Impact of Iowa Consumer and Homemaking Programs on students' knowledge, life importance, and life satisfaction

Helen Marie Brown Crew
Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd
Part of the Home Economics Commons

Recommended Citation
Crew, Helen Marie Brown, "Impact of Iowa Consumer and Homemaking Programs on students' knowledge, life importance, and life satisfaction " (1990). Retrospective Theses and Dissertations. 9432.
https://lib.dr.iastate.edu/rtd/9432
INFORMATION TO USERS

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
Impact of Iowa consumer and homemaking programs on students' knowledge, life importance, and life satisfaction

Crew, Helen Marie Brown, Ph.D.

Iowa State University, 1990
Impact of Iowa Consumer and Homemaking Programs
on students' knowledge, life importance,
and life satisfaction

by

Helen Marie Brown Crew

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Department: Family and Consumer Sciences Education
Major: Home Economics Education

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1990
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>LITERATURE REVIEW</strong></td>
<td>9</td>
</tr>
<tr>
<td>Impact on Knowledge</td>
<td>9</td>
</tr>
<tr>
<td>Impact on Attitudes</td>
<td>14</td>
</tr>
<tr>
<td>Impact on Behavior</td>
<td>18</td>
</tr>
<tr>
<td>Impact on Quality of Life</td>
<td>21</td>
</tr>
<tr>
<td>Summary</td>
<td>30</td>
</tr>
<tr>
<td><strong>PROCEDURE</strong></td>
<td>32</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>33</td>
</tr>
<tr>
<td>Achievement test</td>
<td>33</td>
</tr>
<tr>
<td>Quality of life inventory</td>
<td>34</td>
</tr>
<tr>
<td>Sample</td>
<td>38</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>47</td>
</tr>
<tr>
<td><strong>RESULTS AND DISCUSSION</strong></td>
<td>48</td>
</tr>
<tr>
<td>Student Achievement and Quality of Life Perceptions</td>
<td>48</td>
</tr>
<tr>
<td>Student achievement</td>
<td>48</td>
</tr>
<tr>
<td>Life importance and life satisfaction</td>
<td>54</td>
</tr>
<tr>
<td>Relationships between Achievement and Student Characteristics</td>
<td>60</td>
</tr>
<tr>
<td>Predictors of Perceived Quality of Life</td>
<td>62</td>
</tr>
<tr>
<td><strong>SUMMARY AND RECOMMENDATIONS</strong></td>
<td>66</td>
</tr>
<tr>
<td>Summary</td>
<td>66</td>
</tr>
<tr>
<td>Future Directions for Research</td>
<td>69</td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td>72</td>
</tr>
<tr>
<td><strong>ACKNOWLEDGMENTS</strong></td>
<td>78</td>
</tr>
</tbody>
</table>
APPENDIX

Communication 80
Sampling Procedure 82
Student Information Sheet 83
Achievement Test 85
Quality of Life Inventory 91
Human Subjects Approval 93
LIST OF TABLES

Table 1. Table of specifications for achievement test ........................................ 35
Table 2. Table of specifications for quality of life inventory ................................. 37
Table 3. Counties represented in sample .............................................................. 40
Table 4. School size represented in sample .......................................................... 42
Table 5. Number and types of courses in which students participated .................. 44
Table 6. Achievement of Home Economics content ............................................. 49
Table 7. Mean scores for perceptions of life importance and life satisfaction .......... 55
Table 8. Significant correlations among student achievement, life importance, life satisfaction, total semesters, class rank, and gender ........................................ 61
Table 9. Significant findings from a stepwise regression on Importance score and Satisfaction score ................................................................. 63
INTRODUCTION

Evaluation of public programs at the national, state, and local levels have been conducted in order to determine if policies are being followed, aid in the design of programs to meet individual and population needs, and determine the worth of a program. Such evaluations have been conducted during program implementation to guide necessary changes or improvements. They also have been conducted at the end of a program or treatment to determine the program's impact or to decide whether or not to cancel a program.

In 1976, the first thorough evaluation of vocational education including consumer and homemaking programs was mandated through amendments to the Vocational Education Act. The Carl Perkins Act of 1984 (Irwin, 1985) further directed how vocational education funds were to be used and also required evaluations of consumer and homemaking programs.

Whether or not an evaluation is mandated by policy makers, stakeholders, program managers, individuals, or communities, criteria that will guide what information is needed for the evaluation need to be identified. When selecting criteria to evaluate the outcome of programs, Darcy (1980) listed 15 possible outcomes that could be used as criteria to address two research questions:

1. What outcomes are appropriate and feasible to use
as criteria for evaluating vocational educational programs?

2. What procedures can be used for evaluating vocational education on the basis of specified outcomes?

Rossman (1983) stressed the need for understanding the nature of the program being evaluated in selecting the evaluation criteria to use. Because of the complexity of consumer and homemaking programs, the criteria used in judging other vocational education programs, such as graduates finding related paid employment, are not appropriate (David, 1980).

Three questions were established as guidelines to evaluate consumer and homemaking programs by the National Institute of Education (NIE) (Vocational Education Study, 1981). These questions were:

1. What persons have been served?
2. What content has been taught to the participants?
3. What behaviors, knowledge, and attitudes concerned with the increasingly complex tasks of homemaking and family life have been acquired by the audiences served?

In order to provide data regarding what content has been taught, the National Census Study (Hughes, Rougvie, and Woods, 1980) and the Iowa Census Study (Woods, 1981) used the six content areas included in vocational consumer and homemaking classes and asked teachers to indicate the topics they taught in each area. The teachers also were asked to supply enrollment figures for male and females in each
Several studies have measured the impact of programs on participants using the following criteria: knowledge gain, attitude change, and behavior change. Knowledge gain and attitude change were measured using pretest and posttest inventories in studies comparing two groups conducted by Sand (1980) and by Gritzmancher, Schultz, Shannon, and Watts (1981). These studies concentrated on the content areas of parenthood education and child development. One group participated in a child development course while the other group did not. Sand (1980) and Gritzmancher et al. (1981) found that child development courses did make an impact on the learners; students made gains in their knowledge of concepts related to parenting as well as changed their attitudes toward child rearing and parenthood.

Dittman and Anderson (1987) also conducted a study in the content area of parenthood education and child development. They measured problem solving skills in addition to knowledge gains and attitude changes. They found significant differences in attitudes as well as gains in knowledge and problem solving skills as a result of participation in the program.

Hellums and Gorman (1984) measured knowledge gain in the content area of consumer education. They reported that there was a gain as a result of participating in courses where the emphasis was on consumer education rather than on
Behavior change was the criterion in studies conducted by McClelland (1980), Rossman and Parsons (1980), Mears, Ley, and Ray (1981), and Crawford (1981). McClelland (1980) developed observation and interview devices to be used with a self-report inventory to assess parenting behaviors. Rossman and Parsons (1980), Mears, Ley and Ray (1981), and Crawford (1981) used case studies to demonstrate the effectiveness of consumer and homemaking education in other content areas. All studies reported consumer and homemaking programs did make an impact on learners.

Daniel and Stewart (1983, 1984) and Bell and Glosson (1983) conducted follow-up studies using the criterion of student perceptions of importance and usefulness of consumer and homemaking content areas to evaluate the effectiveness of programs. Daniel and Stewart (1983, 1984) found that as the number of home economics courses in which the students were enrolled increased, so did the tasks they believed were needed. These results were similar for employed and unemployed participants. Bell and Glosson (1983) found that regardless of ethnic heritage, marital status, number of children, education level, or size of community in which the participants lived, participants believed that all of the subject areas of consumer and homemaking are useful to students in their personal lives and in employment.

Studies supported the fact that consumer and homemaking
programs are making an impact on the knowledge and attitudes of participants in the six subject matter areas of home economics: consumer education, food and nutrition, family living and parenthood education, child development and guidance, housing and home management (including resource management), and clothing and textiles.

A further goal of vocational home economics is to improve home environments and the quality of family life (Vocational Education Study, 1981). Home economics was defined by Brown and Paolucci (1978) as being concerned with "well-being of families", "improvement of home life," and "perservation of values significant to home, family, and society." Weiner (1984) states that home economics is an educational program that has the purpose of helping families maintain their desired quality of life and helping families prevent crises.

Wallace (1974) reports there is a need to identify factors that enhance or detract from quality of life if we are going to help individuals achieve a desired quality of life. Andrews and Withey (1974) claim there is a need to measure quality of life because we can achieve a better understanding of causes and conditions which lead to individual feelings of well-being and of the effects of such feelings on behavior. This knowledge is useful in designing social programs whose goal is the enhancement of individual well-being. Such evaluations also can be used to identify
"problems" of individuals when evaluation scores are low, to identify population subgroups with poor quality of life, and to observe changes within population groups and other cultures across time.

Studies have been reported which have tried to define "quality of life" and components, or social indicators, which may be used to measure it. Wallace (1974) identified some factors that people throughout the world identified as influencing quality of life; these factors included relationships between people, and between people and their immediate surroundings. McCall (1975) also agrees quality of life is affected by the environment and states it is the result of meeting the general happiness requirements of the society. These requirements are based on Maslow's hierarchy of needs which are present in all societies.

Flanagan and Russ-Eft (1975) identified 15 social indicators from a set of components that Americans of all ages and background reported as having contributed positively or negatively to their quality of life. These indicators consisted of material comforts; physical and mental health; relationships with family members; parenting; relationships with spouse, boyfriend, girlfriend; close friends; participation in activities helping others; participation in activities relating to government affairs; developing and using the mind; developing maturity; work; expressing self; socializing; passive recreation; and active
recreation. Flanagan and Russ-Eft (1975) then used their instrument to compare the quality of life components to 50 states' educational goals to determine if educational goals help students achieve a quality of life.

While Flanagan and Russ-Eft (1975) identified social indicators for all ages, Bart's (1983) study identified social indicators based on adolescent thinking and quality of life. Bart describes quality of life as being related to happiness, development, and adaptation. He conjectures that a low quality of life is because of environments which are stagnating, boring, stultifying, and unduly nonsupportive of cognitive development. This type of environment does not allow the adolescent to develop and improve upon thinking processes such as attention, memory skills, and problem-solving strategies. He states that quality of life influences development of gifts and talents.

Although consumer and homemaking programs would be expected to impact on perceived quality of life, no studies were found that measured the extent to which participation in consumer and homemaking programs was related to the degree of satisfaction and the degree of ratings of importance of quality of life components. This study will attempt to assess the impact of consumer and homemaking programs on program participants by measuring participants' achievement of home economics content, perceptions about the importance of specific components of quality of life, and
satisfaction with each of the quality of life components. The specific objectives of the study are:

1. To assess the level of achievement of home economics concepts in the areas of food and nutrition, consumer education/resource management, work world, stress management, and child development/family held by secondary students who have taken three or more semesters of home economics courses.

2. To assess secondary students' perceptions toward the importance of specific quality of life components.

3. To assess secondary students' satisfaction with specific quality of life components.

4. To examine possible relationships among achievement scores of home economics concepts, total life importance scores, total life satisfaction scores, total semesters of home economics courses taken, class rank, and gender.

5. To determine the degree achievement scores, class rank, total semesters of home economics courses taken, and gender predict perceptions of importance of and satisfaction with quality of life.
This literature review will address the behaviors, knowledge, and attitudes concerned with the increasingly complex tasks of homemaking and family life that have been acquired by the students who have participated in secondary consumer and homemaking programs. Only evaluation studies conducted since 1980 will be reviewed because Crawford (1980) reviewed earlier studies.

