A STUDY OF THE RELATIONSHIPS BETWEEN
CERTAIN ASPECTS OF CLOTHING AND THE
ABILITY TO HANDLE SELECTED CLOTHING
CONSTRUCTION TOOLS WITH THE
DEVELOPMENTAL LEVELS BY EARLY
ADOLESCENT GIRLS

Thesis for the Degree of Ed. D.
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This is to certify that the

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CLOTHING CONSTRUCTION TOOLS WITH THE
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by

Fern M?Y Horn

AN ABSTRACT

Submitted to the College of Advanced Graduate Studies of
Michigan State University of Agriculture and Applied
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THESIS ABSTRACT

The purpose of this investigation was to study the
relationships between certain aspects of clothing and the
ability to handle selected clothing construction tools with
the developmental levels of early adolescent girls. The
principal method of analysis was to treat the developmental
levels of early adolescent girls and the occupational group-
ings of their fathers as independent variables; interests in
certain aspects of clothing and the ability to handle
selected clothing construction tools were treated as depen-
dent variables.

The analysis was guided by the hypotheses that: (1)
there are significant differences in the interests of early
adolescent girls at different developmental levels in the
area of clothing; (2) there is a positive correlation between
spatial perception of early adolescent girls at different
developmental levels and their ability to handle selected
clothing construction tools; and (3) there are differences
between early adolescent girls, whose fathers are in differ-
ent occupational groupings, in relation to their interests
in clothing and their ability to handle selected clothing
construction tools.

To discover whether or not there were such differ-
ences, first, an interest inventory was developed which
divided the clothing area of the homemaking education curri-
culum into six categories: (1) selection, (2) grooming, (3)

sociological aspects, (4) care, (5) construction, and (6)
management. Then, in order to ascertain any differences in
ability to handle clothing construction tools, four most com-
monly used tools were selected: (1) tracing wheel, (2) sew-
ing machine, (3) shears, and (4) needle. Directions for the
use of these tools and a rating scale for evaluating the
resulting products were developed. Finally, the Differen-
tial Aptitude Test for Space Relations was selected to deter-
mine if there were a correlation between spatial perception
and the ability to handle the selected clothing construction
tools.

Results from the administration of these instruments
were obtained from three hundred early adolescent girls from
four occupational groupings: (1) professional, (2) skilled,
(3) semi-unskilled, and (4) farmer. The data obtained were
compiled, tabulated, analyzed, and reported in the study.
All findings were subjected either to the chi-square test,
the product moment method of correlation, or the test for
analysis of variance.

Within the limitations of the sample used the find-
ings of this research indicated that: (1) there were
statistically significant differences between the develop-
mental levels and occupational groupings of early adolescent
girls in their interests in certain aspects of clothing; (2)
there were significant differences between the developmental
levels and their ability to handle selected clothing

construction tools; and (3) there was a positive correlation between spatial perception of these early adolescent girls and their ability to handle the selected clothing construction tools. These findings would seem to imply that provisions should be made in the junior high homemaking education curriculum for individual differences in interests in the area of clothing and abilities to handle clothing construction tools.

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CHAPTER I

THE PURPOSE OF THE STUDY

Introduction

Psychologists have pointed out that early adolescents are confronted with many new and complex problems. Therefore, if homemaking teachers are to contribute to the individual development of adolescents, an understanding of their current stage of maturity and immediate needs and interests is necessary.

The effectiveness of teaching depends to a large extent upon the ability of the teacher to recognize significant relations so that the student will organize his experiences into meaningful patterns. Dewey has stated:

> Teachers succeed in training facility, skill, mastery of the technique of subjects, but unless enlargement of mental vision, power of increased discrimination of final values, sense for ideas, and principles accompanies this training, forms of skill ready to put indifferently to any end may be the result.[1]

Silverman questions why the areas of clothing and appearance have received so little attention in research studies despite the ascertained importance for adolescents.[2]

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[1] John Dewey, How We Think (New York: D. C. Heath, 1910), p. 62.

[2] Sylvia S. Silverman, Clothing and Appearance, Their Psychological Implications for Teen-Age Girls, Contributions to Education No. 912 (New York: Bureau of Publications, Teachers College, Columbia University, 1945), p. 3.

Biddle and Spencer concluded in a study concerning the interest of junior high school girls in clothing that early adolescence was a nearly ideal time for clothing construction.[1] Much research has been conducted and many articles have been written concerning the teaching of clothing construction, but with the emphasis in homemaking education upon all phases of family living, the teacher is challenged to consider the way in which clothing units are related to family problems.

The writer of this study was concerned with the dissatisfaction many homemaking teachers expressed in relation to some of the bases used for developing a clothing curriculum. Since much attention has been given to the differences in the degree of maturity among students in the same class, there seemed to be a need to develop instruments that would serve as a basis for developing a curriculum in the area of clothing that would be challenging and meaningful.

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[1] Gwendolyn Tucker Biddle and Lilly Hester Spencer, "Family Background and Interest as Basis for Clothing Instruction," _Journal of Home Economics_, LXVI (February, 1954), p. 106.

Statement of the Problem

The purposes of this study were:

(1) to analyze the relationship between the developmental levels of early adolescent girls enrolled in the junior high school grades in selected communities and their interests in the following areas of clothing: (1) selection, (2) grooming, (3) sociological aspects, (4) care, (5) construction, and (6) management.

(2) to study the relationship between the interests of early adolescent girls in the above areas of clothing and the occupation of their fathers.

(3) to analyze the relationship between the development of spatial perception of early adolescent girls at three developmental levels and their ability to handle the following clothing construction tools: (1) tracing wheel, (2) shears, (3) sewing machine, and (4) needle.

(4) to study the relationship between the ability of early adolescent girls to handle the above clothing construction tools and the occupation of their fathers.

(5) on the basis of the above, to make recommendations concerning the development of the curriculum in junior high homemaking education in the area of clothing.

Assumptions Basic to the Study

In undertaking this investigation the writer made three basic assumptions:

First, that students in homemaking classes will give valid information concerning their interests relative to clothing and will be willing to participate in tests to determine their ability in handling clothing construction tools when they understand that this information is to be used in planning the clothing curriculum.

Second, that the development and interests of early adolescent girls do vary.

Third, that information about the developmental levels of early adolescent girls may be of value in developing a more effective curriculum in the area of clothing for junior high homemaking education classes.

Hypotheses

The following hypotheses were set up for this study:

(1) There are significant differences in the interests of early adolescent girls at different developmental levels in the area of clothing.

(2) There is a positive correlation between spatial perception of early adolescent girls at different developmental levels and their ability to handle selected clothing construction tools.

(3) There are differences between early adolescent

girls, whose fathers are in different occupational groupings, in relation to their interests in clothing and their ability to handle selected clothing construction tools.

Definition of Terms

Certain terms may have varying meanings for different people. Therefore, it was believed necessary to clarify the meaning which will be used within the framework of this study.

Developmental level refers to the modal character-istics of an individual at various stages of devel-opment. The levels used in this study refer to the early adolescent: (1) Quartile I--girls ages 10.4-12.5, (2) Quartile II--girls ages 12.4-13.9, and (3) Quartile III--girls ages 13.9-15.6 years of age.[1]

Spatial perception involves complex coordination of mental and motor ability. It may require activities as tracing a maze, identifying similar forms, or fitting objects of varying sizes and shapes into recesses in a form board.

Occupational grouping in reference to the four cate-gories used in this study includes:[2]

[1] C. V. Millard, The Adolescent (unpublished manu-script, East Lansing, Michigan, 1958), pp. 32-63.

[2] Max F. Baer and Edward C. Roeber, Occupational In-formation. (Chicago: Science Research Associates, 1951), pp. 9-12.

Professional--those who are engaged in technical
work such as research, medicine, law, teaching,
or business promotion.

Skilled workers--those employed in machine trades
where understanding is needed to maintain, ad-
just, repair machines, and crafts which includes
the planning and performance of tasks requiring
skillful use of hands, tools and equipment.

Semi-unskilled workers which include those
employed in such jobs as observational work--
watching of machines, and manipulative work--
repetitive tasks of sorting or feeding.

Farmers--those engaged in the full-time opera-
of a farm.

Clothing construction tools refers to tools used in
the process of constructing clothing: (1) tracing
wheel, (2) sewing machine, (3) shears, and (4)
needle.

Clothing as a part of the curriculum was considered
to mean all phases of the homemaking education
curriculum which dealt with problems related to
clothing and is used in this study in reference to:

Selection--indicates the application of art
principles to choosing clothes, accessories, and
textiles, and utilizing consumer information.

Grooming--considers some techniques of making
self neat and attractive.

Sociological aspects--consideration of attitudes,
values, role, and status groupings in relation
to clothing.

Care--includes such techniques as ironing, mend-
ing, and storing of clothes.

Construction--consideration given to use of the
sewing machine, commercial patterns, and some
making of clothing.

Management--includes decision-making in relation
to time, energy, and money in the area of
clothing.

Homemaking education refers to organized homemaking
courses which endeavor to promote personal satisfac-
tion and security by helping the individual become a
contributing member of a group. It is designed to
stimulate interest in sharing family responsibil-
ities.[1]

Some Limitations of the Study

This study was conducted in five communities in
Michigan for the purpose of ascertaining information which

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[1]"Home Economics for Boys and Girls in Seventh,
Eighth, and Ninth Grades" (Washington, D. C.: Federal
Security Agency, 1952), p. 5.

could be of value in developing the clothing area of the
curriculum in homemaking education for junior high school
girls. The communities were within commuting distance for
the investigator.

The instruments and procedures used in collecting
this information from girls were limited to those which
could be used by the local homemaking teacher. The instru-
ments were given to girls enrolled in grades seven, eight,
and nine at the beginning of the school year.

Returns from those girls who were left-handed were
separated out as most schools did not have equipment for
them, and those girls who did not fall within the three
developmental levels were also eliminated. After these con-
ditions were met the respondents were selected by the pro-
cess of random sampling so that results were used from
twenty-five girls for each occupational grouping, thus mak-
ing a total of one-hundred girls for each developmental
level. The data were then analyzed as a homemaking teacher
might analyze them as one basis for developing the clothing
area of the homemaking curriculum.

The interest inventory developed to determine the
interests of early adolescent girls in clothing was limited
to six areas: (1) selection, (2) grooming, (3) sociological
aspects, (4) care, (5) construction, and (6) management.

The ability to use clothing construction tools was
limited to four tests; these included the (1) tracing

wheel, (2) sewing machine, (3) shears, and (4) needle. In
addition, the Space Relations part of the Differential Apti-
tude Tests[1] was administered in order to determine the corre-
lation between spatial perception and the ability to handle
selected clothing construction tools at the time of admin-
istration.

Method of Analysis

Occupation of the father and the developmental
levels of early adolescent girls were treated as independent
variables; while the interests in the various areas of cloth-
ing expressed by the girls and their abilities to handle
selected clothing construction tools were considered to be
dependent variables.

To determine the significance of any relationships
and the differences in the population sample revealed among
the dependent and independent variables, three statistical
tests were employed: the chi-square,[2] the product moment
correlation,[3] and the analysis of variance.[4]

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[1]Appendix C, p. 220.

[2]Sidney Siegel, Nonparametric Statistics (New York:
McGraw-Hill Book Co., 1956), p. 104.

[3]Palmer O. Johnson and Robert W. B. Jackson, Intro-
duction to Statistical Methods (New York: Prentice-Hall,
1953), p. 272.

[4]Wilfrid J. Dixon and Frank J. Massey, Jr., Intro-
duction to Statistical Analysis (New York: McGraw-Hill Book
Co., 1957), pp. 155-58.

All findings reported in the study in relation to the interests expressed in the areas of clothing were subjected to the chi-square test. Unless otherwise indicated, they were considered to be statistically significant at the 5 percent level or below.

The scores obtained on the Space Relations test were correlated with the scores obtained on the clothing construction tools test using the product moment method of correlation. The data were further analyzed according to the two way analysis of variance to determine the significant differences between the three developmental levels and the occupational groupings.

Summary

This study was concerned with investigating the relationships between the interests and abilities in the area of clothing of junior high schools with reference to the developmental levels of early adolescent girls and the occupational grouping of their fathers. The scope was delimited to the study of interests of three hundred junior high school girls in six areas of clothing and their ability to handle four tools used in clothing construction. Certain assumptions and definitions of terms were proposed. Limitations related to the sample were present in the study. The study was divided into six chapters with two of these devoted to an analysis of the findings.

CHAPTER II

REVIEW OF LITERATURE

The first chapter indicated that this study was concerned with both the interests of junior high school girls in the area of clothing and their ability to handle certain clothing construction tools. As a background for this investigation it thus seemed necessary to examine the following types of literature: (1) research concerning the interests and the development of adolescents, (2) studies which described the clothing area of the curriculum in homemaking education for junior high school girls, and (3) devices and procedures which other investigators had used which would be pertinent to the investigation.

Characteristics of the Adolescent

If educational experiences are to have any meaning for individual students they must be related to the purposes and drives of that student. The adolescent years, according to Millard, even though there may be disagreement as to their exact limits, present a unique series of phenomena. He further states that "this is a time when the individual is neither child nor adult but must perform alternately at each level on adult demand."[1]

His attention must be concentrated on the here and now. One year later, basically, he is quite a different

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[1]Millard, op. cit., p. 6

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person, with new demands, new interests, and new out-
looks. It would seem then that the adolescent period
encompasses a uniqueness of development that deserves a
special consideration and analysis.[1]

Characteristic Aspects. One of the characteristic

aspects of the development during adolescence is the individ-

ual's emerging self-consciousness about himself in relation

to the universe. The twelve year old girl reflects standards

held by her mother and women teachers. It is at this stage

that the well-groomed pretty girl comes into her own. She

is becoming more discriminating in her social contacts. Pres-

tige is determined by such qualities as being friendly,

pretty, tidy, and popular. But many changes in prestige

values take place by the time she reaches the ninth grade.[2]

Meek further states that:

> While peer culture may determine what patterns of be-
> havior will be adopted for the time, the individual's
> fundamental personality needs will determine what part
> of the culture of his peers he will emotionally accept
> and make an intrinsic part of himself.[3]

In order to describe the relations of development

and behavior of the adolescent, the total sequence has been

divided by Millard into quarterly rather than year to year

characterizations. He states that there is "more univer-

sality to a given behavior at a particular developmental

point than at a given chronological age, but on the average

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[1]Ibid., p. 8.

[2]Lois Hayden Meek, The Personal-Social Development
of Boys and Girls with Implications for Secondary Education
(New York: Progressive Education Ass., 1940), p. 45.

[3]Ibid., p. 53.

a given developmental point falls at a given chronological age."[1]

The first quarter begins at 10.4 years of age for girls and continues to approximately 12.5 years of age. It is during this period that personal goals come into clearer focus, and thus the individual gains a new outlook for herself. She reacts favorably to new experiences and is beginning to assume initiative. These adolescents are intrigued by group effort which presents a distinctive challenge to them. There is an enthusiasm for mechanical pursuits, and intense interest in skills usually associated with adult life. This is the time for the greatest quantitative learning that she will ever experience.[2]

Integration is the key-note for girls in the second quarter of adolescent development which begins around 12.5 and continues approximately to 13.9 years of age. This is the happy stage of adolescence where energy is abundant. They are now capable of self-evaluation and possess sufficient drive to try and try again. Adults are respected, and there is a preference for a group of friends. She may be further characterized by having more consistency in her actions.[3]

Upon completion of the third quarter which goes from 13.9 years of age to 15.6 years for girls, ninety-eight

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[1] Millard, op. cit., p. 12.

[2] Ibid., pp. 32-42.

[3] Ibid., pp. 49-63.

per cent of the total growth has been achieved. They are
becoming more tolerable and more interested in people. Fre-
quently they are members of gangs and are less inclined to
be included in family functions. They have order and organ-
ization and have a mind that is ordered and under good
control.[1]

In addition, Hurlock points out that:

> There are marked individual differences in the pat-
> terns of adolescent growth and development, not only
> between the sexes but within the sexes as well. These
> differences depend largely upon the rates of maturing.
> The faster maturing individuals have greater spurts of
> rapid growth; their periods of acceleration and of
> stopping come quickly. Late maturing individuals, by
> contrast, have less intense periods of acceleration;
> their growth is more even and gradual; and it continues
> for a longer period of time, generally into the later
> part of adolescence....[2]

Motor ability. One of these individual differences
is concerned with the development of motor ability. According
to Kuhlen there appears to be no generalized motor ability.
When various tests were made, it was found that different
functions mature at different rates and reach a maximum at
different ages.[3] During adolescence many persons (notably
girls) not only reach their peak performance in several motor
activities but also the peak of their desire to be active.[4]

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[1]Ibid., pp. 63-80.

[2]Elizabeth Hurlock, Adolescent Development (New York:
McGraw-Hill Book Co., 1949), p. 69.

[3]Raymond G. Kuhlen, The Psychology of Adolescent
Development (New York: Harper and Bros., 1952), p. 44.

[4]Arthur T. Jersild, The Psychology of Adolescence
(New York: Macmillan Company, 1957), p. 61.

Training, an opportunity for practice, and absence of environmental obstacles are all important factors in the development of motor capacities.[1] In addition, Espenschade found that growth in ability to perform motor acts reaches its maximum at approximately fourteen years of age in girls but continues in boys through the seventeenth year.[2]

Strang points out that it is important to understand as much as possible about the relationships among the various aspects of the individual's total development, such as growth in height and weight, in intelligence, in achievement, in physiological maturity, and in social and emotional adjustment--all considered in the light of environmental influences.[3] She feels that under favorable conditions we can assume that physical efficiency will increase during adolescence.[4]

Vision. Twelve year olds are concerned about their vision according to Gesell, Ilg, and Ames.

> Twelve, visually, now has a better combination of the ability to fixate (which was dominant at ten years and to focus (which was dominant at eleven). Difficulty in achieving this combination may produce a reduced power in focusing or a difficulty in discriminating, so that his responses to some focus tests may be vague.

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[1] Hurlock, op. cit., p. 33.

[2] Anna Espenschade, "Motor Performance in Adolescence," Society for Research in Child Development, Monograph No. 1, "Washington, D. C.: National Research Council, 1940), p. 118.

[3] Ruth Strang, The Adolescent Views Himself (New York: McGraw-Hill Book Co., 1957), p. 22.

[4] Ibid., p. 227.

Each eye tends to respond differently in its focusing ability, but it is expected that the eyes will regain their stability in working together and responding more similarly by fourteen.[1]

At thirteen the symptoms vary from individual to individual. They are showing a greater power to focus than at eleven and twelve.

Though he may fixate beyond the testing target, the visual findings indicate better functioning of his two eyes as a team. Most thirteens, except the near sighted ones, show a good mobility of their eyes as they follow a moving target and can accomplish this with a high degree of accuracy and ease.[2]

The fourteen year old can handle the usual visual skills tests quite adeptly. His eye movements in following a moving object are good.[3]

Visual fatigue is one of the more common symptoms of the fifteen year old. He tends to be quite well organized visually and his visual skills are usually good.

In the reading situation, whereas at fourteen roughly half the group focused their eyes on a point in space closer to them than the printed page, and half focused beyond it, by fifteen the majority are focusing at a point somewhat closer to them. This is a further indication of their tendency to draw toward themselves or to inwardize.[4]

Social. Preoccupation with social activities and a desire to win social approval can color the adolescent's

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[1] Gesell, Ilg, and Ames, Youth--The Years from Ten to Sixteen (New York: Harper and Bros., 1956), p. 112.

[2] Ibid., p. 147.

[3] Ibid., p. 183.

[4] Ibid., p. 223.

outlook on life and influence his behavior according to

Hurlock. She found that:

> Owing to feelings of insecurity, which are almost
> universally found during the early part of adolescence,
> the young adolescent is slavishly conventional in his
> behavior. In his desire to conform to the group pattern
> the adolescent tries to appear like, behave like, and
> conform in every conceivable way to the pattern set by
> the group with which he is identified....[1]

> Characteristically the adolescent is an extremist in
> whatsoever he does....The style of hairdress, the height
> or weight of the body, the appearance of skin blemishes
> on the face, or the clothing she can afford to buy are
> problems of major importance to a girl....[2]

Clothing Interests of the Adolescent

Several investigations indicate that clothing is of

greater importance to adolescents than for other groups. In

the study by Stone and Barker in 1939, the authors concluded

that postmenaracheal girls showed a stronger interest in

adornment and display of person than did the pre-menarcheal

girls.[3] Hurlock found that adolescent interest in clothing

stems from a realization of the importance clothing plays in

group status. When dressed like other members of the group,

the individual identifies himself with the group which gives

him a feeling of security.[4] When accepting extreme styles,

the adolescent simultaneously satisfies two desires—that of

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[1] Hurlock, op. cit., p. 160.

[2] Ibid., p. 239.

[3] Ibid., p. 241.

[4] Ibid., p. 246.

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conformity and that of recognition.[1] To be in style to wear

the latest fashions in clothing, adornment, and hairdress are

frequently more important than becomingness.[2]

Sociological. Research conducted by Stone and Form

gave support to a hypothesis that:

> An important element in the purchase of clothing is the
> social character of its intended use. That is, the
> symbolic quality of clothing reflects upon and influences
> the judgment of the consumer in the purchase and use of
> clothing.

> The social and symbolic character of clothing becomes
> clear when they are considered in relation to significant
> life events: birth, entering school, marriage, change of
> occupation, parenthood, and death. All such changes in
> social positions are accompanied by significant changes
> in mode of dress. Consequently, when most clothing pur-
> chases are made, their social usage is an important con-
> sideration, though durability, fiber composition, and
> other physical characteristics are also involved.[3]

Warning conducted a study to determine the implica-

tions of social class for clothing behavior in the acquisition

and use of apparel for girls seven, eight, and nine years of

age in three social classes in Des Moines, Iowa. She found

that purchases practices showed clearly the differences be-

tween clothing behavior of the members of the three social

classes in her sample.[4] Wide differences were also found

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[1]Ibid., p. 247.

[2]Ibid., p. 423.

[3]Gregory P. Stone and Wm. H. Form. Clothing Inven-
tories and Preferences among Rural and Urban Families, Tech-
nical Bulletin 246, (East Lansing: Depts. of Sociology and
Anthropology, 1955), p. 7.

[4]Margaret Cynthia Warning, The Implications of Social
Class for Clothing Behavior, (Unpublished Ph. D. Dissertation,
East Lansing: Michigan State University, 1956), p. 141.

in the attitudes of mothers and daughters toward opinions of others, importance given to these opinions, and the recognition of purchasing practices of high-style garments.[1] Practices in clothing construction and care also differed.[2] In addition, the kinds and amounts of social participation differed in the various social classes and affected the clothing behavior of social class members. Thus, she concluded that "this study will cause a thoughtful person to have a keener recognition of and respect for the clothing behavior of members of another social class...."[3]

Attitudes toward clothing. One of the most comprehensive of studies concerning the adolescent girl and her clothes was conducted by Silverman and was aimed at discovering the attitudes and feelings of teen-age girls toward clothing. She devised a questionnaire which was administered to 1,100 girls in seventh through twelfth grades in a high school in New Jersey. In this questionnaire girls were asked to select from clusters of three statements the one statement which most nearly represented their viewpoint or feeling. Silverman concluded that:

> The investigation revealed that clothing and appearance are used as much in early adolescence as later to satisfy certain of the girls' needs or desires, such as the need for approval, the desire to be sexually attractive, and the need for self-confidence. This suggests, therefore, that it would serve the interests of adoles-

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[1] Ibid., p. 140.

[2] Ibid., p. 142.

[3] Ibid., p. 145.

cents best if clothing courses geared to help meet these
needs were introduced early enough in the curriculum to
reach even the youngest adolescents and help them use
their clothing and appearance constructively to achieve
greater satisfaction in their personal feelings and in
their social relationships. However, such courses must
be of the functional type, not only acquainting girls
with the theoretical foundation of design and the like,
but taking up realistic problems of appropriateness,
individuality, and suitability to age, and dealing with
procedures in grooming to acquaint girls with the correct
usage of the practices they wish to employ.[1]

As girls in junior high begin to spend hours on self
adornment Meek feels that homemaking teachers can contribute
to their individual development. Since conformity to a group
and having wide selection within the group affects an indi-
vidual's success and attitudes toward himself, his tastes
may contribute to or hamper his achieving good human relation-
ships.[2] Thus in experiences with clothing design, selection,
construction, remodeling, opportunities arise for helping a
girl recognize and feel that what one wears, how it is worn
and what one is seeking from clothes is very closely related
to one's feeling of adequacy as a person.[3] Unsatisfied de-
sires for recognition and acceptance may lead a person to
seek coveted attention through an over-emphasis on dress.
This may result in an exhibition of clothes which is eccen-
tric, inappropriate to the occasion or unbecoming to the
wearer.[4] Help should be given in a manner which will assist

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[1] Silverman, op. cit., p. 119.

[2] Meek, op. cit., p. 190.

[3] Ibid., p. 191.

[4] Ibid., p. 192.

students to attain those values which they want most as in-
dividuals, with the least amount of conflict and the greatest
possible gain in understanding themselves as persons.[1]

Buying practices. In a comparison of the buying
practices of early adolescents, Gesell points out that
shopping for twelve year olds is a more cooperative venture:
"We pick them out together." Some girls shop alone but most
prefer to have their mothers along; whereas, for many thir-
teen year olds this is the last age when their mothers gen-
erally make the final decision and less important items are
frequently purchased alone. By the time they reach fourteen
many girls are allowed to make the final decision but may
prefer to have their mothers along. Some also have a clothes
allowance. Less variation appears in the fifteen year old,
but in most cases their mothers still go along to advise
while many have at least a partial clothes allowance.[2]

In a study conducted by Rosencranz "significant
relationships were found between the occupation of the
father and certain practices in the buying and use of
clothes for the 10-, 11-, and 12-year old daughters."[3] She
found further that:

Both wives of manual workers and wives in the low

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[1] Ibid., p. 193.

