	Winter 1980	13-A	10-B
Tennessee Tech.	Winter 1980	46-B	45-A
Volunteer State	Winter 1980	54-A	45-B
Walters State	Winter 1980	12-A	9-B

The basic elements of informed consent are as follows:

1. A fair explanation of the procedures to be followed, and their purposes, including identification of procedures which are only experimental;
2. A description of any attendant discomforts and risks reasonably to be expected;
3. A description of any benefits reasonably to be expected;
4. A disclosure of any appropriate alternative procedures that might be advantageous for the subjects;
5. An offer to answer any inquiries concerning the procedures; and to discontinue participation in the project or activity at any time without prejudice to the subject.⁴²

⁴²U.S. Federal Register, Vol. 40, No. 50, (46.10), Thursday, March 13, 1975.

The second attachment to the pre-test and post-test was a data sheet (Appendix I) and one answer sheet (Appendix J) for each student.

The purpose of the data sheet was to gather the necessary information on the following student-related variables: age, sex, work experience, and major.

Students were instructed to use a No. 2 pencil and to give only one answer per question. They also were told to make an "intelligent guess" if they were not sure of the answer; no correction would be made for wrong answers caused by guessing. The exams were collected after 50 minutes.

During the spring of 1980, a second group of students who had not taken a course in Personal Finance were examined. The same pre-test and post-test that was used to examine the group who were taking a course in consumer education in the winter was also used to test this group. Table 7 indicates the names of schools, the number of tests given, pre-test or post-test, and the date of administration.

These students were also asked to sign the consent form and fill out the data sheet. They were asked to use a No. 2 pencil and make an "intelligent guess" if they were not sure of the answer. The exam for this group was also collected after 50 minutes. During the winter and spring of 1980, 513 pre-test and 446 post-test exams were administered to seven community colleges and four four-year colleges in Tennessee.

TABLE 7

ADMINISTRATION OF PRE AND POST-TEST FORM BY COLLEGE
FOR STUDENTS NOT TAKING PERSONAL FINANCE

Name of School	Date Administered	Pre-Test And Form	Pre-Test And Form
Austin Peay	Spring 1980	37-B	33-A
Columbia State	Spring 1980	13-A	12-B
Tennessee Tech	Spring 1980	71-B	63-A
Volunteer State	Spring 1980	78-A	70-B

J. COLLECTION AND ORGANIZATION OF THE DATA

After collecting a set of answer sheets and data sheets from each college, the answer sheets were prepared for processing. Each answer sheet had to be checked for stray pencil marks, and the marks erased. No more than one answer per question could be allowed. Some answer sheets had to be copied over because the student used a ball-point pen, rather than a No. 2 pencil. Each answer sheet and data sheet were assigned a number. Each student was also assigned a number to determine those students who could have taken the pre-test but did not take the post-test. If a student did not take the pre-test but took the post-test, he/she was not used in the study. Only those students who took both the pre-test and post-test were used as subjects for the study. Pre-test students who did not take the post-test were used to determine if that person who dropped out could have had an effect on one of the three null hypotheses. Master answer sheets were coded with the correct answers.

Answer sheets were graded by Tennessee State University Data Processing Center, Nashville, Tennessee. Two days later the graded answer sheets were obtained from the center.

Each student's data sheet was analyzed to see if each variable had been marked to indicate the form of the test, A or B, whether that form was a pre-test or a post-test. Each college which participated in the study was numbered 1-11, and was so indicated on the data sheet. The test score of each student was marked on the data sheet along with the student's I.D. number. The data sheet with all the above information was coded on IBM cards at Volunteer State Community College, Gallatin, Tennessee. Appendix K shows the ways the variables were coded for statistical treatment.

1. The course variables were coded (1) for never taken a consumer course; (2) for presently taking a consumer course; and (3) for having already completed a consumer course.

2. The degree variable was coded (1) for Associate degree and (2) for Bachelor degree.

3. The sex variable was coded as (1) for male and (2) for female.

4. Age was coded as a four-part variable, (1) 17-20, (2) 21-25, (3) 26-35, and (4) 36 or over.

5. The work experience was coded on a (1) to (4) basis according to the four categories for each variable on the data sheet.

6. The major or concentration area was also coded on a (1) to (6) basis according to the six categories for each variable on the data sheet.

7. If the student was a day student, he was coded (1); an evening student was coded (2).

The test form was coded as (1) for Test A and (2) for test B. If students took Form A as a pre-test, they were coded as (1); if they took

Form B as a pre-test, they were coded as (2). The college of each student was also coded on the IBM cards. Before testing the hypotheses of the study, the reliability, validity, and equality were determined for both forms of the consumer achievement test.

In order to determine the coefficient of reliability an odd-even analysis was run on the test result of students who took either Form A or Form B as a post-test after completing the course in Personal Finance. There were 149 students that took Form A and 119 students that took Form B. The coefficient of reliability for Form A was .4695 and Form B was .4758. The reliability coefficient for both Form A and Form B was determined to be unacceptable. Several other studies were analyzed to determine the reliability coefficient that was acceptable for this kind of study as revealed in Table 8.

In order to achieve an acceptable coefficient of reliability for Form A and Form B, the researcher chose those questions on both tests that had a high discrimination index. The number of questions that appeared on the consumer try-out test and the number of questions that were assigned to each subtopical area can be found in Appendix L. The questions that were assigned to Form A and Form B achievement test can also be found in Appendix L. After reviewing each subtopical area, 36 questions were chosen from the two achievement tests. Appendix L also gives the assignments of test items to the subtopical areas for the 36 questions that were used to test the hypotheses of the study.

The criteria that were used to choose the 36 questions were based upon the discrimination indices of each question in Form A and Form B. Each of the five topical areas was examined individually to determine the reliability coefficient which was acceptable.

TABLE 8
RELIABILITY COEFFICIENT FROM RELATED STUDIES

Researcher		No. of Questions on Examination	Reliability Coefficient
Beattie		68	.78
Bernard		60	.74
Bibb		65	.80
Blockhus		60	--
Forkner	- Form A	50	.80
	Form B	50	.80
Graf	- Form A	50	.85
	Form B	50	.84
Jelley		60	--
Ogden		60	.74
Peters		50	.80
Smith		90	.76
Stanley	- Form A	55	.73
	Form B	55	.74
Worthington		78	.92

Tables 9 through 13 report the discrimination index for the 50 questions of the total achievement test and the discrimination for the 36 questions which were used for each of the five consumer topical areas.

TABLE 9
DISCRIMINATION INDICES FOR FORM A AND FORM B
FOR THE AREA OF TRANSPORTATION

Item No.	DISCRIMINATION INDEX			
	Form A		Form B	
	50 qt.	36 qt.	50 qt.	36 qt.
1	.27	.27	.25	--
2	.52	.52	.34	.34
3	-.02	--	.25	--
4	.22	--	.25	--
5	.22	--	.56	.56
6	.57	.57	.53	.53
7	.20	--	.12	--
8	.37	.37	.00	--
9	.22	--	.50	.50
10	.37	.37	.18	--

TABLE 10
DISCRIMINATION INDICES FOR FORM A AND FORM B
FOR THE AREA OF HOUSING

Item. No.	DISCRIMINATION INDEX			
	Form A		Form B	
	50 qt.	36 qt.	50 qt.	36 qt.
11	.50	.50	.68	.68
12	.55	.55	.31	.31
13	.42	.42	.56	.56
14	.27	.27	.34	.34
15	.35	.35	.28	.28
16	.35	.35	.56	.56
17	.17	--	.46	.46
18	.62	.62	.37	.37
19	.20	.20	.31	.31
20	.30	.30	.34	.34
21	.07	--	.50	.50
22	.37	.37	.06	--
23	.27	.27	.43	.43
24	.35	.35	--	--
31	--	--	.53	.53

TABLE 11
DISCRIMINATION INDICES FOR FORM A AND FORM B
FOR THE AREA OF FOOD

Item No.	DISCRIMINATION INDEX			
	Form A		Form B	
	50 qt.	36 qt.	50 qt.	36 qt.
24	--	--	.53	.53
25	.55	.55	.15	--
26	.42	.42	.56	.56
27	.22	.22	.40	.40
28	.37	.37	.37	.37
29	.50	.50	.18	--
30	.77	.77	.62	.62

TABLE 12
DISCRIMINATION INDICES FOR FORM A AND FORM B
FOR THE AREA OF CREDIT

Item. No.	DISCRIMINATION INDEX			
	Form A		Form B	
	50 qt.	36 qt.	50 qt.	36 qt.
31	.27	.27	--	--
32	.60	.60	.43	.43
33	.42	.42	.43	.43
34	.15	--	.43	.43
35	.37	.37	.25	--
36	.52	.52	.56	.56
37	.20	--	.43	.43
38	.52	.52	.40	.40
39	.20	--	.12	--
40	.65	.65	.31	.31
41	-.07	--	.43	.43
42	.37	.37	.34	.34
43	.20	--	.53	.53
44	.10	--	.28	--
45	.22	.22	--	--

TABLE 13
DISCRIMINATION INDICES FOR FORM A AND FORM B
FOR THE AREA OF CLOTHING

Item No.	DISCRIMINATION INDEX			
	Form A		Form B	
	50 qt.	36 qt.	50 qt.	36 qt.
45	--	--	.68	.68
46	.25	.25	.50	.50
47	.22	.22	.56	.56
48	.35	.35	.12	--
49	.62	.62	.34	.34
50	.30	--	.15	--

Any question with a discrimination index of .27 or above in the Transportation area was used. Five questions from Form A and four questions from Form B met this criteria.

Any question with a discrimination index of .20 or above in the Housing area was used. Twelve questions from Form A and 13 questions from Form B met this criteria.

Any question with a discrimination index of .22 or above in the Food area was used. Six questions from Form A and five questions from Form B met this criteria.

Any question with a discrimination index of .26 or above in the Credit area was used. In order to maintain content validity of not deviating more than one question in each topical area for Form A and Form B, question number 45 with a discrimination index of .22 had to be used. Nine questions from Form A and 10 questions from Form B met this criteria.

Any question with a discrimination index of .22 or above in the Clothing area was used. Four questions from Form A and four questions from Form B met this criteria.

After removing the 14 questions from the two achievement tests, a second odd-even analysis was run on the 149 students who had taken Form A as a post-test and the 119 students who had taken Form B as a post-test and who had completed the consumer education course. The coefficient of reliability for Form A was .513 and Form B was .669. These coefficients were considered the best possible without disturbing validity of items. The coefficients, however, were not considered adequate for a satisfactory test.

Content validity was established by examining each of the five topical areas. Table 14 reports the content validity for the original 50 questions that appeared on both forms of Form A and Form B and the 36 revised questions that appeared on both forms of Form A and Form B achievement test that were used to test the hypothesis of the study. Although there was not an equal distribution of questions between each of the five topical areas, there was only a deviation of one question for each area for both forms of the revised 36 question achievement test.

TABLE 14
NUMBER OF QUESTIONS BY TOPICAL AREA

Areas	<u>Form A</u>		<u>Form B</u>	
	50 qt.	36 qt.	50 qt.	36 qt.
Transportation	10	5	10	4
Housing	14	12	14	13
Food	6	6	7	5
Credit	15	9	13	10
Clothing	5	4	6	4

The questions appeared on both Form A and Form B of the original 50 question achievement test for the transportation area. Only five of these questions were used for Form A and only four of these questions were used for Form B on the revised 36 question achievement test.

Fourteen questions appeared on both Form A and Form B of the original 50 question achievement test for the housing area. Twelve of these questions were used for Form A and thirteen of these questions were used for Form B on the revised 36 question achievement test.

Six questions appeared on Form A and seven questions appeared on Form B of the original 50 question achievement test for the food area. All six of the original questions were used for Form A and five questions were used for Form B on the revised 36 question achievement test.

Fifteen questions appeared on Form A and 13 questions appeared on Form B of the original 50 question achievement test for the credit area. Only nine of these questions were used for Form A and 10 of these questions were used for Form B on the revised 36 question achievement test.

Five questions appeared on Form A and six questions appeared on Form B of the original 50 question achievement test for the clothing area. Four of these questions were used for Form A and four of these questions were used for Form B on the revised 36 question achievement test.

In order to determine the equality of the two achievement tests, the t test was applied to determine whether there was a significant difference between the means of the two tests. The mean for Form A was 19.16 and the standard deviation was 4.89; for Form B the mean was 18.73 and the standard deviation was 4.04. The variance of the two groups were compared for homogeneity. They were found to be homogeneous; so, a t test was then applied to determine whether there was a significant difference between the two achievement tests. The result to the t test (Table 15) indicated

that the means of the two tests were not equivalent at the .05 level. With the administration of the forms to different students, the lack of equality could not be determined as caused by differences in the tests or differences in the students.

TABLE 15
EQUATING OF TEST FORM A AND FORM B

Form	Number	Mean	Standard Deviation	F	Probability
A	119	19.168	4.89	1.47	0.0274*
B	149	18.738	4.04		

*Significant at .05 level.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF THE DATA

This chapter presents an analysis of the data used to test the hypothesis included in this study. All computations were performed at the Computer Center of The University of Tennessee.

The presentation of data for this study was divided into the following sections:

A. The t test to determine whether there was a significant difference between the consumer education knowledge of community college students and four-year college students in Tennessee who had taken a course in Personal Finance and those community college students and four-year college students who had not taken a course in Personal Finance. Also, the t test to determine whether there was a significant difference between the consumer education knowledge of community college students and four-year college students who had taken a course in Personal Finance.

B. An analysis of variance with Duncan multiple range test to determine whether there was a significant difference between the consumer education knowledge of community college and four-year students who had taken a course in Personal Finance based on four independent variables.

A. t TEST

The population of this study consisted on two groups of students:

1. Those community college students and four-year college students who were enrolled in a Personal Finance course in Tennessee;

2. Those community college students and four-year college students who had not taken a Personal Finance course.

Table 16 shows the total number of students involved in this study. Three hundred and fourteen students from both community colleges and four-year colleges were administered a pre-test in the winter of 1980. The students were enrolled in a Personal Finance course in Tennessee, but when the post-test was administered at the end of winter of 1980, 46 of these students had withdrawn from the study. Table 16 also shows those students who did not take a course in Personal Finance. One hundred and ninety-nine students from both community colleges and four-year colleges were administered a pre-test in the spring of 1980 who were not enrolled in a Personal Finance course. When the post-test was administered to those community college and four-year college students who did not take a course in Personal Finance at the end of the spring of 1980, 21 students had withdrawn from this group. An analysis of variance was run on the 513 pre-test scores of the students who had taken the achievement test at the beginning of the winter and spring of 1980 to see if those 67 students who withdrew from the study had a significant difference on the results. Table 17 shows the result of the analysis of variance procedure. The mean score for those 446 students who did not withdraw from the study was 19.29. The mean score for those 67 students who did withdraw was 18.48. No significant difference at the .05 level was found between those who withdrew and those who did not withdraw.

In order to test the hypotheses of the study, the data cards were tabulated at The University of Tennessee Computer Center. The programming package used was the Statistical Analysis System (SAS).

To test the first hypothesis, the test scores of the Group I students (those 268 students from both community colleges and four-year colleges

TABLE 16
STUDENTS PARTICIPATING IN THIS STUDY BY COURSE AND COLLEGE

College	<u>Taking Course</u>			<u>Not Taking Course</u>			Total Ex. (N)
	Pre-Test (N)	Post-Test (N)	Drop-Out (N)	Pre-Test (N)	Post-Test (N)	Drop-Out (N)	
Austin Peay State University	34	28	6	37	33	4	61
Columbia State Community College	0	0	0	13	12	1	12
Tennessee Technological State University	46	45	1	71	63	8	108
Volunteer State Community College	54	45	9	78	70	8	115
Dyersburg State Community College	37	27	10	0	0	0	27
Johnson Bible College	50	43	7	0	0	0	43
Jackson State Community College	19	16	3	0	0	0	16
Motlow State Community College	14	12	2	0	0	0	12
Middle Tennessee State University	35	33	2	0	0	0	33
Roane State Community College	13	10	3	0	0	0	10
Walters State Community College	12	9	3	0	0	0	9
TOTALS	314	268	46	199	178	21	446

TABLE 17
PRE-TEST MEAN FOR STUDENTS WHO DID AND DID NOT
WITHDRAW FROM THE STUDY

Group	Number	Mean	F	Probability
1. Those students who did not withdraw	446	19.29	1.86	0.1737
2. Those students who did withdraw	67	18.48		

who were enrolled in a Personal Finance course in Tennessee) and the test scores of the Group II students (those 178 students from both community colleges and four-year colleges who had not taken a course in Personal Finance) were compared by the use of a t test to determine whether there was a significant difference between the consumer education knowledge of the two groups.

According to Huck, Cormier, and Bounds,⁴³ the t test is used to determine how great the difference between two means must be for it to be judged significant. According to Huck:

If two sample means are far enough apart, the t test will yield a significant difference, thus permitting the researcher to conclude that the two populations probably do not have the same means.⁴⁴

The variances of the two groups were compared, and the variances were found to be homogeneous. Next a t test was run to see if there was a

⁴³Schuyler W. Huck, William H. Cormier, and William G. Bounds, Jr., Reading Statistics and Research. (New York: Harper and Row, 1974), pp. 49-50.

⁴⁴*Ibid.*, p. 50.

significant difference in the means of the two groups. The mean score for the Group I students (those 268 students from both community colleges and four-year colleges who were enrolled in a course in Personal Finance) was 20.14 while the mean score for the Group II students (those 178 students from both community colleges and four-year colleges who had not taken a course in Personal Finance) was 20.39. No significant difference was found at the .05 level in the means of those students who had and those students who had not taken the course Personal Finance. Table 18 shows the result of the t test.

TABLE 18
MEAN FOR STUDENTS PARTICIPATING IN THIS STUDY

	Group	Number	Mean	Standard Deviation	F	Probability
1.	Those students not taking course	178	20.39	4.934	1.14	0.3312
2.	Those students taking course	268	20.14	5.280		

H_{01} There is no significant difference between the consumer education knowledge of community college students and four-year college students in Tennessee who had taken a course in consumer education and those community college and four-year college students who had not taken a course in consumer education.

The null hypothesis is not rejected. Therefore, there is no significant difference between those students who had and those students who had not taken the course, Personal Finance.

To test the second hypothesis, the test scores of Group I (those 119 community college students and those 149 four-year college students who

were enrolled in a Personal Finance course in Tennessee) were compared by the use of a t test to determine if there was a significant difference between the consumer education knowledge of the community college student and the four-year college student.

The variances of the two groups were compared and found to be homogeneous. Next a t test compared the mean of the two groups. The mean score for the 119 community college students was 19.94, and the mean score for the 149 four-year college students was 20.30. When these 119 community college students and those 149 four-year college students, who were enrolled in a Personal Finance course were compared, it was found that there was no significant difference between community college students and four-year students who had taken a course in Personal Finance. Table 19 shows the result of the t test.

TABLE 19
MEAN FOR STUDENTS PARTICIPATING IN THIS STUDY
THAT TOOK A COURSE IN PERSONAL FINANCE

Group	Number	Mean	Standard Deviation	F	Probability
1. Community College Students	119	19.94	5.609	1.25	0.1958
2. Four-Year College Students	149	20.30	5.014		

H₀₂ There is no significant difference between the consumer education knowledge of community college students and four-year college students who had taken a course in consumer education.