This review will begin with studies which were conducted on the impact of participation in consumer and homemaking programs on student knowledge. Subsequent sections will focus on research conducted on the impact of participation in consumer and homemaking programs on attitudes and behavior. It also will address quality of life indicators and studies that have assessed adolescents' and young adults' perceptions of their quality of life.

Impact on Knowledge

In Sand's (1980) study on the parenthood education effectiveness of Iowa secondary home economics programs, a parenthood test was administered by home economics teachers in participating schools. The test had two parts: a knowledge section and an attitudinal section. Also gathered was demographic information including sex, grade level,
previous home economics courses taken, personal plans for parenthood, amount of experience with children, and type of experience with children.

The sample consisted of 268 child development students and 187 non-child development students. In analyzing the scores Sand found that the mean scores of child development students were higher and that these students felt more capable. She concluded that experiences with children made a significant difference in student capability attitudes and recommended that more experiences with children be provided in child development/parenthood education courses.

Losen (1987) conducted a similar study to determine if the presence or absence of observation and participation activities in child development classes influenced the attitudes and knowledge of students. The sample was composed of 1984 and 1985 students in child development classes attending Washington High School in Cherokee, Iowa. Observation and participation experiences with children were not included in 1984 (n=37) but were in 1985 (n=43). Demographic variables included were sex, grade level, type of experience with children, and personal parenting plans. The 1985 group observed preschoolers while visiting a Head Start Program, a Kid's World Day Care Center, a preschool program, a kindergarten class, and a play group they planned and conducted. Before observing the preschoolers the students studied basic child development concepts in order
to make the activities more meaningful. Both groups were administered a pretest and posttest using the Child Development Knowledge Test and Parenthood Attitude Survey.

Losen concluded that observation and participation with children does influence the attitudes and knowledge of students and recommended that child development/parenthood courses to be lengthened to two semesters to prevent a trade off between observation-participation activities and regular classwork activities, to lengthen the amount of time provided for students to observe or participate, and to include observation-participation activities throughout the semester. She further recommended a flexible observation assignment schedule and format so students are not restricted to one specific area at a time.

Dittman and Anderson (1987) used a questionnaire measuring attitudes, knowledge, and problem solving skills related to parenting with 653 high school students. The students were in two groups, one group was enrolled in a course offering a unit on parenting and working with children and the other group was not enrolled in a course offering the unit. The experimental group was broken into two subgroups, one subgroup (184) having instruction including fieldwork and the other subgroup (168) having only a unit in parenting. The control group (333) received no instruction in parenting.

Significant differences were found between the
experimental group and the control group on the "My Child Care Skills" scale, "Family Life Situation" scale, and the knowledge scales. Boys and girls benefited from the class receiving instruction. Dittman and Anderson (1987) found no significant differences between the classroom situation and the fieldwork situation on the six scales they used from the Parenthood Questionnaire which had been developed by the Behavior Associates in 1978. Girls in the classroom situation had higher gain scores on "My Understanding of Children" scale. Boys in the fieldwork group had higher gain scores on the "Before Birth" scale and in knowledge of child-rearing problems. Dittman and Anderson (1987) concluded that parent education units did make a significant difference in attitudes, knowledge, and problem solving skills in child care situations. They summarized their study by stating that parenting education has the potential to provide students with information and understanding that can increase their competence in present and future parenting roles.

Gitzmacher, Schultz, Shannon, and Watts (1981) conducted similar studies. They compared a group taking a child development/parenting class to a group not taking or having taken a class in child development/parenthood. Gitzmacher et al. (1981) found that child development students in Minnesota, New Mexico, Ohio, and Wisconsin scored higher than nonchild development students in their
knowledge of child development/parenting concepts. Schultz and Sand (1982) found no significant differences in child development knowledge for Iowa students and believed that this was due to similar amounts and types of experience with children and or child development concepts covered in comprehensive home economics courses.

Hellums and Gorman (1984) investigated possible differences in consumer education knowledge of two groups enrolled in vocational consumer and homemaking courses in Mississippi. One group (166) was taught a semester course concentrating on consumer education and the other group (158) took courses in which consumer education concepts were integrated throughout the home economics curriculum. The test they used to collect the knowledge data was a consumer education test developed by Harder and Fanslow in 1979. They concluded that there were no significant differences in scores between the two types of presentation of consumer education concepts. The positive gain scores did lend support to Langrehr's (1979) findings that student competencies were improved when students were enrolled in courses where the emphasis was on consumer education rather than on economic principles (Hellums & Gorman, 1984).

Stokes (1982) found in her study of competencies attained by students who had received instruction in consumer education that girls scored higher than boys on the posttest, but not significantly. The sample consisted of 46
students in control groups and 36 students in experimental groups. The Test of Understanding in Personal Economics was completed by the experimental group before and after receiving instruction in consumer education. The experimental group had a significantly higher mean gain score than the control group. In addition, significantly greater gains were found for younger groups of students receiving instruction in consumerism. This may be due to older students already having been exposed to the content. No significant relationships existed between gain scores and the sex, grade level, or socioeconomic status of participants.

Impact on Attitudes

Tulloch (1982) investigated selected parenthood attitudes of 463 Kentucky high school students following participation in parenthood education. The questionnaire used to collect data included demographic and opinion information, the Parental Attitude Research Instrument Short Form, the Attitude Toward Timing of Parenthood Scale, and the Blake Childlessness Scale. Tullock found that five attitudes changed as a result of participation in the parenthood class. Students expressed more positive attitudes toward delaying marriage and parenthood. Less authoritarian attitudes, more patience with children, and a
slight decrease in the number of students wanting children also were reported.

Dittman and Anderson (1987) used three attitudinal scales: "My Child Care Skills", "My Opinions About Children", and "My Feelings About Parenthood" to compare a classroom group, a fieldwork group, and a control group. Significant differences were found between the pre and posttest means of the fieldwork group on "My Feelings about Parenthood" scale. No differences were found between any of the groups' pre and posttest scores on "My Opinions about Children" scale. On the scale, "My Child Care Skills", significant increases were found in the classroom and fieldwork groups' scores. Significant differences were found between the fieldwork and comparison groups' posttest mean scores for the "My Opinions about Children" scale. The fieldwork group gained more than the comparison group.

When Sand (1980) analyzed the attitudinal section of the parenthood test administered to her sample, she found that the mean scores for the child development students were higher than for the group not taking a child development class. Students believed that they were more capable of taking care of children as a result of having taken the course. Similar results were found by Zeolla and Gritzmacher (1982) in their study on students who had participated in a child development/parenting class.

A 1982 survey was conducted in Georgia (National
Evaluation Systems) to determine if the curriculum was meeting the needs of students. Mailed questionnaires and phone interviews were used to gather the data. When the respondents were asked the importance of knowing how to perform skills matched to curriculum areas of consumer and homemaking programs, the overall results were positive. Students reported being best prepared in the area of clothing and textiles. The students who had been enrolled in child development and family living courses believed that they were more prepared than those who had not participated.

When Daniel and Stewart (1983) surveyed 1,442 former students to determine what tasks they learned in class and what instruction would have been helpful, they found that the respondents' sex, employment status, number of semesters enrolled in home economics, and year of graduation caused a variation in whether the tasks were taught or should be taught. The boys in the sample stated 20 of the 42 tasks listed had been taught in the classes in which they participated and females stated that 26 of the 42 tasks had been taught. Of the top 10 tasks listed as having been taught, boys and girls agreed on eight. Similarities were found in the needs listed by employed and unemployed participants. Of the top 10 tasks perceived as being needed by these groups, eight were similar.

Daniel and Stewart suggested that there is a commonality of required tasks for all people regardless of
their state of employment. When the data regarding the number of semesters enrolled in home economics and the number of tasks perceived as needed were analyzed, it was found that as the number of courses increased so did the tasks perceived as needed. The year of graduation caused a difference between tasks listed as having been taught and the frequency of being taught.

A follow-up study of the same students was conducted by Daniel and Stewart in 1984. A high degree of similarity was found in the tasks identified as being needed and those being taught. As teacher experience and amount of education increased, the number of tasks taught also increased. Daniel concluded that consumer and homemaking programs were meeting the curricular needs of students.

Gritzmaccher et al. (1981), Schultz and Sand (1982), Zeolla and Gritzmaccher (1982), and Shannon and Watts (1982) all agreed that students who participated in child development/parenting courses showed a significant improvement in attitudes toward children and parenting. As family size decreases and students have less experience with children within the home, courses in child development and parenting have the potential to initiate attitudinal changes that will affect future generations. Students who have taken these courses appear to approach parenthood with more realistic expectations (Schultz & Sand, 1982).

Bell and Glosson (1983) surveyed 1800 Texas students
who were last in school between 1974-1978. The purpose of the study was to determine if specific demographic variables affected former students' perceptions of the usefulness of the knowledge and skills needed for the occupation of homemaking taught in consumer and homemaking education. They concluded that consumer and homemaking education was useful to students in their personal lives and in employment; all subject areas were useful; subject areas were useful regardless of the ethnic heritage, marital status, number of children, educational level, or size of community in which students live. They also concluded that the knowledge and skills gained were useful over an extended period of time, that consumer and homemaking programs were effective in schools of all sizes, and that indepth study within a subject area increased its perceived usefulness.

Impact on Behavior

McClelland (1980) developed observation and interview devices to be used with a self-report inventory to assess parenting behaviors. Fifteen parents who had had a course in parenting were compared to a group of 11 parents who had not had a parenting course. The experimental group scored higher on 26 out of the 30 items. The experimental group exhibited more optimum parenting behaviors such as providing more creative play materials, and using reasoning and
Rossman and Parsons (1980), and Mears, Ley, and Ray (1981) used case studies to demonstrate the effectiveness of consumer and homemaking education. They used questionnaires, interviews, and observations to gain information for their case studies. In the content area on caring for children Rossman and Parsons (1980) found that students made comments such as: "...helped me get away from shyness and respond to others...", "...I used to have a bad temper with children and now that's improved...", "...I've learned little children are people too.", and "I talk with parents more now." In the nutrition content area, students' responses consisted of: "I stay away from certain foods now, like those high in fat and sugar.", "I don't eat as much junk food now.", and "At home I eat more carrots." Comments related to consumer education included: "I never realized it costs so much.", "I learned how to live with people.", and "It's given me confidence."

One of Mears et al.'s (1981) case studies quoted a student as saying "...I decided to wait to have children because they mean so much." In another case study, students stated that they were pursuing a career in child development as a result of participation in a high school child development class.

In trying to determine whether students who had completed one semester of consumer education attained a
higher level of competency than those who had not, Stokes (1982) used a checklist to determine behavior change. The most changes were found in behaviors such as comparing prices before buying, looking for a product seal of approval, comparing products, and reading articles on the uses of credit. Crawford and Hughes (1984) obtained similar results in their study; 86% of the consumer and homemaking students indicated that their classes had helped them as a consumer (checking quality of products, comparison shopping, cutting costs, getting the most for one's money, and planning and budgeting money).

Crawford (1981) also conducted a study to determine the impacts of consumer and homemaking education. She found specific impacts in skills in food preparation, use of proper nutrition, and getting the most out of food dollars. Sixty-eight percent of the students reported their participation in classes assisted them in spending money wisely, having a budget, looking for consumer information, and getting the best quality for the money. Instruction in clothing helped 79% of the students in areas such as construction and repair and selection and care of ready made clothing.

A report on the National Follow-Up/Longitudinal Study of Vocational Consumer and Homemaking Graduates (Gritzmacher, Veach, Baum, Pestle, and Clawson, 1985) was concerned with behaviors of graduates in the areas of
parenting, consumer education and nutrition as a result of participation in comprehensive consumer and homemaking courses. Students reported more optimum behaviors when up to three comprehensive courses were taken; the study did not report examples of how student behavior had changed.