[2] Gesell, op. cit., pp. 318-22.

[3] Mary Lou Rosencranz, Relevance of Occupation and In-
come to Mothers' Selection of Clothing for Daughters (East
Lansing: Agr. Experiment Station, M.S.U., 1958), p. 3.

income bracket more often selected their daughter's clothes alone. Mother and daughter selected the daughter's clothes together in families of white collar workers, as well as in high income families.[1]

Care of clothing. Interest in looking nice seldom extends to the care of clothes for the twelve year old according to Gesell as clothes frequently are just piled on bed, couch, or chair. But the thirteen year old has begun to care for clothes, especially the "best" clothes. By the time they are fourteen some girls take all responsibility about clothes care including the washing of their own underwear and sweaters.[2]

Studies of the Clothing Area in the Junior High Curriculum

Relatively few research studies describing the clothing area of the junior high homemaking education program have been reported. Most of those reported were usually concerned with the curriculum of the ninth grade and pertained to the proportion of the time in homemaking classes which were spent in the area of clothing, the effectiveness of clothing construction methods, and the emphasis placed on the various aspects of the clothing curriculum. Many felt that too much emphasis had been given to clothing construction thus leaving little time for a variety of other experiences.

In a book written for teachers at the turn of the

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[1] Ibid., p. 3.

[2] Gesell, op. cit., pp. 313-22.

century, Woolman stated that:

> If sewing is to add to the mental and moral strength
> of the children, if a love of the true and beautiful is
> to come through it, the work must take them into account.
> The child must not be sacrificed to the model, or gar-
> ment, by the demand of the teacher for over accurate
> work, for neat adjustments at an early age, or for the
> stupid task. The interest and development of the child
> must be considered in the selection of the course.
> Setting her to make articles suited to her capacity and
> considered by her as worth doing is the only sensible
> method of gaining her enthusiasm and of bringing out her
> creative ability.[1]
>
> The beginning of sewing is difficult for little hands
> and the use of the tools needs to be taught slowly....
> Judgment and skill are of slow growth, and the demand
> for them at an early age is always discouraging to the
> pupil, and often positively harmful....[2]

Much consideration has been given to make the teach-
ing of homemaking more family centered. Teaching keyed un-
realistically may contribute to family tensions as the
teaching of clothing has sometimes not kept pace with changes
in family practices.[3] According to Brannan the clothing
area may be a

> contributing factor in a student's ability to achieve
> optimum growth in ability to make choices and support
> decisions with logical reasoning, as well as a means
> of developing skills or achieving aesthetic values, as
> it provides active participation in class activities
> through which people learn.[4]

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[1]Mary Schenck Woolman, A Sewing Course for Teachers
(Washington, D. C.: Frederik A. Fernald, 1916), p. 9.

[2]Ibid., p. 10.

[3]Day Monroe, "Making the Teaching of Clothing More
Realistic," Journal of Home Economics, XLV (Nov., 1953), 648.

[4]Betty Jean Brannan, "A Developmental Approach to
the Teaching of Clothing in the Ninth Grade," (Unpublished
Master's thesis, Stilwater: Oklahoma Agricultural and
Mechanical College, 1955), p. 17.

Interests. An investigation was conducted by Biddle and Spencer to determine the opinions on clothing as expressed by eighty-three junior high school girls in Florida. In addition a home visit was made with each mother in order to gain information regarding her opinion. They reported the following results:

> Seventh grade girls were interested in selection first; construction second; and care third. Eighth and ninth grade girls named construction as their first interest; selection second; and care of clothes third.

> Some of the main reasons given by the girls for their interest in clothing selection were: (1) the desire to know how to select the "right" kind of clothes for themselves, (2) disagreements with mothers on clothing selection, (3) preference for selection rather than construction, and (4) pleasure in choosing clothes.[1]

In a study conducted by Linn, the following extra values pupils wanted to obtain from clothing experiences were found:

1. Apply what they learn to better buying and care of clothes.

2. Develop a self confidence in buying.

3. Expand their experiences in planning a costume to the ability to plan a wardrobe.

4. Make sewing a well organized home activity so that new clothes are not obtained at the cost of nervous fatigue, eye fatigue and household disruption.[2]

In an effort to determine some of the practices followed by teachers in junior high homemaking education

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[1]Biddle and Spencer, op. cit., p. 105.

[2]Alice Linn, "Trends in Teaching Clothing," Practical Home Economics, XXVIII (September, 1950), 331.

classes, a survey was conducted by the Home Economics Education Branch, Office of Education, Washington, D. C. One school cited attempted to capitalize on the interest in making a pleasing appearance by eighth grade girls.

> Attention is given to the care and arrangement of the hair, care and grooming of the hands, skin care, the use of cosmetics, and posture. Clothing care and repair and the qualities that make clothes suitable for various occasions are studied. Some time is devoted to considering color and line and their relation to the individual's personality and figure....[1]

Buying. In a study conducted by Mayer to determine who selects and purchases the clothing for teen-age girls, she found evidence that girls can well profit from continued help in wardrobe planning.[2]

Construction. Yergey in a study of procedures used in teaching clothing construction concluded that:

1. Methods and techniques which encourage the self direction of the student are effective in teaching skills in clothing construction.

2. Learning situations which encourage student initiative in solving problems are useful in developing proficiency in skills.

3. The development of creative interest in clothing construction processes affect the ease with which a skill is acquired.

4. Understanding of the reasons for using particular procedures in clothing construction is a contributing factor in retention of skills and ability to apply these skills in solving similar problems.[3]

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[1] Federal Security Agency, op. cit., p. 22.

[2] Sister Marie Lawrence Mayer, "Clothing Inventories of 41 Teen-Age Girls,"Journal of Home Economics, LXIX (February, 1957), 124-5.

[3] Vivian E. Yergey, "A Critical Study of Procedures in Teaching Clothing Construction," (Unpublished Master's thesis Drexel Institute of Technology, Philadelphia, 1950), p. 32.

Division of Time. A study of the programs in reim-
bursed vocational homemaking programs in twenty-three Michi-
gan schools was conduced by O'Donnell. A larger proportion
of time spent in the study of personal appearance and cloth-
ing than in the study of any other phase of homemaking was
reported by the teachers. Less than one-half of the pupils
reported that they had help in understanding their own cloth-
ing needs or needs of others and in reducing the cost of
clothing.[1] In addition less than half reported that they
had received help on personal wardrobe problems, on what to
wear on various occasions and on selecting and buying clothes.[2]
A high percentage of the pupils reported that they had help
with hair styles, care of hands, and other aspects of groom-
ing, but that they had considerably less help on certain
management problems involved in grooming.[3]

A high percentage of pupils in beginning and advanced
homemaking classes had opportunities to understand character-
istics of different kinds of textiles, but a much smaller
group reported they had opportunities to make use of this
knowledge in applying it to laundering, pressing, and iron-

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[1]Beatrice O'Donnell, Taking A Look at What Girls and
Boys do in Homemaking Classes in Grades 9-12 in Michigan
(East Lansing, Michigan: School of Education and School of
Home Economics, Michigan State College in Cooperation with
the State Board for Vocational Education, June, 1953), p. 77.

[2]Ibid., p. 79.

[3]Ibid., p. 81.

ing of clothing.[1] The majority of pupils reported that they had made simple cotton garments,[2] but less than one-third reported that after having finished a garment they had made summaries of the cost of the garment, the satisfactions gained, and how the garment fits into the wardrobe.[3]

Upon considering the findings of O'Donnell, little emphasis had been placed on the consumer or management phases of clothing. As groups have reviewed the findings, they have been concerned by the continued emphasis on clothing construction in view of the persistent findings relating to the clothing consumption patterns of the majority of individuals and families.[4]

A study of clothing in the curriculum in homemaking was also conducted by Holmblade. She found the curriculum to be largely devoted to the construction of garments, an activity for which many pupils and parents had taken little or no responsibility in the past year.[5] The free responses

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[1]Ibid., p. 30.

[2]Ibid., p. 82.

[3]Ibid., p. 83.

[4]Beatrice O'Donnell, Making the Teaching of Clothing Realistic (East Lansing: School of Education, Michigan State University in Cooperation with the State Board of Vocational Education, June, 1957), p. 1.

[5]Amy Jean Holmblade, "A Comparative Study of the Clothing Area in the Secondary Homemaking Curriculum in A Selected Community and Related Beliefs and Practices of Families in that Community," (Unpublished Ph. D. Dissertation, Michigan State University, East Lansing, 1954), p. 194.

concerning the choosing and wearing of clothing reflected
the pre-occupation of teen-age girls with their own appear-
ance.[1] In addition, she found that almost all pupils and
parents indicated responsibilities and concerns in choosing
and wearing, buying, and caring for clothing. Yet little
emphasis had been given to these areas.

Research on Instruments Used to Determine Interests and Spatial Perception

In an attempt to determine the interests of early
adolescent girls in the area of clothing and their ability
to handle certain clothing construction tools, devices that
had been developed and used by other investigators in the
areas of interests and spatial perception testing were
reviewed so that instruments for this study could be de-
veloped.

Interests. Just what constitutes the ultimate
nature of interests is not well understood according to
King.

> They are not as complicated to analyze as many other
> qualities which compose what is generally called char-
> acter. That interests can be recognized is not ques-
> tioned. For instance, an individual may be more inter-
> ested in one group of subjects than in other groups, in
> certain subjects of a group rather than in others, in
> particular aspects of that subject rather than in other
> aspects. This indication of interests with varying
> intensities is manifested by individuals in every phase
> of human activity....[2]

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[1] Ibid., p. 217.

[2] Leo Hamilton King, Mental and Interest Tests (New York: Bureau of Publications, Teachers College, Columbia University, 1931), p. 40.

An interest is a much better indication of the true attitude of an individual when it is the expression of a spontaneous preference rather than when it is an indication of a controlled choice. "In making preferences on the basis of controlled choices, however, greater uniformity, definiteness and ease of classification are possible and these advantages undoubtedly outweigh those which are to be secured by using spontaneous preferences."[1] Interest can be used to approach a curriculum problem, but not to solve it.

In addition Barr, Davis, and Johnson point out that interests are characterized by voluntary self-identification with some activity. Their value for education lies primarily in motivation and to make subject matter meaningful. One may not only be interested in the nature of the quantity of interests of an individual but also to the extent to which they are significant. In fact, some interests may be characteristic of an individual's stage of development.[2]

Barr, Davis, and Johnson state further that such information may be obtained through the use of an inventory which is designed to reveal an individual's typical behavior in connection with various traits of personality, attitudes, and interests. Thus, the purpose of an inventory is that of determining the extent of a trait. This type of instrument

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[1] Ibid., p. 42.

[2] Barr, Davis, and Johnson, Educational Research and Appraisal (New York: J. B. Lippincott Co., 1953), pp. 34-36.

is initially scored by a method which is essentially that of counting or totaling values assigned each response with reference to the trait to which behavior in the item relates. Interpretation is then made upon the basis of ranking and significance in terms of the trait.[1]

Edwards has developed some informal criteria for attitude statements. These include:

1. Avoid statements that refer to the past rather than to the present.

2. Avoid statements that are factual or capable of being interpreted as factual.

3. Avoid statements that may be interpreted in more than one way.

4. Avoid statements that are likely to be endorsed by almost everyone or by almost no one.

5. Select statements that are believed to cover the entire range of the affective scale of interests.

6. Keep the language of the statements simple, clear, and direct.

7. Statements containing universals such as all, always, none, and never often introduce ambiguity and should be avoided.[2]

Aptitude tests. Tests of aptitudes or abilities according to Bennett, Seashore, and Wesman act only as verifiers of what is already known and are valuable only insofar as they enable the next steps to be taken.[3] Super adds that

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[1] Ibid., p. 74.

[2] Allen L. Edwards, Techniques of Attitude Scale Construction (New York: Appleton-Century-Crofts, 1957), p. 13.

[3] Bennett, Seashore, and Wesman, A Casebook for the Differential Aptitude Tests (New York: Psychological Corporation, 1951), p. 3.

tests should describe a person so that we can see him as he
is at the time of testing; they should predict what he will
be like and what he will do at some future date; they should
be relatively timeless; and they should, like the people they
test, be multipotential.[1] In addition, they should have some
value as indicators of probable status, behavior, achievement
and satisfaction in the future.[2]

Test batteries and tests, therefore, need to be so
constructed that they can be applied to people in a great
variety of occupations, and once normed and validated, used
with each person tested for the evaluation of his promise
for a number of different fields.[3] Thus the Differential
Aptitude Tests were developed to provided an integrated well
standardized procedure for measuring the abilities of boys
and girls in junior and senior high school.[4]

> The item type devised for the Space Relations tests
> represents a combination of the two former approaches to
> measurement of the ability to think in spatial terms.
> (verbal reasoning and abstract reasoning) The capacity
> to imagine a constructed object from a picture of a
> pattern has been used frequently in tests of structural
> visualization. Similarly, the ability to determine how
> an object would appear if rotated in various ways has
> been effectively used in the measurement of space
> perception....[5]

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[1] *The Use of Multifactor Tests in Guidance* (Washington D. C.: American Personnel and Guidance Ass., 1957), p. 3.

[2] *Ibid.*, p. 3.

[3] *Ibid.*, p. 4.

[4] *Ibid.*, p. 9.

[5] *Ibid.*, p. 9.

Spatial perception. Carr feels that the accurate perception of the spatial attributes of objects is of fundamental importance for practically all modes of perceptual-motor behavior.[1] Highly mobile organisms like man are continually moving about among a world of objects, and they must necessarily control their movements in reference to the position of these objects. A visual object is correctly localized when one is able to move the head and eyes so as to see it more clearly and distinctly, to move the body so as to approach or recede from it at will, or to reach out the hand and move it about as desired.[2] Thus visual movement is bound up with the whole process of space perception.[3]

Rating techniques. According to Barr, Davis, and Johnson this term is used to apply to the expression of opinion or judgment regarding some situation, object or character. Opinions are usually expressed on a scale of values. The effectiveness of measurement requires specificity and comprehensiveness of definition. If it is to yield dependable data it is necessary that individuals agree on the classification and meaning of whatever is being measured. Rating scales are usually constructed upon the assumption that the characteristics to be rated will take

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[1] Harvey A. Carr, An Introduction to Space Perception (New York: Longmans, Green and Co., 1935), p. 3.

[2] Ibid., p. 30.

[3] Horace Harlan Corbin, "The Perception of Grouping," Archives of Psychology, (September, 1942), p. 47.

the distribution form of a "normal probability" curve.[1]

Several types of rating scales may be used: (1) The rank order type makes a comparison of members of a group with respect to certain qualities shared in varying degrees; (2) The man-to-man technique involves both ranking and rating; and (3) The product scale consists of a series of samples of the product under consideration arranged in the order of merit. Scores are attached to each indicating relative degrees of merit.

> If this rating is accurately made in the case of a specimen of the product, the process of using a product scale results in achievement of a certain amount of objectivity, since the scale may be standardized upon observable characteristics of the product desired.[2]

Summary

The literature reviewed as a background for this study was related to the interests and the development of adolescents, to descriptions of the clothing area in home-making education for junior high school girls, and to devices and procedures which other investigators had used for obtaining similar information concerning other aspects of the individual.

Most of the literature was devoted to secondary home-making education programs. However, a number of studies

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[1]Barr, Davis, and Johnson, op. cit., pp. 74-85.

[2]Ibid., p. 80.

provided evidence concerning the development of adolescents and their interests in clothing, but there was little evidence that the results of this research was used in the development of the clothing curriculum for junior high school girls. The majority of the findings of recent research indicated that most of the time was devoted to the construction of garments and with considerably less time spent on the study of selecting, buying, and caring for clothing, and with very little time spent on the management and sociological aspects.

CHAPTER III

DESCRIPTION OF PROCEDURES AND TREATMENT OF DATA

In order to give the reader a picture of the procedures for this study a discussion of the selection of the point of reference for the developmental levels of adolescent girls used in the study, the selection of the sample, the determination of the areas of interest in clothing, the selection of clothing construction tools, and the development and administration of the instruments will be included in this chapter. Finally attention will be given to the methods by which the data were analyzed.

Selection of the Developmental Levels of Early Adolescent Girls

Since one of the purposes of the study was to analyze the relationships between the developmental levels of early adolescent girls and their interest in the area of clothing, a basis for the establishment and a description of these levels was sought. After reviewing research findings in the field of adolescent development, the writer decided to use the quarterly sequence as developed by Millard.[1] These gave similar characteristics of early adolescent girls as were reported by other authorities, but in addition, Millard stated more specifically the characteristics and

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[1]Millard, op. cit., p. 12.

the points of change in their development.

Those girls who were selected to participate in this study fell within the first three developmental levels for girls: (1) Quartile I--10.4-12.5 years, (2) Quartile II--12.5-13.9 years, and (3) Quartile III--13.9-15.6 years of age.[1] The seventh grade girls who participated ranged from 11.0-12.5 years; the eighth grade girls ranged from 12.8-13.9 years; and the ninth grade girls ranged from 13.9-15.6 years of age at the time this study was conducted.

Selection of the Sample

Four occupational groupings (professional, skilled, semi-unskilled, and farming)[2] were selected after reviewing the literature as the categories for the occupations of the fathers of the participating girls. These were chosen in order to determine if there were any differences between the groups in relation to interests in the area of clothing or in the ability to handle selected clothing construction tools.

The instruments used in this study were administered to girls enrolled in grades seven, eight, and nine in the selected communities at the beginning of the school year. Random samples, controlled for developmental level and occupational grouping were drawn from those who participated

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[1]Ibid., pp. 32-63.

[2]Baer, op. cit., pp. 9-12.

so that results from twenty-five girls for each occupational grouping in each developmental level were obtained for analysis. The size of this sample was determined according to Goode and Hatt in order to have sufficient information that would be valid.[1]

Thus, to obtain information from three hundred early adolescent girls who would meet the criteria established, the writer found it necessary to conduct the study in five communities. Those selected were within commuting distance. A letter of request was sent to the superintendent of schools in each community while each homemaking teacher was contacted personally in order to explain the study and to make the necessary arrangements. All indicated their willingness and cooperation for the study to be conducted.

Development, Administration, and Analysis of Instrument for Determining Interests in Clothing of Early Adolescent Girls

Development of instrument. The next step in order to study the relationship between the developmental levels of early adolescent girls and their interests in clothing and the relationship between the occupational groupings was the development of an interest inventory. All available junior high homemaking texts and references were reviewed to ascertain those items in the area of clothing that would be

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[1]William J. Goode and Paul K. Hatt. Methods in Social Research (New York: McGraw Hill Book Co., 1952), Pp. 225-31.

of interest to early adolescent girls. In addition, twelve
junior high homemaking teachers who were enrolled in summer
school the past summer were interviewed. Finally literature
which discussed research concerning the interests of adoles-
cents in clothing was studied.

From this survey there seemed to be an agreement on
the clothing interests of early adolescents. These were
then used to provide the framework for collecting information
from the participants and were classified into six categories:
(1) selection, (2) grooming, (3) sociological aspects, (4)
care, (5) construction, and (6) management.

This was followed by the compilation of items which
pertained to the six selected categories. Consideration was
given to those items which might be useful to the homemaking
teacher for developing the clothing area of the homemaking
curriculum, those to which the participants could respond
with accuracy, and those to which they would not hesitate to
reply. From these, twenty items which were most frequently
discussed, were selected for each category in order to have
each section comparable and so that the instrument could be
answered within a reasonable period of time. For example,
"Choosing clothes becoming to your figure" was listed under
selection, and "Caring for hands and nails" was listed under
grooming.

These items were then organized into an inventory[1]

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[1] Appendix B, p. 115.
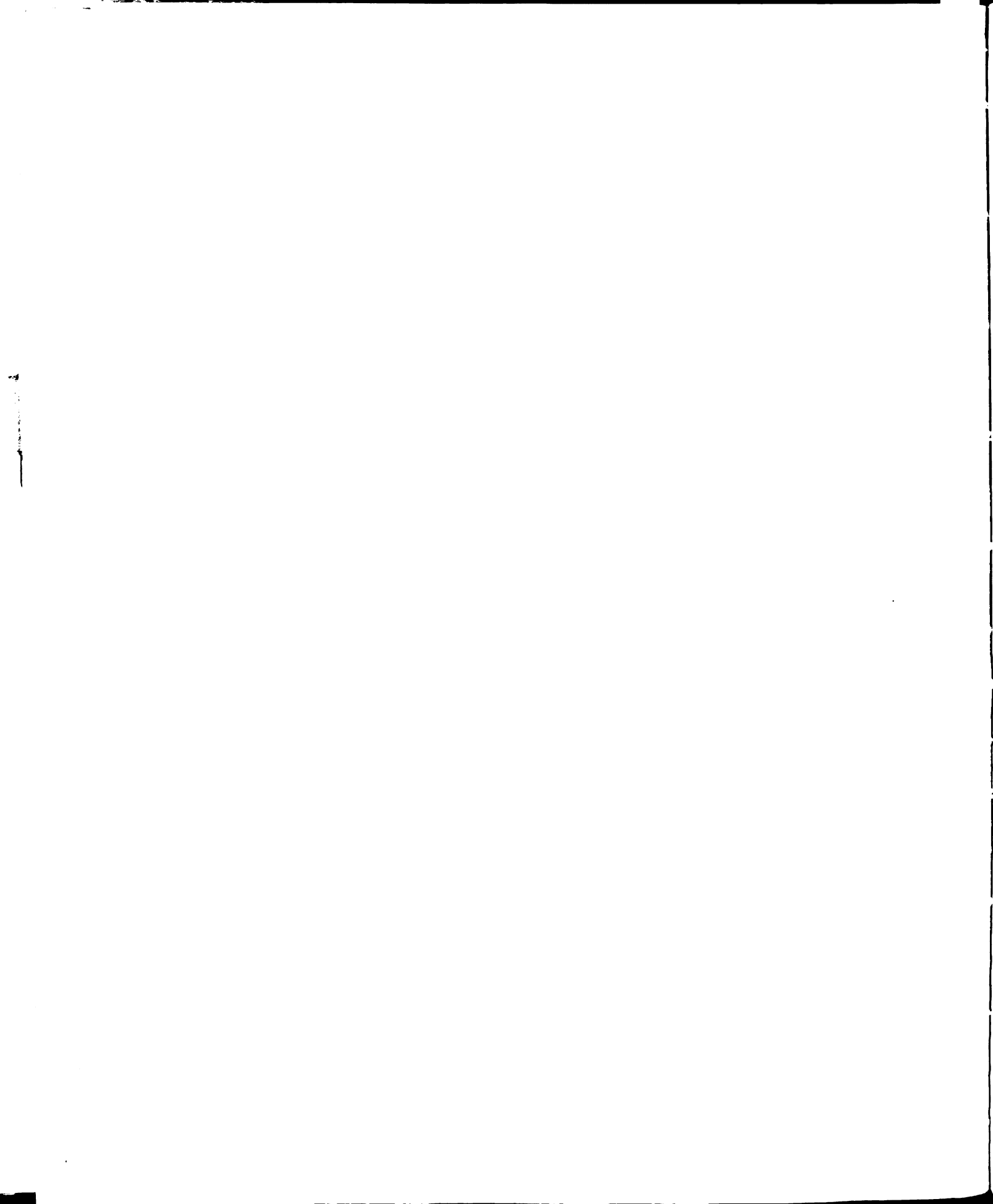
with every seventh item returning again to the first category
so that items relating to each category would be divided and
yet scoring would not be difficult. The participants were
asked to indicate their degree of interest for each item
according to: (1) very much, (2) much, (3) little, and (4)
not at all.[1]

This type of inventory was chosen for two reasons.
First, a large number of items could be checked in a reason-
able period of time, and second, the information would be in
such a form that it could be easily tabulated and analyzed.

Trial of instrument. The size of the trial group
was selected according to Goode and Hatt.[2] Therefore, the
interest inventory was given to thirty-six girls with three
from each of the four occupational groupings thus making a
total of twelve girls for each developmental level.

The participants were urged to take ample time,
read each item carefully, and check it as honestly as possi-
ble. Twenty-five minutes were found to be sufficient for
administration. Specific needs for changes in terminology
were indicated, but no other changes in the items were
suggested by the participants.

The data were analyzed using the chi-square test to
determine the relationships between the three developmental

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[1]Terman and Miles, Manual for Use of Attitude-
Interest Analysis Test (New York: McGraw Hill Book Co.,1938).

[2]Goode and Hatt, op. cit., pp. 225-231.

levels for each of the six categories while Fisher's Critical Value of D test [1] was used to determine the relationships between the three developmental levels for each item. Since the data provided some significant findings, the changes indicated in terminology were made, and the instrument was then printed for use with the larger population sample.

Administration to population sample. The interest inventory was administered during half of a regular sixty minute class period in homemaking in three of the cooperating schools while the girls in grades seven and eight in the other two schools which did not have homemaking at these grade levels took the inventory during another convenient time. In each case the purpose of the inventory was explained by the writer, and both the writer and the regular homemaking teacher were available throughout the period to answer questions. The writer was pleased with the enthusiasm and interest which the girls displayed.

A total of three hundred seventy-two girls answered the interest inventory; out of these three hundred which met the criteria for developmental level, occupational grouping, and who had written all parts were selected by random sampling for analysis.

Analysis of data. In order for the information which had been obtained to be useful, the data were analyzed

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[1]Siegel, op. cit., p. 256.

so that the teachers would have a picture of the differences in interests between the three developmental levels and the occupational groupings of the participants. Therefore, the responses were tabulated by hand according to developmental level, degree of interest in each item, and occupational grouping. Data resulting from this tabulation were then arranged in tables and the chi-square test was used to determine any significant differences in interests between developmental levels, occupational groupings, and the various items and categories of the inventory.