The null hypothesis is not rejected. Therefore, there is no significant difference between community college students and four-year students who had taken a course in Personal Finance.

B. ANALYSIS OF VARIANCE

Ho₃ There is no significant difference between the consumer education knowledge of community college and four-year students who had taken a course in consumer education based on the following factors: (a) age; (b) sex; (c) work experience; and (d) major.

To test the third hypothesis, the test scores of Group I students (those 268 students from both community colleges and four-year colleges who enrolled in Personal Finance) were analyzed by an analysis of variance with Duncan multiple range test to determine if age, sex, work experience, or their major had a significant difference on the scores that were made on the achievement test.

According to Huck, Cormier, and Bounds,⁴⁵ the analysis of variance is used to compare two or more group means. According to Huck:

The analysis of variance can be used to compare groups which differ along two or more dimensions. The analysis of variance is appropriate for studies in which there are several independent variables.⁴⁶

Huck, Cormier, and Bounds also state that:

The Duncan's multiple range test is used to adjust the level of significance to reduce the influence of chance due to having more than just one comparison.⁴⁷

This third major hypothesis was divided into the following minor hypotheses:

Ho_{3a} There is no significant difference in the students' scores on the achievement test with respect to the variable, sex.

Table 20 shows the number of students in this study by sex. Of the 268 students that were tested at the end of the winter of 1980 who took

⁴⁵Huck, Cormier, and Bounds, Jr., op. cit., p. 74.

⁴⁶Ibid. p. 75.

⁴⁷Ibid. p. 69.

TABLE 20
STUDENTS PARTICIPATING IN THIS STUDY BY COURSE, COLLEGE, AND SEX

College	<u>Taking Course</u>			<u>Not Taking Course</u>		
	Male	Female	Total	Male	Female	Total
Austin Peay State University	14	14	28	16	17	33
Columbia State Community College	0	0	0	4	8	12
Tennessee Technological State University	2	43	45	37	26	63
Volunteer State Community College	24	21	45	28	42	70
Dyersburg State Community College	12	15	27	0	0	0
Johnson Bible College	19	24	43	0	0	0
Jackson State Community College	10	6	16	0	0	0
Motlow State Community College	9	3	12	0	0	0
Middle Tennessee State University	0	33	33	0	0	0
Roane State Community College	5	5	10	0	0	0
Walters State Community College	5	4	9	0	0	0
TOTALS	100	168	268	85	93	178

a course in Personal Finance, 168 were females and 100 were males. When the scores of these students (those 268 students from both community colleges and four-year colleges who enrolled in Personal Finance) were compared by sex (Table 21), it was found that the scores of these students were not significantly different at the .05 level. The mean for the females was 20.45, while the mean for the males was 19.63.

TABLE 21
MEAN OF STUDENTS PARTICIPATING IN THIS STUDY BY SEX

Sex	Number	Mean
Female	168	20.45 *
Male	100	19.63
Total	268	

NOTE: $F = 1.55$; $P = 0.2148$.

*Means marked with common vertical line do not differ significantly from each other by Duncan multiple range test.

H_{03b} There is no significant difference in the students' scores on the achievement test with respect to the variable, age.

Table 22 shows the number of students in this study by four age groups. Of the 268 students who took the course in Personal Finance, 217 were under the age of 26 years and 51 were 26 or older. Scores by age groups (Table 23) on post-test achievement were found to be significantly different at the .05 level. The mean for those students 36 and over was 24.85. These students scored significantly higher than the other three younger age groups. The youngest age group, 17-20, mean 18.68, scored significantly lower than the three older age groups.

TABLE 22
STUDENTS PARTICIPATING IN THIS STUDY BY COURSE, COLLEGE, AND AGE

College	<u>Taking Course</u>					<u>Not Taking Course</u>				
	Age Range of Students					Age Range of Students				
	17-20	21-25	26-35	Over 36	Total	17-20	21-25	26-35	Over 36	Total
Austin Peay State University	15	9	2	2	28	8	13	6	6	33
Columbia State Community College	0	0	0	0	0	7	3	2	0	12
Tennessee Technological State University	11	30	4	0	45	10	47	6	0	63
Volunteer State Community College	31	4	5	5	45	31	17	12	10	70
Dyersburg State Community College	19	2	5	1	27	0	0	0	0	0
Johnson Bible College	16	21	4	2	43	0	0	0	0	0
Jackson State Community College	3	6	5	2	16	0	0	0	0	0
Notlow State Community College	3	2	2	5	12	0	0	0	0	0
Middle Tennessee State University	5	25	2	1	33	0	0	0	0	0
Roane State Community College	4	3	1	2	10	0	0	0	0	0
Walters State Community College	8	0	1	0	9	0	0	0	0	0
TOTALS	115	102	31	20	268	56	80	26	16	178

TABLE 23
MEAN OF STUDENTS PARTICIPATING IN THIS STUDY BY AGE

Age	Number	Mean
Over 35	20	24.85 *
26 - 35	31	21.45
21 - 25	102	20.48
17 - 20	115	18.68
Total	268	

NOTE: $F = 9.88$; $P = 0.0001$.

*Means marked with common vertical lines do not differ significantly from each other by Duncan multiple range test.

H_{03c} There is no significant difference in the students' scores on the achievement test with respect to the variable, work experience.

Table 24 shows the number of students in this study by work experience. Of the 268 students that took a course in Personal Finance, only 49 had worked full-time for over three years. There were 219 students who had no work experience or who had worked for less than three years. The post-test achievement scores of these 268 students were compared by the Duncan multiple range test (Table 25) on four classifications by amount of work experience. The mean scores of this group were found to be different at the .05 level of significance. Those students who worked full-time for over three years, mean 22.16, scored significantly higher than the three groups of lower experience. The vertical line in Table 25 shows which work experience groups were not significantly different from each other.

TABLE 24
STUDENTS PARTICIPATING IN THIS STUDY BY COURSE, COLLEGE, AND WORK EXPERIENCE

College	Taking Course					Not Taking Course				
	No Work Experience	Part-Time or Full-Time 6 months or less	Full-Time 6 months - 3 years	Full-Time Over 3 years	TOTAL	No Work Experience	Part-Time or Full-Time 6 months or less	Full-Time 6 months - 3 years	Full-Time Over 3 years	Total
Austin Peay State University	0	16	8	4	28	0	17	2	14	33
Columbia State Community College	0	0	0	0	0	0	6	1	5	12
Tennessee Technological University	2	35	6	2	45	1	43	15	4	63
Volunteer State Community College	4	26	14	11	45	7	20	17	26	70
Dyersburg State Community College	2	9	11	5	27	0	0	0	0	0
Johnson Bible College	2	22	13	6	43	0	0	0	0	0
Jackson State Community College	0	4	4	8	16	0	0	0	0	0
Motlow State Community College	2	2	0	8	12	0	0	0	0	0
Middle Tennessee State University	0	25	6	2	33	0	0	0	0	0
Roane State Community College	0	4	4	2	10	0	0	0	0	0
Walters State Community College	0	8	0	1	9	0	0	0	0	0
TOTALS	12	141	66	49	268	8	86	35	49	178

TABLE 25
MEAN OF STUDENTS PARTICIPATING IN THIS STUDY
BY WORK EXPERIENCE

Work Experience	Number	Mean
Full-Time over 3 years	49	22.16 *
Part or Full-Time 6 months or less)	144	20.11
Full-Time 6 months-3 years	66	19.15
No Work Experience	12	17.83
Total	268	

NOTE: $F = 4.07$; $P = 0.0077$.

*Means marked with common vertical line do not differ significantly from each other by Duncan multiple range test.

H_{03d} There is no significant difference in the students' scores on the achievement test with respect to the variable, major.

Table 26 shows the number of students in this study by major. Of the 268 students that took a course in Personal Finance, 133 of these students were not majoring in one of the business areas. There were 135 majors that were distributed among the areas of accounting, secretarial, banking and finance, marketing or retailing, and management. When post-test scores of these 268 students were compared according to major, the mean scores were found to be different at the .05 level. Significant differences were found between the accounting group, mean 22.45, those who were classified as Others, mean 20.53, and the lower four groups.

TABLE 26
STUDENTS PARTICIPATING IN THIS STUDY BY COURSE, COLLEGE, AND MAJOR

College	Taking Course							Not Taking Course						
	Accounting	Secretarial	Banking or Finance	Marketing or Retailing	Management	Other	Total	Accounting	Secretarial	Banking or Finance	Marketing or Retailing	Management	Other	Total
Austin Peay State University	2	5	0	0	0	13	20	6	4	2	3	12	6	33
Columbia State Community College	0	0	0	0	0	0	0	0	0	0	11	1	0	12
Tennessee Technological State University	0	0	0	5	0	40	45	13	3	2	10	19	16	63
Volunteer State Community College	11	4	1	9	16	1	45	8	8	1	12	32	9	70
Dyersburg State Community College	2	0	4	9	10	2	27	0	0	0	0	0	0	0
Johnson Bible College	0	1	0	0	1	41	43	0	0	0	0	0	0	0
Jackson State Community College	3	0	9	1	3	0	16	0	0	0	0	0	0	0
Motlow State Community College	0	0	0	0	3	1	12	0	0	0	0	0	0	0
Middle Tennessee State University	0	0	0	4	1	28	33	0	0	0	0	0	0	0
Rhone State Community College	2	0	0	3	3	2	10	0	0	0	0	0	0	0
Walters State Community College	0	0	0	1	6	2	9	0	0	0	0	0	0	0
TOTALS	20	10	22	32	51	133	268	27	15	5	36	64	31	178

Significant differences were found between the secretarial group, mean 16.40, and the accounting group. The vertical lines in Table 27 show which majors were not significantly different from each other.

TABLE 27
MEAN OF STUDENTS PARTICIPATING IN THIS STUDY BY MAJOR

Major	Number	Mean
Accounting	20	22.45
Others	133	20.53
Marketing or Retailing	32	20.21
Banking	22	20.05
Management	51	18.98
Secretarial	10	16.40
Total	268	

NOTE: $F = 2.48$; $P = 0.0322$.

*Means marked with common vertical lines do not differ significantly from each other by Duncan multiple range test.

D. SUMMARY

No significant difference of personal finance knowledge was found between those students who had and those students who had not taken a course in Personal Finance. The mean score for those students who did not take the course was 20.39, while the mean score for those students who completed a course in Personal Finance was 20.14. No significant difference was found in the scores of community college students and four-year college students who took a course in Personal Finance.

When the analysis of variance (Table 28) was applied to the four independent variables, age, work experience and major were significant at the .05 level. The variable, sex, was not significant at the .05 level. The null hypothesis was rejected at the .05 level for age, work experience and major. The null hypothesis was not rejected at the .05 level for sex.

TABLE 28

ANALYSIS OF VARIANCE FOR STUDENTS PARTICIPATING
IN THIS STUDY WHO TOOK A COURSE IN PERSONAL FINANCE
FOR SEX, AGE, WORK EXPERIENCE, AND MAJOR

Variable	Degrees of Freedom	Sum of Squares	Mean Square	F	Probability
Sex	1	43.011	43.011	1.55	0.2148
Age	3	751.611	250.537	9.88	0.0001*
Work Experience	3	329.000	109.666	4.07	0.0077*
Major	5	336.178	67.235	2.48	0.0322*
Total	12	1459.800			

*Significant at .05 level.

CHAPTER V

FINDINGS AND RECOMMENDATIONS

A. SUMMARY OF PROCEDURES

The purpose of this study was to construct valid, reliable consumer education objective tests and to determine whether consumer education knowledge of community college students and four-year college students who had taken a consumer education course are better informed than those college students who had not taken the course. The population consisted of two groups of students: 1. Those community college students and four-year college students who were enrolled in a Personal Finance course; 2. Those community college students and four-year college students who had not taken a consumer education course during their tenure as a student. The students participating attended community colleges and four-year colleges in Tennessee. The real question was to determine whether there was a difference in personal finance knowledge of those community college students and four-year college students who took a course in Personal Finance and those community college and four-year college students who did not take a course. In order to determine this fact, the scores of those students completing a course in Personal Finance were compared by the use of a t test with the scores of those students who had not taken a course in Personal Finance. Also, an effort was made to determine if there were certain variables which influence a student's personal finance knowledge. The variables that were studied were: (a) age; (b) sex; (c) work experience; and (d) major.

As a means of gathering the necessary data, it was necessary to examine seven community colleges and four four-year colleges in Tennessee. A course syllabus was requested from each college which indicated the text and topical areas that were taught. After reviewing these outlines, five areas were identified as being commonly taught. After scrutinizing the syllabi and the textbooks to determine the content of the curriculum, 200 behavioral objectives were written by the researcher. A jury of consumer teachers were asked to rate the importance of each objective on a scale of 0-5. After reviewing the consumer objectives, a try-out consumer test was constructed which had 130 questions and were based on the rating of objectives by the consumer teachers. The try-out test was administered to a pilot group of 115 randomly selected students at Volunteer State Community College, Gallatin, Tennessee. Those items having a difficulty index between .20 and .80 and a discrimination index of .20 or above were used to prepare the final forms of the test.

After analyzing the data to determine the most appropriate questions, a pre-test and post-test of 50 questions for each test was constructed and printed in two booklets. These pre-tests and post-tests were administered to a total of 314 students from both community colleges and four-year colleges who were enrolled in a Personal Finance course in Tennessee. A second group of students who had not taken a course in consumer education was also tested in Tennessee.

Before testing the hypothesis of the study, the reliability, validity, and quality were determined for both forms of the consumer achievement test. In order to determine the coefficient of reliability, an odd-even analysis was run on the test results of students who took either Form A or Form B as a post-test after completing the course in Consumer or

Personal Finance. The reliability coefficient for both Form A and Form B was determined to be unacceptable. In order to achieve an acceptable coefficient of reliability for Form A and Form B, the researcher chose those questions on both tests that had a high discrimination index. After reviewing each subtopical area, 36 questions were chosen from the two achievement tests. After removing the 14 questions from the two achievement tests, a second odd-even analysis was run on the 149 students who had taken Form A as a post-test and the 119 students who had taken Form B as a post-test and who had completed the consumer education course.

Content validity was established by examining each of the five topical areas. Although there was not an equal distribution of questions between each of the five topical areas on the original 50 question achievement test, there was only a deviation of one question for each area for both forms of the revised 36 question achievement test.

In order to determine the equality of the two achievement tests, the t test was applied to ascertain whether there was a significant difference between the means of the two tests. The results of the t test indicated that the means of the two tests were significantly different at the .05 level.

Data generated by this study were treated by statistical method from the Statistical Analysis System (SAS). The t test was used to compare:

1. The norms of community college students' scores on the achievement test with norms established for the four-year college students.
2. The similarities of those students who had not taken nor were they presently enrolled in a consumer course.

The scores of those students who had taken the course were compared by an analysis of variance to determine whether mean scores on achievement tests were significantly different on the variables of age, sex, work experience and major.

The hypotheses of the study were analyzed at the .05 level of significance.

B. FINDINGS

The findings were derived from the data collected on the administration of the two achievement tests.

1. Form A and Form B were not equated as indicated by a significant difference at the .05 level.
2. Neither Form A or Form B reached an adequate level of reliability, although the reliability for Form B was greater than for Form A.
3. No significant differences in scores were found between those students who had and those students who had not taken a course in Personal Finance.
4. No significant differences in scores were found between community college students and four-year college students who took a course in Personal Finance.
5. No significant differences were found between post-test achievement scores according to sex.
6. Significant differences were found between post-test achievement scores according to age. Those students that were 36 and over scored significantly higher than the other three younger age groups.
7. Significant differences were found between post-test achievement scores according to work experience. Those students that worked full-time

for over three years scored significantly higher than those students with little or no work experience.

8. Significant differences were found between post-test achievement scores according to major. The accounting group and the group classified as Others scored significantly higher than the lower four groups. The accounting group scored significantly higher than the secretarial group.

C. RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Both Form A and Form B should be consolidated into one test of 50 to 60 questions in order to improve reliability.
2. Considerable effort should be made to improve the quality of instruction and the ways consumer education is currently being delivered in Tennessee.

BIBLIOGRAPY

BIBLIOGRAPHY

- Arbaugh, Joyce Eileen. Profiling the Textile/Apparel Customer: A Study of the Usage of Care Label Information. Doctor's thesis. Columbus: The Ohio State University, 1974, p. 230. Dissertation Abstracts 35-B: 2292.
- Baxley, Edwin Cooper, Jr. An Exploratory Analysis of Consumer Preferences and Expectations of Complaint Processes. Doctor's thesis. Baton Rouge: The Louisiana State University and Agricultural and Mechanical College, 1975, p. 268. Dissertation Abstracts 36-A: 8162.
- Beattie, Arthur Donald. Relationships Between High School Pupils' Information and Attitudes Toward Personal Finance. Doctor's thesis. Minneapolis: University of Minnesota, 1962, p. 245. Dissertation Abstracts 23: 491.
- Benson, Earnest. Improving Consumer Education in Louisiana High Schools Through Analysis of Returned Goods in the Shreveport Metropolitan Area. Doctor's thesis. Fayetteville: University of Arkansas, 1972, p. 103. Dissertation Abstracts 33-A: 2066.
- Bernardi, Ray Dee. The Collegiate Course in Personal Finance: Measurement of Learning Accomplished by Selected College Students. Doctor's thesis. Norman: The University of Oklahoma, 1969.
- Bibb, Frances Gloria. A Comparative Study of the Knowledge of Three Aspects of Consumer Information Possessed by Selected Indiana, Illinois, and Wisconsin University Freshmen. Doctor's thesis. DeKalb: Northern Illinois University, 1971.
- Buswell, Henrietta Arlene. An Analysis of Consumer Credit Behavior of a College Market. Doctor's thesis. Iowa City: The University of Iowa, 1975, p. 204. Dissertation Abstracts 36-A: 7821.
- Curtis, Alan Robert. A Study of the Personal Finance Knowledges Possessed by Selected Community College Business Majors as Related to Certain Factors. Doctor's thesis. Storrs: The University of Connecticut, 1977. 1978
- Dalaba, Barry Arnold. The Validation of Objectives and Development of Criteria-Referenced Tests for Eighteen Units in Consumer Education. Doctor's thesis. DeKalb: Northern Illinois University, 1978.
- English, Donald. "Let's Train Teachers for Consumer Education," The Balance Sheet 55: 204, February, 1974.