Impact on Quality of Life

Quality of life has been defined as people's perceptions of their own well-being or lack of well-being (Andrews and Withey, 1974; Rodgers and Converse, 1975). Several attempts have been made to identify social indicators useful in assessing peoples' perceptions of their quality of life.

Andrews and Withey (1974) used data from several surveys of American adults in which the adults had reported situations and values they perceived as affecting their quality of life. Through a variety of mapping and clustering techniques the concerns were grouped into smaller clusters or domains. After a series of analyses of the domains, 12 domains were found to explain 50-60 percent of the variance in the adult's sense of overall quality of life. These 12 domains remained consistent in each of the 22 subgroups of the American population surveyed. Five of the domains which were the most influential in predicting quality of life consisted of self-efficacy, family, money,
fun, and housing.

Rodgers and Converse (1975) combined subjective and objective indicators in designing their two measures of perceived quality of life. The two measures were based upon data gathered through interviews of 2,164 persons 18 years of age or older. The interviews were conducted by the national interviewing staff of the Survey Research Center in the summer of 1971. A sample (285) of the 2,164 again were interviewed in the spring of 1972 and were asked additional questions. One of the measures, the Index of Well-being asked respondents to look across all parts of their lives and make a general evaluation. The other measure, the Index of Domain Satisfaction, asked respondents to evaluate particular domains of their lives.

The Index of Domain Satisfaction consisted of the following domains: marriage, family life, health, neighborhood, friendship, housework, job, life in United States, city or county, non-work, housing, usefulness of education, standard of living, amount of education, and savings. Respondents rated the domains on a 7-point scale from "completely satisfied" to "completely dissatisfied". Responses tended to cluster heavily toward the satisfied end of the scale.

The reliability of the Index of Well-being was .89 and the reliability of the Domain Satisfaction was .83 (Heise and Bohrnstedt's omega). Although the Index of Well-being
had the higher reliability, the Index of Domain Satisfaction was reported as probably being more useful because it contained the more specific indicators that would provide information about specific sources of well-being that might aid in setting priorities for public expenditures.

Wallace (1974) identified factors affecting quality of life when developing family planning programs in developing countries. Some of the factors that people throughout the world identified as leading to improved quality of life consisted of: land holdings; adequate food, clothing, shelter, and income; employment opportunities; maternal and child health; and family and societal welfare. She states that because home economists are concerned with factors that affect the lives of people and the conditions in which they live, some of the identified factors are areas in which home economists can make major contributions to improve quality of life. Recommendations are made that consideration be given to the values of individuals and society when selecting content and concepts to incorporate into programs so as to help individuals achieve the desired quality of life.

Several studies were found on quality of life of adolescents and young adults in the United States. Bart (1983) described quality of life as being directly related to the degree the individual experienced happiness, development, and adaptation. Happiness was defined as forms
of enjoyment and pleasure such as those emanating from experiences of mastery, discovery, and beauty. Development was described as the development, maintenance, and utilization of internal physical and psychological resources as visual memory skills and creative imagination. Adaptation was defined as the acquiring of skills and knowledge that permits an individual to better adapt to problems and tasks in one's environment. A low quality of life was conjectured to be the result of environments which were stagnating, boring, stultifying, and unduly nonsupportive of cognitive development. This type of environment does not allow the individual to develop and improve upon thinking processes such as attention, memory skills, and problem solving strategies. Quality of life is perceived to influence the development of gifts and talents.

While Bart (1983) attempted to determine how quality of life affected the development of cognitive skills, Fabes (1987) conducted a study to determine how students with high and low cognitive skills perceived factors affecting quality of life. The sample consisted of 443 tenth grade students, 258 women and 185 men. He considered three categories: Self-Issues, Interpersonal Issues, and Social Issues. The Self-Issues category consisted of: personality, aging, physical appearance, health, self-actualization, immaturity, and emotionality. The Interpersonal Issue category consisted of: peer relationships, intimate/sexual
relationships, family relationships, and marriage; and the Social Issues category consisted of: economy, education, politics, military, human rights, religion, suffrage, and hunger. Results revealed that regardless of a high or low level of cognitive skills, the greatest proportion of responses were found in the self-issues category, followed by the interpersonal and social categories. Students who had a higher level of cognitive development favored interpersonal and social factors as affecting quality of life while students having a lower level of cognitive development favored self and interpersonal factors as affecting quality of life.

Flanagan and Russ-Eft (1975) constructed a device to measure quality of life after they identified indicators that were predictive in determining quality of life. Indicators were selected using the critical incident technique with interviews from 1,800 Americans of all ages, races, and groups. Indicators identified were: material comforts; physical and mental health; relationships with family members; parenting; relationships with spouse, boyfriend, girlfriend; close friends; participation in activities helping others; participation in activities relating to government affairs; developing and using the mind; developing maturity; work; expressing self; socializing; passive recreation; and active recreation.

Flanagan and Russ-Eft (1975) compared their quality of
life instrument to educational goals of 50 state education departments. Findings indicated the work component was similar to 45 of the states' educational goals, 43 of the 50 states had educational goals similar to the government participation component, and 41 of the 50 states had an educational goal similar to the quality of life component concerned with physical and mental health. In addition, 36 states had an educational goal similar to the component close relationships, 24 states had similar educational goals to the parenting component, and 22 of the 50 states had an educational goal similar to the material comfort component.

Flanagan and Russ-Eft (1975) then conducted a study using their device with a sample (1,000) of 30-year-old men and women who had been involved in Project Talent, a 1960 National Survey of American high school students. The first objective was to determine how individuals rated their quality of life. Analysis of the study revealed 90% of the sample rated the work component as important or very important, and 79% reported being satisfied; 45% of the sample rated government participation as being important and 54% reported being satisfied; and 98% of the sample rated physical and mental health component as being important or very important, and 86% of the sample reported being very satisfied. Close relationships were rated important or very important by 90% of the sample, and satisfactory by 82% of the sample; 93% of the women and 84% of the men rated
parenting as being important or very important and 81% reported being satisfied; and 90% of the sample rated material comfort as important or very important and 80% of the men and 75% of the women claimed to be satisfied.

Flanagan and Russ-Eft (1975) also analyzed each individual life history separately to determine the direct contribution of education to quality of life. The findings revealed five problem areas. The most important problem, which inhibited the educational development of the sample, was the failure in educational programs to assist students in developing goals and plans. As a result, students lacked knowledge regarding their interests, abilities, and values resulting in wasted time, lack of motivation, and personal frustration. A recommendation was that all students be provided appropriate guidance in career selection based on their interests, abilities, and values.

Bachman, Johnston, and O'Malley (1986) reported findings that have bearing on quality of life of young people currently reaching adulthood. The purpose of the survey was to monitor changes or nonchanges that have affected quality of life of youth. Data were collected from large-scale surveys of high school seniors in the classes 1975 through 1984, as well as follow-up data from some of the students. Five different questionnaire forms were administered in classroom settings. Questions dealt with general life goals of today's youth; plans in relation to
marriage, parenthood, and job; expectations and worries about the future; and experiences with drugs, alcohol, and cigarette use.

Analysis of the section on goals and values of youth revealed more seniors rate "marriage and family life" as extremely important with "finding steady work", "being successful in work", "strong friendships", and "finding purpose and meaning in life" also receiving ratings of extreme importance. Seniors expected marriage and parenthood to provide purpose and meaning in their lives; marriage responsibilities to be equally shared; wives to work part-time or not at all when young children are present in the home; and husbands to have full-time employment. Ratings on the job category found "interesting to do" and "making use of one's skills and abilities" receiving "very important" ratings. Seniors viewed their futures in positive terms; 90% expect the next five years to be better for them and 81% viewed country conditions as improving the next few years. Crime and violence and threat of nuclear war were worried about the most in the category "problems facing the nation". More respondents who married reported using less drugs than those who lived with the opposite sex, continued to live at home, and lived in dormitories.

Schultz (1989) reported a similar survey to determine the issues that concern teenagers and their views of themselves and the world. The statements included factual
and attitudinal statements ranging from present life situations to goals for the future. They also were asked to identify statements which described their lives. The sample was composed of 510 high school juniors and seniors living in 15 locations across the United States. Results found teenagers to be most concerned with issues relating to money, the future, and AIDS. Other issues of concern to teenagers included: decision-making, declining status of the United States and possible economic depression, career choices, and marriage and family relationships. Results also indicated that four-fifths of the teenagers were presently happy with their lives although they view the world as being more difficult for them to live in than it was for their parents. Ninety-four percent of the students indicated having a job they enjoy as being important to them, 82% think household work responsibilities should be shared equally, and although 81% trust their parents, 47% turn to their parents for advice. Students thought schools were doing only an adequate job of teaching life skills. Schultz (1989) recommends the results of this survey be used to promote home economics courses because the needed life skills the students perceived as not being taught by schools are taught in home economics courses.
Summary

The Educational Amendments of 1976 (P.L. 94-482, Subpart 5, Section 150) (Vocational Educational Study, 1981) directed consumer and homemaking programs "...to assist consumers and to help improve home environments and the quality of family life". The Educational Amendments of 1976 also mandated that vocational education including consumer and homemaking programs be evaluated in order to determine if policies were being followed, and to determine the impact of the programs.

Studies have been conducted demonstrating that there has been an impact on knowledge, behavior, and attitudes of high school students as a result of participating in consumer and homemaking programs. Content areas studied consisted of nutrition (Rossman & Parsons, 1980); parenting/child development (Schultz & Sand, 1982); and consumer education (Rossman & Parsons, 1980). Methods of collecting the data consisted of observations, interviews, and paper and pencil instruments. Results revealed that students who participated in consumer and homemaking programs gained knowledge (Losen, 1987; Dittman & Anderson, 1987); developed optimum behaviors (Gritzmacher et al., 1985; Crawford & Hughes, 1984); and acquired positive attitudes (Rossman & Parsons, 1980; Tulloch, 1982).

Studies concerned with quality of life also have been
conducted. Some have identified social indicators useful in assessing quality of life (Fabes, 1987; Flanagan & Russ-Eft, 1975); and some studies designed instruments to measure quality of life (Rogers & Converse, 1975). Additional surveys monitored changes that affect quality of life and to assess concerns of people (Bachman, Johnston, & O'Malley, 1986; Schultz, 1989).

Although studies of individual areas in home economics have been done, no comprehensive studies of home economics content as a result of participating in consumer and homemaking programs were found. In addition, no studies were found that measured the extent to which participation in consumer and homemaking programs was related to the degree of satisfaction and the degree of ratings of importance of quality of life components. Therefore, the purpose of this study is to investigate the impact of participating in consumer and homemaking courses on perceptions of importance of quality of life components, and satisfaction with quality of life components.
PROCEDURE

Public Law 94-482 (1976) mandated the evaluation of consumer and homemaking education programs to determine their effectiveness. The major goal of this study is to determine the impact of participation in secondary consumer and homemaking courses on student perceptions of importance of and satisfaction with specific quality of life components. The following objectives guided this study:

1. To assess achievement of home economics concepts in the areas of food and nutrition, consumer education/resource management, work world, stress management, and child development/family held by secondary students who have taken three or more semesters of home economics courses.

2. To assess secondary students' attitudes toward the importance of specific quality of life components.

3. To assess secondary students' satisfaction with specific quality of life components.

4. To examine possible relationships among achievement scores of home economics concepts, total life importance scores, total life satisfaction scores, total semesters of home economics courses taken, class rank, and gender.