Development, Administration, and Analysis of Instruments for Determining the Ability to Use Selected Clothing Construction Tools

The review of literature revealed differences at various ages of early adolescents and the ability of their eyes to focus or perceive objects. Therefore, a further study was conducted in order to select an aptitude test which might indicate that the ability to handle certain clothing construction tools was or was not related to spatial perception. Such data as could then be gathered would be of value in determining at what level various tools could be introduced in clothing construction. In addition, the degree of ability that might be expected in the use of these tools would also be of value to a homemaking teacher.

Selection of Spatial Perception test. In order to analyze the relationship between spatial perception of early adolescent girls and their ability to handle selected

clothing construction tools, various aptitude tests were studied and discussed with several staff members from the Counseling Center and the Department of Administrative and Educational Services in the College of Education. As a result the Space Relations part of the Differential Aptitude Tests[1] was chosen because it could be used by the writer, could be administered easily to early adolescent girls, could provide valid data, was relatively inexpensive, and could be easily scored.

Administration of Space Relations test to trial group. This aptitude test was administered to the same early adolescent girls as were given the previously discussed interest inventory. The test took twenty minutes to complete and was administered during the same period as the interest inventory. Directions given in the manual were closely followed when administering this test.

Analysis of data. The scoring of the tests was done by hand; then, the raw scores were correlated using the product moment method of correlation with the scores obtained on the clothing construction tools test and were found to have a positive correlation with the trial group. On the basis of these results a decision was made to use the Space Relations test with the larger population sample.

Administration to population sample. The same procedures for administering and analyzing the data as were

[1]Appendix C, p. 220.

used with the trial group were followed with the population sample.

Selection of clothing construction tools. To analyze the relationship between the developmental levels of early adolescent girls and their ability to handle clothing construction tools, all available books pertaining to clothing construction were reviewed so that tools could be selected that best met this purpose. The writer then chose the following four clothing tools as representative of those most likely to be used by early adolescent girls: (1) sewing machine, (2) tracing wheel, (3) shears, and (4) needle.

Development of test for using tools. The next step was a review of the literature in order to find any tests which had been devised for the use of the above four clothing tools or that could be adapted for use with early adolescent girls. The literature revealed that such tests had been developed by Todd.[1] The writer then revised these to incorporate step by step the procedures which would be followed during the administration.[2]

Development of rating scale for determining the ability to use clothing tools. The development of a test for using clothing tools was followed by a review of the literature to determine what type of device could be constructed upon which the results for each girl could be

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[1] Todd, op. cit., pp. 213-255.

[2] Appendix C, p. 220.

evaluated. According to Barr, Davis, and Johnson rating scales could be constructed for this purpose.[1] Therefore, the product scale was selected as it consists of a series of samples of the product under consideration arranged in the order of merit. Suggestions by Arny[2] were followed in the construction of the rating scale. Scores were attached to indicate relative degrees of merit, and three descriptive categories for each tool were specified.[3]

Selection of materials for use with clothing tools. Materials for use with the tools used in clothing construction were next selected and prepared. Stitching charts in the form of a circle and a square with additional straight lines were obtained from the Singer Sewing Machine Company as these are representative of those which might be used in the classroom.[4] These stitching charts were used for the test to determine the ability to use the sewing machine by those early adolescent girls who participated in the study.

Next, half-size patterns of a blouse front were made, and cotton percale in pastel colors was purchased and prepared for use. The patterns were pinned to the cloth by the writer in order to save time during the period of administration. These materials were provided in order to

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[1] Barr, Davis, and Johnson, op. cit., p. 80.

[2] Clara Brown Arny, Evaluation in Home Economics (New York: Appleton-Century-Crofts, Inc., 1953), pp. 191-213.

[3] Appendix C, p. 220.

[4] Appendix C, p. 220.

determine both the ability to use the tracing wheel and to cut on straight lines and curves with a pair of shears.[1]

Preparation of a piece of white batiste measuring three by twelve inches followed next, along with the provision of black thread (number 60) and needles (Sharp number 9). These were used to determine the ability to use the needle in the spacing of a running stitch.

Administration of the trial test for the use of clothing tools. The girls participating were divided into four groups so that all tools would be in use. General directions were given to the entire group (usually about twenty girls) in the homemaking classroom. These were followed by specific instructions and a demonstration for the use of each tool by the writer. Individual questions were also answered by the writer.

This test was given to the trial group at a later date following the administration of the interest inventory and the Space Relations test. Since the girls participating were able to follow the directions, were cooperative and enthusiastic, and could complete the series of four tests in one class period, no changes in the tests were made.

Therefore, the materials were prepared for use with the larger population sample, and the same procedures for administration were followed.

Analysis of the data for the use of clothing tools. Only the name of the girl appeared on the product from each

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[1] Appendix C, p. 220.

test so that the writer could obtain the total score for each individual on the rating scale and be more objective in her scoring. The products were arranged according to the test performed; therefore, all the results from using the tracing wheel were scored by the writer at one time. This was followed by scoring the results from the use of the sewing machine, the shears, and the needle. After all the products for each test were scored and recorded on the rating scale, the developmental level and the occupational grouping were recorded for each individual girl for use when analyzing the data.

The total score obtained on the rating scale for the use of clothing tools by each individual girl was then correlated with the raw score obtained on the Space Relations test using the product moment method of correlation. This was done for each developmental level of the early adolescent girls and was found to have a positive correlation in each case.

The scores obtained on the rating scales for the use of each clothing tool were further analyzed according to the developmental level and occupational grouping of those participating in the study. The analysis of variance test was used to determine any significant differences in the ability to use each of the clothing tools. Some significant differences were found for the use of each clothing tool either between the developmental levels or the occupational groups

of those participating.

Summary

Instruments that were easy to administer, that could
be scored objectively, and that were easy to transport were
either selected or developed. Therefore, the Space Relations
part of the Differential Aptitude Tests was used, an interest
inventory was developed, and the directions for the use of
four clothing tools were developed for use with early ado-
lescent girls.

As the occupational background of the fathers and
the developmental level of the participants were part of
the investigation, such information as their name, age, and
the occupation of their father was obtained when the inter-
est inventory was given. Reasons for obtaining this infor-
mation were clearly stated so that the girls would not be
less willing to respond.

The data obtained were then compiled and analyzed in
terms of the hypotheses stated in the first chapter.

CHAPTER IV

INTERESTS OF EARLY ADOLESCENT GIRLS IN
CERTAIN ASPECTS OF CLOTHING

Introduction

This chapter deals with the dependent variable which was concerned with the interests in the various aspects of clothing as expressed by the early adolescent girls who participated in this study. The presentation of the data accomplishes three things: first it shows how this variable was statistically related to the developmental level of these girls; second, it shows how it was statistically related to the occupational grouping of the same girls; and third, it gives a comprehensive picture of the items that were used to test the hypothesis with respect to the differences in interests in clothing of early adolescent girls.

Each item in the interest inventory was tabulated according to the degree of interest shown and the developmental level and occupational grouping of each participant. The resulting data were then arranged in tables according to the six categories included in the inventory: (1) selection, (2) grooming, (3) sociological aspects, (4) care, (5) construction, and (6) management. The detailed summary of the data may be found in Appendix B, while the findings from each category will be incorporated in the following sections of this chapter.

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The tables used to present the material in this chapter will be the same for all items of the interest inventory depending upon whether the table is concerned with differences due to developmental levels or occupational groupings of the participants. In all cases the chi-square test was used to show whether the differences were statistically significant. Only those items which show a statistically significant difference of 5 per cent or less of occurring strictly by chance will be thus indicated.

Relationship Between the Developmental Levels of Early Adolescent Girls and Their Interest in Clothing

This section examines the data with respect to the relationship between the developmental levels of early adolescent girls and their interests in clothing. A brief review of research found in the literature will be given for each category of the inventory to indicate any differences or similarities with the findings of this study.

Interests in clothing selection. A study conducted by Biddle and Spencer[1] showed that early adolescent girls rated selection as their first or second choice. In addition, Silverman[2] pointed out the importance of clothing in meeting the need of self-confidence of early adolescent

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[1] Biddle and Spencer, op. cit., p. 105.

[2] Silverman, op. cit., p. 119.

girls, but O'Donnell[1] reported that less than half the pupils participating in a study she conducted had received help in this area.

Table 1 gives a summary of the degree of interest in the twenty items in the area of selection as indicated by the girls who participated in this study. Greater interest was expressed in this area by the girls in the first developmental level than was indicated by girls in the other two levels of development; however, out of the six categories in the inventory, selection ranked second in interest for the first developmental and third for the other two levels.

TABLE 1

INTEREST IN CLOTHING SELECTION

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much....	810 (725.67)	718 (725.67)	649 (725.67)	2177
Much.........	711 (667)	654 (667)	636 (667)	2001
Little.......	376 (444.33)	441 (444.33)	516 (444.33)	1333
Not at all...	103 (163)	187 (163)	199 (163)	489
Total....	2000	2000	2000	6000

$$x^2 = 78.234 \quad p. > .01$$

[1] O'Donnell, op. cit., p. 79.

In reviewing the twenty items concerned with clothing selection, the following seven were found to discriminate significantly between the three developmental levels: (a) selecting colors that are best for me, (b) selecting clothes for special occasions, (c) selecting ankle sox and stockings, (d) selecting clothes to wear to school, (e) studying textiles, (f) selecting clothes for different seasons, and (g) selecting bras, panties, and slips.

Items that were of very much interest to all levels included: (a) selecting colors that are best for me, (b) selecting clothes for my figure type, (c) selecting styles most becoming to me, and (d) choosing lip-stick and powder.

Selecting clothes for special occasions was of very much interest to those girls in the first developmental level. In addition, selection of ankle sox and stockings, bras, panties, and slips, selection of clothes to wear to school and for different seasons, shoes for different occasions, and colors which were best for them were of more interest to the first developmental level.

The second developmental level expressed more interest in (a) selecting colors that are best for me, (b) clothes to wear to school, (c) selecting clothes for my figure type, (d) selecting clothes which can be worn for several occasions, and (e) selecting clothes that can be mixed or matched.

More interest was indicated by the third developmental level than the other levels in selecting colors that

are best for me and selecting styles most becoming to me.
Other items of interest included: (a) selecting clothes for
my figure type, and (b) selecting clothes which can be worn
for several occasions.

More girls of all levels indicated little or no in-
terest in the study of textiles, finishes, and textile manu-
facturing than in any other items. A further analysis of
these twenty items may be found in Tables 29 to 49 in
Appendix B.

Interests in grooming. A number of authorities have
indicated the importance of grooming to the early adolescent
girl. Hurlock mentions this area as presenting major prob-
lems to a girl,[1] and O'Donnell reported that a high percen-
tage of pupils participating in her study had help with the
various aspects of grooming except for certain management
problems.[2]

A summary of the replies to the twenty items con-
cerned with grooming is shown in Table 2. Slightly over
two-thirds of the responses either indicated very much or
much interest in studying those particular items. Even
though more girls in the first developmental level responded
with very much interest, all levels were quite interested
in grooming and ranked this category first among the six
areas of interest.

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[1] Hurlock, op. cit., p. 239.
[2] O'Donnell, op. cit., p. 81.

TABLE 2

INTEREST IN GROOMING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much....	1059 (923)	871 (923)	839 (923)	2769
Much.........	620 (633.33)	626 (633.33)	654 (633.33)	1900
Little.......	261 (341.67)	377 (341.67)	387 (341.67)	1025
Not at all...	60 (102)	126 (102)	120 (102)	306
Total.....	2000	2000	2000	6000

$$x^2 = 87.277 \quad p. > .01$$

Significant differences between the developmental levels were found in half of the twenty items upon further analysis. These were: (a) maintaining a neat appearance, (b) **improving my** posture, (c) controlling or eliminating body odors, (d) manicuring my nails, (e) selecting the best hair styles for me, (f) sitting gracefully, (g) why cleanliness is important, (h) caring for my teeth, (i) what to do if my feet hurt, and (j) caring for my body during menstrual periods.

Six of the twenty items were of interest to all levels. These included: (a) maintaining a neat appearance, (b) selecting the best hair styles for me, (c) caring for my hair, (d) caring for my skin, (e) habits that spoil my

personal appearance, and (f) selecting foods for a good complexion.

In addition to indicating very much interest in the above, the first developmental level expressed more interest in: (a) improving my posture, (b) controlling or eliminating body odors, (c) manicuring my nails, (d) sitting gracefully, (e) importance of cleanliness, (f) caring for my teeth, (g) caring for my hands and nails, and (h) caring for my body during menstrual periods.

Selecting the best hair styles was of more interest to the second developmental level than for the other two levels. In addition to the above six items, they were interested in using different kinds of make-up.

The third developmental level as a whole did not express very much interest in any other items beyond those six which were of interest to all levels.

In this area, as well as in clothing selection, some items were not of much interest. These included the importance of a balanced diet and the care of their feet. Both items received more responses by the second and third developmental levels as having little or no interest to them than were indicated by the first level. The detailed analysis of these items may be found in Tables 45 to 69 in Appendix B.

Interests in sociological aspects. Social activities and a desire to win social approval influences the behavior

and the outlook on life according to Hurlock.[1] Since clothing helps achieve greater satisfaction in personal feelings and social relationships,[2] Meek feels that homemaking teachers can contribute toward helping early adolescents feel more adequate and assist them in attaining values with the least amount of conflict and the greatest amount of gain.[3] Yet the literature revealed little had been included in the curriculum in this area.

Table 3 summarizes the interests in sociological aspects of clothing by the three developmental levels. This category ranked second in interest among the six areas for both the second and third developmental levels and third for the first level.

Only three items in this category were found to be statistically significant between the three developmental levels, but a number revealed either considerable or little interest by all levels. The three significant items were: (a) preparing exhibits of dresses and accessories, (b) manners when shopping, and (c) decorating clothes for a pleasing effect.

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[1]Hurlock, op. cit., p. 160

[2]Silverman, op. cit., p. 119.

[3]Meek, op. cit., p. 193.

TABLE 5

INTEREST IN SOCIOLOGICAL ASPECTS OF CLOTHING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much....	798 (734.67)	732 (734.67)	674 (734.67)	2204
Much..........	706 (652.33)	619 (652.33)	632 (652.33)	1957
Little........	388 (445.33)	436 (445.33)	512 (445.33)	1336
Not at all...	108 (167.67)	213 (167.67)	182 (167.67)	503
Total..	2000	2000	2000	6000

$$x^2 = 69.498 \quad p. > .01$$

All levels indicated very much interest in (a) how to be more attractive, (b) choosing becoming clothes, (c) the effect of colors on them, (d) clothes suitable for various activities, and (e) the effect of combining clothes.

Girls in the first developmental level were interested, in addition to the above, in manners when shopping and how clothes affected the way they felt.

Decorating clothes for a pleasing effect was also of interest to the second developmental level. The third developmental level indicated no other additional items beyond those which were of very much interest to all.

Less than one-fourth were very much interested in the latest styles, fashion magazines, or careers in the
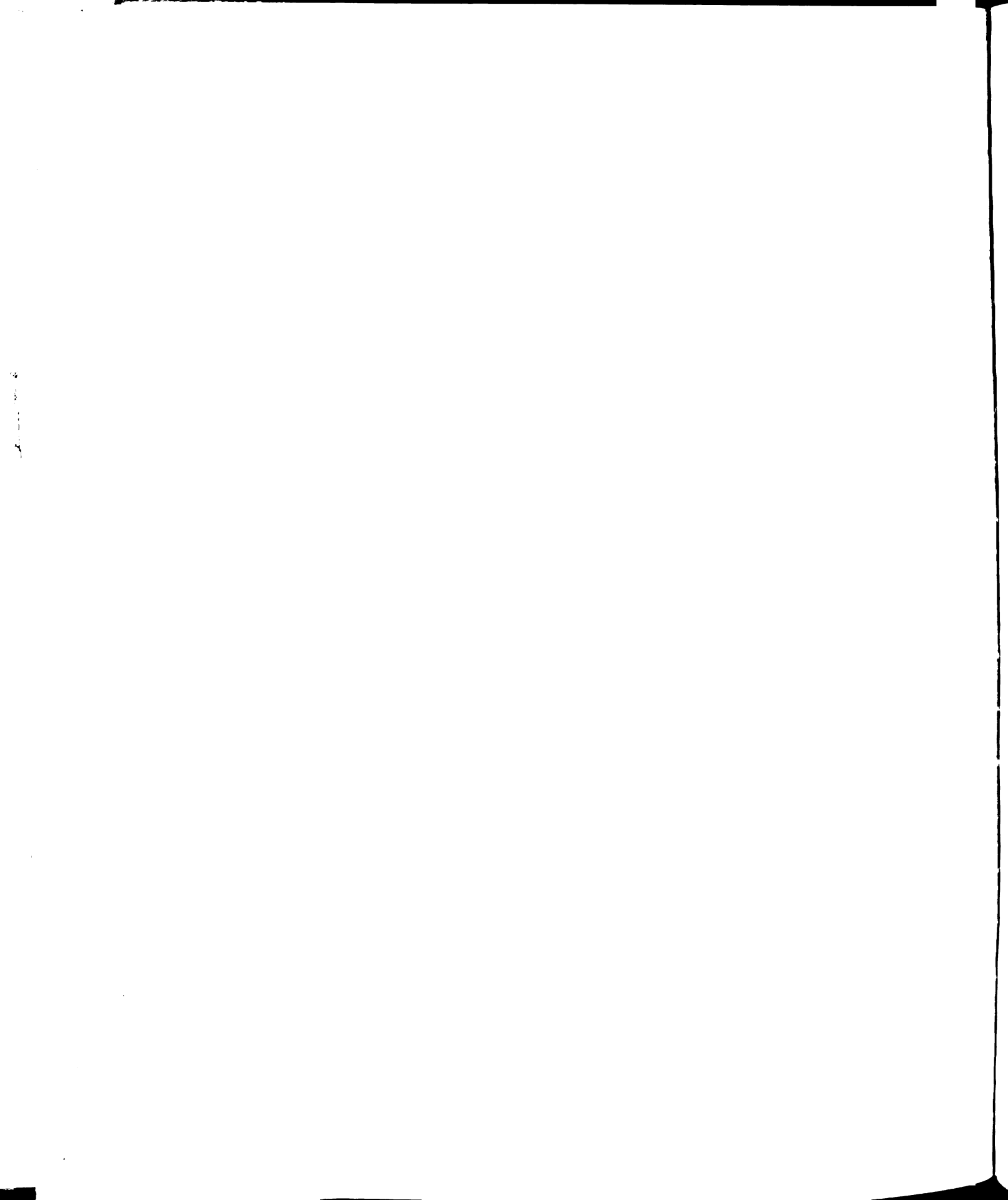
clothing field. Some interest was reported by the first and second levels in making something for a little sister or brother. A summary of these twenty items may be found in Tables 69 to 89 in Appendix B.

Interests in the care of clothing. Gesell reported that interests and responsibilities in the care of clothing by those who would be included in the first developmental level in this study was low, but by the time the third level had been reached some girls had all of the responsibility for the care of their clothes.[1] Research in homemaking education revealed that care was included in the curriculum but ranked third in interest in the study by Biddle and Spencer.[2] Holmblade also reported that pupils indicated responsibilities and concerns in the care of clothing.[3]

Care of clothing ranked last in the amount of interest expressed by all levels in comparison with the other categories of the interest inventory. The data in Table 4 reveal that the girls in the first developmental level indicated more interest than the other two levels.

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[1]Gesell, op. cit., pp. 318-22.

[2]Biddle and Spencer, op. cit., p. 105.

[3]Holmblade, op. cit., p. 217.

TABLE 4

INTEREST IN CLOTHING CARE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much....	529 (408)	377 (408)	318 (408)	1224
Much.........	814 (734.33)	714 (734.33)	675 (734.33)	2203
Little.......	506 (614.67)	619 (614.67)	719 (614.67)	1844
Not at all...	151 (243)	290 (243)	288 (243)	729
Total...	2000	2000	2000	6000

$$x^2 = 161.293 \quad p. > .001$$

Twelve items provided significant differences between the three developmental levels; this was more than for any other category. These items were: (a) learning how to care for my clothes, (b) washing my sweaters, (c) caring for a cotton fabric, (d) steps to follow in washing clothes, (e) ironing different types of clothes, (f) experimenting with soaps, starches, (g) arranging storage space for my clothes, (h) daily care of my clothes, (i) caring for clothes made from nylon, dacron, (j) caring for my shoes, (k) caring for rayon articles, and (l) caring for a garment made from silk.

No items in this category were of interest to all levels; nor was there much interest indicated for any of the items by those in the third developmental level. The second

developmental level displayed more interest in daily and
seasonal care of clothes and caring for shoes than for any
other items.

More interest was indicated in the items by the first
developmental level with learning how to care for my clothes,
daily care of clothes, caring for shoes, and ironing differ-
ent types of clothes receiving the highest number of respon-
ses.

Little interest was indicated by all levels in darn-
ing and patching and caring for specific fabrics. The com-
prehensive analysis of data for these items may be found in
Tables 89 to 109 in Appendix B.

Interests in the construction of clothing. Much has
been written concerning the interests in construction, the
methods used, and the amount of time spent. Biddle and
Spencer reported that construction ranked first in interest
by eighth and ninth grade girls and second by seventh grade
girls.[1] The majority of the pupils in the study by O'Donnell
replied that they had made simple cotton garments,[2] but
Holmblade reported that the pupils in her study had little
or no responsibility in this area at home.[3]

The construction of clothing ranked fifth in the six

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[1]Biddle and Spencer, op. cit., p. 105.

[2]O'Donnell, op. cit., p. 82.

[3]Holmblade, op. cit., p. 124.

categories of the interest inventory for all developmental
levels. Of these, the first developmental level expressed
somewhat more interest than was expected. Table 5 reveals,
in addition, a small degree of difference in interests
between the three developmental levels.

TABLE 5

INTEREST IN CLOTHING CONSTRUCTION

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much....	559 (524.67)	522 (524.67)	493 (524.67)	1574
Much.........	711 (658.67)	642 (658.67)	623 (658.67)	1976
Little.......	517 (569)	593 (569)	597 (569)	1707
Not at all...	213 (246.66)	243 (246.66)	287 (246.66)	743
Total....	2000	2000	2000	6000

$$x^2 = 29.006 \quad p. > .01$$

The analysis for each item may be found in Tables
109 to 129 in Appendix B; significant differences between
the developmental levels were found in only three out of the
twenty items. These were: (a) using different pieces of
sewing equipment, (b) sewing on buttons and snaps, and (c)
taking body measurements.

Making a dress received more responses by all three

levels than any other item; while learning to use a sewing
machine, making a simple skirt and blouse, and matching
plaids were also of some interest to all levels. However,
some items were of more interest than others for different
developmental levels.

More interest was indicated by the first level in
the following items: (a) preparing a fabric before cutting,
(b) fitting a pattern, (c) using different seam finishes,
(d) sewing on buttons and snaps, (e) taking body measure-
ments, and (f) different ways of finishing hems.

The second developmental level revealed the greatest
interest in (a) using different pieces of sewing equipment,
(b) learning to use a sewing machine, (c) using the direction
sheet, (d) making buttonholes, (e) making a simple skirt,
(f) making a simple blouse, and (g) making a dress.

The girls in the third developmental level were
more interested in specific construction techniques, such
as, putting in a zipper, making buttonholes, marking darts,
and sewing in sleeves.

Few items received the degree of interest as was
indicated for some in other categories, but few also re-
vealed much difference between levels or little interest by
all levels.

Interests in the management of clothing. A number
of studies dealing with the purchase of clothing have
reported varying differences in practices of social

classes.[1,2]   Some experiences in decision making were
recommended by Meek.[3]   Gesell also discussed the increase in
the number of decisions made in the purchase of clothing as
the girl matured.   Linn found that pupils wanted to obtain
more ability to plan and more confidence in buying[5] while
others found evidence that girls can well profit from con-
tinued help in this area.

In summarizing the interests of the participants in
this study, management of clothing was found to rank fourth
out of the six categories by all three developmental levels.
Table 6 shows that the first developmental level indicated
more interest than was expected with both the second and
third levels falling somewhat below the expected degree of
interest.

In this area, also, only three out of the twenty
items in Tables 129 to 149 in Appendix B were found to be
statistically significant.   These were: (a) making decis-
ions whether to buy or make a garment, (b) understanding
information found on labels, and (c) buying sewing equip-
ment.

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[1]Warning, op. cit., p. 141.

[2]Rosencranz, op. cit., p. 3.

[3]Meek, op. cit., p. 191.

[4]Gesell, op. cit., pp. 318-22.

[5]Linn, op. cit., p. 331.

TABLE 6

INTEREST IN THE MANAGEMENT OF CLOTHING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much.....	697 (621.33)	608 (621.33)	559 (621.33)	1864
Much..........	745 (700.67)	694 (700.67)	663 (700.67)	2102
Little........	428 (495.67)	487 (495.67)	572 (495.67)	1487
Not at all...	130 (182.33)	211 (182.33)	206 (182.33)	547
Total.....	2000	2000	2000	6000

$$X^2 = 64.386 \quad p. > .01$$

Making decisions whether to buy or make a garment, planning a wardrobe, and deciding when and what make-up to wear were of interest to all three developmental levels.

In addition to the above three items, the first developmental level expressed interest in deciding the most suitable patterns for them to wear. Those in the second level revealed interest also in how much money to have for a clothes allowance and deciding the most suitable patterns to wear. Additional interest was expressed by the girls in the third developmental level in selecting a fabric suitable for a certain garment.

Understanding information on labels, judging how well a garment is made, and developing a plan of work received

the lowest indication of interest of the twenty items in this category.

Relationship Between Occupational Groupings of Early Adolescent Girls and Their Interest in Clothing

The second consideration in relation to the data obtained from the interest inventory was the degree of interest in each category as expressed by the following four occupational groupings: professional, skilled, semi-unskilled, and farmer. The items were arranged in tables with the number of participants who indicated very much interest in the item recorded in the high column. The remainder of the responses were in the low column unless there were less than five responses; in which case, replies for both very much and much interest were combined.