- Everard, Kenneth Eugene. An Identification of Areas of Knowledge About Which Home Buyers Need Understanding. Doctor's thesis. Bloomington: Indiana University, 1962.
- Hawkins, Calvin H. A Follow-Up Study to Determine the Use of Selected Consumer Education Concepts by High School Graduates. Doctor's thesis. Greeley: University of Northern Colorado, 1975, p. 130. Dissertation Abstracts 36-A: 2580-81.
- Healey, Philip Basil. The Knowledge and Use of Consumer Installment Credit by Young Married People of the Lansing, Michigan Area. Doctor's thesis. East Lansing: Michigan State University, 1963, p. 175. Dissertation Abstracts 24: 1867-68.
- Huck, Schuyler W., Cormier, William H., and Bounds, William G., Jr. Reading Statistics and Research. New York: Harper and Row, 1974.
- Inacker, Charles John, Jr. Personal Finance Attitudes and Understandings of Selected Camden County, New Jersey High School Seniors: A Comparative Study. Doctor's thesis. Philadelphia, Pennsylvania: Temple University, 1973, p. 126. Dissertation Abstracts 34-A: 1483.
- Jelley, Herbert Mahlon. A Measurement and Interpretation of Money Management Understandings of Twelfth-Grade Students. Doctor's thesis. Cincinnati: University of Cincinnati, 1958, p. 289. Dissertation Abstracts 19: 2295.
- Knauer, Virginia H. Consumer Education Reference Manual. Tennessee: State Agency for Title I, July, 1976.
- McHugh, Helen Frances. Differentials in Uses of Consumer Credit by Young Urban Families. Doctor's thesis. Ames: Iowa State University of Science and Technology, 1965, p. 167. Dissertation Abstracts 26: 5754.
- McGowan, Daniel A. Consumer Economics. Chicago: Rand McNally College Publishing Company, 1978.
- Moss, Frank E., as quoted by R. Frank Mensel. "Federal Report." Community and Junior College Journal 2: 1. October, 1971.
- Myrold, Donald D. An Analysis of the Knowledge Possessed by a Random Population in the City of Crookston, Minnesota, Relative to the Fundamental Principles of a Minimum Program of Personal Insurance, Its Purchase and Use. Master's thesis. Grand Forks: The University of North Dakota, 1962, p. 93.
- Ogden, Russell L. The Construction and Standardization of an Achievement Test Designed to Measure Personal Financial Knowledges, Understandings, and Applications Possessed by Selected College Students. Doctor's thesis. Greeley: Colorado State College, 1964.

- Preston, William J. A Comparison of the Rationale and Socio-Economic Characteristics of Straight Bankruptcy and Chapter XIII Petitioners in the Denver, Colorado Area. Doctor's thesis. Greeley: Colorado State College, 1969, p. 157. Dissertation Abstracts 30-A: 4078-79.
- Price, Wilmoth C. The Status of Consumer Education Courses in Colleges and Universities. Doctor's thesis. Minneapolis: University of Minnesota, 1953, p. 289. Dissertation Abstracts 13: 1048-49.
- Richardson, Lovella Stoll. Construction of Valid Consumer Education Tests for Adults on Purchasing and Conserving Goods and Services. Doctor's thesis. Knoxville: The University of Tennessee, 1976.
- Roberts, Dean Breckenridge. Consumer Education in Kansas Secondary Schools. Doctor's thesis. Lawrence: University of Kansas, 1974, p. 188. Dissertation Abstracts 35-A: 5789-90.
- Smith, Kathleen Frances. Consumer Finance Attitudes and Achievement of College Students. Doctor's thesis. Boston: Boston University, 1973, p. 124. Dissertation Abstracts 34-A: 1500-01.
- Spitze, Hazel Taylor. The Relation Between Selected Women's Knowledge and Use of Consumer Credit: A Basis for Adult Education Program Planning. Doctor's thesis. Knoxville: The University of Tennessee, 1961.
- Stanley, Thomas O. The Development of the Test of Consumer Competencies. Doctor's thesis. DeKalb: Northern Illinois University, 1976.
- Strunk, Flonnie. The Development of Valid and Reliable Insurance Tests for Secondary School General Business Classes. Doctor's thesis. Knoxville: The University of Tennessee, 1967.
- Tennessee Statewide Consumer Education Program. Tennessee: Partially Funded by Higher Education Act of 1965, Title I, Community Service and Continuing Education.
- Trooboff, Benjamin M., and Boyd, Fannie Lee. Personal Finance for Consumers. New Jersey: General Learning Press, 1976.
- Thompson, Norman S. The Measurement of Consumer Credit Knowledges. Doctor's thesis. Greeley: Colorado State College, 1965.
- Tucker, Duane H. The Relationship of Selected Variables to Consumer Knowledge of Beef in Selected Areas of Mississippi. Doctor's thesis. Baton Rouge: The Louisiana State University and Agricultural and Mechanical College, 1974, p. 96. Dissertation Abstracts 35-A: 2632.
- U. S. Federal Register. Vol. 40, No. 50, (46.3c), Thursday, March 13, 1975.

U. S. Federal Register. Vol. 40, No. 50, (46.10), Thursday, March 13, 1975.

VandeBerg, Loyd Wallace. Educational Needs of Prospective Homeowners Concerning the Acquisition and Ownership of a House. Doctor's thesis. Columbia: University of Missouri, 1955, p. 115. Dissertation Abstracts 16: 491-92.

Walters, C. Glenn. Consumer Behavior. Illinois: Richard D. Irwin, 1974.

Watson, Jewell. Buyer Understanding of Life Insurance. Doctor's thesis. Bloomington: Indiana University, 1963, p. 329. Dissertation Abstracts 24: 5102.

Wellman, Ora Max. A Comparative Study of Personal Economic Understandings of Management and Nonmanagement Personnel in Business and Industrial Firms. Doctor's thesis. Norman: University of Oklahoma, 1975, p. 168. Dissertation Abstracts 36-A: 1990-91.

Yacyk, Peter. A Study of Personal Investment Information at the Secondary School Level. Doctor's thesis. Philadelphia, Pennsylvania: Temple University, 1965, p. 246. Dissertation Abstracts 26: 5106.

APPENDICES

APPENDIX A

LETTER SENT TO JURY MEMBERS

Volunteer State Community College

Nashville Pike • Gallatin, Tennessee 37066 • 615-452-8600 & 615-741-3215

October, 1979

Dr. Earl S. Daniel
Director of Career Education
Motlow State Community College
Tullahoma, TN 37388

Dear Dr. Daniel:

Those of us involved in community college education recognize the need to provide students with the knowledge that he/she needs in order to gain maximum satisfaction from the money he/she earns and eventually spends. This is the subject that I am undertaking as my doctoral dissertation at The University of Tennessee. I am constructing a series of criterion-referenced mastery tests in consumer education for the community college and four-year college level. This study is directed by Dr. George Wieggers. Dr. Wieggers requires that test objectives in five consumer education topic areas be validated by experts in the field of consumer education.

I would appreciate your consenting to be a member of the jury of experts to serve as the validation panel for these sets of objectives. If you agree to participate, I will send you a list of objectives for the five topic areas which include food, clothing, credit, housing, and transportation. You will be asked to evaluate each objective in these five areas by placing a check mark on a graduated scale with five categories. The scale will have a five-title heading ranging from objectives that are essential to objectives that are unnecessary and should not be included in the study. You will also be asked to add any objective that you feel is important but is not already included.

When your objectives are returned, it will be combined with those of your fellow community college colleagues. The result of the objectives will be used as the basis for writing items for the test.

I very much hope that you and your college will assist me in this study. Please indicate if you are willing to help me by filling out the following information at the end of this letter.

Sincerely yours,



H. Ronald Moser
1309 Riverside Drive
Old Hickory, TN 37138

HRM/jo

Dr. Earl S. Daniel
Page 2
October, 1979

Please check one of the following:

_____ Yes, I agree to help in the validation of test objectives for
consumer education. My most convenient address for October
and November is:

_____ H. Ronald Moser

_____ 1309 Riverside Drive

_____ Old Hickory, TN 37138

_____ No, I cannot help with this project.

(Please mail immediately)

APPENDIX B

DIRECTORY OF PARTICIPATING COMMUNITY AND FOUR-YEAR SCHOOLS

DIRECTORY OF PARTICIPATING COMMUNITY AND FOUR-YEAR SCHOOLS

Austin Peay State University

Clarksville, Tennessee 37040

(Dr. John R. Knight, Associate Professor of Finance)

(Mr. David Bodkin, Assistant Professor of Management)

Columbia State Community College

Columbia, Tennessee 38401

(Ms. Cynthia Van Hooser, Instructor in Business Administration)

Dyersburg State Community College

Dyersburg, Tennessee 38024

(Dr. John E. Moore, Director-Division of Technology-Assistant Professor of Computer Science)

Johnson Bible College

Knoxville, Tennessee 37920

(Dr. Lovella Richardson, Professor of Business and Economics)

Jackson State Community College

Jackson, Tennessee 38301

(Mr. Joe M. Pentecost, Associate Professor and Chairman of the Division of Technology)

Motlow State Community College

Tullahoma, Tennessee 37388

(Dr. Earl Daniel, Director of Career Education)

Middle Tennessee State University

Murfreesboro, Tennessee 37132

(Dr. Joyce S. Harrison, Assistant Professor, Home Economics)

Roane State Community College

Harriman, Tennessee 37748

(Mr. Bob Thomas, Chairman of the Division of Business)

Tennessee Technological University

Cookeville, Tennessee 38501

(Mr. Marvin G. Adkins, Assistant Professor Marketing)

(Miss Mary Below, Dean, School of Home Economics, College of
Agriculture and Home Economics; Professor of Home Economics)

(Mr. Stanley J. Phillips, Associate Professor of Management)

Volunteer State Community College

Gallatin, Tennessee 37066

(Mr. Jerry W. Walker, Instructor in Business)

(Mr. Paul L. McClellan, Assistant Professor of Business and Commerce,
and of Office Occupations)

Walters State Community College

Morristown, Tennessee 37814

(Mr. Orville E. Bach, Director of Management)

APPENDIX C

OBJECTIVES USED FOR UNIT TESTS.

TRANSPORTATION

Circle one number for each objective

OBJECTIVE: KNOWLEDGE

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
1. The student will be able to: Identify the most economical time of the year to purchase a new car.	5	4	3	2	1		0	4.00
2. State the purpose of publications like the Kelly Blue Book (Given approximate value of used cars).	5	4	3	2	1		0	3.33
3. List the most important things to look for in buying a new car.	5	4	3	2	1		0	4.33
4. Explain items which should be included in a new car warranty.	5	4	3	2	1		0	4.00
5. List the specific dangers in automobile financing.	5	4	3	2	1		0	4.55
6. Explain the value of no-fault insurance.	5	4	3	2	1		0	3.66
7. State the period when cars depreciate the most in value (during the first year of ownership).	5	4	3	2	1		0	4.33
8. State when repair and maintenance costs on the average car begin to exceed depreciation (during the car's fourth year).	5	4	3	2	1		0	3.44

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
9. Order the steps involved in purchasing a new car.	5	4	3	2	1		0	2.11
10. State the purpose of car buying clubs (may enable the consumer to obtain a car for as little as \$200 over the dealer's cost).	5	4	3	2	1		0	3.00
11. Explain the importance of new car warranties, and how they are figured.	5	4	3	2	1		0	3.66
12. Knowledge that independent service station owners acquire their gasoline from larger brand name gasoline companies.	5	4	3	2	1		0	3.00
13. Explain why choosing a car dealer is important (Type of service one may expect to obtain varies).	5	4	3	2	1		0	3.77
14. State why it might be wiser to have an impartial mechanic check a used car before buying.	5	4	3	2	1		0	4.33
15. Explain why a road test should be taken in a used car and list the parts of the car that should be checked before buying (the steering mechanism, shock absorbers, acceleration, brakes and engine should be checked).	5	4	3	2	1		0	4.55
16. List some of the steps taken by many car dealers to used cars before offering them for sale (clean their cars thoroughly and often paint even the engines).	5	4	3	2	1		0	4.00

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
17. Summarize the requirements of the Automobile Disclosure Act (requires every seller to attach a paper showing the price, price of extra, and freight charges for a new car).	5	4	3	2	1		0	3.33
18. State the method of payment of approximately 60% of new cars bought (the installment plan).	5	4	3	2	1		0	3.11
19. List the costs of operating an automobile: License fees, taxes, depreciation cost, gas and oil cost, and maintenance and repair cost.	5	4	3	2	1		0	3.33
20. Explain how much of a reduction from the suggested retail price of a car might reasonably be expected.	5	4	3	2	1		0	3.55
21. State what a holder in due course can legally be held responsible for (the warranties and guarantees stated in the installment contract).	5	4	3	2	1		0	3.55
22. Explain the advantages and disadvantages of riding public transportation: bus, train, and plane.	5	4	3	2	1		0	3.33
23. State under what circumstances the use of public transportation might cost less than owning and operating an automobile.	5	4	3	2	1		0	3.44
24. Differentiate between costs of some air fare tickets purchased for travel during the week and those purchased for weekend travel.	5	4	3	2	1		0	3.22

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
25. Explain how seasons affect air fares to European countries.	5	4	3	2	1		0	2.55
OBJECTIVE: APPLICATION								
26. The student will be able to choose the type of insurance protection needed by a new car owner: (liability, collision, medical payment, uninsured motorist, and comprehensive).	5	4	3	2	1		0	4.55
27. Calculate discount interest and add on charges.	5	4	3	2	1		0	3.66
28. Calculate the total price on an installment loan when given a problem of buying a car.	5	4	3	2	1		0	3.33
29. From a list of regulations given, choose under which government department it would belong: ICC, CAB, DOT or the FAA.	5	4	3	2	1		0	2.33
30. Calculate the cost of ownership and operation of a new car.	5	4	3	2	1		0	4.11
31. Identify optional equipment one should include in the purchase of a new car.	5	4	3	2	1		0	2.88
32. Calculate depreciation on cars.	5	4	3	2	1		0	2.88
33. Determine whether one is getting a good price for a trade-in car.	5	4	3	2	1		0	4.00
34. Choose octane rating and brands of gasoline.	5	4	3	2	1		0	3.22

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
35. Calculate and figure the cost per mile for gasoline.	5	4	3	2	1		0	3.89
36. List the advantages and disadvantages of radial tires.	5	4	3	2	1		0	3.33
37. When purchasing a car, choose which lending institutions generally give the best rate of interest (car dealer, bank, or credit union).	5	4	3	2	1		0	4.44
38. List ways to reduce auto insurance premiums.	5	4	3	2	1		0	4.22
39. Be able to choose various ratings for fuel economy: maker, consumer, or EPA.	5	4	3	2	1		0	3.77
40. Determine when to buy a new car with cash and when with credit.	5	4	3	2	1		0	4.22
41. Be able to compare the cost air-plane fares in a problem.	5	4	3	2	1		0	2.77

		HOUSING							
<u>Circle one number for each objective</u>									
OBJECTIVE: KNOWLEDGE		Essential					Omit	Do Not Understand	Mean Rating By Teachers
1.	Acknowledge that a house is a basic necessity for most families.	5	4	3	2	1		0	2.88
2.	An understanding that owning a house will probably require the greatest share of the family's budget.	5	4	3	2	1		0	4.11
3.	State why location is an important factor when purchasing a lot.	5	4	3	2	1		0	3.77
4.	Be able to explain how economic factors cause the cost of a house to rise.	5	4	3	2	1		0	4.44
5.	Acknowledge the characteristics of financing a new house under the authority of the Federal Housing Authority (FHA).	5	4	3	2	1		0	4.11
6.	Be able to explain the advantages of Veterans Administration approved loans for housing for veterans.	5	4	3	2	1		0	4.00
7.	Be able to list the financial institutions which are available to the prospective homeowner in obtaining a mortgage loan.	5	4	3	2	1		0	4.67

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
8. Be able to explain how owning a home might be a good investment.	5	4	3	2	1		0	4.56
9. Be able to explain how owning a home might improve one's credit rating.	5	4	3	2	1		0	4.11
10. Identify a deed as a written ownership of the piece of real property.	5	4	3	2	1		0	3.66
11. The student will be able to define amortization as it applies to home loans.	5	4	3	2	1		0	3.44
12. The student will be able to differentiate between the appreciated value of condominiums and the single-unit home.	5	4	3	2	1		0	2.44
13. Explain the important factors in choosing a new home: location, churches, transportation, etc.	5	4	3	2	1		0	4.22
14. Explain the importance of community facilities such as shopping, schools, police, fire protection, etc., when considering housing.	5	4	3	2	1		0	4.00
15. The student will be able to recognize that there is less maintenance cost in renting rather than owning a home.	5	4	3	2	1		0	3.56
16. State what should be in a lease and what rights each party has.	5	4	3	2	1		0	4.78

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
17.	Be able to define a real estate mortgage. (A contract between the lender and borrower for the purpose of buying property.)							
	5	4	3	2	1		0	4.00
18.	Summarize the advantage of renting rather than owning a house: more mobility, less maintenance, and lower short-run cost.							
	5	4	3	2	1		0	4.11
19.	Be able to state the length of time of most mortgage payment contracts for a new home. (Usually between 30 to 35 years.)							
	5	4	3	2	1		0	3.33
20.	Explain the disadvantages of financing a new home under a conventional loan rather than under VA or FHA.							
	5	4	3	2	1		0	4.00
21.	State the guidelines generally used in deciding the amount one should pay for a home. (A home should probably not be more than 2½ to 3 times the annual income.)							
	5	4	3	2	1		0	3.77
22.	Be able to explain the purpose of employing an appraiser before buying a new home.							
	5	4	3	2	1		0	3.67
23.	The student should be able to describe the protection given by homeowners insurance.							
	5	4	3	2	1		0	4.44
24.	Be able to identify those people who can advise in purchasing a home.							
	5	4	3	2	1		0	3.77

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
25. Recognize the legal aspects of purchasing a home.	5	4	3	2	1		0	4.11
OBJECTIVE: APPLICATION								
26. The student will be able to compare the cost of owning a duplex over a single-unit home.	5	4	3	2	1		0	3.44
27. The student will be able to calculate the exact ratio of the area of two diagrammed parcels given in a problem.	5	4	3	2	1		0	1.88
28. Calculate the appreciated value of a house in three years.	5	4	3	2	1		0	2.77
29. Calculate the original cost of a house given the seller profit and the selling price.	5	4	3	2	1		0	3.33
30. Determine the annual rate of interest of a loan given the monthly interest and the amount of the loan.	5	4	3	2	1		0	3.89
31. Calculate the rate of return on rental property given the worth of the property plus annual expenses and monthly rent that is received in a problem.	5	4	3	2	1		0	3.44
32. The student will be able to determine the cost per square feet of a new home given the size and cost of that house.	5	4	3	2	1		0	3.55

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
33.	The student will be able to calculate the principal balance due on a house after the second payment was made given the original mortgage at the interest rate plus the monthly mortgage payment.							
	5	4	3	2	1		0	3.66
34.	Determine the appraised value of a house given the per annum interest rate and the semi-annual interest payment.							
	5	4	3	2	1		0	2.56
35.	Calculate in a problem the fair market value of a house given the assessed tax rate.							
	5	4	3	2	1		0	3.11
36.	The student will be able to determine in a problem the percentage of profit that will be realized on a house given the purchase price and the sale price.							
	5	4	3	2	1		0	4.00
37.	Given the purchase price and the selling price of a house, the student will be able to determine what percent of the sale price was profit.							
	5	4	3	2	1		0	3.44
38.	The student will be able to compare the costs of hotels with that of motels.							
	5	4	3	2	1		0	2.11
39.	The student will be able to determine factors in selecting a mobile home.							
	5	4	3	2	1		0	3.11

						Do Not Understand	Mean Rating By Teachers	
Essential					Omit			
40.	The student will be able to compare the types of businesses that sell house furnishings.	5	4	3	2	1	0	3.00