5. To determine the degree achievement scores, class rank, total semesters of home economics courses taken, and gender predict perceptions of importance of and satisfaction with quality of life.
Instrumentation

The data for this study were gathered as part of a follow-up study conducted by the Department of Home Economics Education at Iowa State University in cooperation with the Department of Public Instruction (R. Hughes & G. Grabe, personal communication, January 16, 1986). Two instruments were used to collect data for this study: an achievement test and a quality of life inventory. The achievement test assessed knowledge of concepts taught in consumer homemaking programs. The quality of life inventory assessed how important specific quality of life components were to students as well as their satisfaction with those same quality of life components. In addition, information on gender, class rank, and number of home economics courses taken also was collected.

Achievement test

The achievement test consisted of 31 items selected from an evaluation file developed in 1982 by the Department of Home Economics Education at Iowa State University College in cooperation with the State Department of Public Instruction and measured knowledge of home economics concepts. The items covered concepts taught in the areas of: food and nutrition, child development/parenting, and
consumer economics/resource management. Following a review of the test by home economics teachers who were members of Patterns for Progress, four work/career items were added as well as two items dealing with stress.

The table of specifications for the achievement test is shown in Table 1. Limitations were placed on the number and types of questions included in the achievement test because two instruments were used and this was the amount of information teachers could be expected to obtain from students.

Validity was assured by selecting items measuring a representative sample of the concepts under consideration (Gronlund & Linn, 1990). The alpha reliability of the test was optimized by deleting items that lowered the reliability. By deleting items 1, 2, 3, and 18, an alpha reliability of .70 was calculated on 215 students.

The total test was studied by individual items within content areas to determine concepts students knew and did not know. The achievement test is shown in the Appendix.

**Quality of life inventory**

The quality of life inventory used to ascertain student perceptions of importance and satisfaction with quality of life components was developed by Flanagan and Russ-Eft (1975). The inventory was used to assess quality of life experiences of a sample of 30-year-old adults who had
<table>
<thead>
<tr>
<th>Concepts</th>
<th>Item numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOOD AND NUTRITION</strong></td>
<td></td>
</tr>
<tr>
<td>Nutrient use</td>
<td>4, 7</td>
</tr>
<tr>
<td>Menu planning</td>
<td>5, 6</td>
</tr>
<tr>
<td>Food consumerism</td>
<td>8</td>
</tr>
<tr>
<td>Preserving nutrients</td>
<td>9</td>
</tr>
<tr>
<td>Food safety/sanitation</td>
<td>10</td>
</tr>
<tr>
<td><strong>CHILD DEVELOPMENT/PARENTING</strong></td>
<td></td>
</tr>
<tr>
<td>Decision to parent</td>
<td>20</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>21</td>
</tr>
<tr>
<td>Intellectual development</td>
<td>22</td>
</tr>
<tr>
<td>Parenting</td>
<td>23, 24, 25</td>
</tr>
<tr>
<td><strong>CONSUMER ECONOMICS/RESOURCE MANAGEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>Decision-making</td>
<td>11</td>
</tr>
<tr>
<td>Time/energy management</td>
<td>12, 13, 17</td>
</tr>
<tr>
<td>Money management</td>
<td>14, 15, 16</td>
</tr>
<tr>
<td>Community resouce</td>
<td>19</td>
</tr>
<tr>
<td><strong>WORK WORLD</strong></td>
<td></td>
</tr>
<tr>
<td>Comparable worth</td>
<td>26</td>
</tr>
<tr>
<td>Job discrimination</td>
<td>27</td>
</tr>
<tr>
<td>Sterotyping</td>
<td>28</td>
</tr>
<tr>
<td>Dual earner role</td>
<td>29</td>
</tr>
<tr>
<td><strong>STRESS MANAGEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>Causes</td>
<td>30</td>
</tr>
<tr>
<td>Management</td>
<td>31</td>
</tr>
</tbody>
</table>
participated in Project Talent, a national survey of students.

Ten of the 15 items were selected from the inventory because the items represented outcomes that could be associated with consumer and homemaking programs. The statements covered the areas of: physical and material well-being, relations with other people, social and community civic activities, personal development and fulfillment, and recreation. The table of specifications for the quality of life inventory is found in Table 2.

Students (215) were asked to respond to each quality of life component on a 4-point Likert-type scale with "1" being not important or not satisfactory; "2", neutral or doesn't matter, or neither satisfied nor not satisfied; "3" important or satisfied; and "4" very important or very satisfied. This response pattern was a part of the original device and was retained for this study.

Normally a Likert-type scale would have a balanced response format for assessing both positive and negative perceptions. Having two response options on the importance and satisfaction side of the neutral response could possibly have resulted in a positive bias in the results of this instrument.

A coefficient alpha reliability estimate was calculated for both the importance and satisfaction scales of the quality of life inventory. The coefficient alpha estimate
Table 2. Table of specifications for quality of life inventory

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Item numbers</th>
<th>Life importance</th>
<th>Life satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL/MATERIAL WELL-BEING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material comforts</td>
<td>32</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Physical and mental health</td>
<td>33</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>RELATIONS WITH OTHER PEOPLE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships with others</td>
<td>34</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Be a parent</td>
<td>35</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Close relationships</td>
<td>36</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Close friends</td>
<td>37</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>COMMUNITY, AND CIVIC ACTIVITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helpful activities</td>
<td>38</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>PERSONAL DEVELOPMENT/FULFILLMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop maturity</td>
<td>41</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>42</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>RECREATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socializing</td>
<td>44</td>
<td>59</td>
<td></td>
</tr>
</tbody>
</table>
for the degree of importance survey was .69 and the coefficient alpha for the degree of satisfaction survey was .76. The inventory is shown in the Appendix.

Sample

In collecting data for this 1986 study, letters inviting schools to participate in the study were sent to the 60 superintendents of Iowa schools that had participated in the 1979-1980 follow-up study of home economics programs (Woods, 1981) and to the 17 schools in which a "Pattern for Progress" key leader was employed as a home economics instructor. "Patterns for Progress" is a group of home economics educators in Iowa who are concerned with the improvement of home economics programs. Response cards were included for the superintendents and teachers to indicate whether or not they were willing to participate in the study. Follow-up letters were sent to the teachers when no response cards were received.

Forty-eight out of the 77 invited schools agreed to participate in the study. Materials were sent to the schools that agreed to participate in the study. Home economics teachers were instructed to determine the number of senior students who had taken at least three consumer and homemaking courses. From this list, teachers were asked to select male students first and then to randomly select girls
up to a maximum of five students per school. Further, teachers were encouraged to exclude any student with a low scholastic aptitude or who had a learning disability. Materials also were sent that described how to collect demographic information, how to administer the achievement test and quality of life inventory, and the actual devices. Follow-up letters were sent to teachers who did not return the data.

Data were obtained from 215 students in 42 school districts. This sample represented 42 of the 99 counties in Iowa (see Table 3).

In the school year 1985-1986 there were 67,450 (51%) boys and 65,347 (49%) girls enrolled in Iowa public high schools grade nine through twelve. During the same school year there were 14,789 (27%) boys and 39,312 (73%) girls enrolled in home economics courses in public schools grades nine through twelve. The socio-demographic data in this sample indicated that 18.6% of the students were boys and 80.9% were girls. Because of the criterion of at least three consumer and homemaking courses, the sample overrepresented girls in the typical consumer and homemaking population.

Breakdown by school size is shown in Table 4. Inspection of the table shows there is a greater concentration of students from smaller schools than would be expected in a random sample of Iowa schools. This
Table 3. Counties represented in sample

<table>
<thead>
<tr>
<th>County</th>
<th>School District</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audubon</td>
<td>Exira</td>
<td>Exira</td>
</tr>
<tr>
<td>Black Hawk</td>
<td>Cedar Falls</td>
<td>Cedar Falls</td>
</tr>
<tr>
<td>Buchanan</td>
<td>Independence</td>
<td>Independence</td>
</tr>
<tr>
<td>Cedar</td>
<td>Tipton</td>
<td>Tipton</td>
</tr>
<tr>
<td>Cerro Gordo</td>
<td>Clear Lake</td>
<td>Clear Lake</td>
</tr>
<tr>
<td>Clayton</td>
<td>Guttenberg</td>
<td>Guttenberg</td>
</tr>
<tr>
<td></td>
<td>Starmont</td>
<td>Strawberry Point</td>
</tr>
<tr>
<td>Delaware</td>
<td>West Delaware</td>
<td>Manchester</td>
</tr>
<tr>
<td>Des Moines County</td>
<td>Danville</td>
<td>Danville</td>
</tr>
<tr>
<td>Dubuque</td>
<td>Western Dubuque</td>
<td>Farley</td>
</tr>
<tr>
<td>Emmet</td>
<td>Armstrong-Ringsted</td>
<td>Armstrong</td>
</tr>
<tr>
<td>Fayette</td>
<td>Oelwein</td>
<td>Oelwein</td>
</tr>
<tr>
<td>Franklin</td>
<td>Hampton</td>
<td>Hampton</td>
</tr>
<tr>
<td>Freemont</td>
<td>Sidney</td>
<td>Sidney</td>
</tr>
<tr>
<td>Grundy</td>
<td>Grundy Center</td>
<td>Grundy Center</td>
</tr>
<tr>
<td>Guthrie</td>
<td>Stuart-Menlo</td>
<td>Stuart</td>
</tr>
<tr>
<td>Hamilton</td>
<td>Webster City</td>
<td>Webster City</td>
</tr>
<tr>
<td>Hancock</td>
<td>Garner-Hayfield</td>
<td>Garner</td>
</tr>
<tr>
<td>Hardin</td>
<td>Eldora</td>
<td>Eldora</td>
</tr>
<tr>
<td>Henry</td>
<td>Winfield-Mt. Union</td>
<td>Winfield</td>
</tr>
<tr>
<td>Humbolt</td>
<td>Humbolt</td>
<td>Humbolt</td>
</tr>
<tr>
<td>Jasper</td>
<td>Colfax-Mingo</td>
<td>Colfax</td>
</tr>
<tr>
<td>Jefferson</td>
<td>Fairfield</td>
<td>Fairfield</td>
</tr>
<tr>
<td>Jones</td>
<td>Midland</td>
<td>Wyoming</td>
</tr>
<tr>
<td>Lee</td>
<td>Fort Madison</td>
<td>Fort Madison</td>
</tr>
<tr>
<td>Linn</td>
<td>Cedar Rapids</td>
<td>Cedar Rapids</td>
</tr>
<tr>
<td>Louisa</td>
<td>Louisa-Muscatine</td>
<td>Letts</td>
</tr>
<tr>
<td>Madison</td>
<td>Wapello</td>
<td>Wapello</td>
</tr>
<tr>
<td>Mahaska</td>
<td>Winterset</td>
<td>Winterset</td>
</tr>
<tr>
<td>Marion</td>
<td>Oskaloosa</td>
<td>Oskaloosa</td>
</tr>
<tr>
<td>Mills</td>
<td>Knoxville</td>
<td>Knoxville</td>
</tr>
<tr>
<td>Mitchell</td>
<td>Nishna Valley</td>
<td>Hastings</td>
</tr>
<tr>
<td>Monroe</td>
<td>Osage</td>
<td>Osage</td>
</tr>
<tr>
<td>Monroe</td>
<td>Albia</td>
<td>Albia</td>
</tr>
<tr>
<td>Montgomery</td>
<td>Red Oak</td>
<td>Red Oak</td>
</tr>
<tr>
<td>Plymouth</td>
<td>LeMars</td>
<td>LeMars</td>
</tr>
<tr>
<td>Polk</td>
<td>Ankeny</td>
<td>Ankeny</td>
</tr>
<tr>
<td>Pottawattamie</td>
<td>Bondurant-Farrar</td>
<td>Bondurant</td>
</tr>
<tr>
<td>Poweshiek</td>
<td>Carson-Macedonia</td>
<td>Carson</td>
</tr>
<tr>
<td>Story</td>
<td>Brooklyn-Guernsey-Malcom</td>
<td>Brooklyn</td>
</tr>
<tr>
<td></td>
<td>Ames</td>
<td>Ames</td>
</tr>
<tr>
<td>Van Buren</td>
<td>Nevada</td>
<td>Nevada</td>
</tr>
<tr>
<td>Winneshiek</td>
<td>North Winneshiek</td>
<td>Keosauqua</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decorah</td>
</tr>
</tbody>
</table>
Table 3. Continued