Interest in clothing selection. Girls with farm backgrounds indicated more interest in studying the twenty items relating to clothing selection than those from the other three occupational groupings as is shown in Tables 7, 8, and 9. The differences in interest between the four occupational groupings were statistically significant for all three developmental levels. Interest in the items in this category decreased as the girls matured.

In reviewing the twenty items, eleven discriminated significantly between the four occupational groupings. These were: (a) selecting the best colors, (b) selecting

TABLE 7

INTEREST IN CLOTHING SELECTION BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P*	204 (202.5)	147 (177.75)	98 (94)	51 (25.75)	500
S	159 (202.5)	199 (177.75)	114 (94)	28 (25.75)	500
U	198 (202.5)	194 (177.75)	94 (94)	14 (25.75)	500
F	249 (202.5)	171 (177.75)	70 (94)	10 (25.75)	500
T	810	711	376	103	2000

$$x^2 = 80.23 \qquad p. > .001$$

TABLE 8

INTEREST IN CLOTHING SELECTION BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	153 (179.5)	151 (163.5)	128 (110.25)	68 (46.75)	500
S	173 (179.5)	164 (163.5)	117 (110.25)	46 (46.75)	500
U	171 (179.5)	176 (163.5)	111 (110.25)	42 (46.75)	500
F	221 (179.5)	163 (163.5)	85 (110.25)	31 (46.75)	500
T	718	654	441	187	2000

$$x^2 = 40.57 \qquad p. > .001$$

TABLE 9

INTEREST IN CLOTHING SELECTION BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	136 (162.25)	168 (159)	135 (129)	61 (49.75)	500
S	151 (162.25)	145 (159)	123 (129)	81 (49.75)	500
U	145 (162.25)	175 (159)	142 (129)	38 (49.75)	500
F	217 (162.25)	148 (159)	116 (129)	19 (49.75)	500
T	649	636	516	119	2000

$$x^2 = 76.58 \qquad p. > .001$$

*Key: P = professional; S = skilled; U = semi-unskilled; and
F = farmer

clothes that can be mixed or matched, and (c) selecting bras, panties, slips for the first developmental level. Selecting clothes to wear to school and studying finishes on fabrics were significant for the second developmental level. Significant differences for the third developmental level were found in (a) selecting ankle sox and stockings, (b) choosing accessories, (c) combining fabrics, and (d) selecting a pattern. Both the second and third levels indicated significant differences between occupational groupings in how a fabric is made and characteristics of fabrics. Studying textiles was significant between occupational groupings for all developmental levels. A further analysis of the twenty items may be found in Tables 149 to 169 in Appendix B.

All occupational groupings for the three developmental levels expressed considerable interest in: (a) selecting lip-stick and powder, (b) suitable styles for them, (c) selecting colors, and (d) selecting clothes for special occasions.

Items of particular interest to the farmer grouping for all developmental levels, in addition to the above, were: (a) selecting ankle sox and stockings, (b) selecting clothes to wear to school, (c) selecting bras, panties, slips, (d) selecting shoes, (e) selecting suitable patterns, and (f) selecting clothes that can be mixed or matched.

The professional grouping, in addition to the above

four items, revealed interest in (a) clothes for school and for different seasons, (b) choosing accessories, and (c) selecting clothes for their figure type for the first developmental level.

Clothes for school for the second level, selecting shoes for the first level, suitable patterns for the third, and clothes that can be mixed and matched were items that revealed the interests of the skilled grouping. The semi-unskilled grouping indicated additional interest in clothes for school and for different seasons for the first and second developmental levels and choosing accessories for the second level.

Less interest was indicated in a number of the items by both the professional and skilled groupings than was revealed by the other two occupational groupings.

Interest in grooming. The data in this area as presented in Tables 10, 11, and 12 again indicated differences in interests between the occupational groupings with less difference at the second developmental level. This was the only instance where another group, in this case skilled, replied slightly higher than those from the former grouping.

Eleven items included in Tables 169 to 189 in Appendix B revealed significant differences between the occupational groupings. These for the first developmental level were: (a) controlling body odors, (b) manicuring nails, (c) using make-up, and (d) caring for the body during menstrual

TABLE 10

INTEREST IN GROOMING BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	255 (264.75)	168 (155)	59 (65.25)	18 (15)	500
S	230 (264.75)	180 (155)	73 (65.25)	17 (15)	500
U	250 (264.75)	149 (155)	83 (65.25)	18 (15)	500
F	324 (264.75)	123 (155)	46 (65.25)	7 (15)	500
T	1059	620	261	60	2000

$$X^2 = 48.72 \quad p. > .001$$

TABLE 11

INTEREST IN GROOMING BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	188 (217.75)	147 (156.5)	114 (94.25)	51 (31.5)	500
S	236 (217.75)	141 (156.5)	91 (94.25)	32 (31.5)	500
U	215 (217.75)	165 (156.5)	98 (94.25)	22 (31.5)	500
F	232 (217.75)	173 (156.5)	74 (94.25)	21 (31.5)	500
T	871	626	377	126	2000

$$X^2 = 38.06 \quad p. > .001$$

TABLE 12

INTEREST IN GROOMING BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	195 (209.75)	161 (163.5)	100 (96.75)	44 (30)	500
S	164 (209.75)	174 (163.5)	119 (96.75)	43 (30)	500
U	203 (209.75)	179 (163.5)	103 (96.75)	15 (30)	500
F	277 (209.75)	140 (163.5)	65 (96.75)	18 (30)	500
T	839	654	387	120	2000

$$X^2 = 78.86 \quad p. > .001$$

periods.

Significant differences between occupational group-
ings for the third developmental level were found in (a)
improving my posture, (b) importance of cleanliness, (c)
caring for the teeth, (d) caring for feet, (e) choosing
soaps, and (f) removing extra hair. There were differences
in interest between occupational groupings for both the
first and third levels in sitting gracefully.

Items of interest to all occupational groupings for
all developmental levels were: (a) maintaining a neat
appearance, (b) selecting foods for a good complexion, (c)
selecting the best hair styles, (d) caring for the hair, (e)
caring for the skin, and (f) habits that spoil my personal
appearance.

In addition to the above, all groupings from the
first level were interested in (a) improving their posture,
(b) the importance of cleanliness, (c) caring for their
teeth, and (d) caring for hands and nails. The farmer
grouping at all levels usually indicated more interest in
the items in this category.

In the items concerned with controlling body odors
and manicuring nails, girls from the professional grouping
in the first developmental level expressed little interest.
Those from the skilled grouping were not interested in
studying the use of make-up or sitting gracefully; while the
semi-unskilled grouping indicated little interest in care

of the body during menstrual periods or in the use of make-up.

In this area of grooming no significant differences were found between the occupational groupings in the second developmental level for any of the items. However, in addition to those items which were of interest to all levels, this level indicated interest in using make-up.

The third developmental level revealed differences in interest for seven of the items, where in each case the farmer grouping expressed more interest than the other three. These items included: (a) caring for teeth, (b) improving posture, (c) caring for the feet, (d) removing extra hair, and (e) the importance of cleanliness.

Little interest was expressed by all in the effect of diets on their weight.

Interest in sociological aspects. Except for the second developmental level, the least amount of difference between occupational groupings was found in this category. As in the other areas, the farmer grouping indicated the highest degree of interest with variations found among the other groupings and between the three developmental levels as summarized in Tables 13, 14, and 15.

Only seven items in this category included in Tables 189 to 209 in Appendix B discriminated significantly between the occupational groupings. Of these, three occured in the first developmental level: how to be more attractive,

TABLE 13

INTEREST IN SOCIOLOGICAL ASPECTS BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	225 (199.5)	154 (176.5)	90 (97)	31 (27)	500
S	170 (199.5)	182 (176.5)	118 (97)	30 (27)	500
U	167 (199.5)	201 (176.5)	107 (97)	25 (27)	500
F	236 (199.5)	169 (176.5)	73 (97)	22 (27)	500
T	798	706	388	108	2000

$$x^2 = 40.37 \quad p. > .001$$

TABLE 14

INTEREST IN SOCIOLOGICAL ASPECTS BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	161 (183)	141 (154.75)	134 (109)	64 (53.25)	500
S	199 (183)	133 (154.75)	116 (109)	52 (53.25)	500
U	150 (183)	193 (154.75)	102 (109)	55 (53.25)	500
F	222 (183)	152 (154.75)	84 (109)	42 (53.25)	500
T	732	619	436	213	2000

$$x^2 = 49.08 \quad p. > .001$$

TABLE 15

INTEREST IN SOCIOLOGICAL ASPECTS BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	144 (168.5)	170 (158)	124 (128)	62 (45.5)	500
S	172 (168.5)	142 (158)	136 (128)	50 (45.5)	500
U	151 (168.5)	165 (158)	142 (128)	42 (45.5)	500
F	207 (168.5)	155 (158)	110 (128)	28 (45.5)	500
T	674	632	510	182	2000

$$x^2 = 35.26 \quad p. > .001$$

creating original dress designs, and how clothes affect the way I feel. Two items which discriminated occured at the second level: choosing suitable clothes and sharing the family clothing budget. Three items were significant at the third level: manners when shopping, combining clothes, and sharing the family clothing budget.

Girls at all levels and for all occupational groupings in this study expressed much interest in attractiveness, choosing becoming and suitable clothes, combining clothes, and the effect of colors on them. Little interest was indicated toward fashion shows and magazines, designs, the latest styles, and budgets by most of the groupings at all levels.

The professional grouping did indicate more interest in fashions and designs than the others. Sharing the family budget was of greater interest to the farmer grouping for both the second and third developmental levels than for the others who responded.

Interest in care of clothing. Considerable differences between occupational groupings and the developmental levels are disclosed in Tables 16, 17, and 18, with regard to interests in the care of clothing. The farmer grouping indicated a greater degree of interest in this category than any other grouping. Considerably more interest for all groupings at the first developmental level was also noted.

TABLE 16

INTEREST IN CLOTHING CARE BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	87 (132.25)	204 (203.5)	136 (126.5)	73 (37.75)	500
S	102 (132.25)	201 (203.5)	154 (126.5)	43 (37.75)	500
U	149 (132.25)	210 (203.5)	122 (126.5)	19 (37.75)	500
F	191 (132.25)	199 (203.5)	94 (126.5)	16 (37.75)	500
T	529	814	506	151	2000

$$x^2 = 121.65 \quad p. > .001$$

TABLE 17

INTEREST IN CLOTHING CARE BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	68 (94.25)	131 (178.5)	179 (154.75)	122 (72.5)	500
S	92 (94.25)	202 (178.5)	156 (154.75)	50 (72.5)	500
U	81 (94.25)	191 (178.5)	166 (154.75)	62 (72.5)	500
F	136 (94.25)	190 (178.5)	118 (154.75)	56 (72.5)	500
T	377	714	619	290	2000

$$x^2 = 104.48 \quad p. > .001$$

TABLE 18

INTEREST IN CLOTHING CARE BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	32 (79.5)	159 (168.75)	208 (179.75)	101 (72)	500
S	51 (79.5)	157 (168.75)	189 (179.75)	103 (72)	500
U	78 (79.5)	177 (168.75)	194 (179.75)	51 (72)	500
F	157 (79.5)	182 (168.75)	128 (179.75)	33 (72)	500
T	318	675	128	208	2000

$$x^2 = 190.22 \quad p. > .001$$

Fourteen items included in Tables 209 to 229 in Appendix B discriminated significantly between the four occupational groupings within the three developmental levels. Five of these items, in addition, revealed differences between two levels. The responses indicating very much interest in this category were so low for thirteen of the twenty items that the replies for very much and much interest were combined in order to complete the statistical analysis so that the chi-square test could be meaningfully used.

Significant items for the third developmental level were: (a) caring for cotton fabrics, (b) caring for woolen clothing, (c) arranging storage space, (d) daily care of clothes, (e) how to let out hems, (f) caring for rayon articles, (g) caring for garment made from silk, and (h) cleaning clothes economically. In addition, the second and third levels indicated significant differences for the following: caring for clothes made from nylon and dacron, and using bleach with clothes. These items indicated significant differences between occupational groupings for both the first and third developmental levels: (a) patching my clothes, (b) learning to care for my clothes, and (c) darning ankle sox. Washing my sweaters was significant for the first developmental level only.

The data revealed that the first developmental level from the semi-unskilled and farmer groupings were more

interested in this category, particularly in: (a) learning
to care for clothes, (b) washing sweaters, (c) patching, and
(d) darning ankle sox. Caring for garments of different
fabrics and mending were of greater interest to the farmer
grouping for the third level.

The professional grouping followed by the skilled
indicated the least amount of interest in the majority of
items. Caring for woolen clothing, removing spots and
stains, caring for a garment made from silk, and arranging
storage space were the items for which little interest was
revealed.

Interest in clothing construction. Greater differ-
ences between occupational groupings were found in this
category except for the third developmental level for which
clothing care was more significant. The skilled grouping
indicated, as shown in Tables 19, 20, and 21, the lowest
degree of interest, but this interest increased at the
higher levels. In the other groupings, this interest either
decreased or remained approximately the same at the second
and third developmental levels. The farmer grouping ex-
pressed considerably more interest at all developmental
levels.

Fifteen items in this category were found to dis-
criminate between the occupational groupings of the three
developmental levels. Again for eleven items, the replies
indicating very much or much interest were combined for

TABLE 19

INTEREST IN CLOTHING CONSTRUCTION BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	124 (139.75)	162 (177.75)	137 (129.25)	77 (53.25)	500
S	88 (139.75)	193 (177.75)	147 (129.25)	73 (53.25)	500
U	111 (139.75)	196 (177.75)	160 (129.25)	33 (53.25)	500
F	236 (139.75)	160 (177.75)	74 (129.25)	30 (53.25)	500
T	559	711	517	213	2000

$$x^2 = 168.82 \quad p. > .001$$

TABLE 20

INTEREST IN CLOTHING CONSTRUCTION BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	107 (130.5)	144 (160.5)	147 (148.25)	102 (60.75)	500
S	92 (130.5)	163 (160.5)	190 (148.25)	55 (60.75)	500
U	132 (130.5)	176 (160.5)	154 (148.25)	38 (60.75)	500
F	191 (130.5)	159 (160.5)	102 (148.25)	48 (60.75)	500
T	522	642	593	243	2000

$$x^2 = 113.06 \quad p. > .001$$

TABLE 21

INTEREST IN CLOTHING CONSTRUCTION BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	51 (123.25)	154 (155.75)	176 (149.25)	119 (71.75)	500
S	111 (123.25)	157 (155.75)	134 (149.25)	98 (71.75)	500
U	140 (123.25)	159 (155.75)	153 (149.25)	48 (71.75)	500
F	191 (123.25)	153 (155.75)	134 (149.25)	22 (71.75)	500
T	493	623	597	287	2000

$$x^2 = 174.31 \quad p. > .001$$

analysis as few participants indicated very much interest in this category.

Those items revealing significant differences between the occupational groupings in the first developmental level were: (a) preparing a fabric before cutting, (b) making and attaching a collar, (c) fitting a pattern, (d) using the direction sheet, (e) sewing on buttons and snaps, (f) using different seam finishes, (g) marking pattern darts,(h) making a dress, and (i) making over a garment. The most interest in all of the items in the category was reported by the farmer grouping; while the skilled grouping, in most instances, indicated the least amount of interest. Both the skilled and semi-unskilled grouping revealed little interest in the construction of a dress.

Significant differences were found between the occupational groupings at the second developmental level for the following: (a) using sewing equipment, (b) learning to use the sewing machine, (c) sewing on buttons and snaps, (d) making machine buttonholes, (e) finishing hems, (f) marking pattern darts, (g) sewing in sleeves, and (h) making over a garment. For this level also, the farmer grouping indicated more interest in most of the items. Using equipment including the sewing machine, revealed the least amount of interest by the skilled grouping.

Items with significant differences between the occupational groupings for the third developmental level

were: (a) using sewing equipment, (b) using the sewing machine, (c) preparing a fabric for cutting, (d) making and attaching a collar, (e) sewing on buttons and snaps, (f) using different seam finishes, and (g) making a simple blouse. In all of these items, the professional followed by the skilled grouping indicated the least amount of interest. More interest was revealed by the farmer grouping at this level, also.

Sewing on buttons and snaps, marking, sewing in sleeves, and making over a garment were of little interest to all levels.

Interest in clothing management. More differences in interests in clothing management were revealed between the occupational groupings of the three developmental levels than for any other category. There was a decrease in interest for the professional grouping, but the other three groupings produced variations at different levels as Tables 22, 23, and 24 demonstrate.

Five items showed significant differences in responses between occupational groupings at two levels while one revealed significant discrimination at three levels, and five more indicated differences at only one level.

Significant items between occupational groupings for the first developmental level were: (a) choosing a suitable pattern, (b) developing a plan of work, (c) deciding when and what make-up to wear, (d) learning to work with

TABLE 22

INTEREST IN CLOTHING MANAGEMENT BY DEVELOPMENTAL LEVEL I

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	168 (174.25)	177 (186.25)	97 (107)	58 (32.5)	500
S	127 (174.25)	197 (186.25)	146 (107)	30 (32.5)	500
U	150 (174.25)	197 (186.25)	125 (107)	27 (32.5)	500
F	252 (174.25)	173 (186.25)	60 (107)	15 (32.5)	500
T	687	745	428	130	2000

$$X^2 = 123.24 \quad p. > .001$$

TABLE 23

INTEREST IN CLOTHING MANAGEMENT BY DEVELOPMENTAL LEVEL II

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	119 (152)	147 (173.5)	159 (121.75)	75 (52.75)	500
S	140 (152)	175 (173.5)	136 (121.75)	49 (52.75)	500
U	144 (152)	181 (173.5)	121 (121.75)	54 (52.75)	500
F	205 (152)	191 (173.5)	71 (121.75)	33 (52.75)	500
T	603	694	487	211	2000

$$X^2 = 84.46 \quad p. > .001$$

TABLE 24

INTEREST IN CLOTHING MANAGEMENT BY DEVELOPMENTAL LEVEL III

Group	Degree of Interest				
	Very Much	Much	Little	None	
P	110 (139.75)	175 (165.75)	133 (143)	82 (51.5)	500
S	109 (139.75)	156 (165.75)	169 (143)	66 (51.5)	500
U	125 (139.75)	183 (165.75)	151 (143)	41 (51.5)	500
F	215 (139.75)	149 (165.75)	119 (143)	17 (51.5)	500
T	559	663	572	206	2000

$$X^2 = 117.05 \quad p. > .001$$

others, (e) caring for a sewing machine, (f) understanding information on labels, and (g) buying sewing equipment. Less interest in these items was usually displayed by the skilled or semi-unskilled groupings. Again the farmer grouping indicated more interest in clothing management than the other groupings.

The second developmental level indicated significant differences between occupational groupings in the following items: (a) judging how well a garment is made, (b) working independently, and (c) understanding information on labels. For the first and last item less interest was revealed by the professional grouping, while the skilled grouping showed little interest in working independently.

Items with significant differences between occupational groupings for the third developmental level were: (a) studying quality of ready-made clothes, (b) judging how well a garment is made, (c) developing a plan of work, (d) working with others, (e) working independently, (f) selecting a suitable fabric, (g) caring for a sewing machine, and (f) understanding information on labels. The farmer grouping indicated more interest for these items except in judging how well a garment is made; in this instance, the skilled grouping showed very little interest thus indicating the significant difference. In many of the items at this level the skilled grouping reported little interest.

Wardrobe planning, deciding whether to make or buy

a garment, and deciding when and what make-up to wear were of interest to all occupational groupings at the three levels of development. Little interest was indicated in fitting of garments, studying quality, learning how to work with others or independently, and understanding information on labels except by the farmer grouping.

Summary

The writer attempted to analyze the data gathered in this study in terms of the relation to the hypotheses to be tested. Attention was given to the interests indicated by early adolescent girls from four occupational groupings and at three developmental levels in regard to the six aspects of clothing included in the interest inventory.

Interests indicated for the items in each category were ranked according to the following order for the first developmental level: (1) grooming, (2) selection, (3) sociological aspects, (4) management, (5) construction, and (6) care. Both the second and third developmental levels ranked the categories similarly: (1) grooming, (2) sociological aspects, (3) selection, (4) management, (5) construction, and (6) care.

A few items in each category were either of very much or little interest to the majority of the girls for the occupational groupings in each developmental level. Significant differences in interests were found between

either occupational groupings or developmental levels for other items.

Thus, some relevant data were uncovered which may have implications for those planning a curriculum in junior high homemaking education. These conclusions will be discussed in the final chapter.

CHAPTER V

ABILITY OF EARLY ADOLESCENT GIRLS TO HANDLE SELECTED
CLOTHING CONSTRUCTION TOOLS

Introduction

The ability of early adolescent girls to handle
selected clothing construction tools is the dependent vari-
able with which the analysis in this chapter is concerned.
The data provides information for testing the second and
third hypotheses as stated in Chapter I: first, that there
is a positive correlation between spatial perception of
early adolescent girls and the ability to handle selected
clothing construction tools; and second, that there are
differences in abilities of early adolescent girls in differ-
ent occupational groupings and at different developmental
levels to handle selected clothing construction tools.

To determine the significance of any relationships
revealed about the dependent and independent variables, two
statistical tests were employed: the product moment method
of correlation and the analysis of variance. The compila-
tion of the data for these two tests may be found in
Appendix C.

Prior to the presentation of the data, a brief
review of the literature and research having a relationship
to the topic under investigation is presented. This review
suggests an exploratory hypothesis which was related to the

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basic hypothesis of differences in abilities.

Relationship of Spatial Perception and Ability to Handle Clothing Construction Tools

Review of selected research. The relationship of spatial perception and the ability of early adolescent girls to handle clothing construction tools had not been explored by other research studies. However, several authors pointed out differences between adolescents at various ages and their ability to visualize objects. Millard believed that the development of an individual followed a series of patterns with a greater degree of integration and differentiation as he matured.[1] Kuhlen stressed that different functions reached a maximum of maturation at different ages.[2]

The ability to perceive spatially involves complex coordination of mental and motor ability, and tests of performance may be administered to predict the ability to perform physical tasks peculiar to certain vocations according to Barr, Davis, and Johnson.[3] They further state that: "Ability in various physical activities is usually best evaluated by noting the physical behavior in which the individual is capable of performing and the product which he can produce."[4]

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[1] Millard, op. cit., pp. 15-17.

[2] Kuhlen, op. cit., p. 44.

[3] Barr, Davis, and Johnson, op. cit., p. 20.

[4] Ibid., p. 25.

Positive correlations, although low, have been found between intelligence and motor ability in adolescents. Coordination and skills are generally measured by tests of speed and accuracy according to Hurlock,[1] but laboratory measurements have been few. Those reported did, however, show that improvements were made with age.

Much research on the effectiveness of methods in teaching clothing construction and achievement in construction have been conducted, but these factors have been measured by pencil and paper tests, attitudes toward, and the actual construction of a garment. Yergey stated that practice was essential in learning a manual ability in order for it to be effective.[2] In addition, several authors, including Todd,[3] have developed tests for the use of clothing tools, but no research was found which produced data for differences in abilities.

This research along with others reviewed in Chapter II and statements by Gesell[4] provided the exploratory hypothesis that spatial perception might have some basis for differences in the ability to handle clothing construction tools by early adolescent girls at different levels of development.

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[1] Hurlock, op. cit., p. 86.

[2] Yergey, op. cit., p. 4.

[3] Todd, op. cit., pp. 213-255.

[4] Gesell, op. cit., pp. 112-223.

Analysis of data. Tables 269, 270, and 271 in
Appendix C show a detailed summary and analysis of the data
acquired from the administration of both the Space Relations
test and the test for the use of clothing construction tools.
These data were subjected to the product moment correlation
test. Positive correlations were obtained for all three
developmental levels of the early adolescent girls who par-
ticipated in this study. A correlation of .4976 was
obtained for the first level; .7965 for the second level;
and .6924 for the third developmental level.

Ability of Early Adolescent Girls to Use Selected Clothing Construction Tools

Review of selected research. In reviewing the
literature, no information was found relating to research
concerning the ability of early adolescent girls to use
clothing construction tools. Homemaking textbooks revealed
four clothing construction tools which seemed to be most
frequently used by girls at this level and some tests which
could be adapted for use.

Results obtained from the tests which were further
developed for use in this study will be reported in this
section.

Analysis of data. In order to determine any differ-
ences between developmental levels or occupational groupings
in the ability to use the selected clothing construction
tools, the data were subjected to the test for the analysis

of variance. Data used in this analysis were taken from Tables 272, 273, and 274 in Appendix C.

Table 25 indicates that there was a significant difference between the developmental levels in their ability to use the tracing wheel, but no significant differences were found between occupational groupings at the various developmental levels.

TABLE 25

ABILITY OF EARLY ADOLESCENT GIRLS TO
USE THE TRACING WHEEL

	Sum of Squares	df	Mean Square	F Ratio	Significance
Among occupations....	6.14	3	2.05	2.35	Not S.
Among levels.........	6.85	2	3.42	3.93	Signif.
Interaction..........	17.48	6	2.91	3.50	Signif.
Within...............	240.33	288	0.83		
Error(interaction + within)........	257.81	294	0.87		
Total........	270.80	299			

In determining the differences between the developmental levels of early adolescent girls in their ability to use the sewing machine, the data in Table 26 reveal no significant differences. However, a significant difference was found between occupational groupings. Upon closer examination the data showed that the farmer grouping in both the second and third developmental levels obtained higher scores

in the use of the sewing machine and the semi-unskilled received considerably lower scores at all levels of development.