		FOOD						
<u>Circle one number for each objective</u>							Do Not Understand	Mean Rating By Teachers
OBJECTIVE: KNOWLEDGE		Essential					Omit	
1.	The student will be able to: List the number of servings one must eat each day from the four basic food groups in order to insure good nutrition.	5	4	3	2	1	0	3.55
2.	State the information the FDA requires on canned food labels.	5	4	3	2	1	0	3.55
3.	State the percentage of an average family's budget that food supplies.	5	4	3	2	1	0	3.55
4.	Explain why seasonal food usually is less expensive during the peak supply season than at other times.	5	4	3	2	1	0	3.44
5.	Explain how the FTC guards against false advertising.	5	4	3	2	1	0	4.11
6.	Differentiate between USDA beef grades.	5	4	3	2	1	0	3.44
7.	Explain the importance of a shopping list in purchasing foods for a menu.	5	4	3	2	1	0	3.78
8.	Explain how trading stamps complicate price comparisons.	5	4	3	2	1	0	3.67

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
9. State how a shopping list helps to eliminate impulse buying.	5	4	3	2	1		0	3.77
10. Explain the importance of USDA listing on foods for consumers.	5	4	3	2	1		0	3.55
11. Explain how packages and containers may add to the cost of a product.	5	4	3	2	1		0	4.44
12. State the Federal Trade Commission's ruling concerning retail stores' advertised special prices on products to consumers.	5	4	3	2	1		0	3.56
13. Explain how Universal Product Codes (UPC) benefits the consumer.	5	4	3	2	1		0	3.44
14. Define the term "loss-leader." (An item that has been advertised at a low price to attract customers to a store.)	5	4	3	2	1		0	3.67
15. Explain the purpose of the Federal Hazardous Substances Act.	5	4	3	2	1		0	2.89
16. Explain the purpose of the Fair Packing and Labeling Act.	5	4	3	2	1		0	3.56
17. State the importance of expiration dates on food items sold by stores.	5	4	3	2	1		0	4.11
18. State the importance of grade labeling in restaurants.	5	4	3	2	1		0	3.44
19. List reasons why labels should be read.	5	4	3	2	1		0	4.22

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
20. List the products graded and inspected by the U.S. Department of Agriculture.	5	4	3	2	1		0	3.55
21. State the quality of private brands (store brands) as compared to the quality of nationally advertised brands.	5	4	3	2	1		0	3.88
22. List the advantages/disadvantages of buying in quantity.	5	4	3	2	1		0	4.00
23. Knowledge that fruits and vegetables may be lower in unit cost when they are in season rather than at other times of the year.	5	4	3	2	1		0	3.33
24. List factors involved in choosing snacks intelligently.	5	4	3	2	1		0	3.11
25. List factors affecting a family's food spending.	5	4	3	2	1		0	4.11
26. Differentiate the value of unit pricing to the consumer: cost per ounce, pound, and other measures for certain products.	5	4	3	2	1		0	4.33

OBJECTIVE: APPLICATION

27. The student will be able to: compare newspaper advertisement specials on food at various markets.	5	4	3	2	1		0	3.77
28. Compare the cost of health foods with regular foods.	5	4	3	2	1		0	3.44

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
29. Determine which foods are low in calories and cholesterol.	5	4	3	2	1		0	3.77
30. Compare the cuts of beef and indicate which have the greatest nutritional value.	5	4	3	2	1		0	3.44
31. Choose from a list which foods add to the cost of the food budget, but have little nutritive value.	5	4	3	2	1		0	4.11
32. Choose a balanced meal from a buffet or a smorgasboard.	5	4	3	2	1		0	3.44
33. Identify those food additives that have been linked to possible cancer conditions and heart disease.	5	4	3	2	1		0	3.88
34. Compare the price of food of the same quality at different stores.	5	4	3	2	1		0	4.11
35. Be able to compare forms of food at various prices: fresh, frozen, canned, and dried; and their respective nutritional value.	5	4	3	2	1		0	4.33
36. Compare the price of milk: delivered at home or at the store; carton or bottle.	5	4	3	2	1		0	3.33
37. Identify and judge the quality of fruits.	5	4	3	2	1		0	3.33
38. Determine the cost per serving at various prices.	5	4	3	2	1		0	4.00

39. Compare various grades of fruits and vegetables.
40. Compare calories provided by fats, sugars, starches, and proteins.

Essential					Omit	Do Not Understand	Mean Rating By Teachers
5	4	3	2	1		0	3.22
5	4	3	2	1		0	3.77

Circle one number for each objective

OBJECTIVE: KNOWLEDGE		Essential					Do Not Understand		Mean Rating By Teachers	
1.	State what percent of the price now paid for commodities could be saved if consumer credit were eliminated.	5	4	3	2	1	0		4.33	
2.	Explain how over use of credit in the society may help to create inflation.	5	4	3	2	1	0		4.66	
3.	Define the term "attachment," (a legal process whereby property is controlled by the court until a lawsuit is settled).	5	4	3	2	1	0		3.56	
4.	Define the term "insolvent," (a person or company cannot pay his (its) debts because of insufficient funds).	5	4	3	2	1	0		3.77	
5.	State the possible result of continuously remaining insolvent (the court may decided to declare the person or company legally bankrupt).	5	4	3	2	1	0		4.00	
6.	Explain the meaning of an acceleration clause.	5	4	3	2	1	0		4.00	

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
7. Differentiate between short-term credit and long-term credit.	5	4	3	2	1		0	4.33
8. Explain how a real estate mortgage is a type of credit.	5	4	3	2	1		0	3.66
9. State the requirements of the Truth-in-Lending Law (banks, stores, and other lenders must clearly tell the consumer what he is paying to borrow or to buy goods on credit).	5	4	3	2	1		0	4.55
10. List the requirements of the Credit Billing Act (bills and statements must itemize all charges, payments, effective interest rates, and other information).	5	4	3	2	1		0	4.22
11. Identify the three C's of credit: character, capacity, and capital.	5	4	3	2	1		0	4.11
12. State the substance of the Fair Credit Reporting Act (permits all individuals the right to see information in their credit files and to correct any errors).	5	4	3	2	1		0	4.44
13. State when title to merchandise passes to buyer on installment plans. (Title remains with the seller until the goods are paid for).	5	4	3	2	1		0	3.88
14. Explain the limitations of a consolidation loan (will not reduce the interest rate or the amount of the indebtedness but will extend the time of the loan).	5	4	3	2	1		0	4.55

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
15. Explain why the cash value of an insurance policy can serve as a source for a loan.	5	4	3	2	1		0	4.55
16. Define a cosigner on a note or contract (a person who agrees to pay the debt for the debtor if the debtor cannot or will not pay).	5	4	3	2	1		0	4.44
17. Explain what happens to a person's credit rating when he moves from one state to another (credit rating follows him).	5	4	3	2	1		0	4.11
18. Explain the terms of payment in an open charge account. (The buyer agrees to pay in full for all purchases within a certain time after being billed, usually 10 to 30 days.)	5	4	3	2	1		0	4.44
19. Identify the factors involved in shopping for credit.	5	4	3	2	1		0	4.56
20. Differentiate between interest rates of credit unions and those of commercial banks and other sources of credit.	5	4	3	2	1		0	4.22
21. State the liability and obligation the owner of a credit card has if it is lost or stolen. (If reported, the owner may be held liable for no more than \$50.)	5	4	3	2	1		0	4.33

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
22. Identify possible owners of an installment contract.	5	4	3	2	1		0	4.11
23. Define the term "debtor," (a person who owes money in a credit situation).	5	4	3	2	1		0	4.00
24. Define the term "creditor," (a person to whom money is owed in a credit situation).	5	4	3	2	1		0	4.00
25. Explain how usury laws protect the debtor. (Usury laws limit the highest contract rate of interest that may be charged.)	5	4	3	2	1		0	4.33
26. Knowledge that one's total indebtedness should not be more than 25 percent of annual income.	5	4	3	2	1		0	4.22
27. Explain under all circumstances credit instruments should be read carefully and understood before they are signed.	5	4	3	2	1		0	4.88
28. Explain how discrimination laws affect creditors. (Creditors are not allowed to discriminate against a person because of race, religion, national origin, or sex.	5	4	3	2	1		0	3.77
29. Explain why debts should be paid according to the terms of the agreement.	5	4	3	2	1		0	4.44

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
30. Define the term "default." (Default refers to missing a payment when it is due.)	5	4	3	2	1		0	4.00
31. Explain why a loan should be obtained only from a licensed lender.	5	4	3	2	1		0	4.44
32. Student will be able to identify advantages and disadvantages of credit. (It may lead to over-spending, and it may cost extra money.)	5	4	3	2	1		0	4.55
OBJECTIVE: APPLICATION								
33. The student will be able to: Identify the most important factor in obtaining a loan from any lending agency.	5	4	3	2	1		0	4.66
34. Compare interest rates at different financial companies: loan companies, banks, or credit unions.	5	4	3	2	1		0	4.77
35. Calculate the dollar cost of a simple interest loan in a problem.	5	4	3	2	1		0	4.55
36. Calculate the dollar cost of an add-on interest loan in a problem.	5	4	3	2	1		0	4.44
37. Calculate the dollar cost of interest on an unpaid balance type of loan in a problem.	5	4	3	2	1		0	4.44

38. Calculate in a problem the amount of debt that a consumer can afford.

Essential

Omit

Do Not
Understand

Mean Rating
By Teachers

5 4 3 2 1

0

4.33

39. Be able to determine which factors should be considered first prior to other considerations when obtaining a loan from any lending agency.

5 4 3 2 1

0

4.00

CLOTHING

Circle one number for each objective

OBJECTIVE: KNOWLEDGE	<u>Essential</u>					<u>Omit</u>	<u>Do Not Understand</u>	<u>Mean Rating By Teachers</u>
1. The student will be able to identify the different types of retail credit: regular, installment, and revolving.	5	4	3	2	1		0	3.66
2. In planning a wardrobe, the student will be able to determine clothing needs as opposed to clothing wants.	5	4	3	2	1		0	4.00
3. The student should demonstrate his understanding that one strategy in buying clothing on a limited budget is to purchase versatile items that serve many different purposes.	5	4	3	2	1		0	3.67
4. State the purpose of the Wool Product Labeling Act (prevents manufacturers of wool items from misrepresenting their products).	5	4	3	2	1		0	2.66
5. State the purpose of the Fur Product Labeling Act (states the true English name of the fur, the country of origin, and dyeing).	5	4	3	2	1		0	2.66
6. State the purpose of the Flammable Fabrics Labeling Act.	5	4	3	2	1		0	2.33
7. State the purpose of Textile Fiber Products Identification Act.	5	4	3	2	1		0	2.88

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
8.	Be able to identify signs of good workmanship in clothing.							
	5	4	3	2	1		0	3.77
9.	Explain why labels should inform the purchasers of the fabric content of the garment.							
	5	4	3	2	1		0	3.55
10.	State the reasons why clothing prices are usually lower after Christmas.							
	5	4	3	2	1		0	3.44
11.	The student will be able to explain the proper storing procedures for clothing.							
	5	4	3	2	1		0	3.11
12.	State reasons why one should do comparison shopping for the best buys in clothing.							
	5	4	3	2	1		0	4.11
13.	Explain why trademarks and brand names may be helpful in obtaining best quality in clothing.							
	5	4	3	2	1		0	3.00
14.	Explain why one may be able to reduce clothing cost by making one's own clothes.							
	5	4	3	2	1		0	3.22
15.	The student should explain how building a wardrobe around a few colors rather than around many different colors can allow more versatility in a wardrobe at greater savings.							
	5	4	3	2	1		0	3.44
16.	The student should be able to list the four basic natural fibers used in clothing (cotton, wool, linen, and silk).							
	5	4	3	2	1		0	3.22

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
17. State what one should do to maintain the life and beauty of a garment at minimum cost.	5	4	3	2	1		0	3.77
18. Identify the types of dresses a woman should buy who is on a tight budget and can alter her own clothing.	5	4	3	2	1		0	2.88
19. The student should be able to state the purpose of bonding (the massing together of fibers onto a web by means of resins and heat).	5	4	3	2	1		0	2.55
20. Be able to state the purpose of wash and wear finishes (decrease the need for extensive ironing of the garment after it has been washed).	5	4	3	2	1		0	4.00
21. The student will be able to explain how preseason sales may be a source of saving.	5	4	3	2	1		0	4.00
22. State the purpose of mercerizing (indicate that the fabric has been chemically treated to add luster as well as strength).	5	4	3	2	1		0	3.11
23. The student should understand that preshrinking is a process used to treat fabrics so that they will have little or no shrinkage after washing.	5	4	3	2	1		0	2.77

	Essential					Omit	Do Not Understand	Mean Rating By Teachers
24. The student should understand that some seasonal clothing can often be bought at the end of a season at substantial savings.	5	4	3	2	1		0	4.00
25. Be able to explain why permanent-press finish is applied to clothing (to set pleats, creases, cuffs, and general shape of a garment).	5	4	3	2	1		0	3.11
OBJECTIVE: APPLICATION								
26. The student should be able to identify the fabric finish which helps garments to retain their shape.	5	4	3	2	1		0	3.44
27. Identify the kind of information the FTC requires for permanent labels on textile products.	5	4	3	2	1		0	3.72
28. Be able to differentiate among style, fashion, or fad.	5	4	3	2	1		0	3.66
29. The student should be able to differentiate between different kinds of manmade fibers (polyester, acrylic, rayon, acetate, and nylon).	5	4	3	2	1		0	3.44
30. Be able to calculate how much one can save in dollars when given an original selling price and information that the item is reduced 10 percent.	5	4	3	2	1		0	3.66

40. State the fiber characteristics of cotton, wool, linen, silk, rayon, acetate, nylon, acrylic, and polyester.

Essential					Omit	Do Not Understand	Mean Rating By Teachers
5	4	3	2	1		0	3.22

APPENDIX D

PARTICIPATING CONSUMER JURY MEMBERS

PARTICIPATING CONSUMER JURY MEMBERS

Dr. John E. Moore - Director, Division of Technology, Assistant Professor of Computer Science - Dyersburg State Community College - Dyersburg, Tennessee 38024

Mr. Joe M. Pentecost - Associate Professor and Chairman of the Division of Technology - Jackson State Community College - Jackson, Tennessee 38301

Dr. Earl Daniel - Director of Career Education - Motlow State Community College - Tullahoma, Tennessee 37388

Mr. Bob Thomas - Chairman of the Division of Business - Roane State Community College - Harriman, Tennessee 37748

Miss Cinda C. Jordan - Instructor of Economics - Cleveland State Community College - Cleveland, Tennessee 37311

Mrs. Marirose Arendale - Associate Professor, Social Studies - Chattanooga State Technical Community College - Chattanooga, Tennessee

Mr. Paul L. McClellan - Assistant Professor of Business and Commerce and Office Occupations - Volunteer State Community College - Gallatin, Tennessee 37066

Mr. Roland D. Whitsell - Associate Professor of Business - Volunteer State Community College - Gallatin, Tennessee 37066

Mr. Orville E. Bach - Director of Management - Walters State Community College - Morristown, Tennessee 37814

APPENDIX E

CONSUMER TRY-OUT TEST -- DIFFICULTY AND DISCRIMINATION INDICES

CONSUMER TRY-OUT

1. When is the most economical time to purchase a new car?
 - A. When it appears that the car will require some expensive repairs and one can buy another car cheaper than he can make the repairs.
 - B. About the time the present car has 100,000 miles on it, if one drives the average of 10,000-12,000 miles a year.
 - C. When the present car costs more for depreciation, repairs, gasoline, and oil than a new one would.
 - D. When a revolutionary new model first comes on the market, especially if it is designed to reduce driving cost.
2. A person should decide upon the kind of car that is needed:
 - A. after shopping for the car.
 - B. before shopping for the car.
 - C. when shopping for the car.
 - D. after the car is bought.
3. Which of the following general factors should be considered when buying a new car:
 - A. Size and extras needed.
 - B. Car's mileage per gallon of gasoline.
 - C. Dealer's cost and buyer's ability to bargain with seller.
 - D. Market value of any trade-in.
 - E. All the above should be considered.
4. Where does one get a car warranty?
 - A. In the car manufacturer's advertising material.
 - B. In the glove compartment of the new car or attached to the sun visor.
 - C. In the owner's manual or with it.
 - D. From the car salesman at the time one pays for the car.
5. Prepayment of an automobile loan:
 - A. carries a penalty.
 - B. decreases depreciation.
 - C. may carry a penalty.
 - D. is not legally allowed in automobile contracts.
6. How does one know how beneficial a car warranty will be:
 - A. Since the manufacturer honors the warranty, his reputation is a good indicator.
 - B. The consumer must depend upon the reputation of the car dealer because he carries out the conditions of the warranty.
 - C. Benefits are determined by knowing the conditions of the warranty and the length of time it covers.
 - D. The salesman explains what the warranty covers and does not cover, as well as how to take advantage of benefits. One receives full benefit only if he meets his responsibilities.

7. New car dealers are likely to be:
 - A. the least reliable sellers of used cars.
 - B. the most reliable sellers of used cars.
 - C. lowest priced sellers of used cars.
 - D. the poorest repairers of used cars.
8. How can one avoid repair frauds by incompetent or dishonest mechanics?
 - A. Find a knowledgeable mechanic by talking to friends and neighbors, then ask him for a specific estimate in writing.
 - B. Pick a mechanic who will look at you straight in the eye and has a winning personality because he is likely to know his job and to treat one honestly.
 - C. Pick a repair shop which can get to the work quickly because this is a sign of competence and good management.
 - D. Find a shop with young mechanics because they will have been to school recently and know how to repair recent models and to use latest methods.
9. Teenager Consumer is buying his first car while away from home. He has a klunker his Dad gave him to trade in on a used car. He knows little about cars. What procedure should he follow?
 - A. Try to buy from an individual, rather than a used car lot; check the service record; ask for a guarantee.
 - B. Ask the car salesman what condition the car is in and who the previous owner was; especially check the clutch, steering, and brakes; get top dollar for the klunker.
 - C. Read classified advertisements in the papers; visit all used car lots in the area; check for the lowest-priced car in the year and model which will suit predetermined needs.
 - D. Buy from a reputable dealer; take a road test, listening for a quiet engine and looking for a clean body; have the car checked by a trustworthy mechanic.
10. Large used-car dealers:
 - A. sell their used cars as is (the car is not cleaned up).
 - B. do not charge for cleaning their cars.
 - C. clean their cars thoroughly and often paint even the engines.
 - D. do not service their used cars.
11. What is the name of the insurance coverage that provides financial protection for the owner of an automobile in cases where someone is injured or killed?
 - A. liability insurance.
 - B. comprehensive physical damage insurance.
 - C. property damage insurance.
 - D. collision insurance.