<table>
<thead>
<tr>
<th>County</th>
<th>School District</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodbury</td>
<td>Sioux City East</td>
<td>Sioux City</td>
</tr>
<tr>
<td></td>
<td>Sioux City North</td>
<td>Sioux City</td>
</tr>
<tr>
<td></td>
<td>Sioux City West</td>
<td>Sioux City</td>
</tr>
<tr>
<td>Wright</td>
<td>Belmond</td>
<td>Belmond</td>
</tr>
</tbody>
</table>
Table 4. School size represented in sample

<table>
<thead>
<tr>
<th>School size grades 9-12</th>
<th>Number in Iowa</th>
<th>Percent in Iowa</th>
<th>Number in sample</th>
<th>Percent of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-200</td>
<td>263</td>
<td>61%</td>
<td>10</td>
<td>19%</td>
</tr>
<tr>
<td>201-500</td>
<td>119</td>
<td>28%</td>
<td>21</td>
<td>43%</td>
</tr>
<tr>
<td>501-1250</td>
<td>34</td>
<td>8%</td>
<td>12</td>
<td>25%</td>
</tr>
<tr>
<td>1251-2000</td>
<td>7</td>
<td>2%</td>
<td>5</td>
<td>11%</td>
</tr>
<tr>
<td>2000-+</td>
<td>8</td>
<td>2%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
concentration probably resulted from teachers in smaller schools being more willing to participate in the study.

Examination of student class rank distributions of this sample indicated that 20% of the students were in the upper 25% of their class, 30.2% were in the upper 26-50%, 22.8% were in the lower 49-75%, and 19.1% were in the lower 76-100% of their class. Although the class rank distribution shows that more students from the second quartile take home economics, the distribution is probably distorted to more academically able students than actually take home economics. The distortion occurred because teachers were encouraged to exclude any student having a low scholastic aptitude or a learning disability.

One of the criteria for a student to be in the sample was to have participated in at least three consumer and homemaking courses. Fifty-four (25%) students had participated in three or more courses, 44 (20%) had participated in four or more courses, 30 (14%) had participated in five or more courses, 28 (13%) had participated in six courses, and 22 (10%) had taken seven courses. Breakdown of the number and types of courses are shown in Table 5.

More students (83%) in this study had taken child development or parenting courses than any other course or subject matter area. Thirty-eight (17%) of the students had not taken any child development or parenting courses, 95
Table 5. Number and types of courses in which students participated

<table>
<thead>
<tr>
<th>Courses</th>
<th>Total Semesters</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total semesters of consumer and homemaking courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>55</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>44</td>
<td>20.5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>28</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>22</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>21</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Child development/parenting/family course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>38</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>95</td>
<td>44.2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>70</td>
<td>32.6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>Food and nutrition course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>41</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>85</td>
<td>39.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>76</td>
<td>35.3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Comprehensive consumer and homemaking course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>80</td>
<td>37.2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>42</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>63</td>
<td>29.3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>7.9</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>.9</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Total</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Semesters</td>
<td></td>
</tr>
<tr>
<td><strong>Textiles and clothing course</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>110</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>61</td>
<td>28.4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td><strong>Housing course</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>134</td>
<td>62.3</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>77</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td><strong>Consumer economics/family finance/management course</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>164</td>
<td>76.3</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>47</td>
<td>21.9</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>
(44%) had participated in one semester, and 70 (32%) had taken two semesters of child development or parenting.

Food and nutrition courses ranked second in level of participation by students (81%) after child development or parenting courses. Nineteen percent of the students had not participated in any food and nutrition courses. Eighty-five (39%) had participated in one course and 76 (35%) had participated in two food and nutrition courses.

Approximately 62% of the students had taken a comprehensive home economics course, 19% had taken one semester, and 29% had taken two semesters of comprehensive home economics courses. One hundred five (49%) of the students had taken a textiles and clothing course, 91 (42%) had participated in one or two textiles courses. The housing courses also had relatively low participation by students with 37% of the students having taken any housing courses and 35% having participated in one housing course.

The course area that had the lowest enrollment was consumer economics/management/family finance (76%). Only 21% had taken at least one semester of consumer economics/family finance/management coursework. The low enrollment probably is due to the fact that this course is infrequently offered in high school consumer and homemaking programs.

In summary, although the sample is spread geographically throughout Iowa, the sample is
over-represented by students in small schools (< 200). Further, girls are overrepresented as compared to boys (81% to 19%) in the sample. The typical student population that enrolls in consumer and homemaking programs is 73% girls and 27% boys.

Data Analysis

Descriptive statistics including frequency distributions and percentages were calculated. Means and standard deviations were calculated for the achievement test, importance inventory, and the satisfaction inventory. Academic rank was recoded prior to data analysis, that is; the upper one-fourth was coded 4; the second quartile, 3; the third quartile, 2; and the bottom quartile 1.

Pearson product moment correlation analyses were used to examine relationships among total achievement scores, total life importance scores, total life satisfaction scores, and the demographic variables of gender, class rank, and total semesters of participation. Multiple stepwise regression analyses were conducted to determine the degree to which class rank, gender, total number of courses taken, and total achievement test score predicted life importance and life satisfaction perceptions.
RESULTS AND DISCUSSION

The findings are reported in three sections: achievement of students in home economics content and their perspective on importance of and satisfaction with quality of life components; relationships between total knowledge scores, total ratings of importance and satisfaction with quality of life components, total semesters of home economics courses taken, class rank, and gender; and predictors of perceived quality of life importance and life satisfaction by achievement and demographic characteristics of respondents.

Student Achievement and Quality of Life Perceptions

**Student achievement**

The achievement test scores ranged from 5 to 24. The test had a mean of 17.2 out of a possible 27 points, a median of 18, and a standard deviation of 4.0 (See Table 6). Inspection of frequency distribution of the scores showed that scores on the test ranged from a score of 5 to a score of 24 with the scores clustering toward the higher end of the total possible score. Overall, students exhibited mastery of 63% of the concepts, and 120 (56%) of the students achieved higher scores than the 63%. This is satisfactory because it indicates students are achieving
Table 6. Achievement of Home Economics content (N=215)

<table>
<thead>
<tr>
<th>Subtest/item</th>
<th>Mean</th>
<th>Frequency Correct</th>
<th>Item Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food/Nutrition</strong></td>
<td>4.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrient use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A (#4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy value (#7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Menu planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food selection (#5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food substitution (#6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food consumerism (#8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perserving nutrients (#9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food safety/sanitation (#10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Development/Parenting</strong></td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision to parent (#20)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prenatal care (#21)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellect development (#22)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenting practices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punishment (#23)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping with jealousy (#24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving affection (#25)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumer Economics</strong></td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision making (#11)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/energy management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human energy management (#12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishing priorities (#13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy conservation (#17)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making payments (#14)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting up a budget (#15)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer responsibility (#16)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community resources (#19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work World</strong></td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparable worth (#26)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job discrimination (#27)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterotyping (#28)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual earner role (#29)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stress Management</strong></td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causes (#30)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management (#31)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total test</strong></td>
<td>Mean=17.2</td>
<td>SD=4.0</td>
<td></td>
</tr>
</tbody>
</table>
more than 50% of the concepts emphasized in consumer and homemaking programs. Given that the reliability of the achievement test was .70 suggesting that the test is usable for group interpretations, the achievement of the students as a group probably is accurately reflected.

The reliability of .70 was probably a function of test length (27 items) and concentration of test scores between 18 and 24. The clustering of scores toward the maximum score is what would be expected because the test was measuring concepts taught in courses and students were understanding the concepts being tested (Gronlund & Linn, 1990).

In an effort to understand areas of home economics in which students had strengths and weaknesses, the performance of students by content area was studied (see Table 6). Analysis of concepts measuring food and nutrition knowledge indicate 92% of the students correctly identified the kinds of food most likely to spoil and 77% correctly determined the best food value per dollar spent on food. In addition, 73% knew how to preserve nutrients when preparing foods, however, only 26% correctly answered the question identifying specific nutrients in foods.

Approximately 81% of the sample had taken one or more semesters of Food and Nutrition. Generally Foods and Nutrition courses include laboratory work which emphasize skills such as preserving nutrients and planning menus based
upon a specified amount of money. Because 73% and 77% of
the students correctly answered questions pertaining to
those concepts, students appear to be achieving as a result
of hands on activities. This finding agrees with Crawford's
study (1981) in which she found that consumer and homemaking
programs did have specific impacts on students' skills in
food preparation.

With only 26% of the respondents correctly answering
the question regarding specific nutrients in foods, there
appears to be an inconsistency in what teachers reported as
being taught in Food and Nutrition courses. Woods (1981)
reported in the Iowa Census Study that 99% of the 98 schools
studied taught the concept on the use of the food guide,
e.g., Basic Four. This inconsistency between students'
knowledge of nutrients compared to what teachers report as
being taught may indicate a need to explore further how Food
and Nutrition courses are actually taught.

Analysis of the Child Development/Parenting/Family
items reveal that 81% of the students correctly selected
examining one's feelings and reasons for wanting a child as
the first factor to consider before deciding to become a
parent. Although 81% of the sample correctly answered
children find it easier to accept themselves and others as a
result of receiving adequate expressions of affection from
their parents, 72% had trouble identifying an appropriate
way to help a child deal with jealousy. Sixty-three percent
correctly identified beer or liquor as contributing to low birth weight, heart defects, joint defects, and abnormal eye shapes.

Approximately 82% of the sample participated in child development/parenting/family courses and 81% participated in food and nutrition courses. Schools are reporting teaching units regarding "Maternal health and nutrition" (Woods, 1981). The use of alcohol by a pregnant woman probably was included with the concepts regarding maternal health and nutrition. With 37% of the sample not being aware of the effect of alcohol on fetal development a question arises regarding the need for more research on what is being taught within units covering maternal health and nutrition in consumer and homemaking programs. The response to question 20, examining one's feeling regarding becoming a parent also was examined by Mears, Ley, and Ray (1981) and they found similar results as illustrated by a student quote, "I decided to wait to have a child because they mean so much."

Eighty-three percent of the students were able to identify low cost community resources available to the public as one of the items tested in the Consumer Economics/Family Finance/Management content area. Although 87% understood the consequences of not making payments to a credit company, 65% of the students lacked knowledge regarding who has the primary responsibility in using installment credit. The differences between these two
responses may reflect that item 16 was too complex for the students. The concepts the students did answer correctly were probably covered in other consumer and homemaking courses because the consumerism area usually is integrated into other subject areas of home economics.

Items within the Work World content area included job discrimination, time management, and combining work and family roles. Ninety-one percent of the students knew how to handle discrimination on the job but 59% were not aware that time management is the most difficult adjustment in combining work and family roles. With such a large percentage of the students not understanding this concept, the question may have been too complex for them to understand or the content was not covered in courses in which they participated. Although this concept would be expected to be learned outside of the classroom, especially because both parents are working in a majority of families, this concept may need to be included in consumer and homemaking curriculum.