TABLE 26

ABILITY OF EARLY ADOLESCENT GIRLS TO USE
THE SEWING MACHINE

	Sum of Squares	df	Mean Square	F Ratio	Significance
Among occupations.....	14.33	3	4.77	6.71	Signif.
Among levels..........	2.06	2	1.03	1.45	Not S.
Interaction..........	20.12	6	3.35	5.15	Signif.
Within...............	189.61	238	0.65		
Error (interaction + within)........	209.73	294	0.71		
Total......	226.12	299			

A significant difference between developmental levels was found when analyzing the data in Table 27. Closer examination of the data revealed the third developmental level reporting considerably more ability in the use of the shears. No significant differences were found between the occupational groupings.

TABLE 27

ABILITY OF EARLY ADOLESCENT GIRLS TO USE SHEARS

	Sum of Squares	df	Mean Square	F Ratio	Significance
Among occupations....	1.36	3	0.45	0.76	Not S.
Among levels.........	7.52	2	3.76	6.37	Signif.
Interaction..........	10.27	6	1.71	3.05	Signif.
Within...............	163.09	288	0.56		
Error (interaction + within........	173.36	294	0.59		
Total.......	182.24	299			

In Table 28 significant differences were found between
the developmental levels, but not between the occupational
groupings in the ability to use a needle. Closer examination
of the data revealed that the first developmental level
received scores considerably lower than the other two levels
which rated similarly in ability.

TABLE 28

ABILITY OF EARLY ADOLESCENT GIRLS TO USE A NEEDLE

	Sum of squares	df	Mean Square	F Ratio	Signif-icance
Among occupations....	3.25	3	1.08	1.89	Not S.
Among levels.........	5.62	2	2.81	4.93	Signif.
Interaction..........	7.04	6	1.17	2.05	Signif.
Within............ ...	164.89	288	0.57		
Error (interaction + within)........	171.93	294	0.57		
Total........	181.80	299			

Summary

The data were analyzed in terms of the relation to the hypotheses to be tested. Upon examining the findings with respect to differences in abilities of early adolescent girls to handle clothing construction tools, significant differences were found in the use of each tool.

Significant differences were found between developmental levels in the ability to use the tracing wheel, shears, and needle. Those girls in the first developmental level in this study were found to show more ability in the use of the tracing wheel; while the second and third developmental levels both showed less ability. However, in the

use of the shears, the third developmental level rated much higher on the rating scale with the first and second levels almost comparable. The second and third developmental levels were comparable in the ability to use the needle with the first level considerably lower.

A difference was found between occupational groupings in the use of the sewing machine. The farmer grouping rated higher in the second and third developmental levels than the other occupational groupings. The other three occupational groupings rated similarly in their ability to use the sewing machine.

In addition, a positive correlation between the Space Relations test and the ability to use these clothing construction tools was obtained for all three developmental levels.

CHAPTER VI

SUMMARY OF FINDINGS AND CONCLUSIONS WITH IMPLICATIONS

Summary of Findings and Conclusions

Findings in relation to the hypotheses. This study
has provided research on a problem in the junior high home-
making education curriculum: that of interests and abili-
ties of early adolescent girls in the area of clothing.

Statistical analyses were used to test the hypotheses
that: (1) there are differences between early adolescent
girls from different occupational groupings and at different
developmental levels in their interests in clothing; (2)
there are differences in their ability to handle selected
clothing construction tools; and (3) there is a positive
correlation between spatial perception of these early adoles-
cent girls and their ability to handle selected clothing
construction tools.

These hypotheses were tested with three hundred
early adolescent girls who met the criteria of developmental
level and occupational grouping. An interest inventory
which was comprised of six categories (i.e., (1) selection,
(2) grooming, (3) sociological aspects, (4) care, (5) con-
struction, and (6) management) was administered to deter-
mine if any relationship existed between the dependent and
independent variables. In order to further test the rela-
tionships between these variables a clothing construction

tools test was developed which considered the use of the following tools: (1) tracing wheel, (2) sewing machine, (3) shears, and (4) needle. The scores from these were correlated with scores obtained on the Space Relations part of the Differential Aptitude Tests to determine if spatial perception was related to the ability to use these tools.

The analysis of the data showed that there were differences among both the developmental levels and the occupational groupings of the early adolescent girls who participated in this study. The data also revealed that there was a positive correlation between spatial perception of the participants and their ability to handle the selected clothing construction tools.

Findings in relation to interests in clothing selection. On the basis of the data presented, the following conclusions are drawn subject to the limitations of this study.

1. Selection ranked second among the categories of interest in clothing by the first developmental level and third by both the second and third developmental levels.

2. The early adolescent girls in the first developmental level who participated in this study indicated more interest in the following items: (a) selecting clothes for special occasions, school, and different seasons, (b) selecting

bras, panties, and slips, and (c) choosing
clothes most becoming to them.

3. Selecting clothes that could be worn to school
   and ones that could be mixed or matched were of
   interest to the first two developmental levels.

4. All three developmental levels were interested
   in the selection of colors and styles most be-
   coming to them.

5. Those in the second and third developmental
   levels revealed interest in selecting clothes
   suitable for their figure and choosing lip-stick
   and powder.

6. Little interest was evident for all levels in
   the study of textile fabrics, characteristics,
   finishes, and quality.

7. Those girls in the farmer grouping at all levels
   indicated more interest in this category; while
   those in the professional grouping from the
   first and third levels indicated the least
   interest.

Findings in relation to interests in grooming. The
findings of this study in relation to interests in grooming
were as follows:

1. More participants indicated interest in this
   category of the interest inventory than in any
   of the other five. Thus, grooming ranked first

for all three developmental levels.

2. Interest was shown by all levels in selecting
    hair styles and caring for their hair, in estab-
    lishing good grooming habits, in maintaining a
    neat appearance, and in choosing foods in order
    to have a good complexion.

3. Those in the first developmental level indicated
    very much interest in the following items: (a)
    improving posture, (b) controlling body odors,
    (c) manicuring nails, (d) caring for teeth, hands
    and nails, (e) caring for the skin, and (f) care
    of the body during menstrual periods.

4. No additional items beyond those which were of
    interest to all levels were of very much inter-
    est to either the second or third developmental
    levels.

5. Little interest was revealed by all levels in
    caring for their feet, selecting a balanced diet,
    and developing a grooming check list.

6. The farmer grouping were found to indicate the
    most interest in this category, and the skilled
    grouping the least amount of interest except for
    the second developmental level. The semi-
    unskilled grouping indicated the least amount of
    interest for only one item--the importance of
    cleanliness.

Findings in relation to interests in sociological
aspects. The following conclusions were drawn on the basis
of the data collected in relation to the interests of the
participants in the sociological aspects of clothing.

1. This category ranked third among the six areas
    in the amount of interest expressed by the first
    developmental level and second for both the sec-
    ond and third developmental levels.

2. Fewer differences in interest between levels
    and groupings were expressed for this category
    by the participants than in any of the other
    categories.

3. All levels indicated considerable interest in:
    (a) how to be more attractive, (b) choosing
    becoming clothes, (c) effect of colors on them,
    (d) clothes suitable for various activities, (e)
    combining clothes, and (f) decorating clothes.

4. In addition, the first developmental level was
    interested in manners when shopping, particularly
    for the farmer grouping.

5. Neither the second or third developmental levels
    expressed very much interest in any other items
    beyond those which were of interest to all levels.

6. Little interest was displayed by all levels in
    the following: (a) sharing the family clothing
    budget, (b) planning a simple fashion show, (c)

careers in clothing, (d) studying fashion magazines, and (e) preparing exhibits of clothes and accessories.

7. The professional grouping expressed the least amount of interest in those items that revealed significant differences between occupational groupings. The farmer grouping was more interested in budgets and shopping manners than the other occupational groupings.

Findings in relation to interests in clothing care.
The findings of this study in relation to interests in clothing care were as follows:

1. This category ranked sixth in the degree of interest expressed by all three developmental levels.

2. Daily and seasonal care of clothes were of interest to all levels.

3. Those in the third developmental level were more interested in removing spots and stains and cleaning economically than the other two levels. The second and third levels also showed interest in caring for woolens.

4. Washing sweaters was of interest to those in the first developmental level; while ironing different types of clothes was of interest to both the first and second developmental levels.

5. Little interest was expressed by all levels in patching and darning. Both the second and third developmental levels also indicated little interest in washing sweaters, letting out hems, and caring for cottons and synthetics.

6. The farmer grouping indicated more interest in those items which revealed significant differences between developmental levels. The professional grouping showed the least interest in a number of items. The semi-unskilled at the first developmental level expressed interest in care of clothes, darning, and washing sweaters.

Findings in relation to interests in clothing construction. The data from this study appear to justify the following conclusions:

1. Construction ranked fifth in the amount of interest revealed by all three developmental levels.

2. Several items were of interest to all three levels, but the second level indicated more interest in making a skirt, a blouse, and a dress.

3. The first level showed more interest in fitting a pattern and taking measurements; the second level in using the sewing machine and sewing equipment; and the third level in putting in a

zipper and sewing in sleeves.

4. Little interest was indicated by all levels in sewing on buttons and snaps and in using different seam finishes. In addition, hand sewing received few indications of interest at both the second and third developmental levels.

5. Much interest was indicated by the farmer grouping in most of the items relating to construction, particularly at the first and second levels of development. The professional grouping of the third developmental level indicated the least amount of interest in many items. The skilled and semi-unskilled groupings were more alike but were neither high nor low in the degree of interest expressed. However, both revealed less interest in making a dress.

Findings in relation to interests in clothing management. On the basis of the data, the following conclusions were drawn:

1. Clothing management ranked fourth in the amount of interest expressed for all three developmental levels.

2. Several items including the decision as to when and what make-up to wear and whether to buy or make a garment were of interest to all developmental levels.

3. Those in the first developmental level indicated interest in decisions related to: (a) the most suitable patterns, (b) buying sewing equipment, (c) arrangement of dresser drawers, and (d) plans for clothes needed in their wardrobe.

4. Both the second and third developmental levels were interested in planning a wardrobe. A clothes allowance was also of interest to those in the second level.

5. Little interest was indicated by all levels in understanding information on labels and determining the quality of ready-made clothes. Neither the second or third levels revealed much interest in a plan of work, judging how well a garment is made, buying sewing equipment, or caring for the sewing machine.

6. Again the farmer grouping expressed more interest in this category. The other groupings were similar in indication of interest.

Findings in relation to the ability to handle selected clothing construction tools. On the basis of the data obtained, the following conclusions are presented subject to the limitations of this study.

1. There were differences between the three developmental levels in the ability to handle three of the clothing construction tools used in this

study: shears, needle, and tracing wheel.

2. A greater difference was found between the
    occupational groupings in the use of the sewing
    machine. The farmer grouping in the second and
    third developmental levels rated higher than the
    other occupational groupings. These rated
    similarly in their ability to use the sewing
    machine at all three developmental levels.

3. Those in the third developmental level in this
    study rated the highest in the ability to use
    the shears with the first and second levels
    almost comparable.

4. The second and third levels were comparable in
    the ability to use the needle with the first
    developmental level considerably lower in
    ability.

5. Those in the first developmental level were
    found to rate somewhat higher in the ability to
    use the tracing wheel.

6. Spatial perception had a positive correlation
    with the ability to handle the clothing con-
    struction tools used in this study.

Implications from the Findings

Some implications for a junior high homemaking
education curriculum in the area of clothing. The conclu-
sions drawn in this study have a number of implications for
developing a more meaningful and challenging curriculum in
the area of clothing for those who participated in this
study.

1. Greater emphasis needs to be placed in the
   curriculum on the interests and concerns in the
   selection and sociological aspects of clothing.

2. Since the second developmental level indicated
   the most interest in actual clothing construction
   and also demonstrated similar ability to the
   third level in handling most of the construction
   tools, simple construction techniques using the
   sewing machine could be introduced in the curri-
   culum at this level.

3. More attention could be devoted to certain
   items concerning the care of clothing (i.e.,
   ironing, daily and seasonal care) at the first
   developmental level.

4. Concern for items related to decision-making
   was expressed by all developmental levels (i.e.,
   whether to buy or make a garment, which to select,
   and planning a wardrobe). Therefore, more con-
   sideration needs to be given to this factor

when developing a curriculum in clothing.

5. Since there were differences of interest in some
    items from all categories indicated by the
    occupational groupings, an understanding of this
    background of the students would be of value in
    curriculum planning.

6. Instruments developed for this study could be
    used to secure information for program planning
    for other schools which have homemaking at this
    level.

7. Provision for individual differences in interests
    and needs require further emphasis in this area
    of the curriculum.

Implications for further study. The conclusions
from this study suggest a few problems for further explora-
tion.

1. It seems desirable that a study be made of the
    motivating factors of farm girls, specifically
    those relating to their interests in clothing.

2. An investigation of the utilization of the data
    secured by these instruments in developing a
    curriculum in one or more of the schools where
    this study was conducted would be pertinent.

3. This study also suggests a follow-up of the same group to indicate any changes in interests or increases in ability after the trial of the curriculum.

4. It would seem desirable to develop similar instruments to be used with older adolescent girls to determine their interests and needs.

5. A further study of the ability to use other kinds and sizes of clothing construction tools would be desirable in order to obtain a more comprehensive picture of the ability to use these various tools.

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APPENDIX A

COOPERATING SCHOOLS AND HOMEMAKING TEACHERS

COPY OF LETTER TO SUPERINTENDENTS

COOPERATING SCHOOLS AND HOMEMAKING TEACHERS

Mrs. Gladys Wolven
Ithaca High School
Ithaca, Michigan

Mrs. Eileen Bell
Kingston High School
Kingston, Michigan

Miss Eileen Hopkins
Loyal Public Schools
Loyal, Wisconsin

Mrs. Betty McGowan
Okemos High School
Okemos, Michigan

Mrs. Jane Colbeck
Olivet High School
Olivet, Michigan

Mrs. Charlotte Frank
Williamston High School
Williamston, Michigan

Mrs. Joan Johnson
Miss Ruth Tuthill
Wyoming Park High School
Wyoming, Michigan

<u>Copy of Letter to A Superintendent</u>

October 8, 1958

Mr. _____ _____
Superintendent of Schools
_____, Michigan

Dear Mr. _____:

I am working toward a doctorate in Home Economics Education
at Michigan State University and am at the stage of gather-
ing data for my dissertation. My study involves the in-
terests and abilities of girls in grades 7-8-9 in the area
of clothing. If possible, I would like to do some of my
research at _____.

Last summer I spoke to Miss (Homemaking Teacher) about my
proposed study, but since then I have completed the pilot
study so can give more complete details. It consists of
two written parts which take one full hour and need not be
given in the homemaking department, and another part where
clothing construction tools are used which takes a full
hour and needs to be given in the homemaking department.

If you feel that it would be possible for me to do part of
my research at _____, I can come on the morning of
October 23 to make arrangements and give any further infor-
mation concerning my study.

Sincerely

Fern Horn

APPENDIX B

INTEREST INVENTORY--"INTERESTS IN CLOTHING OF JUNIOR
   HIGH SCHOOL GIRLS"

RELATIONSHIP BETWEEN DEVELOPMENTAL LEVELS OF EARLY
   ADOLESCENT GIRLS AND THEIR INTEREST IN CLOTHING

RELATIONSHIP BETWEEN OCCUPATIONAL GROUPINGS OF EARLY
   ADOLESCENT GIRLS AND THEIR INTEREST IN CLOTHING

Area	VM	M	L	N
Se	—	—	—	—
G	—	—	—	—
Soc	—	—	—	—
Ca	—	—	—	—
C	—	—	—	—
M	—	—	—	—

Interests in Clothing of Junior High School Girls

Name_____ Birthdate_____
                                        Month   Day   Year

Occupation of Father_____

School_____ Grade_____

Date_____

* * * * * *

Most girls want to be attractive. Some girls like to wear the newest style in clothing while others select clothes in which they can have a good time. But being attractive includes more than being pretty and wearing pretty clothes. Would you like to find out what else is included?

Below are some items which relate to the field of clothing. Your school is one which was selected to find out which of these items are of interest to girls in the junior high school grades. Will you help by checking those interests which would be helpful for you to study in your homemaking class this year? Try to mark every item. Work rather rapidly and trust the way you feel about each as you read it. Draw a circle around the letter following the item to indicate how much it interests you.

Key

VM means _____ Very Much
M means _____ Much
L means _____ Little
N means _____ Not at all

Examples:

| 1. Caring for hands and nails | VM M L N |
| 2. Choosing clothes becoming to your figure | VM M L N |

* * * * * *

1. Selecting clothes for special occasions .... VM M L N
2. Maintaining a neat appearance .... VM M L N
3. Study of the latest styles .... VM M L N
4. Learning how to care for my clothes .... VM M L N
5. Using different pieces of sewing equipment .... VM M L N

6. Planning a wardrobe .... VM M L N
7. Selecting colors that are best for me .... VM M L N
8. How a balanced diet affects my weight .... VM M L N
9. How to be more attractive .... VM M L N
10. Washing my sweaters .... VM M L N

11.	Learning to use a sewing machine	VM	M L
12.	Making a plan for the clothes I need	VM	M L
13.	Selecting ankle sox and stockings	VM	M L
14.	Improving my posture	VM	M L
15.	Selecting clothes that other people will like	VM	M L
16.	Caring for a cotton fabric	VM	M L
17.	Preparing a fabric before cutting	VM	M L
18.	Making decisions whether to buy or make a garment	VM	M L
19.	Selecting clothes to wear to school	VM	M L
20.	Controlling or eliminating body odors	VM	M L
21.	Studying fashion magazines such as Vogue	VM	M L
22.	Steps to follow in washing clothes	VM	M L
23.	Making and attaching a collar	VM	M L
24.	How much money to have for a clothes allowance	VM	M L
25.	Choosing accessories to go with an outfit	VM	M L
26.	Manicuring my nails	VM	M L
27.	Studying fashion magazines such as Seventeen	VM	M L
28.	Ironing different types of clothes	VM	M L
29.	Fitting a pattern	VM	M L
30.	Figuring out the cost of a wardrobe	VM	M L
31.	Studying textiles—cotton, silk, wool	VM	M L
32.	Selecting foods for a good complexion	VM	M L
33.	Creating original dress designs	VM	M L
34.	Experimenting with soaps, starches	VM	M L
35.	Using the direction sheet in a commercial pattern	VM	M L
36.	Deciding the most suitable patterns for me to wear	VM	M L
37.	Selecting clothes for my figure type	VM	M L
38.	Selecting the best hair styles for me	VM	M L
39.	Preparing exhibits of dresses and accessories	VM	M L
40.	Patching my clothes	VM	M L
41.	Sewing on buttons and snaps	VM	M L
42.	Studying the quality in ready-made clothes	VM	M L
43.	Combining fabrics of different colors and textures	VM	M L
44.	Sitting gracefully	VM	M L
45.	Manners when shopping	VM	M L
46.	Darning ankle sox	VM	M L
47.	Using different seam finishes	VM	M L
48.	Fitting of garments	VM	M L
49.	Determining the quality of material	VM	M L
50.	Using different kinds of make-up	VM	M L
51.	Choosing clothes that are becoming to me	VM	M L
52.	Caring for woolen clothing	VM	M L
53.	Making buttonholes with the machine	VM	M L
54.	Judging how well my garment is made	VM	M L
55.	Selecting clothes for different seasons	VM	M L

56.	Why cleanliness is important	VM	M	L	N
57.	Effect of colors on me	VM	M	L	N
58.	Removing spots and stains	VM	M	L	N
59.	Taking body measurements	VM	M	L	N
60.	Choosing a suitable pattern for a sewing project	VM	M	L	N
61.	How a fabric is made	VM	M	L	N
62.	Caring for my hair	VM	M	L	N
63.	Careers in the clothing field	VM	M	L	N
64.	Arranging storage space for my clothes	VM	M	L	N
65.	Different ways of finishing hems	VM	M	L	N
66.	Developing a plan of work for making a garment	VM	M	L	N
67.	Studying finishes on fabrics	VM	M	L	N
68.	Caring for my teeth	VM	M	L	N
69.	Making something for my little sister or brother	VM	M	L	N
70.	Daily care of my clothes	VM	M	L	N
71.	Putting in a zipper	VM	M	L	N
72.	Deciding when and what make-up to wear	VM	M	L	N
73.	Selecting bras, panties, slips	VM	M	L	N
74.	Caring for my hands and nails	VM	M	L	N
75.	Choosing clothes that are suitable for things I do	VM	M	L	N
76.	Seasonal care of my clothes	VM	M	L	N
77.	Making a simple skirt	VM	M	L	N
78.	Learning how to work with others when sewing	VM	M	L	N
79.	Determining styles most becoming for me	VM	M	L	N
80.	What to do if my feet hurt	VM	M	L	N
81.	Putting clothes together so they look nice	VM	M	L	N
82.	Caring for clothes made from nylon, dacron	VM	M	L	N
83.	Making a simple blouse	VM	M	L	N
84.	Working independently	VM	M	L	N
85.	Selecting shoes for different occasions	VM	M	L	N
86.	Choosing different kinds of soaps	VM	M	L	N
87.	Planning a simple fashion show	VM	M	L	N
88.	How to let out hems	VM	M	L	N
89.	Doing hand sewing, such as basting	VM	M	L	N
90.	Planning the arrangement of dresser drawers	VM	M	L	N
91.	Characteristics of different fabrics	VM	M	L	N
92.	Making a teen-age grooming check list	VM	M	L	N
93.	Why clothes sell for different prices	VM	M	L	N
94.	How to clean clothes economically	VM	M	L	N
95.	Marking pattern darts, tucks	VM	M	L	N
96.	Selecting a fabric suitable for a certain garment	VM	M	L	N
97.	Selecting a pattern that fits me	VM	M	L	N
98.	Caring for my body during menstrual periods	VM	M	L	N
99.	How clothes affect the way I feel	VM	M	L	N
100.	Caring for my shoes	VM	M	L	N

101. Sewing in sleeves .... VM M L

102. Taking care of a sewing machine .... VM M L

103. Selecting clothes which can be worn for several occasions .... VM M L

104. Ways in which extra hair can be removed .... VM M L

105. Sharing the family clothing budget .... VM M L

106. Caring for rayon articles .... VM M L

107. Making a dress .... VM M L

108. Different types of stores which sell clothes .... VM M L

109. Choosing lip-stick, powder .... VM M L

110. Caring for my skin .... VM M L

111. Understanding why I wish to wear boys clothes .... VM M L

112. Using bleach with clothes .... VM M L

113. Making over a garment .... VM M L

114. Understanding information found on labels .... VM M L

115. Selecting clothes that can be mixed or matched .... VM M L

116. Habits that may spoil my personal appearance .... VM M L

117. Decorating clothes for a pleasing effect .... VM M L

118. Caring for a garment made from silk .... VM M L

119. Matching plaids .... VM M L

120. Buying sewing equipment .... VM M L

Others:

RELATIONSHIP BETWEEN THE DEVELOPMENTAL LEVELS OF EARLY
ADOLESCENT GIRLS AND THEIR INTEREST IN CLOTHING

TABLE 29

ITEM 1: SELECTING CLOTHES FOR SPECIAL OCCASIONS[1]

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	56 (46.33)	43 (46.33)	40 (46.33)	139
Much	39 (34.67)	30 (34.67)	35 (34.67)	104
Little + None	5 (19)	27 (19)	25 (19)	57
Total	100	100	100	300

$$x^2 = 19.87 \qquad p. > .001$$

TABLE 30

ITEM 7: SELECTING COLORS THAT ARE BEST FOR ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	53 (54)	52 (54)	57 (54)	162
Much	40 (32.67)	27 (32.67)	31 (32.67)	98
Little + None	7 (13.33)	21 (13.33)	12 (13.33)	40
Total	100	100	100	300

$$x^2 = 10.52 \qquad p. > .05$$

[1]Items show significant relationships when the
Probabilities of: .05 = 9.49; .01 = 13.28; .001 = 18.46.