12. Mr. B is being charged \$8 for each \$100 per year on his truck loan. This \$240 interest is added on to the principal of \$3,000, making \$270 to be repaid each month. What is the true annual interest rate?
- A. 10.1%
 - B. 14.8%
 - C. 16.5%
 - D. 17.4%
13. Fixed costs plus variable costs divided by the number of miles driven equals:
- A. cost per kilometer of automobile operation.
 - B. cost per mile of automobile operation.
 - C. cost per hour of automobile operation.
 - D. cost per day of automobile operation.
14. How can one tell whether he is really getting a good price for his used car as a trade-in on a new one?
- A. Get the price for the new car with a trade-in and without a trade-in. The difference is the price being paid for the used car, and it should be compared with suggested retail prices in Consumers Reports or the Red Book.
 - B. Advertise your used car in the paper. Compare the offers received from individuals with those offered by the new car dealer. If the dealer is offering as much on a trade-in, that is a good price.
 - C. Find the newspaper ads of a car of the same year, make, and model identical with the one being traded in; if you can get that amount from the car dealer, he is offering a good price.
 - D. Go to used car lots, pretending to be buying a car like the one you own. If the price is similar to what the new car dealer is offering, you are getting a good price.
15. Mr. C's gas tank holds 20 gallons. He filled it up; drove 225 miles; and filled it again. The second time it took 15 gallons and cost him \$8. About how much per mile did gasoline cost?
- A. 1.9¢
 - B. 3.6¢
 - C. 4¢
 - D. 5.3%
16. Which of the following offers cheapest interest? Each loan is to be paid in equal monthly installments.
- A. Credit union: $\frac{3}{4}$ of 1% a month on the unpaid balance.
 - B. Commercial bank: 6% per annum, added on to the original amount of the loan, plus credit investigation and filing.
 - C. Car dealer: \$10 per \$100 of principal added on to the original amount of the loan.
 - D. Consumer finance company: $1\frac{1}{2}\%$ per month on the unpaid balance, plus credit life and a maintenance fee of $1\frac{1}{2}\%$ of the amount of the loan.

17. On which of the following would one have to pay HIGHEST taxes?
- A. Small home owned in an unincorporated town and rented to someone else.
 - B. Three acres of land on the edge of town.
 - C. Small lot and average-sized house in an affluent neighborhood.
 - D. Large old house on a small farm at the edge of the county.
18. By whom are property taxes levied and for what purpose?
- A. Local government, primarily for education and government.
 - B. State in which the property is located, in place of state income taxes.
 - C. Township in which the property is located for law enforcement, city streets, and recreational facilities.
 - D. Federal tax district for revenue-sharing purposes.
19. Mr. C is in a hurry to get a 25-year loan and move into his new \$35,000 home. He is not a veteran. He can pay up to \$3,000 down, but he wants to pay as little as possible. What type loan shall he get? Why?
- A. VA loan--because the loan would be guaranteed by the federal government; therefore, little or no downpayment is required and interest is low.
 - B. FHA loan--because he can borrow up to 97% of the value of the house, although he must pay a mortgage insurance premium of $\frac{1}{2}$ of 1%.
 - C. Conventional loan. Although Mr. C will have to pay 20% or more down, the conventional loan is easiest and quickest to obtain.
 - D. Mr. C is eligible for VA, FHA, or conventional loan, and he should apply for the one which offers lowest interest and least downpayment.
20. Approximately three-fourths of all loans for family housing are provided through:
- A. mortgage assumptions.
 - B. second mortgages.
 - C. FHA-insured mortgage loans.
 - D. conventional financing.
21. One of the major sources of funds for home mortgages is the:
- A. life insurance companies.
 - B. mortgage brokers.
 - C. Federal Housing Authority.
 - D. savings and loan associations,

22. Several financial institutions are available to the prospective homeowner of obtaining a mortgage loan. Which of the following is a legitimate lending institution?
- A. Federal government through FHA.
 - B. Savings and loan association.
 - C. Veterans Administration.
 - D. State government through FFA.
23. Consumer family wants a 20- or 30-year home mortgage with the least possible downpayment at the prevailing rate of interest. Where would be the best source of mortgage money for them?
- A. Bank.
 - B. Savings and loan association.
 - C. Private lender.
 - D. Life insurance company.
24. Most housing experts feel that owning a home is:
- A. not a good way to plan for the future.
 - B. an investment.
 - C. a poor investment.
 - D. an investment only for the rich.
25. Especially in the early years of a home mortgage, a large percentage of the mortgage payments can be:
- A. used to lower one's utility costs.
 - B. used to increase one's property taxes.
 - C. claimed as deductible interest on one's income tax.
 - D. used to pay for homeowners insurance.
26. The methods of transportation that one has available:
- A. will be the same for most people.
 - B. can be ignored when choosing housing.
 - C. is an important factor when choosing housing.
 - D. make a person appreciate mass transportation.
27. Mr. and Mrs. Consumer are checking into the governmental jurisdiction of the location they have chosen for a home. Which of the following is NOT a factor that would be determined by the community?
- A. Amount of taxes paid.
 - B. Kind and quality of community services.
 - C. Zoning laws.
 - D. Nearness to colleges, schools, churches, and employment.

28. In addition to the signatures of landlord and tenant, which of the following are most important information for a lease?
- A. Effective dates of lease, amount and due date of rental, and identification of property.
 - B. Date, what constitutes breaking the lease, and names of landlord and tenant.
 - C. When rent is due, where it is to be paid, and how.
 - D. Description of the property, date on which the lease takes effect, and who is responsible for maintenance.
29. In a lease covering a certain period of time, which of the following is NOT a right or duty of the tenant?
- A. Peaceful possession of the property.
 - B. Use of the property for the purpose adapted.
 - C. Improvements in the property.
 - D. Maintenance of the property.
30. In a lease, which of the following is NOT a right or duty of the landlord?
- A. Enter the premises at will.
 - B. Pay taxes and assessments on the property.
 - C. Keep improvements made by the tenant and attached to the property.
 - D. Pay for injuries to guests of the tenant because of defects in the property controlled by the landlord.
31. Which of the following statements would offer the strongest argument for renting?
- A. It is less expensive to rent in the short run than it is to buy.
 - B. Rentals are more fixed than mortgage payments.
 - C. Renters are not affected by changes in property taxes.
 - D. The prestige associated with home ownership no longer exists; therefore, "renting what you want" is more desirable.
32. The typical insurance policy which covers loss by fire, theft, or liability on real estate is called:
- A. package insurance.
 - B. comprehensive insurance.
 - C. mortgage insurance.
 - D. homeowner's insurance.
33. When buying a home, the prospective homeowner is encouraged to buy "title insurance." This insurance states that:
- A. the mortgage, deed, abstract of title, and note are acceptable by legal standards.
 - B. all pertinent records have been examined by an attorney, and, to the best of his knowledge, the buyer is receiving a valid title.
 - C. the homeowner will be defended against claims brought by unknown parties contesting his legal ownership.
 - D. a thorough investigation of previous home ownership has been made, and payment of any known or unknown claims against the property is guaranteed.

34. How many servings must be eaten daily from the four basic food groups in order to insure good nutrition?
- A. Dairy products--3; meat, eggs, and beans--3; cereal products--3; milk--2-4.
 - B. Beef, pork, and poultry--3; fruit--2; vegetables--2; grains--4.
 - C. Milk--2-4; meat--2; vegetable-fruit--4; bread-cereal--4.
 - D. Protein--3; vitamin--3; calcium--4; calorie--4.
35. In addition to the name of the producer, product, and net contents, what information does FDA require on canned food label?
- A. Variety, picture of contents, recommended use of the food.
 - B. Additives, nutritional guide, location of cannery.
 - C. Grade, whether real or imitation, amount of liquid and solid.
 - D. Address of producer and ingredients.
36. As family income rises, there is a tendency to spend proportionately fewer dollars on:
- A. food.
 - B. taxes.
 - C. recreation.
 - D. housing.
37. If the FTC finds that an advertiser cannot support his claims about a certain product, it may require the publication of corrective advertising to:
- A. increase the amount of money spent for advertising.
 - B. counteract false impressions customers may have received from deceptive advertising.
 - C. punish companies that engage in false advertising.
 - D. force companies to substantiate the claims they make.
38. How do trading stamps complicate price comparisons?
- A. Their worth varies with what one buys with them.
 - B. The shopper often doesn't know before buying who gives stamps.
 - C. There are so many different kinds of stamps that it is hard to accumulate enough to cash in.
 - D. One doesn't know how many stamps she will receive.
39. The major benefit to the customer of a grocery shopping list is that the list helps the consumer to:
- A. plan menus in advance so that less time is used in food preparation.
 - B. know which food items are on sale and where to buy them.
 - C. avoid backtracking the grocery cart to find items, if the list is organized according to the way food is displayed.
 - D. buy only needed items; not unnecessary foods.

40. How does listing U. S. RDA on foods help the consumer? The information tells:
- A. one whether there is serious deficiency in the diet.
 - B. recommended percentage of daily requirements for calories, fat, protein, and carbohydrates.
 - C. nutrient content of foods.
 - D. how many and what size servings each can of food contains.
41. It is important to check the package of the product:
- A. to see if it is made of cardboard.
 - B. to see if it is made of glass.
 - C. to see if it is insulated.
 - D. to see if there are defects that may harm the food.
42. A loss-leader is an item:
- A. sold only by leading food stores.
 - B. that was lost, then found, and now sold.
 - C. placed on sale to attract customers.
 - D. that is lost in inventory.
43. The Fair Packaging and Labeling Act requires all products sold through interstate commerce to be:
- A. honestly and informatively labeled.
 - B. packaged in wooden boxes.
 - C. transported by members of the Teamsters Union.
 - D. inspected four times.
44. One of the purposes of the Fair Packaging and Labeling Act is to insure that foods:
- A. are sold by retail merchants only.
 - B. are safe, pure and wholesome, and produced under sanitary conditions.
 - C. are sold directly from farmers to wholesalers.
 - D. are grown on soil polluted by water.
45. Labels should be read because:
- A. they contain valuable information.
 - B. they give the price per pound.
 - C. they contain interesting recipes.
 - D. they show how to open the container.
46. Which of the following items of information is not required on the labels of food products?
- A. the ingredients.
 - B. the net weight.
 - C. the name of the producer or manufacturer.
 - D. the address of the producer or manufacturer.

47. Private-label foods tend to _____ than brand-name foods.
- A. Cost more.
 - B. Cost less.
 - C. Be of lower quality.
 - D. Be of higher quality.
48. Ms. C notices that meat takes about one-third of her food shopping dollar, and she feels that this is the best place to cut her grocery bill. Which of the following would NOT help?
- A. Substitute dry beans, eggs, or cheese for some meat.
 - B. Buy whole chicken and hamburger instead of steak, roasts, or chops.
 - C. Serve lunch meat sandwiches for one meal a day.
 - D. Use meat dish recipes which include pasta, bread, or rice.
49. Unit pricing gives the cost:
- A. per case or gross of the product.
 - B. per dozen, half-dozen, or gross of a product.
 - C. per ounce, pound, quart, or other measure for certain products.
 - D. of only meat and dairy products.
50. One factor to consider in buying food is cost. What can take the guesswork out of comparing prices?
- A. Using an electronic calculator.
 - B. Comparing the costs of identical sizes of packages in different brands.
 - C. Unit pricing.
 - D. Asking stock boy or check-out clerk which are best bargains.
51. In which of the following is cost per serving least?
- A. 20 oz. Brand A corn flakes @ 89¢.
 - B. 12 oz. Brand B corn flakes @ 50¢.
 - C. 8 oz. Brand C corn flakes @ 46¢.
 - D. 18 Oz. Brand D corn flakes @ 65¢.
52. If a 5-pound steak costs \$3.95, what is the cost per pound?
- A. \$.79 per lb.
 - B. \$.89 per lb.
 - C. \$.99 per lb.
 - D. \$.97 per lb.
53. A seven-pound turkey costs \$8.40. What is the cost per pound?
- A. \$1.20
 - B. \$1.30
 - C. \$1.40
 - D. \$1.50

54. What percent of the price now paid for commodities could be saved if consumer credit were eliminated?
- A. 0-5%
 - B. 5-10%
 - C. 15-20%
 - D. 20-25%
55. A charge account may be both convenient and low in cost. An able person can handle his cash and charge account purchases wisely. An important rule for such a person to follow is:
- A. to budget your spending (both cash and charge account) and stick to your budget.
 - B. never to use charge accounts when you have cash.
 - C. to use charge accounts only for the so-called luxury purchases.
 - D. to determine how much you have to spend and use your charge account up to that limit.
56. What is a possible result of continuously remaining insolvent?
- A. Destroys credit rating.
 - B. The court may decide to declare the person or company legally bankrupt.
 - C. Little need or concern as long as the interest on the debt is paid.
 - D. Nothing legally will happen.
57. When purchasing merchandise on an installment basis, an individual consumer may sign a contract in which there is an acceleration clause. This clause gives the:
- A. seller the right to collect the unpaid balance of an account immediately upon nonpayment of one installment.
 - B. buyer the right to speed up his payments, paying off the debt prior to the final due date.
 - C. seller the right to increase the carrying charge for the default in one payment.
 - D. buyer the right to start with small payments and to make larger payments toward the end of the payment period.
58. What is the purpose of the truth-in-lending law?
- A. To reveal the true amount of interest and the annual percentage rate.
 - B. To put in writing exactly how much the borrower must pay each month and when it is due.
 - C. To allow consumers to compare interest rates at various credit sources.
 - D. To make provision for the lender to repossess whatever the borrower has purchased if he fails to meet his payments.

59. When you ask for credit, a businessman will consider your application according to the "three C's" of credit: (1) capital, or your net worth; (2) character, or is your word good; and (3)
- A. cost, or how much it will cost.
 - B. confidence, or the confidence of the businessman in you.
 - C. credit rating, or your reputation for paying your bills.
 - D. capacity, or your ability to pay.
60. The three C's of credit are:
- A. capital, character, and canorous.
 - B. capacity, capital, and capricious.
 - C. contrite, capital, and character.
 - D. character, capital, and capacity.
61. The Fair Credit Reporting Act provides that all individuals have the right to:
- A. fair trial.
 - B. discard bad information from their credit reports.
 - C. see information in their credit files.
 - D. destroy their credit files.
62. The law that limits your liability if you los your credit card is the:
- A. Truth-in-Lending Act.
 - B. Fair Credit Billing Act.
 - C. Fair Credit Reporting Act.
 - D. Consumer Credit Protection Act.
63. Deferred Payment Plan, Divided Payment Account, Budget Account, Extended Payment Plan, Revolving Credit Account, Time Plan, Coupon Account, and Convenient Payment Account are all names of one consumer credit plan, namely:
- A. a 60- to 90-day charge account.
 - B. installment credit.
 - C. an open charge account.
 - D. small loan company credit.
64. A limitation of a consolidation loan:
- A. will not reduce the interest rate.
 - B. will not reduce the amount of indebtedness.
 - C. will extend the time of the loan.
 - D. All are limitations of a consolidation loan.
65. It costs little to borrow on your life insurance policy. Most life policies have a cash or loan value. One of the following types of life policies usually does not carry a cash or loan value:
- A. 20-year endowment.
 - B. term.
 - C. 20-pay life.
 - D. straight life.

66. An inexpensive way to borrow money is to borrow on your life insurance policy. Most life policies have a cash or loan value. One of the following types of life policies usually does not carry a cash or loan value:
- A. 20-year endowment.
 - B. term policy.
 - C. 20-pay life policy.
 - D. straight life policy.
67. The cosigner or comaker of a loan agrees to:
- A. pay for faulty merchandise.
 - B. make sure the loan is legal.
 - C. pay only the interest on the loan.
 - D. pay the debt if the debtor does not pay.
68. A credit rating follows a consumer:
- A. for two years.
 - B. only within the state.
 - C. from one state to another.
 - D. only if the consumer requests it.
69. John Doe has never paid his bills on time. He has a bad credit rating. He moves to another state and gets a good job with a good salary. One of the following statements is true about John Doe and his credit rating:
- A. his bad credit rating will become known to businessmen in his new home city.
 - B. state laws prevent interstate exchanges of confidential credit information.
 - C. because John Doe has a good job with a good salary, the businessmen in his new home city will not ask about old credit rating.
 - D. John Doe should protect himself by not telling people in his new home town about where he lived in the past.
70. Stores that offer "open" charge accounts to all customers make up the cost of this service by one of the following methods:
- A. the store sells more than it would without charge accounts.
 - B. higher prices are charged to both cash and charge account customers.
 - C. other services are cut to make up for the cost of charge accounts.
 - D. the salaries of store clerks are cut.
71. An "open" charge account differs from other types of charge accounts because:
- A. it offers credit at a lower interest charge.
 - B. it offers credit with no credit investigation.
 - C. it provides for credit purchases up to a certain pre-determined amount.
 - D. it provides for credit purchases with no interest charges for periods of from 30 to 90 days.

72. Where to borrow is difficult to determine. The best rule to follow is to:
- A. borrow from banks only.
 - B. borrow from credit unions only.
 - C. borrow from either banks or credit unions.
 - D. shop around and to borrow from the least expensive source.
73. Where and when to borrow money is hard to determine. One of the following four ideas gives the best advise on where and when to borrow money:
- A. borrow from a bank or emergency use only.
 - B. borrow from friends and relatives.
 - C. borrow where the cost of borrowing is lowest.
 - D. borrow only from a credit union, because their rates are lowest.
74. In order to obtain the best deal, a consumer should:
- A. recognize that shopping for credit is different from goods and services.
 - B. shop for credit in the same way as shopping for goods and services.
 - C. have at least seven credit cards to make sure an item can be purchased.
 - D. avoid the use of credit because it will give the consumer a poor credit rating.
75. You would most likely be able to borrow money at the lowest true annual interest rate from a:
- A. pawn shop.
 - B. small loan company.
 - C. sales finance company.
 - D. personal loan department of a commercial bank.
76. Commercial banks offer loans to consumers through their personal-loan departments. The commercial bank is the chief source of credit for one of the following types of loans:
- A. home repair and modernization loans.
 - B. loans for the purchase of household appliances.
 - C. retail automobile credit.
 - D. personal loans.
77. Credit unions charge a relatively low true annual interest rate because:
- A. they are not interested in making a profit.
 - B. they have almost no losses from bad debts.
 - C. the U.S. government pays all of their expenses.
 - D. they have tax advantages, and often have free office space and free secretarial help.

78. Credit card holders may be held liable for:
- A. not more than \$25 if the card is lost or stolen.
 - B. not more than \$50 if the card is lost or stolen.
 - C. not more than \$100 if the card is lost or stolen.
 - D. the full amount charged.
79. If you lose your credit card you should:
- A. forget about it, since no one but you can legally use your card.
 - B. put an advertisement in the newspaper saying that you are not responsible for any bills charged to your credit card.
 - C. go to the nearest place of business which accepts your card and tell the businessman of your credit card loss.
 - D. wire or phone the credit card company telling them of the loss, followed by a registered letter informing them of the lost card.
80. Interest rates under the usury laws in most states range from 6 percent to 12 percent. However, most of the states allow licensed small loan companies to make small loans at much higher rates. This is done because:
- A. the small loan companies have powerful lobbies that influence state legislatures.
 - B. usury laws, which do not apply to loans under \$5,000, do not affect small loan companies.
 - C. no state has adequate legislation to protect the consumer who borrows small amounts of money.
 - D. no business can make a profit on small loans unless the interest charged exceeds the 6 to 12 percent limits.
81. One's total indebtedness should not be more than what percent of annual income?
- A. 15
 - B. 20
 - C. 25
 - D. 30
82. There are a few people dealing in installment credit who are not entirely honest. The best description of a dishonest consumer of installment credit is one who:
- A. fails to pay, or refuses to pay, for goods received.
 - B. fails to acquaint himself with the terms of his contract.
 - C. does not have a good credit rating.
 - D. is ignorant of the cost of installment credit.