Close inspection of the items relating to stress found that although 88% of the students knew how to handle stress only 47% of the students knew the causes of stress. Because stress is a factor everyone has to learn to cope with students need additional help in understanding the causes of stress. Because of the concern with teenage suicides, consumer and homemaking programs can help students meet the
need of identifying causes of stress.

Life importance and life satisfaction

Student perceptions of importance of 10 specific quality of life components showed a mean score of 33.7 out of a possible 40 points with a standard deviation of 3.6. Satisfaction with the same 10 quality of life components revealed a mean score of 28.8 out of a possible 40 points with a standard deviation of 4.8 (see Table 7). Although the response pattern on both inventories has two responses above neutral and could result in a positive bias, students' ratings on the importance of quality of life components were generally higher than their level of satisfaction with the same components. Because the reliabilities were .69 and .76, respectively, interpretation of the mean scores by group is reasonable.

Students had clear perceptions of what they considered important in life but indicated they were less satisfied with the degree to which components had been achieved. Student ratings of importance may have been related to concepts studied in consumer and homemaking programs as these students had participated in at least three or more consumer and homemaking courses. Therefore, as they gained knowledge, they perceived the components as being important. This supports Bell and Glosson's study (1983) in which they indicated that the more students knew, the more important
Table 7. Mean scores for perceptions of life importance and life satisfaction

<table>
<thead>
<tr>
<th>Quality of life Subgroup/Components</th>
<th>Importance Mean</th>
<th>Importance Percent</th>
<th>Satisfaction Mean</th>
<th>Satisfaction Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-2</td>
<td>3-4</td>
<td>1-2</td>
<td>3-4</td>
</tr>
<tr>
<td>Relations with Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships, Family</td>
<td>3.5</td>
<td></td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Be a parent</td>
<td>3.4</td>
<td>8</td>
<td>91</td>
<td>3.1</td>
</tr>
<tr>
<td>Close relationships</td>
<td>3.6</td>
<td>7</td>
<td>92</td>
<td>2.9</td>
</tr>
<tr>
<td>Close friends</td>
<td>3.5</td>
<td>7</td>
<td>92</td>
<td>3.3</td>
</tr>
<tr>
<td>Personal Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop maturity</td>
<td>3.5</td>
<td>46</td>
<td>53</td>
<td>3.0</td>
</tr>
<tr>
<td>Work</td>
<td>3.5</td>
<td>7</td>
<td>92</td>
<td>2.6</td>
</tr>
<tr>
<td>Physical/Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material comforts</td>
<td>3.4</td>
<td></td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Physical/mental</td>
<td>3.5</td>
<td>14</td>
<td>85</td>
<td>3.0</td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socializing</td>
<td>3.1</td>
<td>16</td>
<td>83</td>
<td>3.0</td>
</tr>
<tr>
<td>Social/Civic Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help others</td>
<td>2.7</td>
<td>38</td>
<td>61</td>
<td>2.7</td>
</tr>
<tr>
<td>Total score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>33.8</td>
<td>SD = 3.6</td>
<td>28.8</td>
<td>SD = 4.8</td>
</tr>
</tbody>
</table>

Scale:
1= Not important, Not satisfied
2= Neutral, doesn't matter; Neutral, neither satisfied nor not satisfied
3= Important, Satisfied
4= Very important, Very satisfied
the concepts related to the subject area became.

The importance rating for each quality of life component revealed that all components except the component regarding "Helping others" were considered to be important or very important on the 4-point scale that was used. The subgroup "Relations with Others" was perceived as being the most important to the sample. The two components concerned with "Relationships with parents, brothers, sisters, and other relatives", and "Close relationships with a spouse, boyfriend, or girlfriend" were perceived as being the most important components by 91% and 92% of the sample. The component concerned with "Being a parent" was perceived by 81% of the sample as less important than the others, but still important to very important. This difference could be due to the fact that the sample consisted of seniors in high school and they may not have thought about, or experienced parenthood.

The "Personal Development" subgroup consisted of two components, "Develop maturity" and "Work". The component, "Develop maturity, insight into your assets and limitations, understanding the meaning of life", was perceived by 53% as being important to very important and the component "Work in a job or at home that is interesting, rewarding, worthwhile" also was perceived by 92% of the sample as being important to very important.

"Physical and Material Well-Being" was perceived as
being important to very important. This subgroup was rated third in importance in the importance of quality of life components. "Physical and mental health" was perceived by 94% to be important to very important and "Material comforts such as home, good food, increasing income and security for the future" was perceived as important to very important by 85% of the sample.

The component "Socializing--such as meeting other people, doing things with them", making up the subgroup "Recreation" was perceived by 83% to be more important than the subgroup "Social/Civic Activities". The "Social/Civic" single component was concerned with participation in activities which help or encourage other adults or children. This component was perceived as being important to very important by 61% of the sample.

These findings tentatively support Sand's (1980) and Bell and Glosson's (1983) findings which report that participation in courses increases the perception of the importance of the concepts related to the subject matter area. Eighty-two percent of the students in the present study had participated in child development, parenting, or family courses and these concepts were perceived as being important to very important. Further, the findings indicate the students are achieving the developmental tasks for their age bracket, as they are achieving new and more mature relations with agemates of both sexes (Havighurst, 1957).
Findings regarding importance of relationships and health are consistent with Schultz's (1989) survey of American youth. She found that youth were 'extremely concerned' about developing positive relationships. In addition, health was rated as a top concern. Because these are concerns of youth, they should be considered when developing curriculum. In addition, students should be encouraged to participate in classes which concentrate on skills which develop effective relationships and promote good health.

A review of Table 7 indicated that most seniors were somewhat satisfied with their present status in relation to the components they perceived as being important to very important. Of the six components rated having mean importance scores of greater than or equal to 3.5, three components were rated as being satisfactory. These three consisted of "Relationships with family", "Relations with close friends", and "Developing maturity".

A large discrepancy was found in the component "Work" where it was perceived as being important to very important by 92% of the sample but reported as being only satisfactory to very satisfactory by approximately 57% of the sample. Discrepancies also were found in "Close relationships", and "Physical and mental health". Because this sample consisted of seniors who were still in school, they may have expressed dissatisfaction due to the nature of the kind of jobs in
which they were currently employed. Dissatisfaction with the work component also was found by Flanagan and Russ-Eft (1975), in their survey of 30 year olds. Their sample reported lack of guidance regarding future careers during their high school years. Perhaps research needs to be done to determine if students are receiving guidance in selecting a career based upon their interests, abilities, and talents.

The rating on the "Physical and mental health" component also could have had a low rating because students at this age are having to make important decisions regarding their future; consequently, they are feeling stress. Although the sample claimed to be satisfied with the component "Material comforts" this may be misleading because the students were living at home and this perception may be based upon what parents provided.

In summary, the students generally claimed to be satisfied with the quality of life components. The components with which students were satisfied to very satisfied may be areas which are reflections of consumer and homemaking programs. The areas rated below satisfactory were areas which also could be included in consumer and homemaking programs.
Relationships between Achievement and Student Characteristics

Significant relationships between home economics achievement, quality of life importance and satisfaction ratings, total semesters of participation in consumer and homemaking classes, class rank, and gender are shown in Table 6. All of the relationships were interpreted in the context of common variance (r squared); if a correlation coefficient of at least .3 was not obtained representing 9% of the variance, the correlation was judged not worthy of interpretation. Using this criterion, moderate positive relationships were obtained between achievement score, importance rating score, and class rank. In addition, the importance rating score had a moderate relationship with the rating of the satisfaction score.

Apparently, as students knew more about home economics content, they perceived related quality of life components as important. As expected, achievement correlated positively with academic rank suggesting higher ranks had higher achievement test scores. Academic rank correlated positively because ranks had been recoded so that the highest score, 4, was associated with the upper quartile.

The relationship between the importance score and the satisfaction score may indicate the seniors in the sample
Table 8. Significant correlations among student achievement, life importance, life satisfaction, total semesters, class rank, and gender

<table>
<thead>
<tr>
<th></th>
<th>Ascore</th>
<th>Iscore</th>
<th>Sscore</th>
<th>Totsem</th>
<th>Rank</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascore</td>
<td>.33</td>
<td>-.18</td>
<td>--</td>
<td>.31</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>Iscore</td>
<td>.36</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>Sscore</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ascore = student achievement score. Iscore = life importance score. Sscore = perception of life satisfaction score. p < .01
are achieving developmental tasks appropriate to their age. Consequently, the components the students rated as important are being achieved or adapted to satisfactorily by the students. This would agree with Havighurst's (1957) theory of developmental tasks. Furthermore, this would agree with Bart's study (1983) which described quality of life as being directly related to the degree the individual experienced happiness, development, and adaptation.

Surprisingly, no significant relationship was found between achievement and total semesters. The lack of relationship may be due to limited variability in courses taken, i.e., 3 to 9 and the fact that 56% of students scored between 17 and 24 on the achievement test.

Predictors of Perceived Quality of Life

The results of the multiple regression indicate the achievement score variable (beta = .28) emerged as the strongest predictor of perception of importance of quality of life (Table 9). This indicates that as students gained knowledge about concepts included in consumer and homemaking programs, apparently concepts related to those concepts gained importance. This finding supports previous research done by Bell and Glosson (1983) who reported that the more one knows about subject content, the more the concepts are perceived as being important.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Importance Score</th>
<th>Satisfaction Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R-square</td>
<td>Beta</td>
</tr>
<tr>
<td>Ascore</td>
<td>.10</td>
<td>.28</td>
</tr>
<tr>
<td>Gender</td>
<td>.02</td>
<td>.16</td>
</tr>
<tr>
<td>Total</td>
<td>.12</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note: Ascore = achievement score
Gender = 1 = Boys, 2 = Girls
p < .01
The second variable to emerge in the stepwise regression as a significant predictor was gender (beta = .16). This indicates girls perceived the quality of life components as being more important than boys. Generally, senior girls tend to be more interested in the components rated than senior boys. This supports Dittman and Anderson's study (1987) in which they surmised that girls have traditionally tended to be more interested in "family centered programs" and if that is so, they probably perceive the quality of life components as being more important than boys.

The achievement test score accounted for 10% of the variance and gender accounted for an additional 2% of the variance in perception of importance of quality of life. The variables total semesters and class rank did not enter into the stepwise regression equation. This finding suggests that the number of courses and level of class rank had little effect on how an individual perceives importance of quality of life components. However, given that 88% of the variance of importance ratings was not explained, the finding most suggests that further research on other variables is needed.

Results of the stepwise regression on perception of satisfaction with quality of life also are in Table 9. Achievement (beta = -.21) was a negative predictor of perception of satisfaction with quality of life, that is, as
achievement scores increased, satisfaction with quality of life decreased. An R square of .04 indicates that the achievement score accounted for 4% of the variance in the perception of satisfaction with quality of life. The variables total semesters, class rank, and gender did not enter into the equation.

Speculation about this finding suggests that the more one knows, the more one becomes dissatisfied with the present situation in life. However, because this finding only accounts for only 4% of the variance, the results should not be over-interpreted. The finding is more likely to be a function of the sample that consisted of 17 and 18-year-old senior students who may not yet have had experience with some of the quality of life components. In addition, assuming the students were achieving important developmental tasks, they would be seeking independence. Because this is likely to be the situation, and the students believed they did not have full control over their lives, they would be dissatisfied with their present quality of life. This result would support Bart's (1983) hypothesis that perceived quality of life is related to the degree the individual experienced happiness, development, and adaptation.
Summary

The purpose of this study was to determine the impact of consumer and homemaking programs on student achievement of home economics concepts and on perceived importance and satisfaction with quality of life. An achievement test was used to determine knowledge of concept areas in consumer and homemaking programs and an inventory was used to determine perceptions of importance and satisfaction with quality of life components. The achievement test had an alpha reliability of .70; the perception of importance inventory had a reliability of .69; and the perception of satisfaction inventory had a reliability of .76. All of the reliabilities were sufficient for research purposes.