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TABLE 31

ITEM 13: SELECTING ANKLE SOX AND STOCKINGS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	23 (16.33)	15 (16.33)	11 (16.33)	49
Much	40 (33.33)	35 (33.33)	25 (33.33)	100
Little + None	37 (50.34)	50 (50.34)	64 (50.34)	151
Total	100	100	100	300

$$x^2 = 15.31 \qquad p. >.01$$

TABLE 32

ITEM 19: SELECTING CLOTHES TO WEAR TO SCHOOL

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	63 (54.33)	58 (54.33)	42 (54.33)	163
Much	25 (29.33)	29 (29.33)	34 (29.33)	88
Little + None	12 (16.34)	13 (16.34)	24 (16.34)	49
Total	100	100	100	300

$$x^2 = 11.24 \qquad p. >.05$$

TABLE 33

ITEM 25: CHOOSING ACCESSORIES TO GO WITH AN OUTFIT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	42 (38.67)	41 (38.67)	33 (38.67)	116
Much	50 (48)	43 (48)	51 (48)	144
Little + None	8 (13.33)	16 (13.33)	16 (13.33)	40
Total	100	100	100	300

$$x^2 = 5.25$$

TABLE 34

ITEM 31: STUDYING TEXTILES--COTTON, SILK, WOOL

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	18 (12.67)	15 (12.67)	5 (12.67)	38
Much	29 (25.33)	20 (25.33)	27 (25.33)	76
Little + None	53 (62)	65 (62)	68 (62)	186
Total	100	100	100	300

$$x^2 = 11.11 \qquad p. > .05$$

TABLE 35

ITEM 37: SELECTING CLOTHES FOR MY FIGURE TYPE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	54 (57.67)	62 (57.67)	57 (57.67	173
Much	41 (33.67)	27 (33.67)	33 (33.67)	101
Little + None	5 (8.66)	11 (8.66)	10 (8.66)	26
Total	100	100	100	300

$$x^2 = 5.88$$

TABLE 36

ITEM 43: COMBINING FABRICS OF DIFFERENT COLORS AND TEXTURES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	28 (24)	24 (24)	20 (24)	72
Much	41 (40.33)	47 (40.33)	33 (40.33)	121
Little + None	31 (35.67)	29 (35.67)	47 (35.67)	107
Total	100	100	100	300

$$x^2 = 9.23$$

TABLE 37

ITEM 49: DETERMINING THE QUALITY OF MATERIAL

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (15.33)	13 (15.33)	12 (15.33)	46
Much	36 (36.33)	36 (36.33)	37 (36.33)	109
Little + None	43 (38.34)	51 (48.34)	51 (48.34)	145
Total	100	100	100	300

$$x^2 = 4.07$$

TABLE 38

ITEM 55: SELECTING CLOTHES FOR DIFFERENT SEASONS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	47 (42.67)	43 (42.67)	38 (42.67)	128
Much	43 (39)	39 (39)	35 (39)	117
Little + None	10 (18.33)	18 (18.33)	27 (18.33)	55
Total	100	100	100	300

$$x^2 = 9.66 \quad p. > .05$$

TABLE 39

ITEM 61: HOW A FABRIC IS MADE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	16 (11.33)	9 (11.33)	9 (11.33)	34
Much	30 (25)	24 (25)	21 (25)	75
Little + None	54 (63.67)	67 (63.67)	70 (63.67)	191
Total	100	100	100	300

$$x^2 = 6.83$$

TABLE 40

ITEM 67: STUDYING FINISHES ON FABRICS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	16 (9.33)	6 (9.33)	6 (9.33)	28
Much	29 (26.67)	26 (26.67)	25 (26.67)	80
Little + None	55 (64)	68 (64)	69 (64)	192
Total	100	100	100	300

$$x^2 = 9.37$$

TABLE 41

ITEM 73: SELECTING BRAS, PANTIES, SLIPS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	42 (30)	28 (30)	20 (30)	90
Much	40 (40.67)	39 (40.67)	43 (40.67)	122
Little + None	18 (29.33)	33 (29.33)	37 (29.33)	88
Total	100	100	100	300

$$x^2 = 15.32 \qquad p. > .01$$

TABLE 42

ITEM 79: DETERMINING STYLES MOST BECOMING TO ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	59 (58)	51 (58)	64 (58)	174
Much	36 (31.67)	36 (31.67)	23 (31.67)	95
Little + None	5 (10.33)	13 (10.33)	13 (10.33)	31
Total	100	100	100	300

$$x^2 = 9.17$$

TABLE 43

ITEM 85: SELECTING SHOES FOR DIFFERENT OCCASIONS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	51 (45.33)	48 (45.33)	37 (45.33)	136
Much	35 (36.33)	38 (36.33)	36 (36.33)	109
Little + None	14 (18.34)	14 (18.34)	27 (18.34)	55
Total	100	100	100	300

$$x^2 = 8.67$$

TABLE 44

ITEM 91: CHARACTERISTICS OF DIFFERENT FABRICS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	14 (9.67)	7 (9.67)	8 (9.67)	29
Much	35 (29.33)	31 (29.33)	22 (29.33)	88
Little + None	51 (61)	62 (61)	70 (61)	183
Total	100	100	100	300

$$x^2 = 8.97$$

TABLE 45

ITEM 97: SELECTING A PATTERN THAT FITS ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	44 (43.67)	42 (43.67)	45 (43.67)	131
Much	37 (34.67)	34 (34.67)	33 (34.67)	104
Little + None	19 (21.66)	24 (21.66)	22 (21.66)	65
Total	100	100	100	300

$$x^2 = .94$$

TABLE 46

ITEM 103: SELECTING CLOTHES WHICH CAN BE WORN FOR SEVERAL
OCCASIONS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	50 (48.67)	50 (48.67)	46 (48.67)	146
Much	40 (37)	33 (37)	38 (37)	111
Little + None	10 (14.33)	17 (14.33)	16 (14.33)	43
Total	100	100	100	300

$$x^2 = 2.92$$

TABLE 47

ITEM 109: CHOOSING LIP-STICK, POWDER

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	51 (56)	60 (56)	57 (56)	168
Much	24 (22)	23 (22)	19 (22)	66
Little + None	25 (22)	17 (22)	24 (22)	66
Total	100	100	100	300

$$x^2 = 3.11$$

TABLE 48

ITEM 115: SELECTING CLOTHES THAT CAN BE MIXED OR MATCHED

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	57 (51)	53 (51)	43 (51)	153
Much	32 (32.67)	33 (32.67)	33 (32.67)	98
Little + None	11 (16.33)	14 (16.33)	24 (16.33)	49
Total	100	100	100	300

$$x^2 = 7.73$$

<u>Grooming</u>

TABLE 49

ITEM 2: MAINTAINING A NEAT APPEARANCE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	70 (59.67)	55 (59.67)	54 (59.67)	179
Much	27 (35)	41 (35)	37 (35)	105
Little + None	3 (5.33)	4 (5.33)	9 (5.33)	16
Total	100	100	100	300

$$x^2 = 9.53 \qquad p. > .05$$

TABLE 50

ITEM 8: HOW A BALANCED DIET AFFECTS MY WEIGHT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	33 (30.33)	31 (30.33)	27 (30.33)	91
Much	38 (38.67)	38 (38.67)	40 (38.67)	116
Little + None	29 (31)	31 (31)	33 (31)	93
Total	100	100	100	300

$$x^2 = .94$$

TABLE 51

ITEM 14:   IMPROVING MY POSTURE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	61 (45.67)	39 (45.67)	37 (45.67)	137
Much	31 (36.67)	37 (36.67)	42 (36.67)	110
Little + None	8 (17.66)	24 (17.66)	21 (17.66)	53
Total	100	100	100	300

$$X^2 = 17.60 \qquad p. > .01$$

TABLE 52

ITEM 20:   CONTROLLING OR ELIMINATING BODY ODORS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	53 (40.33)	35 (40.33)	33 (40.33)	121
Much	36 (35)	35 (35)	34 (35)	105
Little + None	11 (24.67)	30 (24.67)	33 (24.67)	70
Total	100	100	100	300

$$X^2 = 17.60 \qquad p. > .01$$

TABLE 53

ITEM 26:   MANICURING MY NAILS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	50 (41.33)	38 (41.33)	36 (41.33)	124
Much	34 (30.33)	27 (30.33)	30 (30.33)	91
Little + None	16 (28.34)	35 (28.34)	34 (28.34)	85
Total	100	100	100	300

$$X^2 = 11.65 \qquad p. > .05$$

TABLE 54

ITEM 32: SELECTING FOODS FOR A GOOD COMPLEXION

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	50 (49)	47 (49)	50 (49)	147
Much	39 (37.33)	36 (37.33)	37 (37.33)	112
Little + None	11 (13.67)	17 (13.67)	13 (13.67)	41
Total	100	100	100	300

$$x^2 = 1.60$$

TABLE 55

ITEM 38: SELECTING THE BEST HAIR STYLES FOR ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	72 (71.67)	75 (71.67)	68 (71.67)	215
Much	27 (24.33)	17 (24.33)	29 (24.33)	73
Little + None	1 (4)	8 (4)	3 (4)	12
Total	100	100	100	300

$$x^2 = 10.24 \quad p. > .05$$

TABLE 56

ITEM 44: SITTING GRACEFULLY

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	46 (38)	36 (38)	32 (38)	114
Much	41 (38.67)	35 (38.67)	40 (38.67)	116
Little + None	13 (23.33)	29 (23.33)	28 (23.33)	70
Total	100	100	100	300

$$x^2 = 10.15 \quad p. > .05$$

TABLE 57

ITEM 50:   USING DIFFERENT KINDS OF MAKE-UP

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	43 (44.67)	47 (44.67)	44 (44.67)	134
Much	27 (31.67)	31 (31.67)	37 (31.67)	95
Little + None	30 (23.66)	22 (23.66)	19 (23.66)	71
Total	100	100	100	300

$$x^2 = 4.52$$

TABLE 58

ITEM 56: WHY CLEANLINESS IS IMPORTANT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	58 (42.67)	41 (42.67)	29 (42.67)	128
Much	35 (31.67)	27 (31.67)	33 (31.67)	95
Little + None	7 (25.66)	32 (25.66)	38 (25.66)	77
Total	100	100	100	300

$$x^2 = 32.11 \quad p. > .001$$

TABLE 59

ITEM 62:   CARING FOR MY HAIR

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	76 (69.67)	69 (69.67)	64 (69.67)	209
Much	19 (23.33)	25 (23.33)	26 (23.33)	70
Little + None	5 (7)	6 (7)	10 (7)	21
Total	100	100	100	300

$$x^2 = 4.26$$

TABLE 60

ITEM 68: CARING FOR MY TEETH

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	58 (46)	42 (46)	38 (46)	138
Much	29 (34)	37 (34)	36 (34)	102
Little + None	13 (20)	21 (20)	26 (20)	60
Total	100	100	100	300

$$x^2 = 10.28 \quad p. > .05$$

TABLE 61

ITEM 74: CARING FOR MY HANDS AND NAILS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	57 (47)	41 (47)	43 (47)	141
Much	33 (35)	37 (35)	35 (35)	105
Little + None	10 (18)	22 (18)	22 (18)	54
Total	100	100	100	300

$$x^2 = 8.79$$

TABLE 62

ITEM 80: WHAT TO DO IF MY FEET HURT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	24 (14.67)	11 (14.67)	9 (14.67)	44
Much	31 (30)	28 (30)	31 (30)	90
Little + None	45 (55.33)	61 (55.33)	60 (55.33)	166
Total	100	100	100	300

$$x^2 = 12.14 \quad p. > .05$$

TABLE 63

ITEM 86: CHOOSING DIFFERENT KINDS OF SOAPS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	35 (30.67)	31 (30.67)	26 (30.67)	92
Much	29 (32.33)	28 (32.33)	40 (32.33)	97
Little + None	36 (37)	41 (37)	34 (37)	111
Total	100	100	100	300

$$x^2 = 4.77$$

TABLE 64

ITEM 92: MAKING A TEEN-AGE GROOMING CHECK LIST

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	35 (35.67)	33 (35.67)	39 (35.67)	107
Much	36 (29)	28 (29)	23 (29)	87
Little + None	29 (35.33)	39 (35.33)	38 (35.33)	106
Total	100	100	100	300

$$x^2 = 5.20$$

TABLE 65

ITEM 98: CARING FOR MY BODY DURING MENSTRUAL PERIODS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	62 (49)	44 (49)	41 (49)	147
Much	30 (30)	31 (30)	29 (30)	90
Little + None	8 (21)	25 (21)	30 (21)	63
Total	100	100	100	300

$$x^2 = 17.99 \quad p. > .01$$

TABLE 66

ITEM 104: WAYS IN WHICH EXTRA HAIR CAN BE REMOVED

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	44 (36.33)	31 (36.33)	34 (36.33)	109
Much	27 (30.67)	34 (30.67)	31 (30.67)	92
Little + None	29 (33)	35 (33)	35 (33)	99
Total	100	100	100	300

$$x^2 = 4.03$$

TABLE 67

ITEM 110: CARING FOR MY SKIN

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	69 (67.33)	66 (67.33)	67 (67.33)	202
Much	23 (22.67)	23 (22.67)	22 (22.67)	68
Little + None	8 (10)	11 (10)	11 (10)	30
Total	100	100	100	300

$$x^2 = .69$$

TABLE 68

ITEM 116: HABITS THAT SPOIL MY PERSONAL APPEARANCE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	65 (65.33)	64 (65.33)	67 (65.33)	196
Much	26 (26.67)	28 (26.67)	26 (26.67)	80
Little + None	9 (8)	8 (8)	7 (8)	24
Total	100	100	100	300

$$x^2 = .42$$

Sociological Aspects

TABLE 69

ITEM 3: STUDY OF THE LATEST STYLES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	25 (24)	28 (24)	19 (24)	72
Much	40 (37.67)	33 (37.67)	40 (37.67)	113
Little + None	35 (38.33)	39 (38.33)	41 (38.33)	115
Total	100	100	100	300

$$x^2 = 3.10$$

TABLE 70

ITEM 9: HOW TO BE MORE ATTRACTIVE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	70 (70.33)	72 (70.33)	69 (70.33)	211
Much	26 (23.67)	19 (23.67)	26 (23.67)	71
Little + None	4 (6)	9 (6)	5 (6)	18
Total	100	100	100	300

$$x^2 = 3.77$$

TABLE 71

ITEM 15: SELECTING CLOTHES THAT OTHER PEOPLE WILL LIKE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	45 (42.67)	42 (42.67)	41 (42.67)	128
Much	41 (35.33)	32 (35.33)	33 (35.33)	106
Little + None	14 (22)	26 (22)	26 (22)	66
Total	100	100	100	300

$$x^2 = 5.94$$

TABLE 72

ITEM 21: STUDYING FASHION MAGAZINES SUCH AS VOGUE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	23 (23)	22 (23)	24 (23)	69
Much	26 (31.33)	33 (31.33)	35 (31.33)	94
Little + None	51 (45.67)	45 (45.67)	41 (45.67)	137
Total	100	100	100	300

$$x^2 = 2.62$$

TABLE 73

ITEM 27: STUDYING FASHION MAGAZINES SUCH AS SEVENTEEN

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	33 (36.67)	40 (36.67)	37 (36.67)	110
Much	36 (31.67)	31 (31.67)	28 (31.67)	95
Little + None	31 (31.66)	29 (31.66)	35 (31.66)	95
Total	100	100	100	300

$$x^2 = 2.29$$

TABLE 74

ITEM 33: CREATING ORIGINAL DRESS DESIGNS

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	31 (31)	27 (31)	35 (31)	93
Much	37 (29.33)	23 (29.33)	28 (29.33)	88
Little + None	32 (39.67)	50 (39.67)	37 (39.67)	119
Total	100	100	100	300

$$x^2 = 8.81$$

TABLE 75

ITEM 39: PREPARING EXHIBITS OF DRESSES AND ACCESSORIES

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	33 (21.33)	14 (21.33)	17 (21.33)	64
Much	38 (38.67)	42 (38.67)	36 (38.67)	116
Little + None	29 (40)	44 (40)	47 (40)	120
Total	100	100	100	300

$$x^2 = 14.91 \quad p. > .01$$

TABLE 76

ITEM 45: MANNERS WHEN SHOPPING

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	44 (32.33)	30 (32.33)	23 (32.33)	97
Much	41 (37.67)	37 (37.67)	35 (37.67)	113
Little + None	15 (30)	33 (30)	42 (30)	90
Total	100	100	100	300

$$x^2 = 20.16 \quad p. > .001$$

TABLE 77

ITEM 51:   CHOOSING CLOTHES THAT ARE BECOMING TO ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	69 (65.33)	63 (65.33)	64 (65.33	196
Much	27 (28)	30 (28)	27 (28)	84
Little + None	4 (6.67)	7 (6.67)	9 (6.67)	20
Total	100	100	100	300

$$x^2 = 2.42$$

TABLE 78

ITEM 57: EFFECT OF COLORS ON ME

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	51 (49.33)	49 (49.33)	48 (49.33)	148
Much	41 (37.67)	35 (37.67)	37 (37.67)	113
Little + None	8 (13)	16 (13)	15 (13)	39
Total	100	100	100	300

$$x^2 = 3.51$$

TABLE 79

ITEM 63:   CAREERS IN THE CLOTHING FIELD

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	19 (17.33)	15 (17.33)	18 (17.33)	52
Much	30 (24.33)	27 (24.33)	16 (24.33)	73
Little + None	51 (58.34)	58 (58.34)	66 (58.34)	175
Total	100	100	100	300

$$x^2 = 6.89$$

TABLE 80

ITEM 69: MAKING SOMETHING FOR MY LITTLE SISTER OR BROTHER

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	39 (32.67)	35 (32.67)	24 (32.67)	98
Much	29 (29)	28 (29)	30 (29)	87
Little + None	32 (38.33)	37 (38.33)	46 (38.33)	115
Total	100	100	100	300

$$x^2 = 6.38$$

TABLE 81

ITEM 75: CHOOSING CLOTHES THAT ARE SUITABLE FOR THE THINGS I DO

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	52 (50.67)	53 (50.67)	47 (50.67)	152
Much	39 (36)	34 (36)	35 (36)	108
Little + None	9 (13.33)	13 (13.33)	18 (13.33)	40
Total	100	100	100	300

$$x^2 = 3.84$$

TABLE 82

ITEM 81: PUTTING CLOTHES TOGETHER SO THEY LOOK NICE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	61 (56.67)	58 (56.67)	51 (56.67)	170
Much	33 (31.33)	29 (31.33)	32 (31.33)	94
Little + None	6 (12)	13 (12)	17 (12)	36
Total	100	100	100	300

$$x^2 = 6.37$$

TABLE 83

ITEM 87: PLANNING A SIMPLE FASHION SHOW

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	34 (31.33)	30 (31.33)	30 (31.33)	94
Much	29 (23.67)	20 (23.67(	22 (23.67)	71
Little + None	37 (45)	50 (45)	48 (45)	135
Total	100	100	100	300

$$x^2 = 4.40$$

TABLE 84

ITEM 93: WHY CLOTHES SELL FOR DIFFERENT PRICES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (17)	19 (17)	11 (17)	51
Much	38 (34.33)	28 (34.33)	37 (34.33)	103
Little + None	41 (48.67)	53 (48.67)	52 (48.67)	146
Total	100	100	100	300

$$x^2 = 6.38$$

TABLE 85

ITEM 99: HOW CLOTHES AFFECT THE WAY I FEEL

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	49 (42.67)	43 (42.67)	36 (42.67)	128
Much	34 (35.33)	35 (35.33)	37 (35.33)	106
Little + None	17 (22)	22 (22)	27 (22)	66
Total	100	100	100	300

$$x^2 = 4.39$$

TABLE 86

ITEM 105:   SHARING THE FAMILY CLOTHING BUDGET

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	30 (24.33)	24 (24.33)	19 (24.33)	73
Much	42 (38)	35 (38)	37 (38)	114
Little + None	28 (37.67)	41 (37.67)	44 (37.67)	113
Total	100	100	100	300

$$x^2 = 7.01$$

TABLE 87

ITEM 111:   UNDERSTANDING WHY I WISH TO WEAR BOYS CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	25 (23.67)	25 (23.67)	21 (23.67)	71
Much	31 (28)	27 (28)	26 (28)	84
Little + None	44 (48.33)	48 (48.33)	53 (48.33)	145
Total	100	100	100	300

$$x^2 = 1.78$$

TABLE 88

ITEM 117:   DECORATING CLOTHES FOR A PLEASING EFFECT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	45 (43.67)	46 (43.67)	40 (43.67)	131
Much	45 (37.33)	32 (37.33)	35 (37.33)	112
Little + None	10 (19)	22 (19)	25 (19)	57
Total	100	100	100	300

$$x^2 = 9.58 \quad p. > .05$$

<u>Care</u>

TABLE 89

ITEM 4:   LEARNING HOW TO CARE FOR MY CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	46 (36)	35 (36)	27 (36)	108
Much	44 (40)	36 (40)	40 (40)	120
Little + None	10 (24)	29 (24)	33 (24)	72
Total	100	100	100	300

$$x^2 = 13.44 \quad p. > .01$$

TABLE 90

ITEM 10:   WASHING MY SWEATERS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	25 (16)	11 (16)	12 (16)	48
Much	43 (42)	44 (42)	39 (42)	126
Little + None	32 (42)	45 (42)	49 (42)	126
Total	100	100	100	300

$$x^2 = 11.72 \quad p. > .05$$

139

TABLE 91

ITEM 16: CARING FOR A COTTON FABRIC

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	18 (12)	5 (12)	13 (12)	36
Much	39 (32.33)	35 (32.33)	23 (32.33)	97
Little + None	43 (55.67)	60 (55.67)	64 (55.67)	167
Total	100	100	100	300

$$x^2 = 15.92 \quad \text{p.} \quad > .01$$

TABLE 92

ITEM 22: STEPS TO FOLLOW IN WASHING CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	19 (14.33)	15 (14.33)	9 (14.33)	43
Much	44 (38)	39 (38)	31 (38)	114
Little + None	37 (47.67)	46 (47.67)	60 (47.67)	143
Total	100	100	100	300

$$x^2 = 11.43 \quad \text{p.} \quad > .05$$

TABLE 93

ITEM 23: IRONING DIFFERENT TYPES OF CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	40 (25.67)	21 (25.67)	16 (25.67)	77
Much	35 (39.33)	42 (39.33)	41 (39.33)	118
Little + None	25 (35)	37 (35)	43 (35)	105
Total	100	100	100	300

$$x^2 = 18.02 \quad \text{p.} \quad > .01$$

TABLE   94

ITEM 34:   EXPERIMENTING WITH SOAPS, STARCHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	16 (11.33)	9 (11.33)	9 (11.33)	34
Much	38 (30)	29 (30)	23 (30)	90
Little + None	46 (58.67)	62 (58.67)	68 (58.67)	176
Total	100	100	100	300

$$x^2 = 11.09 \qquad p. > .05$$

TABLE   95

ITEM 46: DARNING ANKLE SOX

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	13 (9.67)	10 (9.67)	6 (9.67)	29
Much	30 (27)	25 (27)	26 (27)	81
Little + None	57 (63.33)	65 (63.33)	68 (63.33)	190
Total	100	100	100	300

$$x^2 = 4.09$$

TABLE   96

ITEM 40: PATCHING MY CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	15 (10)	7 (10)	8 (10)	30
Much	40 (37.67)	42 (37.67)	31 (37.67)	113
Little + None	45 (52.33)	51 (52.33)	61 (52.33)	157
Total	100	100	100	300

$$x^2 = 8.12$$

TABLE 97

ITEM 52:   CARING FOR WOOLEN CLOTHING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	25 (21.67)	19 (21.67)	21 (21.67)	65
Much	44 (41)	42 (41)	37 (41)	123
Little + None	31 (37.33)	39 (37.33)	42 (37.33)	112
Total	100	100	100	300

$x^2 = 3.22$

TABLE 98

ITEM 58: REMOVING SPOTS AND STAINS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	23 (21.67)	21 (21.67)	21 (21.67)	65
Much	44 (38.67)	40 (38.67)	32 (38.67)	116
Little + None	33 (39.66)	39 (39.66)	47 (39.66)	119
Total	100	100	100	300

$x^2 = 4.54$

TABLE 99

ITEM 64:   ARRANGING STORAGE SPACE FOR MY CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	28 (24)	24 (24)	20 (24)	72
Much	47 (35.67)	33 (35.67)	27 (35.67)	107
Little + None	25 (40.33)	43 (40.33)	53 (40.33)	121
Total	100	100	100	300