83. What is the main advantage and the main disadvantage of buying on credit? The use of credit enables one to:
- A. establish a line of credit so that when it is needed, it will be available; but results in having to pay for an unnecessary credit check.
 - B. buy something at a bargain without the money to pay for it; but may cause him to accumulate goods he does not need.
 - C. enjoy now what he does not have the money to pay for; but often increases the cost of goods.
 - D. shop without carrying large amounts of cash and reduces the chance of his being mugged; but may result in his leaving cash at home and being robbed there.
84. One advantage of installment credit buying is that:
- A. the regular payments force the buyer to plan his spending.
 - B. goods cost less when purchased on the installment plan.
 - C. it is convenient for the buyer.
 - D. it helps the buyer to build a good credit rating.
85. In obtaining a loan from any lending agency, which of the following factors should be considered first prior to the other considerations?
- A. Rate of interest quoted.
 - B. Dollar cost of the loan.
 - C. Type of security demanded.
 - D. Repayment period required.
86. Costs of loans vary according to the type of financial source from which the funds are borrowed. Probably the least expensive place from which to borrow is:
- A. a credit union.
 - B. a commercial bank.
 - C. a mutual savings bank.
 - D. an insurance policy with cash value.
87. The consumer can argue for small loan companies because such companies:
- A. make loans to people who cannot borrow money elsewhere.
 - B. charge a lower interest rate than do the banks.
 - C. are closely controlled by the federal government.
 - D. have an outstanding record for giving good service.
88. Occasionally a person will see an advertisement in a newspaper that reads something like this: "Own this ladies' beautiful watch for only 10% down and \$9 per month with a small carrying charge of only \$1 per month. Assuming that the list price before down payment was \$100, we know that the jeweler is charging a true annual interest rate of approximately:
- A. 12%
 - B. 18%
 - C. 24%
 - D. 30%

89. Mr. C is being charged \$8 for each \$100 per year on his car loan. This \$240 interest is added on to the principal of \$3,000, making \$270 to be repaid each month. What is the true annual interest rate?
- A. 8%
 - B. 14.8%
 - C. 16.1%
 - D. None of these
90. You charge a \$120 item on a revolving charge account. Your twelve monthly payments are \$10 each plus interest. Interest is 1-1/2 percent per month on the declining balance. Your charge account purchase will cost you (over the \$120 purchase price):
- A. \$9.70
 - B. \$10.70
 - C. \$11.70
 - D. \$12.70
91. Which of the following types of bank loans will carry the lowest true annual interest rate?
- A. \$1,200 payable over 12 months at \$106 a month (106 X 12 = \$1,272).
 - B. \$1,200 payable in two semi-annual payments of \$636 each.
 - C. \$1,200 payable in 52 weekly payments of \$24.46 each (24.46 X 52 = \$1,272).
 - D. \$1,200 payable after one year with one payment of \$1,272.
92. Susan C is a secretary in a large city and can barely stretch her budget to cover the necessities. However, she feels that she must dress well. What is NOT a guideline for her to follow in selecting clothes?
- A. Use credit to buy whatever seems appropriate.
 - B. Buy clothes that can be altered if one should gain or lose weight or if the styles should change.
 - C. Buy the current fad at the end of the season; get perfect fit and appropriate color.
 - D. Choose classic styles that can be teamed with parts of other outfits.
93. What is the best shopping tip for a woman who likes to shop for clothes only when they are on sale?
- A. At the beginning of the season, buy at a discount store whatever clothes are currently in vogue.
 - B. Buy clothes copied from famous designers as soon as they get on department store racks.
 - C. Buy "seconds" or "imperfects" that probably can be mended to suit your needs.
 - D. Buy basic styles from reputable stores at the end of the season.

94. What are signs of good workmanship in clothing?
- A. Quality trim; simple cut; stain-resistant finish.
 - B. Well-known brand; specialty store; loose fabric and construction.
 - C. Current style; correct fit; stiffened collar, cuffs, and front.
 - D. Cut on grain; wide seams with close, even stitching and non-fraying edges; reinforced weak points.
95. For the best buy in clothing, a person should:
- A. shop at only a few stores.
 - B. do comparison shopping.
 - C. buy just before Christmas.
 - D. shop in only a favorite store.
96. What should one do to maintain the life and beauty of a garment at minimum cost?
- A. Watch for bargain sales and buy clothes at reduced prices; wear them only until they lose their bright, new look.
 - B. Buy wash-and-wear clothing; rotate the clothes that are worn; clean at certain intervals whether they have been worn or not.
 - C. Buy well-known brands of clothing that can be depended upon and have them professionally cleaned and stored.
 - D. Buy well-constructed garments that can be cleaned at home, then keep them mended and clean.
97. The leather on the uppers of Mr. C's favorite shoes that he wears to work every day is rotting. How can he make them last longer?
- A. Rub with tallow and alternate days with another pair of shoes.
 - B. Keep the shoes shined and do not get them wet.
 - C. Take the shoes to a repairman and have him darn the weak points with invisible thread.
 - D. Apply liquid leather to the entire surface.
98. Ms. C likes to shop for clothes when items are reduced, but she has gotten "stung" in the past. Which is the BEST shopping tip?
- A. At the beginning of the season, buy at a discount store whatever clothes are currently in vogue.
 - B. Buy clothes copied from famous designers as soon as they get on department store racks.
 - C. Buy "seconds" or "imperfects" that probably can be mended to suit your needs.
 - D. Buy basic styles from reputable stores at the end of the season.
99. What determines whether a garment will be a style, fashion, or fad?
- A. How many people accept the garment and how long it is worn.
 - B. How expensive the garment is and what segments of society wear it.
 - C. How the garment is designed and who the designer is.
 - D. How much sales pressure is put on the public to buy the garment and whether the great masses of people buy it or just elite society.

100. A temporary, short-run acceptance of a particular type of clothing is called:
- A. an individual taste.
 - B. a current fad.
 - C. a current fashion.
 - D. an accepted style.
101. A type of clothing that is generally well accepted and used by a wide cross section of society is considered a:
- A. a short-run page.
 - B. current fashion.
 - C. temporary fad.
 - D. style.
102. Ms. C charged \$5 worth of merchandise at her local department store. Since she did not pay within 20 days after being billed, she was charged the minimum amount of 70¢ for the month. What yearly interest rate would this be?
- A. 7%
 - B. 14%
 - C. Almost 17%
 - D. 168%
103. There is a horizontal wrinkle across the top of the shoulders below the neck and one below the waist and above the rump of Mary's pants suit. What is the cause? How can it be fixed?
- A. The suit is too big at the shoulders and hips. The back sleeve seams and the side seams the length of the hip should be taken up.
 - B. The suit is too tight at the shoulders and hips. Back sleeve seams and side seams through the hip should be let out.
 - C. The suit is not cut on the straight grain on the fabric and will probably never fit right.
 - D. The fabric is too loosely worn. Lining the garment will correct the problem.
104. Cars usually depreciate the most in value during which year of ownership?
- A. The first year.
 - B. The second year.
 - C. The third year.
 - D. The fourth year.

105. Which of the following statements is FALSE regarding no-fault car insurance?
- A. Puts an end to out-of-court settlements for less than the dollar amount suffered. Currently, the insured may settle for less because he needs the money to pay his bills.
 - B. Saves insurance companies money because they would not have to pay lawyers and claims investigators large amounts of money. Therefore, they would lower insurance rates.
 - C. Provides public notice that anybody can make a mistake and should not be charged with guilt for the rest of his life because he was negligent in driving.
 - D. Eliminates the need to prove who caused the accident before a claim can be paid.
106. Which of the following will need to be considered before applying for a home loan?
- A. Size of the family, family activities, and ages of the family.
 - B. What initial expenses will be involved: water supply, gas or electrical lines, telephone and sewer.
 - C. How much they can afford to spend for housing.
 - D. Location and boundaries of the lot.
107. When money is scarce, the lower interest rates set by the Veterans Administration are adjusted by the use of:
- A. larger down payments.
 - B. mortgage insurance premiums.
 - C. points charged to the seller.
 - D. increasing the loan period.
108. Mr. C is unhappy when he finds he must get a conventional loan on his new house. Of what disadvantage is a conventional loan?
- A. It must meet the requirements of the Federal Housing Authority.
 - B. The borrower must pay a larger downpayment, and he has less time to repay his loan.
 - C. The borrower must pay 1/2 of 1% each month for mortgage insurance.
 - D. The borrower is being forced to use up his veteran's home loan benefits on this house.
109. Which of the following statements is usually true about health foods?
- A. The cost is higher than for regular foods.
 - B. The nutritive value is higher than for regular foods.
 - C. Special values prevent and cure certain diseases.
 - D. The soil in which they are grown has no deficiencies.
110. The Automobile Disclosure Act requires every new car dealer to attach a paper to the car showing:
- A. the number of accidents the car may have been in.
 - B. the price and possible discounts.
 - C. who has title to the car.
 - D. the price, price of extras, and the freight charges.

111. The cost of operating an automobile will include license fees, taxes, depreciation costs, gasoline, oil and lubrication, tire replacement, and:
- A. a federal user's fee
 - B. a notary public fee.
 - C. maintenance and repairs.
 - D. a surcharge.
112. The consumer should recognize that the biggest single cost in owning and operating a new car is:
- A. maintenance.
 - B. depreciation.
 - C. fuel costs.
 - D. environmental pollution.
113. The manufacturers suggested retail price on a new automobile is:
- A. the price that the law requires one to pay for the car,
 - B. the lowest price at which that car dealer will sell the car.
 - C. the price that the car manufacturer and car dealer hope they can get.
 - D. the actual value of the car.
114. What is a deed?
- A. A legal paper transferring title from seller to buyer.
 - B. An agreement to perform a service for another.
 - C. A promise to buy a home from another person at a definite price.
 - D. Any action performed by a lawyer for buyers and sellers.
115. A deed is a legal document that shows:
- A. written ownership of real property.
 - B. written ownership of an automobile.
 - C. what someone receives from a will.
 - D. how much is owed on a mortgage.
116. Most home loans are amortized. What does this mean?
- A. Total payment remains the same, but proportion applied to principal increases each month while interest decreases.
 - B. Payments of the same amount are made each month. Principal and interest payments remain the same throughout the loan.
 - C. Amortization is a schedule which is given to the borrower when the loan is closed so he will know how much interest he has paid.
 - D. Principal payments remain the same throughout the loan, but interest payments are decreased as the balance decreases.

117. Consumer family has an assured annual income of \$10,000. With average expenses, how much should they be able to pay for a home?
- A. \$10,000
 - B. \$15,000
 - C. \$20,000
 - D. \$30,000
118. Some experts in real estate suggest that a family can afford to purchase a home valued at:
- A. $\frac{1}{4}$ of their annual income.
 - B. $1\frac{1}{4}$ times their annual income.
 - C. $2\frac{1}{2}$ times their annual income.
 - D. $3\frac{1}{2}$ times their annual income.
119. A home loan for \$30,000 at 8% interest has payments (not including taxes and insurance) of \$3,000 this year. About how much of that amount will be interest and how much principal?
- A. Principal of \$1,500 and interest of \$1,500.
 - B. Principal of \$2,400 and interest of \$600.
 - C. Principal of \$600 and interest of \$2,400.
 - D. Principal of \$2,000 and interest of \$1,000.
120. If you purchase a house for \$14,000 and sell it for \$16,800, what is your percentage of profit?
- A. 10
 - B. 20
 - C. 30
 - D. 35
121. Which of the following factors can provide the consumer with the greatest combination of wearing apparel and a wider selection of outfits?
- A. Design
 - B. Size
 - C. Color
 - D. Fit
122. Mr. C pays \$13.13 interest each month on a \$2,100 loan. What is the annual rate of interest of this loan?
- A. $6\frac{1}{2}\%$
 - B. $7\frac{1}{2}\%$
 - C. 8%
 - D. 10%

123. Determine the balance due after the second payment was made on a \$20,000 mortgage at $7\frac{1}{2}\%$ interest which required payment of \$139.00 per month.
- A. \$19,972
 - B. \$20,174
 - C. \$21,007
 - D. \$22,716
124. If you purchase a house for \$14,000 and sell it for \$16,000, what percent of the sales price is the profit?
- A. 16.6%
 - B. 17.4%
 - C. 18%
 - D. 19.5%
125. A lot sold for \$9,000. The profit to the seller was 25%. What was the original cost of the lot?
- A. \$6,500
 - B. \$7,000
 - C. \$7,200
 - D. \$7,800
126. What kind of tire guarantee is most beneficial to the consumer?
- A. One based on the current selling price of a duplicate tire.
 - B. One based on the original price paid for the tire.
 - C. Neither; it is usually cheaper to forget the guarantee and to get a new tire when they are reduced or to buy at a discount store.
 - D. It depends on whether tires are now selling for more or less than when the guaranteed ones were purchased and on how good the first bargain was.
127. Mr. C's gas tank holds 25 gallons. He filled it up; drove 240 miles; and filled it again. The second time it took 20 gallons and cost him \$10.00. About how much per miles did the gasoline cost?
- A. 5.4
 - B. 6.1
 - C. 6.9
 - D. 7.5
128. Ms. C charged \$10.00 worth of merchandise at her local department store. Since she did not pay within 20 days after being billed, she was charged the minimum amount of 90¢ for the month. What yearly interest rate would this be?
- A. 10%
 - B. 18%
 - C. 20%
 - D. 108%

129. If you purchase a house for \$20,000 and sell it for \$26,000, what is your percentage of profit?
- A. 10
 - B. 20
 - C. 30
 - D. 40
130. A lot sold for \$10,000. The profit to the seller was 30%. What was the original cost of the lot?
- A. \$7,520.40
 - B. \$7,610.14
 - C. \$7,692.30
 - D. \$7,714.32

DIFFICULTY AND DISCRIMINATION INDICES
OF THE CONSUMER TRY-OUT TEST
(130 QUESTIONS)

TEST ITEM NUMBER	DISCRIMINATION INDEX	DIFFICULTY INDEX
1	.12	.547
2	.16	.797
3	.12	.947
4	.16	.443
5	.64	.513
6	.19	.478
7	.22	.539
8	.29	.869
9	.19	.817
10	.38	.721
11	.32	.565
12	.16	.217
13	.19	.878
14	.51	.721
15	.48	.391
16	.38	.678
17	.35	.678
18	.35	.513
19	.41	.686
20	.35	.260
21	.25	.480
22	.38	.634
23	.32	.521
24	.12	.930
25	.35	.852
26	.25	.791
27	.58	.347
28	.25	.460
29	.41	.443
30	.45	.573
31	.45	.486
32	.35	.730
33	.16	.339
34	.00	.660
35	.12	.217
36	.48	.556
37	.48	.591
38	.06	.591
39	.48	.800
40	.12	.339
41	.12	.939
42	.41	.773
43	.19	.913
44	.12	.956
45	.06	.965
46	.25	.721
47	.29	.747
48	.35	.365
49	.32	.747
50	.38	.452

TEST ITEM NUMBER	DISCRIMINATION INDEX	DIFFICULTY INDEX
51	.41	.626
52	.25	.921
53	.32	.860
54	-.03	.339
55	.54	.634
56	-.16	.260
57	.29	.382
58	.48	.495
59	.22	.608
60	.19	.904
61	.51	.739
62	.32	.730
63	.29	.539
64	.45	.460
65	.22	.521
66	.48	.504
67	.29	.921
68	.41	.671
69	.48	.530
70	-.22	.182
71	.12	.269
72	.51	.686
73	.35	.678
74	.19	.747
75	.45	.739
76	.16	.573
77	.22	.252
78	.54	.443
79	.32	.834
80	.12	.243
81	.25	.295
82	.70	.539
83	.32	.373
84	.16	.360
85	.32	.469
86	.38	.495
87	.38	.660
88	-.03	.165
89	.12	.208
90	.06	.243
91	.35	.382
92	.06	.243
93	.19	.808
94	.35	.747
95	.25	.886
96	.41	.721
97	.35	.278
98	.32	.773
99	.29	.556
100	.25	.843
101	.29	.339
102	.19	.313
103	.06	.373
104	.38	.652
105	.45	.530

TEST ITEM NUMBER	DISCRIMINATION INDEX	DIFFICULTY INDEX
106	.22	.573
107	.32	.495
108	.25	.600
109	.00	.634
110	.00	.617
111	.09	.539
112	.19	.513
113	.22	.486
114	.22	.634
115	.29	.634
116	.12	.417
117	.12	.556
118	.29	.365
119	.41	.513
120	.22	.452
121	.32	.539
122	.25	.573
123	.29	.486
124	.51	.582
125	.09	.626
126	.19	.478
127	.51	.408
128	.22	.356
129	.35	.486
130	.09	.582

APPENDIX F

SOURCES OF TRY-OUT QUESTIONS

CONSUMER TRY-OUT QUESTIONS USED
QUESTION NUMBERS BY AUTHOR

SOURCE	ITEM NUMBER
Barry Arnold Dalaba	2,5,7,10,13,24,25,26,41,42,43,44,45,49,52,53 60,61,67,68,74,78,95,110,111,113,115
Homer Ronald Moser	3,47,56,64,81,104,120,122,123,124,125,127,128, 129,130
Russell L. Ogden	22,31,33,54,57,85,88
Norman Samuel Thompson	55,59,63,65,66,69,70,71,72,73,75,76,77,79,80, 82,84,87,90,91
Thomas Owen Stanley	11,20,21,36,46,62,100,101,107,112,118,121
Lovella S. Richardson	1,4,6,8,9,12,14,15,16,17,18,19,23,27,28,29,30, 32,34,35,37,38,39,40,48,50,51,58,83,86,89,92, 93,94,96,97,98,99,102,103,105,106,108,109,114, 116,117,119,126

APPENDIX G

CONSUMER PRE AND POST-TEST

CONSUMER TEST NO. A

1. Where does one get a car warranty?
 - A. In the car manufacturer's advertising material.
 - B. In the glove compartment of the new car or attached to the sun visor.
 - C. In the owner's manual or with it.
 - D. From the car salesman at the time one pays for the car.
2. Which of these is true about prepayment of an automobile loan?
 - A. Prepayment carries a penalty.
 - B. It decreases depreciation.
 - C. It may carry a penalty.
 - D. It is not legal in automobile contracts.
3. What kind of tire guarantee is most beneficial to the consumer?
 - A. One that is based on the current selling price of a duplicate tire.
 - B. One that is based on the original price paid for the tire.
 - C. Neither; it is usually cheaper to forget the guarantee and to get a new tire when they are reduced or to buy at a discount store.
 - D. It depends on whether tires are now selling for more or less than when the guaranteed ones were purchased and on how good the first bargain was.
4. Large used-car dealers:
 - A. sell their used cars as is (the car is not cleaned up).
 - B. do not charge for cleaning their cars.
 - C. clean their cars thoroughly and often paint even the engines.
 - D. do not service their used cars.
5. The cost of operating an automobile will include license fees, taxes, depreciation costs, gasoline, oil and lubrication, tire replacement, and:
 - A. a state user's fee.
 - B. a notary public fee.
 - C. maintenance and repairs.
 - D. a surcharge.
6. The manufacturer's suggested retail price on a new automobile is:
 - A. the price that the law requires one to pay for the car.
 - B. the lowest price at which that car dealer will sell the car.
 - C. the price that the car manufacturer and car dealer hope they can get.
 - D. the actual value of the car.