The sample consisted of 43 boys and 172 girls who were graduating seniors. Girls made up 80% of the sample and boys made up 20% of the sample. All students had participated in at least three semesters of consumer and homemaking courses. The findings are limited to students in Iowa who have completed at least three semester courses in consumer and homemaking programs.

Descriptive statistics including frequency distributions and percentages were calculated for items. Means and standard deviations were calculated for the achievement test, importance inventory, and satisfaction
inventory. Pearson Product Moment Correlations were computed to determine possible relationships among achievement, life importance, life satisfaction, and total semesters of consumer and homemaking courses, class rank, and gender. Multiple stepwise regression analyses were used to determine if scores on the quality of life inventory could be predicted.

Scores on the home economics achievement test ranged from 19% to 89% correct with an average test score of 63%. This score demonstrated that students were achieving concepts emphasized in consumer and homemaking courses because students were achieving more than 50% of the concepts. In the area of food and nutrition, the majority of students were knowledgeable about foods which are most likely to spoil and how to determine the best food value per dollar spent on food. The majority of the students were aware of factors to consider before having children although 37% of the sample did not know the consequences of drinking alcoholic beverages during pregnancy. Most students understood the consequences of not making payments to a credit company but lacked understanding regarding credit responsibility. Students understood what to do if job discrimination occurred but did not know how to handle stress.

Findings regarding students' perceptions toward the importance of specific quality of life components revealed
that the students believed all were important or very important. The quality of life component receiving the highest rating of importance dealt with close relationships with boy/girlfriend.

Satisfaction with all quality of life components was rated in the neutral to satisfied range by students. This may be due to the fact that the sample consisted of seniors who may not yet have had much experience with some of the life components. The life component receiving the highest rating of degree of present satisfaction concerned relationships with close friends.

Moderate positive relationships were found between achievement test scores, importance rating scores, and class ranks. In addition, the importance rating scores had a moderate relationship with ratings on satisfaction. Apparently, as students knew more about home economics content, they perceived related quality of life components as important. Not surprisingly, academic rank and achievement were related suggesting that more academically able students obtained higher test scores.

Multiple regression analyses showed achievement and gender contributed 12% of the variance associated with perceived importance of quality of life. Achievement accounted for 4% of the variance associated with perceived satisfaction with quality of life. Total semesters of consumer and homemaking courses, and class rank did not
enter into either of the equations. Although these findings suggest that achievement related to consumer and homemaking courses influences importance attached to quality of life and satisfaction with quality of life, the small amount of variance explained suggests that many influencing variables have not been identified.

**Future Directions for Research**

Recommendations for future research focus on alternative methods by which the impact of consumer and homemaking programs could be evaluated. As such, the methods focus on alternative criterion measures and alternative research methodologies.

Modification of the achievement test used as a criterion measure in this study would be a first consideration. Lengthening of the achievement test to at least 100 test items would not only improve the test reliability, but also would permit sufficient items to warrant study of the content areas with home economics. By including valid and reliable subtests within the larger test, insight into achievement of students related to the specific content areas of home economics could be obtained.

If the quality of life device is to be retained, the response needs to be changed from a 4-point scale to a 5-point scale. The addition of a fifth option would permit the more customary response pattern of not important,
somewhat important, undecided, important, and very important.

Because consumer and homemaking programs strive for behavior change, a behavioral inventory might be considered for use as a criterion measure. The behavioral inventory could address "high-risk" behaviors and include items on food selection, alcohol and drug consumption, exercise patterns, sexual behaviors, and safety practices. A behavioral inventory would be particularly appropriate for the age of the students because it would assess what students were actually doing in their daily lives.

Other variables that could contribute to the importance/satisfaction ratings could be considered. These might include the demographic variables of educational levels of parents, family income levels, and relationships within the family. Community variables also might be considered.

An alternative research design that could be considered would be nonequivalent control group design. In addition to selecting senior students who had completed at least three semesters of consumer and homemaking courses, senior students could be selected who had completed no semester courses in consumer and homemaking. Ideally, these students would be selected by a "snowball" sampling method, i.e., students would be "matched" as closely as possible to the students who took home economics courses except, of course,
for enrollment in home economics courses. Further, students would have to be screened so they did not have sustained exposure to home economics concepts through participation in 4-H Clubs.

The addition of a control group to the study would permit a more precise identification of the effect of consumer and homemaking courses on whatever criterion variables were selected for study. Both qualitative and quantitative assessments might be considered as criterion measurements. Further, an effort could be made to randomly select consumer and homemaking programs in Iowa so that the results of the study would have greater population validity.

Finally, further research might attempt to evaluate consumer and homemaking programs using longitudinal follow-up studies one, three, and five years after graduation. Particular attention might be paid to the impact of family living/child development and parenting courses on the decision to parent as well as parenting practices and the impact of consumer economics/resources management concepts on budgeting behaviors and consumer credit practices.
REFERENCES


(pp. 19-36). University Park: Pennsylvania State University, Division of Occupational Vocational Studies.


ACKNOWLEDGMENTS

The author greatly appreciates the support and guidance shown her while completing this program of study. Among those the author wishes to thank are:

Dr. Ruth Hughes for starting me on this research project and program;

Dr. Jerelyn Schultz, my major professor and advisor, for her warm support, encouragement, and scholarly guidance;

Dr. Alyce Fanslow for her warm support, encouragement, and scholarly guidance;

Drs. Anton Netusil, Jr., Michael Warren, and Sally Williams for their willingness to serve as committee members;

Dr. Cheryl Hausafus for assistance in computing research data;

Walter, my husband, for his encouragement, endurance, and support;

Debbie, Dawn, Denise, and Derek, my children, for cooperating and trying to understand my need to complete this program; and

Suzy Sheahan, my mother, for instilling in me the spirit and desire to set high goals.
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>80</td>
</tr>
<tr>
<td>Sampling Procedure</td>
<td>82</td>
</tr>
<tr>
<td>Student Information Sheet</td>
<td>83</td>
</tr>
<tr>
<td>Achievement Test</td>
<td>85</td>
</tr>
<tr>
<td>Quality of Life Inventory</td>
<td>91</td>
</tr>
<tr>
<td>Human Subjects Approval</td>
<td>93</td>
</tr>
</tbody>
</table>
April 24, 1986

Dear Home Economics Teacher:

We want to thank you for agreeing to participate in the follow-up study of consumer and homemaking education students in Iowa. We are asking participating schools to select the sample, contact the students to get their participation, and complete an information sheet for each participant. We will then contact the former students.

The procedure for selecting the sample of participants is enclosed. After identifying the sample of five students would you please contact them to encourage them to participate and to find out the best time for the telephone interview that we will conduct. We are asking you to do this because we want as good a response as we can possibly get. Our experience has been that it is best if you make the initial contact with the student.

For each student who will participate, please complete a student information sheet. We have enclosed 10, five for you to send to us and five for you to work with if you wish. Since we will need to contact the students next winter, we have asked for the name of someone who would have their address at that time.

We have enclosed five copies of a survey of knowledge and attitudes regarding consumer and homemaking education. Please have students put their responses on the enclosed answer sheet. Would you please be certain that the student puts his/her name on the answer sheet?

A postage paid envelope is enclosed for your use in returning the student information sheets and the student answer sheets.

We would like you to assure the graduates that all responses will be confidential. Of course, so will all information that you provide on the student information sheet. Not only will the information be confidential; on all our records it will also be coded so as to be anonymous. These procedures are customary.

As indicated, we want responses from only the five students per school. However, if you wish to use the survey with other students, please feel free to do so. In any event, we want only the answer sheets and student information sheets returned. Would you please get those back to us on or before June 4?
We are pleased that you are willing to be a part of this study and thank you for your cooperation. Although we are working with the Iowa Department of Public Instruction, we will conduct the study here in Ames. If you have questions, please call me. If I am not here, the secretary will forward your call to Helen Crew. Ms. Crew is an Iowa home economics teacher who is working on the project this year as a graduate assistant.

Sincerely,

Ruth P. Hughes  
Distinguished Professor in Home Economics  
Head, Home Economics Education

RPH/gb

Enclosures
- Directions for drawing sample  
- Student information sheets  
- Knowledge and attitude survey  
- Return envelope
Procedure for Selecting Sample

1. List in alphabetical order by sex, all students who graduated in spring 1985 and who had three or more semesters of consumer and homemaking courses in grades 9-12. (Do not include courses reimbursed as Occupational.)

2. Delete from the lists any student(s) not appropriate. (For example, foreign student, mainstreamed, multiple behavior problem.)

3. Select two male students. Beginning with student number 2, take every fourth student returning to the top of the list as often as necessary.
   - If only one male, use him and draw four females.
   - If only two males, use both.
   - If no males, draw five females.

4. Select three female students. Beginning with student number 2, take every fourth student returning to the top of the list as often as necessary.
   - If only three females, use all three.
   - If fewer then three, use all.

5. If a student(s) does not wish to participate continue the same procedure to draw others.

6. We would appreciate knowing the total number of males and females who fit the criteria. Names are wanted for participants only.
STUDENT INFORMATION SHEET

Column (Column numbers on the left of this sheet are to be used in coding for data analysis. Interviewers will complete items 1-8.)

Student Name __________________________________________________________
Address ________________________________________________________________
City ___________________________ Zip Code ________
Phone # ___________________________ Area Code _______
Parent/Guardian _______________________________________________________
Parent/Guardian Address (if different from above) __________________________
Parent/Guardian Phone (if different from above) __________________________

1 Interview Form (circle one) A=1 B=2
2, 3 State ____________________________
4, 5 Interviewer ____________________________
6, 7, 8 Student Number ____________________________

9, 10 School ____________________________
11, 12 County/District of School Attended ____________________________

PLACE NUMBER FOR EACH ANSWER TO THE FOLLOWING QUESTIONS ON THE LINE TO THE LEFT. These figures pertain to the 1984-85 school year.

13 ______ What is the size of the high school grades 9-12?
   1. 200 or less  1a. 201 to 500  2. 501 to 1250
   3. 1251 to 2000  4. 2001 or more

14 ______ What was the total unduplicated enrollment in home economics for the spring 1985 semester?
   1. 75 or less  2. 76 - 150  3. 151 - 250
   4. 251 - 350  5. 351 or more
What is the size of the community which the school serves?

1. less than 2000--very rural
2. 2000-5000--rural
3. 5000-10,000--small town
4. 10,000-50,000--city
5. 50,000 or more--urban

If the school serves more than one town (community) estimate the average size of the community served.

Does the school have an FHA/HERO Chapter? 1=yes 2=no

What is the gender of the student? 1 = male 2 = female

What is the ethnic/racial origin of the student?
1=Caucasian 2=Black 3=Hispanic 4=Asian 5=Other

What is the approximate rank of the student in his/her graduating class?
1=upper 25% 2=upper 26-50% 3=lower 49-75%
4=lower 76-100% 5=information not available

What is the percentile rank of the student on the ITED (Iowa Test of Educational Development)?

local
state
not available

Give the number of semesters the student took the following home economics classes in grades 9-12. Do not count occupational classes.

Total number of semesters of home economics.

Number of semesters of comprehensive home economics courses, including independent living courses.

Number of semesters of child development/parenting/family courses.

Number of semesters of consumer economics/management/family finance.

Number of semesters of food/nutrition/family health.

Number of semesters of clothing & textiles

Number of semesters of housing & home furnishings.
Department of Home Economics Education
Iowa State University
Home Economics Survey

The following questions are a survey of your understanding of consumer and homemaking education and your knowledge and attitudes toward what you have studied.