$x^2 = 17.22$ p. $> .01$

TABLE 100

ITEM 70: DAILY CARE OF MY CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	41 (35)	32 (35)	32 (35)	105
Much	49 (43)	40 (43)	40 (43)	129
Little + None	10 (22)	28 (22)	28 (22)	66
Total	100	100	100	300

$$X^2 = 12.61 \qquad p. > .05$$

TABLE 101

ITEM 76: SEASONAL CARE OF MY CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	34 (30.67)	30 (30.67)	28 (30.67)	92
Much	45 (42)	40 (42)	41 (42)	126
Little + None	21 (27.33)	30 (27.33)	31 (27.33)	82
Total	100	100	100	300

$$X^2 = 3.16$$

TABLE 102

ITEM 82: CARING FOR CLOTHES MADE FROM NYLON, DACRON

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	35 (25.67)	24 (25.67)	18 (25.67)	77
Much	43 (39.33)	39 (39.33)	36 (39.33)	118
Little + None	22 (35)	37 (35)	46 (35)	105
Total	100	100	100	300

$$X^2 = 14.81 \qquad p. > 01$$

TABLE 103

ITEM 88:   HOW TO LET OUT HEMS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	24 (17.33)	17 (17.33)	11 (17.33)	52
Much	32 (29.33)	29 (29.33)	27 (29.33)	88
Little + None	44 (53.34)	54 (53.34)	62 (53.34)	160
Total	100	100	100	300

$$x^2 = 8.36$$

TABLE 104

ITEM 94:   HOW TO CLEAN CLOTHES ECONOMICALLY

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	22 (22)	23 (22)	21 (22)	66
Much	40 (39.33)	37 (39.33)	41 (39.33)	118
Little + None	38 (38.67)	40 (38.67)	38 (38.67)	116
Total	100	100	100	300

$$x^2 = .38$$

TABLE 105

ITEM 100:   CARING FOR MY SHOES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	38 (29.33)	31 (29.33)	19 (29.33)	88
Much	45 (39.33)	29 (39.33)	44 (39.33)	118
Little + None	17 (31.34)	40 (31.34)	37 (31.34)	94
Total	100	100	100	300

$$x^2 = 20.35 \quad p. > .001$$

TABLE 106

ITEM 106:   CARING FOR RAYON ARTICLES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	20 (13.67)	14 (13.67)	7 (13.67)	41
Much	40 (33.67)	32 (33.67)	29 (33.67)	101
Little + None	40 (52.66)	54 (52.66)	64 (52.66)	158
Total	100	100	100	300

$$x^2 = 13.63 \quad p. > .01$$

TABLE 107

ITEM 112:   USING BLEACH WITH CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	20 (14)	12 (14)	10 (14)	42
Much	41 (38.33)	39 (38.33)	35 (38.33)	115
Little + None	39 (47.67)	49 (47.67)	55 (47.67)	143
Total	100	100	100	300

$$x^2 = 7.22$$

TABLE 108

ITEM 118:   CARING FOR A GARMENT MADE FROM SILK

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	29 (18.67)	16 (18.67)	11 (18.67)	56
Much	34 (30.67)	27 (30.67)	31 (30.67)	92
Little + None	37 (50.66)	57 (50.66)	58 (50.66)	152
Total	100	100	100	300

$$x^2 = 15.59 \quad p. > .01$$

TABLE 109

ITEM 5:   USING DIFFERENT PIECES OF SEWING EQUIPMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	27 (27.33)	32 (27.33)	23 (27.33)	82
Much	46 (36.67)	33 (36.67)	31 (36.67)	110
Little + None	27 (36)	35 (36)	46 (36)	108
Total	100	100	100	300

$$x^2 = 10.16 \qquad p. > .05$$

TABLE 110

ITEM 11:   LEARNING TO USE A SEWING MACHINE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	36 (37)	45 (37)	30 (37)	111
Much	38 (35.67)	34 (35.67)	35 (35.67)	107
Little + None	26 (27.33)	21 (27.33)	35 (27.33)	82
Total	100	100	100	300

$$x^2 = 7.00$$

TABLE 111

ITEM 17:   PREPARING A FABRIC BEFORE CUTTING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	25 (20.33)	14 (20.33)	22 (20.33)	61
Much	41 (36.33)	36 (36.33)	32 (36.33)	109
Little + None	34 (43.34)	50 (43.34)	46 (43.34)	130
Total	100	100	100	300

$$x^2 = 7.50$$

TABLE 112

ITEM 23:   MAKING AND ATTACHING A COLLAR

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (19.67)	18 (19.67)	20 (19.67)	59
Much	31 (31.67)	36 (31.67)	28 (31.67)	95
Little + None	48 (48.66)	46 (48.66)	52 (48.66)	146
Total	100	100	100	300

$$x^2 = 1.65$$

TABLE 113

ITEM 29:   FITTING A PATTERN

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	36 (31.33)	28 (31.33)	30 (31.33)	94
Much	29 (29.33)	24 (29.33)	36 (29.33)	88
Little + None	36 (39.34)	48 (39.34)	34 (39.34)	118
Total	100	100	100	300

$$x^2 = 6.56$$

TABLE 114

ITEM 35: USING THE DIRECTION SHEET IN A COMMERCIAL PATTERN

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	18 (21)	22 (21)	23 (21)	63
Much	40 (36.33)	38 (36.33)	31 (36.33)	109
Little + None	42 (42.67)	40 (42.67)	46 (42.67)	128
Total	100	100	100	300

$$x^2 = 2.33$$

TABLE 115

ITEM 41: SEWING ON BUTTONS AND SNAPS

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	21 (12.67)	10 (12.67)	7 (12.67)	38
Much	39 (27.33)	27 (27.33)	16 (27.33)	82
Little + None	40 (60)	63 (60)	77 (60)	180
Total	100	100	100	300

$$x^2 = 29.89 \quad p. > .001$$

TABLE 116

ITEM 47: USING DIFFERENT SEAM FINISHES

| Degree of Interest | Developmental Levels of Early Adolescent Girls | | | |
	I	II	III	
Very Much	22 (16)	9 (16)	17 (16)	48
Much	32 (30.67)	32 (30.67)	28 (30.67)	92
Little + None	46 (53.33)	59 (53.33)	55 (53.33)	160
Total	100	100	100	300

$$x^2 = 7.38$$

TABLE 117

ITEM 53: MAKING BUTTONHOLES WITH THE MACHINE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	18 (22)	25 (22)	23 (22)	66
Much	35 (31.33)	32 (31.33)	27 (31.33)	94
Little + None	47 (46.67)	43 (46.67)	50 (46.67)	140
Total	100	100	100	300

$$x^2 = 2.75$$

TABLE 118

ITEM 59: TAKING BODY MEASUREMENTS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	32 (22)	20 (22)	14 (22)	66
Much	44 (37)	32 (37)	35 (37)	111
Little + None	24 (41)	48 (41)	51 (41)	123
Total	100	100	100	300

$$x^2 = 20.42 \qquad p. > .001$$

TABLE 119

ITEM 65: DIFFERENT WAYS OF FINISHING HEMS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (17)	14 (17)	16 (17)	51
Much	35 (30.33)	27 (30.33)	29 (30.33)	91
Little + None	44 (52.67)	59 (52.67)	55 (52.67)	158
Total	100	100	100	300

$$x^2 = 4.96$$

TABLE 120

ITEM 71:   PUTTING IN A ZIPPER

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (21.67)	19 (21.67)	25 (21.67)	65
Much	34 (36.33)	37 (36.33)	38 (36.33)	109
Little + None	45 (42)	44 (42)	37 (42)	126
Total	100	100	100	300

$$x^2 = 2.00$$

TABLE 121

ITEM 77: MAKING A SIMPLE SKIRT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	38 (39)	47 (39)	32 (39)	117
Much	40 (36)	31 (36)	37 (36)	108
Little + None	22 (25)	22 (25)	31 (25)	75
Total	100	100	100	300

$$x^2 = 6.25$$

TABLE 122

ITEM 83:   MAKING A SIMPLE BLOUSE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	37 (38)	43 (38)	34 (38)	114
Much	29 (34.33)	32 (34.33)	42 (34.44)	103
Little + None	34 (27.67)	25 (27.67)	24 (27.67)	83
Total	100	100	100	300

$$x^2 = 5.99$$

TABLE 123

ITEM 89: DOING HAND SEWING, SUCH AS BASTING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	24 (18.33)	16 (18.33)	15 (18.33)	55
Much	34 (31)	35 (31)	24 (31)	93
Little + None	42 (50.67)	49 (50.67)	61 (50.67)	152
Total	100	100	100	300

$$x^2 = 8.68$$

TABLE 124

ITEM 95: MARKING PATTERN DARTS, TUCKS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	22 (25.67)	27 (25.67)	28 (25.67)	77
Much	38 (33.33)	31 (33.33)	31 (33.33)	100
Little + None	40 (41)	42 (41)	41 (41)	123
Total	100	100	100	300

$$x^2 = 1.83$$

TABLE 125

ITEM 101: SEWING IN SLEEVES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	20 (26)	28 (26)	30 (26)	78
Much	31 (30.67)	32 (30.67)	29 (30.67)	92
Little + None	49 (43.33)	40 (43.33)	41 (43.33)	130
Total	100	100	100	300

$$x^2 = 3.42$$

TABLE 126

ITEM 107: MAKING A DRESS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	48 (49.33)	53 (49.33)	47 (49.33)	148
Much	24 (25.67)	24 (25.67)	29 (25.67)	77
Little + None	28 (25)	23 (25)	24 (25)	75
Total	100	100	100	300

$$x^2 = 1.62$$

TABLE 127

ITEM 113: MAKING OVER A GARMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	29 (24)	23 (24)	20 (24)	72
Much	33 (32)	29 (32)	34 (32)	96
Little + None	38 (44)	48 (44)	46 (44)	132
Total	100	100	100	300

$$x^2 = 3.46$$

TABLE 128

ITEM 119: MATCHING PLAIDS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	46 (40.33)	39 (40.33)	36 (40.33)	121
Much	36 (33.33)	30 (33.33)	34 (33.33)	100
Little + None	18 (26.34)	31 (26.34)	30 (26.34)	79
Total	100	100	100	300

$$x^2 = 5.84$$

TABLE 129

ITEM 6:   PLANNING A WARDROBE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	44 (49.33)	53 (49.33)	51 (49.33)	148
Much	43 (33.33)	29 (33.33)	28 (33.33)	100
Little + None	13 (17.34)	18 (17.34)	21 (17.34)	52
Total	100	100	100	300

$$x^2 = 7.01$$

TABLE 130

ITEM 12:   MAKING A PLAN FOR THE CLOTHES I NEED

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	42 (35)	30 (35)	33 (35)	105
Much	40 (42.33)	49 (42.33)	38 (42.33)	127
Little + None	18 (22.67)	21 (22.67)	29 (22.67)	68
Total	100	100	100	300

$$x^2 = 6.70$$

TABLE 131

ITEM 18:   MAKING DECISIONS WHETHER TO BUY OR MAKE A GARMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	64 (54.67)	58 (54.67)	42 (54.67)	164
Much	24 (29)	29 (29)	34 (29)	87
Little + None	12 (16.33)	13 (16.33)	24 (16.33)	49
Total	100	100	100	300

$$x^2 = 11.88 \quad p. > .05$$

TABLE 132

ITEM 24:   HOW MUCH MONEY TO HAVE FOR A CLOTHES ALLOWANCE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	39 (39.33)	47 (39.33)	32 (39.33)	118
Much	26 (29.67)	30 (29.67)	33 (29.67)	89
Little + None	35 (31)	23 (31)	35 (31)	93
Total	100	100	100	300

$$x^2 = 6.79$$

TABLE 133

ITEM 30:   FIGURING OUT THE COST OF A WARDROBE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	42 (33.33)	28 (33.33)	30 (33.33)	100
Much	34 (34.67)	38 (34.67)	32 (34.67)	104
Little + None	24 (32)	34 (32)	38 (32)	96
Total	100	100	100	300

$$x^2 = 7.23$$

TABLE 134

ITEM 36: DECIDING THE MOST SUITABLE PATTERNS FOR ME TO WEAR

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	47 (46.33)	50 (46.33)	42 (46.33)	139
Much	36 (34.33)	31 (34.33)	36 (34.33)	103
Little + None	17 (19.34)	19 (19.34)	22 (19.34)	58
Total	100	100	100	300

$$x^2 = 1.84$$

TABLE 135

ITEM 42: STUDYING THE QUALITY IN READY-MADE CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	23 (17.67)	15 (17.67)	15 (17.67)	53
Much	39 (36)	37 (36)	32 (36)	108
Little + None	38 (46.33)	48 (46.33)	53 (46.33)	139
Total	100	100	100	300

$$x^2 = 5.65$$

TABLE 136

ITEM 48: FITTING OF GARMENTS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	32 (28)	29 (28)	23 (28)	84
Much	49 (44)	38 (44)	45 (44)	132
Little + None	19 (28)	33 (28)	32 (28)	84
Total	100	100	100	300

$$x^2 = 7.26$$

TABLE 137

ITEM 54:   JUDGING HOW WELL MY GARMENT IS MADE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	26 (18.67)	11 (18.67)	19 (18.67)	56
Much	40 (39)	40 (39)	37 (39)	117
Little + None	34 (42.33)	49 (42.33)	44 (42.33)	127
Total	100	100	100	300

$$x^2 = 8.94$$

TABLE 138

ITEM 60:   CHOOSING A SUITABLE PATTERN FOR A SEWING PROJECT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	34 (28.67)	27 (28.67)	25 (28.67)	86
Much	35 (37.67)	39 (37.67)	39 (37.67)	113
Little + None	31 (33.66)	34 (33.66)	36 (33.66)	101
Total	100	100	100	300

$$x^2 = 2.21$$

TABLE 139

ITEM 66:   DEVELOPING A PLAN OF WORK FOR MAKING A GARMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	23 (18)	13 (18)	18 (18)	54
Much	37 (33.33)	33 (33.33)	30 (33.33)	100
Little + None	40 (48.67)	54 (48.67)	52 (48.67)	146
Total	100	100	100	300

$$x^2 = 5.37$$

TABLE 140

ITEM 72: DECIDING WHEN AND WHAT MAKE--UP TO WEAR

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	61 (54.67)	51 (54.67)	52 (54.67)	164
Much	19 (23.67)	27 (23.67)	25 (23.67)	71
Little + None	20 (21.66)	22 (21.66)	23 (21.66)	65
Total	100	100	100	300

$$x^2 = 2.79$$

TABLE 141

ITEM 78: LEARNING HOW TO WORK WITH OTHERS WHEN SEWING

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	31 (26.33)	26 (26.33)	22 (26.33)	79
Much	43 (42.33)	40 (42.33)	44 (42.33)	127
Little + None	26 (31.34)	34 (31.34)	34 (31.34)	94
Total	100	100	100	300

$$x^2 = 3.11$$

TABLE 142

ITEM 84: WORKING INDEPENDENTLY

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	27 (25.33)	25 (25.33)	24 (25.33)	76
Much	52 (45.33)	41 (45.33)	43 (45.33)	136
Little + None	21 (29.34)	34 (29.34)	33 (29.34)	88
Total	100	100	100	300

$$x^2 = 5.26$$

TABLE 143

ITEM 90: PLANNING THE ARRANGEMENT OF DRESSER DRAWERS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	35 (29.34)	29 (29.34)	24 (29.34)	88
Much	34 (29.33)	28 (29.33)	26 (29.33)	88
Little + None	31 (41.33)	43 (41.33)	50 (41.33)	124
Total	100	100	100	300

$$x^2 = 7.71$$

TABLE 144

ITEM 96: SELECTING A FABRIC SUITABLE FOR A CERTAIN GARMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	32 (31.67)	27 (31.67)	36 (31.67)	95
Much	44 (35.33)	35 (35.33)	27 (35.33)	106
Little + None	24 (33)	38 (33)	37 (33)	99
Total	100	100	100	300

$$x^2 = 9.07$$

TABLE 145

ITEM 102: TAKING CARE OF A SEWING MACHINE

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	24 (20.67)	24 (20.67)	14 (20.67)	62
Much	37 (31.33)	26 (31.33)	31 (31.33)	94
Little + None	39 (48)	50 (48)	55 (48)	144
Total	100	100	100	300

$$x^2 = 7.95$$

TABLE 146

ITEM 108: DIFFERENT TYPES OF STORES WHICH SELL CLOTHES

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	21 (24.33)	27 (24.33)	25 (24.33)	73
Much	42 (32.67)	30 (32.67)	26 (32.67)	98
Little + None	37 (43)	43 (43)	49 (43)	129
Total	100	100	100	300

$$x^2 = 6.63$$

TABLE 147

ITEM 114: UNDERSTANDING INFORMATION FOUND ON LABELS

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	15 (16.33)	21 (16.33)	13 (16.33)	49
Much	44 (34.33)	33 (34.33)	26 (34.33)	103
Little + None	41 (49.34)	46 (49.34)	61 (49.34)	148
Total	100	100	100	300

$$x^2 = 11.31 \quad p. > .05$$

TABLE 148

ITEM 120: BUYING SEWING EQUIPMENT

Degree of Interest	Developmental Levels of Early Adolescent Girls			
	I	II	III	
Very Much	34 (23.33)	17 (23.33)	19 (23.33)	70
Much	29 (32)	38 (32)	29 (32)	96
Little + None	37 (44.67)	45 (44.67)	52 (44.67)	134
Total	100	100	100	300

$$x^2 = 11.61 \quad p. > .05$$

RELATIONSHIP BETWEEN OCCUPATIONAL GROUPINGS OF
EARLY ADOLESCENT GIRLS AND THEIR INTEREST
IN CLOTHING
Selection

TABLE 149

ITEM 1: SELECTING CLOTHES FOR SPECIAL OCCASIONS[1]

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P*	15 (14)	10 (11)	25	10 (10.75)	15 (14.25)	25	10 (10)	15 (15)	25
S	14 (14)	11 (11)	25	13 (10.75)	12 (14.25)	25	8 (10)	17 (15)	25
U	12 (14)	13 (11)	25	8 (10.75)	17 (14.25)	25	9 (10)	16 (15)	25
F	15 (14)	10 (11)	25	12 (10.75)	13 (14.25)	25	13 (10)	12 (15)	25
Total	56	44	100	43	57	100	40	60	100
	X^2 = .645			X^2 = 2.403			X^2 = 2.332		

TABLE 150

ITEM 7: SELECTING COLORS THAT ARE BEST FOR ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	16 (13.25)	9 (11.75)	25	12 (13)	13 (12)	25	11 (14.25)	14 (10.75)	25
S	7 (13.25)	18 (11.75)	25	15 (13)	10 (12)	25	17 (14.25)	8 (10.75)	25
U	14 (13.25)	11 (11.75)	25	10 (13)	15 (12)	25	12 (14.25)	13 (10.75)	25
F	16 (13.25)	9 (11.75)	25	15 (13)	10 (12)	25	17 (14.25)	8 (10.75)	25
Total	53	47	100	52	48	100	57	43	100
	X^2 = 8.767 p. >.05			X^2 = 2.881			X^2 = 5.014		

[1]Items show significant relationships when the
probabilities of: .05 = 7.82; .01 = 11.34; and .001 = 16.27

*Key: P = Professional; S = Skilled; U = Semi-
Unskilled; and F = Farming.

TABLE 151

ITEM 13: SELECTING ANKLE SOX AND STOCKINGS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	12 (15.75)	13 (9.25)	25	9 (12.5)	16 (12.5)	25	8 (9)	17 (17)	25
S	17 (15.75)	8 (9.25)	25	12 (12.5)	13 (12.5)	25	2 (9)	23 (17)	25
U	18 (15.75)	7 (9.25)	25	12 (12.5)	13 (12.5)	25	13 (9)	12 (17)	25
F	16 (15.75)	9 (9.25)	25	17 (12.5)	8 (12.5)	25	13 (9)	12 (17)	25
Total	63	37	100	50	50	100	36	64	100

$$x^2 = .3334 \qquad x^2 = 5.28 \qquad x^2 = 14.233 \; p. \; .01$$

TABLE 152

ITEM 19: SELECTING CLOTHES TO WEAR TO SCHOOL

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	18 (15.75)	7 (9.25)	25	9 (14.5)	16 (10.5)	25	13 (10.5)	12 (14.5)	25
S	11 (15.75)	14 (9.25)	25	15 (14.5)	10 (10.5)	25	6 (10.5)	19 (14.5)	25
U	17 (15.75)	8 (9.25)	25	16 (14.5)	9 (10.5)	25	9 (10.5)	16 (14.5)	25
F	17 (15.75)	8 (9.25)	25	18 (14.5)	7 (10.5)	25	14 (10.5)	11 (14.5)	25
Total	63	37	100	58	42	100	42	58	100

$$x^2 = .5432 \qquad x^2 = 7.385 \; p. \; <.05 \qquad x^2 = 6.729$$

*High includes both very much and much for degree of interest

TABLE 153

ITEM 25: CHOOSING ACCESSORIES TO GO WITH AN OUTFIT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (10.5)	12 (14.5)	25	8 (10.25)	17 (14.75)	25	7 (8.25)	18 (16.75)	25
S	9 (10.5)	16 (14.5)	25	10 (10.25)	15 (14.75)	25	8 (8.25)	17 (16.75)	25
U	9 (10.5)	16 (14.5)	25	12 (10.25)	13 (14.75)	25	4 (8.25)	21 (16.75)	25
F	11 (10.5)	14 (14.5)	25	11 (10.25)	14 (14.75)	25	14 (8.25)	11 (16.75)	25
Total	42	58	100	41	59	100	33	67	100

$$x^2 = 1.804 \qquad x^2 = 1.443 \qquad x^2 = 9.539 \quad p.>.05$$

TABLE 154

ITEM 31: STUDYING TEXTILES--COTTON, SILK, WOOL

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	10 (11.75)	15 (13.25)	25	3 (8.75)	22 (16.25)	25	3 (8.25)	22 (16.75)	25
S	9 (11.75)	16 (13.25)	25	8 (8.75)	17 (16.25)	25	8 (8.25)	17 (16.75)	25
U	13 (11.75)	12 (13.25)	25	12 (8.75)	13 (16.25)	25	7 (8.25)	18 (16.75)	25
F	15 (11.75)	10 (13.25)	25	12 (8.75)	13 (16.25)	25	15 (8.25)	10 (16.75)	25
Total	47	53	100	35	65	100	33	67	100

$$x^2 = 8.78 \quad p.>.05 \qquad x^2 = 9.624 \quad p.>.05 \qquad x^2 = 13.639 \quad p.>.01$$

*Includes both very much and much

TABLE 155

ITEM 37: SELECTING CLOTHES FOR MY FIGURE TYPE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	17 (13.5)	8 (11.5)	25	14 (15.5)	11 (9.5)	25	14 (14.25)	11 (10.75)	25
S	10 (13.5)	15 (11.5)	25	16 (15.5)	9 (9.5)	25	18 (14.25)	7 (10.75)	25
U	11 (13.5)	14 (11.5)	25	14 (15.5)	11 (9.5)	25	14 (14.25)	11 (10.75)	25
F	16 (13.5)	9 (11.5)	25	18 (15.5)	7 (9.5)	25	11 (14.25)	14 (10.75)	25
Total	54	46	100	62	38	100	57	43	100

$$x^2 = 5.954 \qquad x^2 = 1.364 \qquad x^2 = 4.035$$

TABLE 156

ITEM 43: COMBINING FABRICS OF DIFFERENT COLORS AND TEXTURES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	6 (7)	19 (18)	25	5 (6)	20 (19)	25	3 (5)	22 (20)	25
S	6 (7)	19 (18)	25	6 (6)	19 (19)	25	5 (5)	20 (20)	25
U	8 (7)	17 (18)	25	6 (6)	19 (19)	25	2 (5)	23 (20)	25
F	8 (7)	17 (18)	25	7 (6)	18 (19)	25	10 (5)	15 (20)	25
Total	28	72	100	24	76	100	20	80	100

$$x^2 = .788 \qquad x^2 = .436 \qquad x^2 = 9.5 \ \text{p.} > .05$$

TABLE 157

ITEM 49: DETERMINING THE QUALITY OF MATERIAL

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High*	Low	T	High*	Low	T
P	6 (5.25)	19 (19.75)	25	8 (12.25)	17 (12.75)	25	11 (12.25)	14 (12.75)	25
S	3 (5.25)	22 (19.75)	25	13 (12.25)	12 (12.75)	25	9 (12.25)	16 (12.75)	25
U	6 (5.25)	19 (19.75)	25	13 (12.25)	12 (12.75)	25	12 (12.25)	13 (12.75)	25
F	6 (5.25)	19 (19.75)	25	15 (12.25)	10 (12.75)	25	17 (12.25)	8 (12.75)	25
Total	21	79	100	49	51	100	49	51	100

$$x^2 = 1.752 \qquad x^2 = 4.278 \qquad x^2 = 5.558$$

TABLE 158

ITEM 55: SELECTING CLOTHES FOR DIFFERENT SEASONS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (11.75)	13 (13.25)	25	7 (10.75)	18 (14.25)	25	11 (9.5)	14 (15.5)	25
S	8 (11.75)	17 (13.25)	25	11 (10.75)	14 (14.25)	25	8 (9.5)	17 (15.5)	25
U	13 (11.75)	12 (13.25)	25	13 (10.75)	12 (14.25)	25	7 (9.5)	18 (15.5)	25
F	14 (11.75)	11 (13.25)	25	12 (10.75)	13 (14.25)	25	12 (9.5)	13 (15.5)	25
Total	47	53	100	43	57	100	38	62	100

$$x^2 = 3.258 \qquad x^2 = 3.382 \qquad x^2 = 2.882$$

* Includes both very much and much

TABLE 159

ITEM 61: HOW A FABRIC IS MADE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High *	Low	T	Interest High*	Low	T	Interest High *	Low	T
P	4 (12)	21 (13)	25	5 (8.25)	20 (16.75)	25	3 (7.5)	22 (17.5)	25
S	10 (12)	15 (13)	25	7 (8.25)	18 (16.75)	25	6 (7.5)	19 (17.5)	25
U	17 (12)	8 (13)	25	8 (8.25)	17 (16.75)	25	6 (7.5)	19 (17.5)	25
F	17 (12)	8 (13)	25	13 (8.25)	12 (16.75)	25	15 (7.5)	10 (17.5)	25
Total	48	52	100	33	67	100	30	70	100

$$x^2 = 15.908 \text{ p. } .001 \quad x^2 = 6.283 \quad x^2 = 15.427 \text{ p. } > .01$$

TABLE 160

ITEM 67: STUDYING FINISHES ON FABRICS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High *	Low	T	Interest High	Low	T	Interest High	Low	T
P	9 (11.25)	16 (13.75)	25	2 (8)	23 (17)	25	4 (7.75)	21 (17.25)	25
S	8 (11.25)	17 (13.75)	25	10 (8)	15 (17)	25	8 (7.75)	17 (17.25)	25
U	12 (11.25)	13 (13.75)	25	9 (8)	16 (17)	25	7 (7.75)	18 (17.25)	25
F	16 (11.25)	9 (13.75)	25	11 (8)	14 (17)	25	12 (7.75)	13 (17.25)	25
Total	45	55	100	32	68	100	31	69	100

$$x^2 = 7.223 \quad x^2 = 9.189 \text{ p. } > .05 \quad x^2 = 6.121$$

*Includes both very much and much

TABLE 161

ITEM 73: SELECTING BRAS, PANTIES, SLIPS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (12)	14 (13)	25	5 (7)	20 (18)	25	3 (5)	22 (20)	25
S	5 (12)	20 (13)	25	7 (7)	18 (18)	25	4 (5)	21 (20)	25
U	10 (12)	15 (13)	25	5 (7)	20 (18)	25	5 (5)	20 (20)	25
F	16 (12)	9 (13)	25	11 (7)	14 (18)	25	8 (5)	17 (20)	25
Total	42	58	100	28	72	100	20	80	100

$$x^2 = 11.214 \quad p. .05 \qquad x^2 = 4.759 \qquad x^2 = 3.5$$

TABLE 162

ITEM 79: DETERMINING STYLES MOST BECOMING TO ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	18 (14.75)	7 (10.25)	25	14 (12.75)	11 (12.25)	25	14 (16)	11 (9)	25
S	11 (14.75)	14 (10.25)	25	12 (12.75)	13 (12.25)	25	17 (16)	8 (9)	25
U	13 (14.75)	12 (10.25)	25	12 (12.75)	13 (12.25)	25	15 (16)	10 (9)	25
F	17 (14.75)	8 (10.25)	25	13 (12.75)	12 (12.25)	25	18 (16)	7 (9)	25
Total	59	41	100	51	49	100	64	36	100

$$x^2 = 5.411 \qquad x^2 = .437 \qquad x^2 = 1.734$$

TABLE 163

ITEM 85: SELECTING SHOES FOR DIFFERENT OCCASIONS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (12.75)	13 (12.25)	25	11 (12)	14 (13)	25	10 (9.25)	15 (15.75)	25
S	13 (12.75)	12 (12.25)	25	10 (12)	15 (13)	25	8 (9.25)	17 (15.75)	25
U	12 (12.75)	13 (12.25)	25	12 (12)	13 (13)	25	5 (9.25)	20 (15.75)	25
F	14 (12.75)	11 (12.25)	25	15 (12)	10 (13)	25	14 (9.25)	11 (15.75)	25
Total	51	49	100	48	52	100	37	63	100

$$X^2 = .434 \qquad X^2 = 2.241 \qquad X^2 = 7.331$$

TABLE 164

ITEM 91: CHARACTERISTICS OF DIFFERENT FABRICS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High *	Low	T	High *	Low	T	High *	Low	T
P	8 (12.25)	17 (12.75)	25	5 (9.5)	20 (15.5)	25	3 (7.5)	22 (17.5)	25
S	10 (12.25)	15 (12.75)	25	8 (9.5)	17 (15.5)	25	6 (7.5)	19 (17.5)	25
U	13 (12.25)	12 (12.75)	25	12 (9.5)	13 (15.5)	25	8 (7.5)	17 (17.5)	25
F	18 (12.25)	7 (12.75)	25	13 (9.5)	12 (15.5)	25	13 (7.5)	12 (17.5)	25
Total	49	51	100	38	62	100	30	70	100

$$X^2 = 9.08 \quad p. > .05 \qquad X^2 = 6.957 \qquad X^2 = 10.093 \quad p. > .05$$