7. Mr. B is being charged \$8 for each \$100 per year on his truck loan. This \$240 interest is added on to the principal of \$3,000, making \$270 to be repaid each month. What is the true annual interest rate?
- A. 12.8%
 - B. 14.8%
 - C. 16.5%
 - D. 17.4%
8. How can one tell whether he is really getting a good price for his used car as a trade-in on a new one?
- A. Get the price for the new car with a trade-in and without a trade-in. The difference is the price being paid for the used car, and it should be compared with suggested retail prices in Consumers Reports or the Red Book.
 - B. Advertise your used car in the paper. Compare the offers received from individuals with those offered by the new car dealer. If the dealer is offering as much on a trade-in, that is a good price.
 - C. Find the newspaper ads of a car of the same year, make, and model identical with the one being traded in; if you can get that amount from the car dealer, he is offering a good price.
 - D. Go to used car lots, pretending to be buying a car like the one you own. If the price is similar to what the new car dealer is offering, you are getting a good price.
9. Mr. C's gas tank holds 20 gallons. He filled it up and drove 225 miles; and filled it again. The second time it took 15 gallons and cost him \$8. About how much per mile did gasoline cost?
- A. 1.9¢
 - B. 3.6¢
 - C. 4¢
 - D. 5.3¢
10. Cars usually depreciate the most in value during which year of ownership?
- A. The first year.
 - B. The second year.
 - C. The third year.
 - D. The fourth year.
11. Which of the following will need to be considered before applying for a home loan?
- A. Size of the family, family activities, and ages of family.
 - B. What initial expenses will be involved: water supply, gas or electrical lines, telephone and sewer.
 - C. How much they can afford to spend for housing.
 - D. Location and boundaries of the lot.

12. On which of the following would one have to pay HIGHEST taxes?
- A. Small home owned in an unincorporated town and rented to someone else.
 - B. Three acres of land on the edge of town.
 - C. Small lot and average-sized house in an affluent neighborhood.
 - D. Large old house on a small farm at the edge of the county.
13. Approximately three-fourths of all loans for family housing are provided through:
- A. mortgage assumptions.
 - B. second mortgages.
 - C. FHA-insured mortgage loans.
 - D. conventional financing.
14. What is a deed?
- A. A legal paper transferring title from seller to buyer.
 - B. An agreement to perform a service for another.
 - C. A promise to buy a home from another person at a definite price.
 - D. Any action performed by a lawyer for buyers and sellers.
15. The methods of transportation that one has available:
- A. will be the same for most people.
 - B. can be ignored when choosing housing.
 - C. are an important factor when choosing housing.
 - D. make a person appreciate mass transportation.
16. In a lease covering a certain period of time, which of the following is NOT a right or duty of the tenant?
- A. Peaceful possession of the property.
 - B. Use of the property for the purpose adapted.
 - C. Improvements in the property.
 - D. Maintenance of the property.
17. Which of the following statements would offer the strongest argument for renting?
- A. It is less expensive to rent in the short run than it is to buy.
 - B. Rentals are more fixed than mortgage payments.
 - C. Renters are not affected by changes in property taxes.
 - D. The prestige associated with home ownership no longer exists; therefore, "renting what you want" is more desirable.
18. Mr. C is unhappy when he finds he must get a conventional loan on his new house. Of what disadvantage is a conventional loan?
- A. It must meet the requirements of the Federal Housing Authority.
 - B. The borrower must pay a larger downpayment, and he has less time to repay his loan.
 - C. The borrower must pay 1/2 of 1% each month for mortgage insurance.
 - D. The borrower is being forced to use up his veteran's home loan benefits on this house.

19. Consumer family has an assured annual income of \$10,000. With average expenses, how much should they be able to pay for a home?
- A. \$10,000
 - B. \$15,000
 - C. \$20,000
 - D. \$30,000
20. The typical insurance policy which covers loss by fire, theft, or liability on real estate is called:
- A. package insurance.
 - B. comprehensive insurance.
 - C. mortgage insurance.
 - D. homowner's insurance.
21. A lot sold for \$9,000. The profit to the seller was 25%. What was the original cost of the lot?
- A. \$6,500
 - B. \$7,000
 - C. \$7,200
 - D. \$7,800
22. A home loan for \$30,000 at 8% interest has payments (not including taxes and insurance) of \$3,000 this year. About how much of that amount will be interest and how much principal?
- A. Principal of \$1,500 and interest of \$1,500.
 - B. Principal of \$2,400 and interest of \$600,
 - C. Principal of \$600 and interest of \$2,400.
 - D. Principal of \$2,000 and interest of \$1,000.
23. Determine the balance due after the second payment was made on a \$20,000 mortgage at $7\frac{1}{2}\%$ interest which required payment of \$139.00 per month.
- A. \$19,972
 - B. \$20,174
 - C. \$21,007
 - D. \$22,716
24. If you purchase a house for \$14,000 and sell it for \$16,000, what percent of the sales price is the profit?
- A. 16.6%
 - B. 17.4%
 - C. 18%
 - D. 19.5%

25. In addition to the name of the producer, product, and net contents, what information does FDA require on canned food labels?
- A. Variety, recommended use of the food.
 - B. Additives, nutritional guide, location of cannery.
 - C. Grade, whether real or imitation, amount of liquid and solid.
 - D. Address of producer and ingredients.
26. If the FTC finds that an advertiser cannot support his claims about a certain product, it may require the publication of corrective advertising to:
- A. increase the amount of money spent for advertising.
 - B. counteract false impressions customers may have received from deceptive advertising.
 - C. punish companies that engage in false advertising.
 - D. force companies to substantiate the claims they make.
27. Listing U.S. RDA on foods helps the consumer by telling:
- A. one whether there is serious deficiency in the diet.
 - B. recommended percentage of daily requirements for calories, fat, protein, and carbohydrates.
 - C. nutrient content of foods.
 - D. how many and what size servings each can of food contains.
28. Private-label foods tend to _____ than brand-name foods.
- A. Cost more.
 - B. Cost less.
 - C. Be of lower quality.
 - D. Be of higher quality.
29. Unit pricing gives the cost:
- A. per case or gross of the product.
 - B. per dozen, half-dozen, or gross of a product.
 - C. per ounce, pound, quart, or other measure for certain products.
 - D. of only meat and dairy products.
30. In which of the following is cost per serving least?
- A. 20 oz. Brand A corn flakes @ 89¢.
 - B. 12 oz. Brand B corn flakes @ 50¢.
 - C. 8 oz. Brand C corn flakes @ 46¢.
 - D. 18 oz. Brand D corn flakes @ 65¢.
31. A charge account may be both convenient and low in cost. An able person can handle his cash and charge account purchases wisely. An important rule for such a person to follow is:
- A. to budget your spending (both cash and charge accounts) and stick to your budget.
 - B. never to use charge accounts when you have cash.
 - C. to use charge accounts only for the so-called luxury purchases.
 - D. to determine how much you have to spend and use your charge account up to that limit.

32. What is the purpose of the truth-in-lending law?
- A. To reveal the true amount of interest and the annual percentage rate.
 - B. To put in writing exactly how much the borrower must pay each month and when it is due.
 - C. To allow customers to compare interest rates at various credit sources.
 - D. To make provision for the lender to repossess whatever the borrower has purchased if he fails to meet his payments.
33. The Fair Credit Reporting Act provides that all individuals have the right to:
- A. fair trial.
 - B. discard bad information from their credit reports.
 - C. see information in their credit files.
 - D. destroy their credit files.
34. Deferred Payment Plan, Divided Payment Account, Budget Account, Extended Payment Plan, Revolving Credit Account, Time Plan, Coupon Account, and Convenient Payment Account are all names of one consumer credit plan, namely:
- A. a 60- to 90-day charge account.
 - B. installment credit.
 - C. an open charge account.
 - D. small loan company credit.
35. It costs little to borrow on your life insurance policy. Most life policies have a cash or loan value. One of the following types of life policies usually does not carry a cash or loan value:
- A. 20-year endowment.
 - B. term.
 - C. 20-pay life.
 - D. straight life.
36. A credit rating follows a consumer:
- A. for two years.
 - B. only within the state.
 - C. from one state to another.
 - D. only if the consumer requests it.
37. An "open" charge account differs from other types of charge accounts because:
- A. it offers credit at a lower interest charge.
 - B. it offers credit with no credit investigation.
 - C. it provides for credit purchases up to a certain pre-determined amount,
 - D. it provides for credit purchases with no interest charges for periods of from 30 to 90 days.

38. Where and when to borrow money is hard to determine. One of the following four ideas gives the best advice on where and when to borrow money:
- A. borrow from a bank for emergency use only.
 - B. borrow from friends and relatives.
 - C. borrow where the cost of borrowing is lowest.
 - D. borrow only from a credit union, because their rates are lowest.
39. You would most likely be able to borrow money at the lowest true annual interest rate from a:
- A. pawn shop.
 - B. small loan company.
 - C. sales finance company.
 - D. personal loan department of a commercial bank.
40. Credit card holders may be held liable for:
- A. not more than \$25 if the card is lost or stolen.
 - B. not more than \$50 if the card is lost or stolen.
 - C. not more than \$100 if the card is lost or stolen.
 - D. the full amount charged.
41. One's total indebtedness should not be more than what percent of annual income?
- A. 15
 - B. 20
 - C. 25
 - D. 30
42. What is the main advantage and the main disadvantage of buying on credit? The use of credit enables one to:
- A. establish a line of credit so that when it is needed, it will be available; but results in having to pay for an unnecessary credit check.
 - B. buy something at a bargain without the money to pay for it; but may cause him to accumulate goods he does not need.
 - C. enjoy now what he does not have the money to pay for; but often increases the cost of goods.
 - D. shop without carrying large amounts of cash and reduces the chance of his being mugged; but may result in his leaving cash at home and being robbed there.
43. In obtaining a loan from any lending agency, which of the following factors should be considered first prior to the other considerations?
- A. Rate of interest quoted.
 - B. Dollar cost of the loan.
 - C. Type of security demanded.
 - D. Repayment period required.

44. Costs of loans vary according to the type of financial source from which the funds are borrowed. Probably the least expensive place from which to borrow is:
- A. a credit union.
 - B. a commercial bank.
 - C. a mutual savings bank.
 - D. an insurance policy with cash value.
45. Which of the following types of bank loans will carry the lowest true annual interest rate?
- A. \$1,200 payable over 12 months at \$106 a month
($106 \times 12 = \$1,272$).
 - B. \$1,200 payable in two semi-annual payments of \$636 each.
 - C. \$1,200 payable in 52 weekly payments of \$24.46 each
($24.46 \times 52 = \$1,272$).
 - D. \$1,200 payable after one year with one payment of \$1,272.
46. Susan C is a secretary in a large city and can barely stretch her budget to cover the necessities. However, she feels that she must dress well. What is NOT a guideline for her to follow in selecting clothes?
- A. Use credit to buy whatever seems appropriate.
 - B. Buy clothes that can be altered if one should gain or lose weight or if the styles should change.
 - C. Buy the current fad at the end of the season; get perfect fit and appropriate color.
 - D. Choose classic styles that can be worn with parts or other outfits.
47. Which of the following factors can provide the consumer with the greatest combination of wearing apparel and a wider selection of outfits?
- A. Design
 - B. Size
 - C. Color
 - D. Fit
48. The leather on the uppers of Mr. C's favorite shoes that he wears to work every day is rotting. How can he make them last longer?
- A. Rub with tallow and alternate days with another pair of shoes.
 - B. Keep the shoes shined and do not get them wet.
 - C. Take the shoes to a repairman and have him darn the weak points with invisible thread.
 - D. Apply liquid leather to the entire surface.

49. What determines whether a garment will be a style, fashion, or fad?
- A. How many people accept the garment and how long it is worn.
 - B. How expensive the garment is and what segments of society wear it.
 - C. How the garment is designed and who the designer is.
 - D. How much sales pressure is put on the public to buy the garment and whether the great masses of people buy it or just elite society.
50. Ms. C is charged \$5 worth of merchandise at her local department store. Since she did not pay within 20 days after being billed, she was charged the minimum amount of 70¢ for the month. What yearly interest rate would this be?
- A. 10%
 - B. 14%
 - C. Almost 17%
 - D. 168%

CONSUMER TEST NO. B

1. How can one judge the value of a new car warranty?
 - A. Depends on the reputation of the car manufacturer.
 - B. Depends only on the reputation of the car dealer,
 - C. Study the warranty and know all of its provisions.
 - D. Take the word of the car salesperson, who knows how to get the benefits of the warranty.
2. New car dealers are likely to be:
 - A. the least reliable sellers of used cars.
 - B. the most reliable sellers of used cars.
 - C. lowest priced sellers of used cars.
 - D. the poorest repairers of used cars.
3. How can one avoid repair frauds by incompetent or dishonest mechanics?
 - A. Find a knowledgeable mechanic by talking to friends and neighbors, then ask him for a specific estimate in writing.
 - B. Pick a mechanic who will look at you straight in the eye and has a winning personality because he is likely to know his job and to treat one honestly.
 - C. Pick a repair shop which can get to the work quickly because this is a sign of competence and good management.
 - D. Find a shop with young mechanics because they will have been to school recently and know how to repair recent models and to use latest methods.
4. The Automobile Disclosure Act requires every new car dealer to attach a paper to the car showing:
 - A. the number of accidents the car may have been in.
 - B. the price and possible discounts.
 - C. who has title to the car.
 - D. the price, the price of extras, and the freight charges.
5. The consumer should recognize that the biggest single cost in owning and operating a new car is:
 - A. maintenance.
 - B. depreciation.
 - C. fuel costs.
 - D. environmental pollution.
6. What is the name of the insurance coverage that provides financial protection for the owner of an automobile in cases where someone is injured or killed?
 - A. Liability insurance.
 - B. Comprehensive physical damage insurance.
 - C. Property damage insurance.
 - D. Collision insurance.

7. Mr. C is being charged \$8 for each \$100 per year on his car loan. This \$240 interest is added on to the principal of \$3,000, making \$270 to be repaid each month. What is the true annual interest rate?
- A. 13.4%
 - B. 14.8%
 - C. 16.1%
 - D. None of these
8. Mr. C's gas tank holds 25 gallons. He filled it up; drove 240 miles; and filled it again. The second time it took 20 gallons and cost him \$10.00. About how much per miles did the gasoline cost?
- A. 5.4
 - B. 6.1
 - C. 6.9
 - D. 7.5
9. Which of the following offers cheapest interest? Each loan is to be paid in equal monthly installments.
- A. Credit union: $\frac{3}{4}$ of 1% a month on the unpaid balance.
 - B. Commercial bank: 6% per annum, added on to the original amount of the loan, plus credit investigation and filing.
 - C. Car dealer: \$10 per \$100 of principal added on to the original amount of the loan,
 - D. Consumer finance company: $1\frac{1}{2}\%$ per month on the unpaid balance, plus credit life and a maintenance fee of $1\frac{1}{2}\%$ of the amount of the loan.
10. Which of the following statements is FALSE regarding no-fault car insurance?
- A. Puts an end to out-of-court settlements for less than the dollar amount suffered. Currently, the insured may settle for less because he needs the money to pay his bills.
 - B. Saves insurance companies money because they would not have to pay lawyers and claims investigators large amounts of money. Therefore, they would lower insurance rates.
 - C. Provides public notice that anybody can made a mistake and should not be charged with guilt for the rest of his life because he was negligent in driving.
 - D. Eliminates the need to prove who caused the accident before a claim can be paid.
11. By whom are property taxes levied and for what purpose?
- A. Local government, primarily for education and government.
 - B. State in which the property is located, in place of state income taxes.
 - C. Township in which the property is located for law enforcement, city streets, and recreational facilities.
 - D. Federal tax district for revenue-sharing purposes.

12. Mr. C is in a hurry to get a 25-year loan and move into his new \$35,000 home. He is not a veteran. He can pay up to \$3,000 down, but he wants to pay as little as possible. What type loan shall he get? Why?
- A. VA loan--because the loan would be guaranteed by the federal government; therefore, little or no downpayment is required and interest is low.
 - B. FHA loan--because he can borrow up to 97% of the value of the house, although he must pay a mortgage insurance premium of $\frac{1}{2}$ of 1%.
 - C. Conventional loan. Although Mr. C will have to pay 20% or more down, the conventional loan is easiest and quickest to obtain.
 - D. Mr. C is eligible for VA, FHA, or conventional loan, and he should apply for the one which offers lowest interest and least downpayment.
13. When money is scarce, the lower interest rates set by the Veterans Administration are adjusted by the use of:
- A. larger down payments.
 - B. mortgage insurance premiums.
 - C. points charged to the seller.
 - D. increasing the loan period.
14. Several financial institutions are available to the prospective homeowner of obtaining a mortgage loan. Which of the following is a legitimate lending institution?
- A. Federal government through FHA.
 - B. Savings and loan association.
 - C. Veterans Administration.
 - D. State government through FFA.
15. A deed is a legal document that shows:
- A. written ownership of real property.
 - B. written ownership of an automobile.
 - C. what someone receives from a will,
 - D. how much is owed on a mortgage.
16. Most home loans are amortized. What does this mean?
- A. Total payment remains the same, but proportion applied to principal increases each month while interest decreases.
 - B. Payments of the same amount are made each month. Principal and interest payments remain the same throughout the loan.
 - C. Amortization is a schedule which is given to the borrower when the loan is closed so he will know how much interest he has paid.
 - D. Principal payments remain the same throughout the loan, but interest payments are decreased as the balance decreases.