Directions:
1. Please put your name on the answer sheet.
2. For items 1-31, select your response. Mark the answer sheet by darkening the appropriate circle.
3. For items 32-61, see special instructions on survey form, then mark the answer sheet.
1. In your choice of food to eat, what's most important to you?
   The effect of food on:
   (1) weight
   (2) physical activities
   (3) how I look
   (4) my health

2. When you choose food to prepare for a meal, which factor is most important?
   (1) calorie content
   (2) a balanced diet
   (3) cost
   (4) preparation time

3. Which of the following combinations of foods contains the most calcium for the least cost?
   (1) cheddar cheese spread, skim milk
   (2) cottage cheese, ice cream
   (3) cheddar cheese, low-fat milk

4. Vitamin A is necessary for
   (1) contraction of muscles in the body
   (2) formation of body connective tissue
   (3) visual adaptation to dim light

   Use the following information to answer the next two questions.

<table>
<thead>
<tr>
<th></th>
<th>Breakfast</th>
<th>Dinner</th>
<th>Snack</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2 c. Apricot Nectar</td>
<td>1 Pork Chop</td>
<td>1 c. Chocolate</td>
</tr>
<tr>
<td></td>
<td>1 c. Oatmeal with</td>
<td>1/2 c. Green Beans</td>
<td>Milk</td>
</tr>
<tr>
<td></td>
<td>1/2 c. Milk</td>
<td>1 piece Cake</td>
<td>1 Apple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 glass Iced Tea</td>
<td></td>
</tr>
</tbody>
</table>

5. Of the following three lunches, the best choice for Jean (age 20), to go with the other meals and snacks listed above would be
   (1) 4 pieces of Shrimp, 1/2 c. French-Fried Potatoes, 3 Celery Sticks, 1 Biscuit with Honey Butter, 1 c. Milk.
   (2) 1 c. Chicken Noodle Soup, 5 Carrot Sticks, 1/2 c. Vanilla Pudding, 2 Chocolate Chip Cookies.
   (3) Roast Beef Sandwich (2 1/2 oz. beef, 2 slices bread), 1/2 c. Broccoli, 1 Oatmeal Cookie, 1 c. Milk.

6. John (age 7), to meet recommendations for his nutrient intake would alter the above meals (including the lunch you selected) by substituting
   (1) orange juice for apricot nectar at breakfast.
   (2) milk for iced tea for dinner.
   (3) a peanut butter sandwich for the chocolate milk.
7. The energy value of carbohydrates is
   (1) about equal to that of proteins
   (2) more than twice that of fats
   (3) less than that of proteins and fats

8. The best food value per dollar spent on food is that which
   (1) furnishes maximum nutrition at minimum costs
   (2) costs the least per unit weight
   (3) has the largest edible portion per serving
   (4) cost the least per serving

9. In order to preserve the most nutrients when cooking the potatoes for
   the evening meal, Mary would
   (1) cook them slowly for a long time
   (2) slice thinly and cook rapidly
   (3) bake the potatoes
   (4) boil and mash the potatoes

10. Which of the following foods is most likely to spoil and make you ill
    if not refrigerated?
    (1) tuna fish salad
    (2) tossed salad
    (3) spaghetti sauce
    (4) fresh peach pie

11. The decision-making process in making consumer choices involves the
    following steps
    (1) seek alternatives or possible course of action
    (2) make a list of all possible courses of action
    (3) choose an alternative
    (4) identify the problem
    (5) examine alternatives

    Select the most appropriate sequence for these steps from the list below.
    (1) 4 1 2 5 3
    (2) 4 2 1 5 3
    (3) 4 1 5 2 3
    (4) 4 2 5 1 3
12. Flora works during the week, and must do quite a few household tasks on Saturday. Even though Sam helps her, she finds that between her household tasks and taking care of the baby, she gets very tired. Which of the following procedures would help most in reducing fatigue?

(1) Do all the hard jobs first.
(2) Make a strict time plan and stick to it.
(3) Avoid all interruptions.
(4) Do similar kinds of tasks together.

13. An important factor for establishing priorities for basic needs is identifying one's

(1) standards
(2) time
(3) money
(4) values

14. The Blacks have not made the last four payments on their car. They did not tell the credit company that they couldn't make the payments. The credit company has started garnishment proceedings against Mr. Black. Such action could possibly have been avoided if Mr. Black had

(1) explained to the credit company why he could not make the payments.
(2) told his employer.
(3) returned the car to the dealer.
(4) advertised the car for sale.

15. In setting up a budget, the most important thing to consider is

(1) the form you are going to use to set up the budget.
(2) what the money has to pay for between pay periods.
(3) the length of the pay period.
(4) the average budget figures for a family of your size and income.

16. The primary responsibility of the consumer in using installment credit is

(1) borrowing on time only what one can afford.
(2) paying on debts what he/she can afford every month.
(3) knowing how to figure the true interest rate.
(4) limiting the use of credit to emergency needs.

17. All of the following are ways of cutting costs of heating and air conditioning EXCEPT:

(1) the fireplace with the draft open.
(2) large window areas with wide overhang on the south.
(3) cross ventilation in attic area.
(4) heavy insulation above ceiling, in walls, and under floor.
18. You buy four new tires from a local service station for $200 and later discover that they are retreads. The service station operator says you must have switched tires and refuses to refund your money. The agency that would finally settle this complaint is the

(1) Better Business Bureau
(2) Small Claims Court
(3) Chamber of Commerce
(4) Department of Transportation

19. Low cost community resources available to the public include all the following EXCEPT:

(1) cable television
(2) county parks
(3) local health department
(4) libraries

20. What should one do first before deciding to become a parent?

(1) Examine one's feelings and reason for wanting a child.
(2) Talk with others who have raised children.
(3) Read books and magazine articles on parenting.
(4) Do all the "fun" things one wants to do.

21. Low birth weight, abnormal heart, joint defects and abnormal eye shapes are possible birth defects due to the mother's use of

(1) cigarettes
(2) coffee
(3) cola beverages
(4) beer or liquor

22. An infant's intellectual development can best be stimulated by

(1) a small, affectionate pat.
(2) use of mobiles and colorful toys.
(3) a busy, noisy environment.
(4) providing time in a play pen.

23. A child's punishment by a parent is adequate if it

(1) contributes to improving personal and social adjustment of the child.
(2) provides an emotional release for the parent.
(3) establishes the parent's authority over the child.
(4) prevents recurrence of the act that brought on the punishment.

24. A good way to help a child deal with feelings of jealousy is to

(1) Punish the child when he/she shows signs of jealousy.
(2) Explain to the child why it is "silly" to be jealous.
(3) Show the child why jealousy is bad.
(4) Try to give the child more attention.
25. When children receive adequate expression of affection from their parents, the children will

(1) Find it easier to accept themselves and others.
(2) Learn to expect their parents to give them gifts as an expression of their affection.
(3) Become dependent on others for constant displays of affection.
(4) Always be obedient as a way of returning their love.

26. Paying people the same amount for work that is similar in skill, effort, working conditions, and responsibility is the principle of

(1) equal pay for equal work
(2) non-stereotypic jobs
(3) fair labor standards
(4) comparable worth

27. If you were discriminated against in applying for a job, how would you handle it?

(1) confront the head of the company
(2) sue the interviewer
(3) go to your local civil rights officer
(4) ignore it

28. Assuming that nurses are female is an illustration of

(1) sex bias
(2) sex stereotyping
(3) both sex bias and sex stereotyping
(4) neither sex bias nor sex stereotyping

29. In combining the work role and the family role, the most difficult adjustment usually is to

(1) budget the family's money
(2) adapt the family's lifestyle
(3) manage time
(4) divide up the household tasks

30. Individual differences in stress are due to:

(1) differences in motivation, intelligence, and perception.
(2) differences in intelligence, stress tolerance, and perception.
(3) differences in tolerance, perception, motivation, and intelligence.
(4) differences in motivation, stress tolerance, and perception.

31. When a teenager faces too much stress, it is wise to:

(1) listen to music.
(2) stay in his/her room.
(3) talk with a friend or relative.
(4) wait for the stress to go away.
The following statements numbered 32-46 describe what people may consider important in their lives. Indicate how important they are to you by placing your response as follows on numbers 32-46.

1 = Not important
2 = Neutral—doesn't matter
3 = Important
4 = Very Important

32. **Material comforts**—things like a desirable home, good food, possessions, conveniences, an increasing income, and security for the future.

33. **Physical and mental health**—to be physically fit and vigorous, to be free from anxiety and distress, and to avoid bodily harm.

34. **Relationships with your parents, brothers, sisters, and other relatives**—things like communicating, visiting, understanding, doing things, and helping and being helped by them.

35. **Be a parent** and help, teach, and care for your children.

36. **Close relationship with a spouse, boyfriend, girlfriend.** Consider things like love, companionship, understanding, appreciation, and sexual satisfaction.

37. **Close friends**—sharing activities, interests, and views; being accepted, visiting, giving and receiving help, love, trust, support, guidance.

38. **Participate in activities which help or encourage other adults or children.** These can be your own efforts or efforts as a member of some church, club, or volunteer group.

39. **Participation in activities relating to local or national government and public affairs.**

40. **Develop and use your mind** through learning, attending school, improving your understanding, or acquiring additional knowledge.

41. **Develop maturity, insight into your assets and limitations, understanding of the meaning of life, and ability to plan and make decisions on major life activities.**

42. **Work in a job or at home that is interesting, rewarding, worthwhile.**

43. **Express yourself** in a creative manner in music, art, writing, photography, practical activities, or in leisure time activities.

44. **Socializing**—meeting other people, doing things with them, and giving or attending parties.

45. **Read, listen to music, or observe sporting events or entertainment.**

46. **Participate in active recreation**—such as sports, traveling and sightseeing, playing games, singing, dancing, playing an instrument, acting, and other such activities.
Describe how satisfied you are now with your present status on each of the same statements. Place your responses as follows on numbers 47-61.

1 = Not satisfied
2 = Neutral—neither satisfied nor not satisfied
3 = Satisfied
4 = Very satisfied

47. **Material comforts**—things like a desirable home, good food, possessions, conveniences, an increasing income, and security for the future.

48. **Physical and mental health**—to be physically fit and vigorous, to be free from anxiety and distress, and to avoid bodily harm.

49. **Relationships with your parents, brothers, sisters, and other relatives**—things like communicating, visiting, understanding, doing things, and helping and being helped by them.

50. **Be a parent** and help, teach, and care for your children.

51. **Close relationship with a spouse, boyfriend, girlfriend.** Consider things like love, companionship, understanding, appreciation, and sexual satisfaction.

52. **Close friends**—sharing activities, interests, and views; being accepted, visiting, giving and receiving help, love, trust, support, guidance.

53. **Participate in activities which help or encourage other adults or children.** These can be your own efforts or efforts as a member of some church, club, or volunteer group.

54. **Participation in activities relating to local or national government and public affairs.**

55. **Develop and use your mind through learning, attending school, improving your understanding, or acquiring additional knowledge.**

56. **Develop maturity, insight into your assets and limitations, understanding of the meaning of life, and ability to plan and make decisions on major life activities.**

57. **Work in a job or at home that is interesting, rewarding, worthwhile.**

58. **Express yourself in a creative manner in music, art, writing, photography, practical activities, or in leisure time activities.**

59. **Socializing**—meeting other people, doing things with them, and giving or attending parties.

60. **Read, listen to music, or observe sporting events or entertainment.**

61. **Participate in active recreation**—such as sports, traveling and sightseeing, playing games, signing, dancing, playing an instrument, acting, and other such activities.