17. Mr. and Mrs. Consumer are checking into the governmental jurisdiction of the location they have chosen for a home. Which of the following is NOT a factor that would be determined by the community?
- A. Amount of taxes paid.
 - B. Kind and quality of community services.
 - C. Zoning laws.
 - D. Nearness to colleges, schools, churches, and employment.
18. In a lease, which of the following is NOT a right or duty of the landlord?
- A. Enter the premises at will.
 - B. Pay taxes and assessments on the property.
 - C. Keep improvements made by the tenant and attached to the property.
 - D. Pay for injuries to guests of the tenant because of defects in the property controlled by the landlord.
19. Some experts in real estate suggest that a family can afford to purchase a home valued at:
- A. $\frac{1}{4}$ of their annual income.
 - B. $1\frac{1}{4}$ times their annual income.
 - C. $2\frac{1}{2}$ times their annual income.
 - D. $3\frac{1}{2}$ times their annual income.
20. When buying a home, the prospective homeowner is encouraged to buy "title insurance." This insurance states that:
- A. the mortgage, deed, abstract of title, and note are acceptable by legal standards.
 - B. all pertinent records have been examined by an attorney. and, to the best of his knowledge, the buyer is receiving a valid title.
 - C. the homeowner will be defended against claims brought by unknown parties contesting his legal ownership.
 - D. a thorough investigation of previous home ownership has been made, and payment of any known or unknown claims against the property is guaranteed.
21. Mr. C pays \$13.13 interest each month on a \$2,100 loan. What is the annual rate of interest on this loan?
- A. $6\frac{1}{2}\%$
 - B. $7\frac{1}{2}\%$
 - C. 8%
 - D. 10%
22. A lot sold for \$10,000. The profit to the seller was 30%. What was the original cost of the lot?
- A. \$7,520.40
 - B. \$7,610.14
 - C. \$7,692.30
 - D. \$7,714.32

23. If you purchase a house for \$14,000 and sell it for \$16,800, what is your percentage of profit?
- A. 10%
 - B. 20%
 - C. 30%
 - D. 35%
24. As family income rises, there is a tendency to spend proportionately fewer dollars on:
- A. food.
 - B. taxes.
 - C. recreation.
 - D. housing.
25. The major benefit to the consumer of a grocery shopping list is that the list helps the consumer to:
- A. plan menus in advance so that less time is used in food preparation.
 - B. know which food items are on sale and where to buy them.
 - C. avoid backtracking the grocery cart to find items, if the list is organized according to the way food is displayed.
 - D. buy only needed items; not unnecessary foods.
26. A loss-leader is an item:
- A. sold only by leading food stores.
 - B. that was lost, then found, and now sold.
 - C. placed on sale to attract customers.
 - D. that is lost in inventory.
27. Which of the following items of information is not required on the labels of food products?
- A. the ingredients.
 - B. the net weight.
 - C. the name of the producer or manufacturer.
 - D. the address of the producer or manufacturer.
28. Ms. C notices that meat takes about one-third of her food shopping dollar, and she feels that this is the best place to cut her grocery bill. Which of the following would NOT help?
- A. Substitute dry beans, eggs, or cheese for some meat.
 - B. Buy whole chicken and hamburger instead of steak, roasts, or chops.
 - C. Serve lunch meat sandwiches for one meal a day.
 - D. Use meat dish recipes which include pasta, bread, or rice.
29. One factor to consider in buying food is cost. What can take the guesswork out of comparing prices?
- A. Using an electronic calculator.
 - B. Comparing the costs of identical sizes of packages in different brands.
 - C. Unit pricing.
 - D. Asking stock boy to check-out clerk which are best bargains.

30. Which of the following statements is usually true about health foods?
- A. The cost is higher than for regular foods.
 - B. The nutritive value is higher than for regular foods.
 - C. Special values prevent and cure certain diseases.
 - D. The soil in which they are grown has no deficiencies.
31. If you purchase a house for \$20,000 and sell it for \$26,000, what is your percentage of profit?
- A. 10%
 - B. 20%
 - C. 30%
 - D. 40%
32. When purchasing merchandise on an installment basis, an individual consumer may sign a contract in which there is an acceleration clause. This clause gives the:
- A. seller the right to collect the unpaid balance of an account immediately upon nonpayment of one installment.
 - B. buyer the right to speed up his payments, paying off the debt prior to the final due date.
 - C. seller the right to increase the carrying charge for the default in one payment.
 - D. buyer the right to start with small payments and to make larger payments toward the end of the payment period.
33. When you ask for credit, a businessman will consider your application according to the "three C's" of credit: (1) capital, or your net worth; (2) character, or is your word good; and (3)
- A. cost, or how much will it cost.
 - B. confidence, or the confidence of the businessman in you.
 - C. credit rating, or your reputation for paying your bills.
 - D. capacity, or your ability to pay.
34. The law that limits your liability if you lose your credit card is the:
- A. Truth-in-Lending Act.
 - B. Fair Credit Billing Act.
 - C. Fair Credit Reporting Act.
 - D. Consumer Credit Protection Act.
35. A limitation of a consolidation loan:
- A. will not reduce the interest rate.
 - B. will not reduce the amount of the indebtedness.
 - C. will extend the time of the loan.
 - D. All are limitations of a consolidation loan.

36. An inexpensive way to borrow money is to borrow on your life insurance policy. Most life policies have a cash or loan value. One of the following types of life policies usually does not carry a cash or loan value:
- A. 20-year endowment.
 - B. term policy.
 - C. 20-pay life policy.
 - D. straight life policy.
37. John Doe has never paid his bills on time. He has a bad credit rating. He moves to another state and gets a good job with a good salary. One of the following statements is true about John Doe and his credit rating:
- A. his bad credit rating will become known to businessmen in his new home city.
 - B. state laws prevent interstate exchanges of confidential credit information.
 - C. because John Doe has a good job with a good salary, the businessmen in his new home city will not ask about old credit rating.
 - D. John Doe should protect himself by not telling people in his new home town about where he lived in the past.
38. In order to obtain the best deal, a consumer should:
- A. recognize that shopping for credit is different from goods and services.
 - B. shop for credit in the same way as shopping for goods and services.
 - C. have at least seven credit cards to make sure an item can be purchased.
 - D. avoid the use of credit because it will give the consumer a poor credit rating.
39. Credit unions charge a relatively low true annual interest rate because:
- A. they are not interested in making a profit.
 - B. they have almost no losses from bad debts.
 - C. the U.S. government pays all of their expenses.
 - D. they have tax advantages, and often have free office space and free secretarial help.
40. Interest rates under the usury law in most states range from 6 percent to 12 percent. However, most of the states allow licensed small loan companies to make small loans at much higher rates. This is done because:
- A. the small loan companies have powerful lobbies that influence state legislatures.
 - B. usury laws, which do not apply to loans under \$5,000, do not affect small loan companies.
 - C. no state has adequate legislation to protect the consumer who borrows small amounts of money.
 - D. no business can make a profit on small loans unless the interest charged exceeds the 6 to 12 percent limits.

41. There are a few people dealing in installment credit who are not entirely honest. The best description of a dishonest consumer on installment credit is one who:
- A. fails to pay, or refuses to pay, for goods received.
 - B. fails to acquaint himself with the terms of his contract.
 - C. does not have a good credit rating.
 - D. is ignorant of the cost of installment credit.
42. One advantage of installment credit buying is that:
- A. the regular payments force the buyer to plan his spending.
 - B. goods cost less when purchased on the installment plan.
 - C. it is convenient for the buyer.
 - D. it helps the buyer to build a good credit rating.
43. The consumer can argue for small loan companies because such companies:
- A. make loans to people who cannot borrow money elsewhere.
 - B. charge a lower interest rate than do the banks.
 - C. are closely controlled by the federal government.
 - D. have an outstanding record for giving good service.
44. You charge a \$120 item on a revolving charge account. Your twelve monthly payments are \$10 each plus interest. Interest is 1-1/2 percent each month on the declining balance. Your charge account purchase will cost you (over the \$120 purchase price):
- A. \$9.70
 - B. \$10.70
 - C. \$11.70
 - D. \$12.70
45. What are signs of good workmanship in clothing?
- A. Quality trim; simple cut; stain-resistant finish.
 - B. Well-known brand; specialty store; loose fabric and construction.
 - C. Current style; correct fit; stiffened collar, cuffs, and front.
 - D. Cut on grain; wide seams with close, even stitching and non-fraying edges; reinforced weak points.
46. What should one do to maintain the life and beauty of a garment at minimum cost?
- A. Watch for the bargain sales and buy clothes at reduced prices; wear them only until they lose their bright, new look.
 - B. Buy wash-and-wear clothing; rotate the clothes that are worn; clean at certain intervals whether they have been worn or not.
 - C. Buy well-known brands of clothing that can be depended upon and have them professionally cleaned and stored.
 - D. Buy well-constructed garments that can be cleaned at home, then keep them mended and clean.

47. Ms. C likes to shop for clothes when items are reduced, but she has gotten "stung" in the past. Which is the BEST shopping tip?
- A. At the beginning of the season, buy at a discount store whatever clothes are currently in vogue.
 - B. Buy clothes copied from famous designers as soon as they get on department store racks.
 - C. Buy "seconds" or "imperfects" that probably can be mended to suit your needs.
 - D. Buy basic styles from reputable stores at the end of the season.
48. A type of clothing that is generally well accepted and used by a wide cross section of society is considered a:
- A. short-run rage.
 - B. current fashion.
 - C. temporary fad.
 - D. style.
49. Ms. C charged \$10.00 worth of merchandise at her local department store. Since she did not pay within 20 days after being billed, she was charged the minimum amount of 90¢ for the month. What yearly interest rate would this be?
- A. 10%
 - B. 18%
 - C. 20%
 - D. 108%
50. There is a horizontal wrinkle across the top of the shoulders below the neck and one below the waist and about the rump of Mary's pants suit. What is the cause? How can it be fixed?
- A. The suit is too big at the shoulders and hips. The back sleeve seams and the side seams the length of the hip should be taken up.
 - B. The suit is too tight at the shoulders and hips. Back sleeve seams and side seams through the hip should be let out.
 - C. The suit is not cut on the straight grain of the fabric and will probably never fit right.
 - D. The fabric is too loosely woven. Lining the garment will correct the problem.

DIFFICULTY AND DISCRIMINATION INDICES FOR THE
50 QUESTION CONSUMER PRE-TEST AND POST-TEST

TEST ITEM NUMBER	FORM A		FORM B	
	DISCRIMINATION INDEX	DIFFICULTY INDEX	DISCRIMINATION INDEX	DIFFICULTY INDEX
1	.27	.281	.25	.864
2	.52	.543	.34	.364
3	-.02	.416	.25	.898
4	.22	.818	.25	.822
5	.22	.892	.56	.669
6	.57	.758	.53	.667
7	.20	.281	.12	.288
8	.37	.637	.00	.220
9	.22	.375	.50	.601
10	.37	.751	.18	.466
11	.50	.785	.68	.559
12	.55	.664	.31	.686
13	.42	.268	.56	.389
14	.27	.926	.34	.542
15	.35	.906	.28	.906
16	.35	.570	.56	.330
17	.17	.348	.46	.355
18	.62	.691	.37	.711
19	.20	.241	.31	.593
20	.30	.691	.34	.372
21	.07	.261	.50	.449
22	.37	.402	.06	.364
23	.27	.288	.43	.610
24	.35	.416	.53	.423
25	.55	.523	.15	.796
26	.42	.630	.56	.762
27	.22	.389	.40	.635
28	.37	.785	.37	.355
29	.50	.738	.18	.474
30	.77	.610	.62	.601
31	.27	.731	.53	.610
32	.60	.402	.43	.601
33	.42	.738	.43	.525
34	.15	.429	.43	.618
35	.37	.577	.25	.372
36	.52	.637	.56	.516
37	.20	.422	.43	.686
38	.52	.778	.40	.652
39	.20	.678	.12	.161
40	.65	.577	.31	.364
41	-.07	.167	.43	.525
42	.37	.389	.34	.228
42	.20	.590	.53	.686
44	.10	.489	.28	.423
45	.22	.389	.68	.644
46	.25	.248	.50	.703
47	.22	.395	.56	.720
48	.35	.355	.12	.350
49	.62	.604	.34	.313
50	.30	.174	.15	.288

APPENDIX H

CONSENT FORM

Attachment A

INFORMED CONSENT FORM

Research Project: A Study of the Consumer Education Knowledge Possessed by Selected Four-Year and Community College Students in Tennessee

Researcher: Homer Ronald Moser, The University of Tennessee

You are invited to participate in a research study at The University of Tennessee. The purpose of this study is: (1) To construct valid, reliable consumer education objective tests, and (2) To determine whether consumer education knowledge of community college and four-year college students in Tennessee who have taken a consumer education course are better informed than those college students who have not taken the course. A detailed outline of objectives was developed and followed to prepare the test questions for this study.

Your help in conducting this study will be greatly appreciated. You will be asked to complete a data sheet. The purpose of the data sheet is to gather the necessary information concerning the following student-related factors: age, sex, practical experience, day or evening student, and major. You will also be asked to complete a consumer education test consisting of questions that have been used and validated in other studies. The information collected will be coded to maintain anonymity. No personal identification of any sort will appear in written reports or summaries of the project. Your reply granting permission is needed. Questions regarding procedures should be directed to the researcher, Ron Moser, through his chairperson, Dr. George Wiegers, The University of Tennessee, 225 Morgan Hall, Knoxville, Tennessee 37916, Telephone: 974-7371.

Attached is a participant consent form certifying your willingness to participate in this study.

PARTICIPANT CONSENT FORM

This certifies that the person signing this form has participated in the research study of his/her own free will and is free to withdraw his/her consent and to withdraw his/her participation in the study at any time without prejudice.

Signed _____

Date _____

APPENDIX I

DATA SHEET

DATA SHEET

Dear Student:

I thank you, your instructor, and your college for participating in this research project. Would you be kind enough to fill in this data sheet before beginning the exam? I assure you that all personal information will be completely confidential. You may use pencil or pen, but please PRINT clearly. Thank you.

Ron Moser

1. Place a check () before one choice in each subsection:

- A. _____ 1. I have never taken a Consumer Decision Making course.
_____ 2. I am presently taking the Consumer Decision Making course.
_____ 3. I have already completed a Consumer Decision Making course.
- B. I am seeking an _____ 1. Associate Degree. _____ 2. I am seeking a Bachelor Degree.
- C. _____ 1. Male _____ 2. Female
- D. My age (nearest birthday) is:
_____ 1. 17-20 _____ 3. 26-35
_____ 2. 21-25 _____ 4. 36 and over
- E. My work experience has been:
_____ 1. No work experience
_____ 2. Part-time only or full-time for six months or less
_____ 3. Full-time for six months to three years
_____ 4. Full-time for over three years
- F. My major (or concentration) is:
_____ 1. Accounting _____ 4. Marketing or Retailing
_____ 2. Secretarial _____ 5. Management
_____ 3. Banking or Finance _____ 6. Other - Name _____
- G. _____ Day Student
- H. _____ Evening Student

APPENDIX J

ANSWER SHEET

APPENDIX K

VARIABLE CODES

DATA LAYOUT

			Possible Values
A Col	1	Course	1, 2, 3,
B Col	2	Degrees	1, 2
C Col	3	Sex	1, 2
D Col	4	Age	1, 2, 3, 4
E Col	5	Work Experience	1, 2, 3, or 4
F Col	6	Major (or concentration) area	1, 2, 3, 4, 5, or 6
G&H Col	7	Day = 1, Evening = 2	1 or 2
I Col	8 9 10	I.D. Number	001-450
J Col	11 12	College Code	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or 11
K Col	13 14	Pre-Test A Score	1, 2
L Col	15 16	Pre-Test B Score	1, 2
M Col	17 18	Post-Test A Score	1, 2
N Col	19 20	Post-Test B Score	1, 2

APPENDIX L

ASSIGNMENT OF TEST ITEMS TO SUBTOPICAL AREAS

ASSIGNMENT OF TEST ITEMS TO SUBTOPICAL AREAS

Major and Subtopical Headings

Test Items Assigned to Each Subtopical Area (Listed by Test No. As Appearing in Achievement Tests)

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
1. TRANSPORTATION					
A. When to Purchase a Car	1				
B. Deciding the Kind of Car Needed	2 3				
C. Benefits of Car Warranty	4 6	1	1	1	
D. Prepayment of an Automobile Loan	5	2		2	
E. Choosing a Car Dealer	7 113	6	2	6	2
F. Choosing a Car Mechanic	8		3		
G. Testing a Used Car	9 10	4			
H. Kind of Tire Guarantee	126	3			
I. Advantages of The Automobile Disclosure Act	110		4		
J. Cost of Operating an Automobile	111 112 13	5	5		5

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
K. Buying Car Insurance	11 105		6 10		6
L. Calculating Discount Interest and Add On Charges	12 89	7	7		
M. Determining the Value of a Used Car	14	8		8	
N. Calculating Cost Per Miles for Gasoline	15 127	9	8		
O. Type of Automobile Lending Institutions	16		9		9
P. Period When Cars Depreciate the Most	104	10		10	
2. HOUSING					
A. Budgeting for a New House	106 117 118	11 19	19	11 19	19
B. Living Property Taxes	17 18	12	11	12	11
C. Sources of Funds for Home Ownership	19 107 20 21 22 23	13	12 13 14	13	12 13 14

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 50 qt.	Form B 36 qt.
D. Importance of a Deed	114 115	14	15	14	15
E. Important Factors in Choosing a Home	26 27	15	17	15	17
F. Amortization of Home Loans	116		16		16
G. Importance of a Lease	28 29 30	16	18	16	18
H. Advantages and Disadvantages of Renting a Dwelling	31	17			
I. Advantages and Disadvantages of Home Ownership	108	18		18	
J. Types of Home Insurance	32	20		20	
K. Legal Implications of Home Ownership	33		20		20
L. Financial Implications of Home Ownership	24 25 119 120 122 123 124 125 129 130	22	23 22	22 23 24	23
			31 21		31 21

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
3. FOOD					
A. Recommended Service Per Week For the Four Basic Food Groups	34				
B. Importance of Food Labels	35 40 45 46 47	25 27		25 27	
			27		27
		28		28	
C. Importance of Family Food Budgeting	36 48 50 51		24 28 29		24 28
		30		30	
D. Guarding Against False Advertising	37	26		26	
E. Importance of Trading Stamps	38				
F. Importance of Shopping Lists	39		25		
G. Importance of a Package to the Product	41				
H. Types of Leader Pricing	42 49		26		26
		29		29	
I. Legal Implications of Food	43 44				
J. Importance of Health Foods	109		30		30

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
K. Determining the Cost Per Serving at Various Prices	52 53				
4. CREDIT					
A. Cost of Credit Plans	54 86 87 88 90 91	44	43 44	45	43
B. Advantages and Disadvantages of Buying on Credit	55 83 84	31 42	42	31 42	42
C. Legal Implications of Credit	56 58 62 63 69 78 79 80 82	32 36 40	34 37 40 41	32 36 40	34 37 40 41
D. Considerations for Extending Credit	59 60 61 67 81	33 41	33	33	33

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
E. Type of Credit Plans	57		32		32
	63	34			
	64		35		
	65	35		35	
	66		36		36
	70				
	71	37			
F. Comparison of Lending Sources	72				
	73	38		38	
	74		38		38
	75	39			
	76		39		
	77				
	85	43			
5. CLOTHING					
A. Budgeting for Clothing	92	46		46	
	93				
	98		47		47
B. Determining Good Workmanship in Clothing	94		45		45
	103		50		
	121	47		47	
C. Importance of Trademarks and Brand Names	95				
D. Maintaining the Life and Beauty of a Garment	96		46		46
	97	48		48	

	Consumer Try-Out	Form A 50 qt.	Form B 50 qt.	Form A 36 qt.	Form B 36 qt.
E. Determining the Difference Between Style, Fashion or Fad	99 100 101	49	48	49	
F. Calculating Charge Account Cost	102 128	50	49		49

VITA

Homer Ronald Moser was born in Old Hickory, Tennessee, attended elementary school in Old Hickory, Tennessee, and was graduated from DuPont High School in Old Hickory, Tennessee. He received a Bachelor of Science degree in Business Administration from Tennessee Technological University, Cookeville, Tennessee and a Master of Business Administration degree from Middle Tennessee State University, Murfreesboro, Tennessee.

The author continued his graduate studies at the University of Tennessee, Knoxville. He received the Doctor of Education degree with a major in Vocational Technical Education in June 1981.

Presently, he is employed by Volunteer State Community College, Gallatin, Tennessee as an Associate Professor of Business and Commerce.