*Includes both very much and much

TABLE 165

ITEM 97:   SELECTING A PATTERN THAT FITS ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	7 (11)	18 (14)	25	9 (12)	16 (13)	25	6 (11.25)	19 (13.75)	25
S	10 (11)	15 (14)	25	7 (12)	18 (13)	25	12 (11.25)	13 (13.75)	25
U	12 (11)	13 (14)	25	10 (12)	15 (13)	25	14 (11.25)	11 (13.75)	25
F	15 (11)	10 (14)	25	16 (12)	9 (13)	25	13 (11.25)	12 (13.75)	25
Total	44	56	100	42	58	100	45	55	100

$$x^2 = 6.332 \qquad x^2 = 6.421 \qquad x^2 = 11.035 \quad p. > .01$$

TABLE 166

ITEM 103:   SELECTING CLOTHES WHICH CAN BE WORN FOR SEVERAL OCCASIONS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (12.5)	14 (12.5)	25	14 (12.5)	11 (12.5)	25	9 (11.5)	16 (11.5)	25
S	13 (12.5)	12 (12.5)	25	13 (12.5)	12 (12.5)	25	8 (11.5)	17 (11.5)	25
U	12 (12.5)	13 (12.5)	25	9 (12.5)	16 (12.5)	25	14 (11.5)	11 (11.5)	25
F	14 (12.5)	11 (12.5)	25	14 (12.5)	11 (12.5)	25	15 (11.5)	10 (11.5)	25
Total	50	50	100	50	50	100	46	54	100

$$x^2 = .807 \qquad x^2 = 2.72 \qquad x^2 = 5.954$$

TABLE 167

ITEM 109: CHOOSING LIP-STICK, POWDER

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	15 (12.75)	10 (12.25)	25	14 (15)	11 (10)	25	14 (14.25)	11 (10.75)	25
S	12 (12.75)	13 (12.25)	25	16 (15)	9 (10)	25	14 (14.25)	11 (10.75)	25
U	11 (12.75)	14 (12.25)	25	14 (15)	11 (10)	25	12 (14.25)	13 (10.75)	25
F	13 (12.75)	12 (12.25)	25	16 (15)	9 (10)	25	17 (14.25)	8 (10.75)	25
Total	51	49	100	60	40	100	57	43	100

$$x^2 = 1.398 \qquad x^2 = .664 \qquad x^2 = 2.076$$

TABLE 168

ITEM 115: SELECTING CLOTHES THAT CAN BE MIXED OR MATCHED

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	13 (14.25)	12 (10.75)	25	10 (13.25)	15 (11.75)	25	8 (10.75)	17 (14.25)	25
S	13 (14.25)	12 (10.75)	25	15 (13.25)	10 (11.75)	25	10 (10.75)	15 (14.25)	25
U	10 (14.25)	15 (10.75)	25	10 (13.25)	15 (11.75)	25	10 (10.75)	15 (14.25)	25
F	21 (14.25)	4 (10.75)	25	18 (13.25)	7 (11.75)	25	15 (10.75)	10 (14.25)	25
Total	57	43	100	53	47	100	43	57	100

$$x^2 = 10.89 \quad p. > .01 \qquad x^2 = 7.505 \quad p. > .05 \qquad x^2 = .4362$$

TABLE 169

ITEM 2: MAINTAINING A NEAT APPEARANCE

Group	Developmental Levels of Early Adolescent Girls								
	I Interest			II Interest			III Interest		
	High	Low	T	High	Low	T	High	Low	T
P	17 (17.5)	8 (7.5)	25	14 (13.75)	11 (11.25)	25	13 (13.5)	12 (11.5)	25
S	16 (17.5)	9 (7.5)	25	17 (13.75)	8 (11.25)	25	10 (13.5)	15 (11.5)	25
U	17 (17.5)	8 (7.5)	25	13 (13.75)	12 (11.25)	25	16 (13.5)	9 (11.5)	25
F	20 (17.5)	5 (7.5)	25	11 (13.75)	14 (11.25)	25	15 (13.5)	10 (11.5)	25
Total	70	30	100	55	45	100	54	46	100

$$x^2 = 1.71 \qquad x^2 = 3.03 \qquad x^2 = 3.38$$

TABLE 170

ITEM 3: HOW A BALANCED DIET AFFECTS MY WEIGHT

Group	Developmental Levels of Early Adolescent Girls								
	I Interest			II Interest			III Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (8.25)	17 (16.75)	25	9 (7.75)	16 (17.25)	25	7 (6.75)	18 (18.25)	25
S	7 (8.25)	18 (16.75)	25	8 (7.75)	17 (17.25)	25	6 (6.75)	19 (18.25)	25
U	9 (8.25)	16 (16.75)	25	8 (7.75)	17 (17.25)	25	10 (6.75)	15 (18.25)	25
F	9 (8.25)	16 (16.75)	25	6 (7.75)	19 (17.25)	25	4 (6.75)	21 (18.25)	25
Total	33	67	100	31	69	100	27	73	100

$$x^2 = .50 \qquad x^2 = .09 \qquad x^2 = 3.50$$

TABLE 171

ITEM 14:   IMPROVING MY POSTURE

| Group | Developmental Levels of Early Adolescent Girls | | | | | | | | |
| | I | | | II | | | III | | |
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	12 (15.25)	13 (9.75)	25	10 (9.75)	15 (15.25)	25	5 (9.25)	20 (15.75)	25
S	13 (15.25)	12 (9.75)	25	9 (9.75)	16 (15.25)	25	6 (9.25)	19 (15.75)	25
U	18 (15.25)	7 (9.75)	25	8 (9.75)	17 (15.25)	25	12 (9.25)	13 (15.75)	25
F	18 (15.25)	7 (9.75)	25	12 (9.75)	13 (15.25)	25	14 (9.25)	11 (15.75)	25
Total	61	39	100	39	61	100	37	63	100

$$x^2 = 5.17 \qquad x^2 = 1.47 \qquad x^2 = 10.08 \quad p. > .05$$

TABLE 172

ITEM 20:   CONTROLLING OR ELIMINATING BODY ODORS

| Group | Developmental Levels of Early Adolescent Girls | | | | | | | | |
| | I | | | II | | | III | | |
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	7 (13.25)	18 (11.75)	25	7 (8.75)	18 (16.25)	25	9 (8.25)	16 (16.75)	25
S	13 (13.25)	12 (11.75)	25	11 (8.75)	14 (16.25)	25	7 (8.25)	18 (16.75)	25
U	15 (13.25)	10 (11.75)	25	8 (8.75)	17 (16.25)	25	7 (8.25)	18 (16.75)	25
F	18 (13.25)	7 (11.75)	25	9 (8.75)	16 (16.25)	25	10 (8.25)	15 (16.75)	25
Total	53	47	100	35	65	100	33	67	100

$$x^2 = 10.40 \; p. > .05 \qquad x^2 = 1.54 \qquad x^2 = 1.22$$

TABLE 173

ITEM 26: MANICURING MY NAILS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	9 (12.5)	16 (12.5)	25	9 (9.5)	16 (15.5)	25	8 (9)	17 (16)	25
S	10 (12.5)	15 (12.5)	25	10 (9.5)	15 (15.5)	25	7 (9)	18 (16)	25
U	13 (12.5)	12 (12.5)	25	12 (9.5)	13 (15.5)	25	7 (9)	18 (16)	25
F	18 (12.5)	7 (12.5)	25	7 (9.5)	18 (15.5)	25	14 (9)	11 (16)	25
Total	50	50	100	38	62	100	36	64	100

$$x^2 = 7.84 \quad p. > .05 \qquad x^2 = 2.21 \qquad x^2 = 5.90$$

TABLE 174

ITEM 32: SELECTING FOODS FOR A GOOD COMPLEXION

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (12.5)	12 (12.5)	25	11 (11.75)	14 (13.25)	25	14 (12.5)	11 (12.5)	25
S	11 (12.5)	14 (12.5)	25	11 (11.75)	14 (13.25)	25	10 (12.5)	15 (12.5)	25
U	10 (12.5)	15 (12.5)	25	13 (11.75)	12 (13.25)	25	13 (12.5)	12 (12.5)	25
F	16 (12.5)	9 (12.5)	25	12 (11.75)	13 (13.25)	25	13 (12.5)	12 (12.5)	25
Total	50	50	100	47	53	100	50	50	100

$$x^2 = 3.36 \qquad x^2 = .44 \qquad x^2 = 1.44$$

TABLE 175

ITEM 38: SELECTING THE BEST HAIR STYLES FOR ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	20 (18)	5 (7)	25	16 (18.75)	9 (6.25)	25	20 (17)	5 (8)	25
S	15 (18)	10 (7)	25	18 (18.75)	7 (6.25)	25	18 (17)	7 (8)	25
U	15 (18)	10 (7)	25	20 (18.75)	5 (6.25)	25	14 (17)	11 (8)	25
F	22 (18)	3 (7)	25	21 (18.75)	4 (6.25)	25	16 (17)	9 (8)	25
Total	72	28	100	75	25	100	68	32	100

$$x^2 = 7.54 \qquad x^2 = 3.15 \qquad x^2 = 3.68$$

TABLE 176

ITEM 44: SITTING GRACEFULLY

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	14 (11.5)	11 (13.5)	25	7 (9)	18 (16)	25	6 (8)	19 (17)	25
S	5 (11.5)	20 (13.5)	25	9 (9)	16 (16)	25	7 (8)	18 (17)	25
U	13 (11.5)	12 (13.5)	25	9 (9)	16 (16)	25	5 (8)	20 (17)	25
F	14 (11.5)	11 (13.5)	25	11 (9)	14 (16)	25	14 (8)	11 (17)	25
Total	46	54	100	36	64	100	32	68	100

$$x^2 = 9.18 \quad p. > .05 \qquad x^2 = 1.39 \qquad x^2 = 9.19 \quad p. > .05$$

TABLE 177

ITEM 50:   USING DIFFERENT KINDS OF MAKE-UP

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	15 (10.75)	10 (14.25)	25	10 (11.75)	15 (13.25)	25	11 (11)	14 (14)	25
S	7 (10.75)	18 (14.25)	25	14 (11.75)	10 (13.25)	25	11 (11)	14 (14)	25
U	7 (10.75)	18 (14.25)	25	11 (11.75)	14 (13.25)	25	9 (11)	16 (14)	25
F	14 (10.75)	11 (14.25)	25	12 (11.75)	13 (13.25)	25	13 (11)	12 (14)	25
Total	43	57	100	47	53	100	44	56	100

$$x^2 = 9.26 \quad p. > .05 \qquad x^2 = 1.40 \qquad x^2 = 1.30$$

TABLE 178

ITEM 56:   WHY CLEANLINESS IS IMPORTANT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (14.5)	12 (10.5)	25	6 (10.25)	19 (14.75)	25	7 (7.25)	18 (17.75)	25
S	16 (14.5)	9 (10.5)	25	14 (10.25)	11 (14.75)	25	3 (7.25)	22 (17.75)	25
U	14 (14.5)	11 (10.5)	25	10 (10.25)	15 (14.75)	25	5 (7.25)	20 (17.75)	25
F	15 (14.5)	10 (10.5)	25	11 (10.25)	14 (14.75)	25	14 (7.25)	11 (17.75)	25
Total	58	42	100	41	59	100	29	71	100

$$x^2 = .82 \qquad x^2 = 5.42 \qquad x^2 = 13.36 \quad p. > .01$$

TABLE 179

ITEM 62: CARING FOR MY HAIR

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	19 (19)	6 (6)	25	17 (17.25)	8 (7.75)	25	17 (16)	8 (9)	25
S	19 (19)	6 (6)	25	20 (17.25)	5 (7.75)	25	15 (16)	10 (9)	25
U	17 (19)	8 (6)	25	16 (17.25)	9 (7.75)	25	13 (16)	12 (9)	25
F	21 (19)	4 (6)	25	16 (17.25)	9 (7.75)	25	19 (16)	6 (9)	25
Total	76	24	100	69	31	100	64	36	100

$$x^2 = 1.75 \qquad x^2 = 2.01 \qquad x^2 = 3.47$$

TABLE 180

ITEM 68: CARING FOR MY TEETH

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (14.5)	13 (10.5)	25	5 (10.5)	20 (14.5)	25	8 (9.5)	17 (15.5)	25
S	14 (14.5)	11 (10.5)	25	12 (10.5)	13 (14.5)	25	3 (9.5)	22 (15.5)	25
U	15 (14.5)	10 (10.5)	25	11 (10.5)	14 (14.5)	25	10 (9.5)	15 (15.5)	25
F	17 (14.5)	8 (10.5)	25	14 (10.5)	11 (14.5)	25	17 (9.5)	8 (15.5)	25
Total	58	42	100	42	58	100	38	62	100

$$x^2 = 2.13 \qquad x^2 = 7.39 \qquad x^2 = 17.15 \quad p. > .001$$

TABLE 181

ITEM 74: CARING FOR MY HANDS AND NAILS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (14.25)	14 (10.75)	25	8 (10.25)	17 (14.75)	25	10 (10.75)	15 (14.25)	25
S	15 (14.25)	10 (10.75)	25	12 (10.25)	13 (14.75)	25	8 (10.75)	17 (14.25)	25
U	15 (14.25)	10 (10.75)	25	12 (10.25)	13 (14.75)	25	10 (10.75)	15 (14.25)	25
F	16 (14.25)	9 (10.75)	25	9 (10.25)	16 (14.75)	25	15 (10.75)	10 (14.25)	25
Total	57	43	100	41	59	100	43	57	100

$$x^2 = 2.41 \qquad x^2 = 2.11 \qquad x^2 = 4.36$$

TABLE 182

ITEM 80: WHAT TO DO IF MY FEET HURT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High *	Low	T	High *	Low	T	High *	Low	T
P	11 (13.75)	14 (11.25)	25	7 (9.75)	18 (15.25)	25	7 (10)	18 (15)	25
S	11 (13.75)	14 (11.25)	25	9 (9.75)	16 (15.25)	25	6 (10)	19 (15)	25
U	16 (13.75)	9 (11.25)	25	12 (9.75)	13 (15.25)	25	9 (10)	16 (15)	25
F	17 (13.75)	8 (11.25)	25	11 (9.75)	14 (15.25)	25	18 (10)	7 (15)	25
Total	55	45	100	39	61	100	40	60	100

$$x^2 = 4.97 \qquad x^2 = 2.43 \qquad x^2 = 15.00 \quad p. > .01$$

*Includes both very much and much

TABLE 183

ITEM 86: CHOOSING DIFFERENT KINDS OF SOAPS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	10 (8.75)	15 (16.25)	25	8 (7.75)	17 (17.25)	25	5 (6.5)	20 (18.5)	25
S	8 (8.75)	17 (16.25)	25	9 (7.75)	16 (17.25)	25	3 (6.5)	22 (18.5)	25
U	7 (8.75)	18 (16.25)	25	8 (7.75)	17 (17.25)	25	6 (6.5)	19 (18.5)	25
F	10 (8.75)	15 (16.25)	25	6 (7.75)	19 (17.25)	25	12 (6.5)	13 (18.5)	25
Total	35	65	100	31	69	100	26	64	100

$$x^2 = 1.19 \qquad x^2 = .89 \qquad x^2 = 9.36 \quad p. > .05$$

TABLE 184

ITEM 92: MAKING A TEEN-AGE GROOMING CHECK LIST

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (8.75)	13 (16.25)	25	6 (8.25)	19 (16.75)	25	6 (9.75)	19 (15.25)	25
S	5 (8.75)	20 (16.25)	25	11 (8.25)	14 (16.75)	25	11 (9.75)	14 (15.25)	25
U	6 (8.75)	19 (16.25)	25	5 (8.25)	20 (16.75)	25	9 (9.75)	16 (15.25)	25
F	12 (8.75)	13 (16.25)	25	11 (8.25)	14 (16.75)	25	13 (9.75)	12 (15.25)	25
Total	35	65	100	33	67	100	39	61	100

$$x^2 = 7.52 \qquad x^2 = 5.56 \qquad x^2 = 4.50$$

TABLE 185

ITEM 98:   CARING FOR MY BODY DURING MENSTRUAL PERIODS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	14 (15.5)	11 (9.5)	25	10 (11)	15 (14)	25	8 (10.25)	17 (14.75)	25
S	14 (15.5)	11 (9.5)	25	10 (11)	15 (14)	25	7 (10.25)	18 (14.75)	25
U	12 (15.5)	13 (9.5)	25	9 (11)	16 (14)	25	12 (10.25)	13 (14.75)	25
F	22 (15.5)	3 (9.5)	25	15 (11)	10 (14)	25	14 (10.25)	11 (14.75)	25
Total	62	38	100	44	56	100	41	59	100

$$x^2 = 10.02 \quad p. > .05 \qquad x^2 = 3.57 \qquad x^2 = 5.42$$

TABLE 186

ITEM 104:   WAYS IN WHICH EXTRA HAIR CAN BE REMOVED

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (11)	13 (14)	25	4 (7.75)	21 (17.25)	25	6 (8.5)	19 (16.5)	25
S	11 (11)	14 (14)	25	8 (7.75)	17 (17.25)	25	5 (8.5)	20 (16.5)	25
U	9 (11)	16 (14)	25	8 (7.75)	17 (17.25)	25	8 (8.5)	17 (16.5)	25
F	12 (11)	13 (14)	25	11 (7.75)	14 (17.25)	25	15 (8.5)	10 (16.5)	25
Total	44	56	100	31	69	100	34	66	100

$$x^2 = .97 \qquad x^2 = 4.63 \qquad x^2 = 10.87 \quad p. > .05$$

TABLE 187

ITEM 110: CARING FOR MY SKIN

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	19 (17.25)	6 (7.75)	25	15 (16.5)	10 (8.5)	25	17 (16.75)	8 (8.25)	25
S	17 (17.25)	8 (7.75)	25	17 (16.5)	8 (8.5)	25	12 (16.75)	13 (8.25)	25
U	13 (17.25)	12 (7.75)	25	18 (16.5)	7 (8.5)	25	18 (16.75)	7 (8.25)	25
F	20 (17.25)	5 (7.75)	25	16 (16.5)	9 (8.5)	25	20 (16.75)	5 (8.25)	25
Total	69	31	100	66	34	100	67	33	100

$$x^2 = 5.38 \qquad x^2 = .89 \qquad x^2 = 6.29$$

TABLE 188

ITEM 116: HABITS THAT SPOIL MY PERSONAL APPEARANCE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	15 (16.25)	10 (8.75)	25	15 (16)	10 (9)	25	16 (16.75)	9 (8.25)	25
S	14 (16.25)	11 (8.75)	25	15 (16)	10 (9)	25	15 (16.75)	10 (8.25)	25
U	15 (16.25)	10 (8.75)	25	15 (16)	10 (9)	25	16 (16.75)	9 (8.25)	25
F	21 (16.25)	4 (8.75)	25	19 (16)	6 (9)	25	20 (16.75)	5 (8.25)	25
Total	65	35	100	64	36	100	67	33	100

$$x^2 = 5.41 \qquad x^2 = 2.00 \qquad x^2 = 2.67$$

TABLE 189

ITEM 3: STUDY OF THE LATEST STYLES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (6.25)	17 (18.75)	25	5 (7)	20 (18)	25	3 (4.75)	22 (20.25)	25
S	6 (6.25)	19 (18.75)	25	11 (7)	14 (18)	25	8 (4.75)	17 (20.25)	25
U	3 (6.25)	22 (18.75)	25	6 (7)	19 (18)	25	4 (4.75)	21 (20.25)	25
F	8 (6.25)	17 (18.75)	25	6 (7)	19 (18)	25	4 (4.75)	21 (20.25)	25
Total	25	75	100	28	72	100	19	81	100

$$x^2 = 3.57 \qquad x^2 = 4.36 \qquad x^2 = 3.83$$

TABLE 190

ITEM 9: HOW TO BE MORE ATTRACTIVE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	20 (17.5)	5 (7.5)	25	17 (18)	8 (7)	25	20 (17.25)	5 (7.75)	25
S	16 (17.5)	9 (7.5)	25	20 (18)	5 (7)	25	16 (17.25)	9 (7.75)	25
U	12 (17.5)	13 (7.5)	25	18 (18)	7 (7)	25	17 (17.25)	8 (7.75)	25
F	22 (17.5)	3 (7.5)	25	17 (18)	8 (7)	25	16 (17.25)	9 (7.75)	25
Total	70	30	100	72	28	100	69	31	100

$$x^2 = 11.24 \quad p. > .05 \qquad x^2 = 1.19 \qquad x^2 = 2.01$$

TABLE 191

ITEM 15: SELECTING CLOTHES THAT OTHER PEOPLE WILL LIKE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (11.25)	12 (13.75)	25	6 (10.5)	19 (14.5)	25	8 (10.25)	17 (14.75)	25
S	10 (11.25)	15 (13.75)	25	15 (10.5)	10 (14.5)	25	12 (10.25)	13 (14.75)	25
U	8 (11.25)	17 (13.75)	25	11 (10.5)	14 (14.5)	25	9 (10.25)	16 (14.75)	25
F	14 (11.25)	11 (13.75)	25	10 (10.5)	15 (14.5)	25	12 (10.25)	13 (14.75)	25
Total	45	55	100	42	58	100	41	59	100

$$x^2 = 3.67 \qquad x^2 = 6.73 \qquad x^2 = 2.10$$

TABLE 192

ITEM 21: STUDYING FASHION MAGAZINES SUCH AS VOGUE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	10 (5.75)	15 (19.25)	25	6 (5.5)	19 (19.5)	25	6 (6)	19 (19)	25
S	4 (5.75)	21 (19.25)	25	8 (5.5)	17 (19.5)	25	10 (6)	15 (19)	25
U	4 (5.75)	21 (19.25)	25	3 (5.5)	22 (19.5)	25	5 (6)	20 (19)	25
F	5 (5.75)	20 (19.25)	25	5 (5.5)	20 (19.5)	25	3 (6)	22 (19)	25
Total	23	77	100	22	78	100	24	76	100

$$x^2 = 5.59 \qquad x^2 = 3.03 \qquad x^2 = 5.70$$

TABLE 193

ITEM 27: STUDYING FASHION MAGAZINES SUCH AS SEVENTEEN

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (8.25)	12 (16.75)	25	11 (10)	14 (15)	25	10 (9.25)	15 (15.75)	25
S	6 (8.25)	19 (16.75)	25	12 (10)	13 (15)	25	13 (9.25)	12 (15.75)	25
U	5 (8.25)	20 (16.75)	25	7 (10)	18 (15)	25	6 (9.25)	19 (15.75)	25
F	9 (8.25)	16 (16.75)	25	10 (10)	15 (15)	25	8 (9.25)	17 (15.75)	25
Total	33	67	100	40	60	100	37	63	100

$$x^2 = 7.01 \qquad x^2 = 2.33 \qquad x^2 = 4.58$$

TABLE 194

ITEM 33: CREATING ORIGINAL DRESS DESIGNS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	14 (7.75)	11 (17.25)	25	8 (6.75)	17 (18.25)	25	7 (8.75)	18 (16.25)	25
S	5 (7.75)	20 (17.25)	25	4 (6.75)	21 (18.25)	25	8 (8.75)	17 (16.25)	25
U	5 (7.75)	20 (17.25)	25	5 (6.75)	20 (18.25)	25	7 (8.75)	18 (16.25)	25
F	7 (7.75)	18 (17.25)	25	10 (6.75)	15 (18.25)	25	13 (8.75)	12 (16.25)	25
Total	31	69	100	27	73	100	35	65	100

$$x^2 = 10.23 \quad p. > .05 \qquad x^2 = 4.61 \qquad x^2 = 4.35$$

TABLE 195

ITEM 39: PREPARING EXHIBITS OF DRESSES AND ACCESSORIES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	20 (17.75)	5 (7.25)	25	9 (14)	16 (11)	25	9 (13.25)	16 (11.75)	25
S	14 (17.75)	11 (7.25)	25	14 (14)	11 (11)	25	15 (13.25)	10 (11.75)	25
U	19 (17.75)	6 (7.25)	25	17 (14)	8 (11)	25	16 (13.25)	9 (11.75)	25
F	18 (17.75)	7 (7.25)	25	16 (14)	9 (11)	25	13 (13.25)	12 (11.75)	25
Total	71	29	100	56	44	100	53	47	100

$$x^2 = 4.03 \qquad x^2 = 6.16 \qquad x^2 = 4.61$$

TABLE 196

ITEM 45: MANNERS WHEN SHOPPING

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (11)	13 (14)	25	4 (7.5)	21 (17.5)	25	1 (5.75)	24 (19.25)	25
S	8 (11)	17 (14)	25	7 (7.5)	18 (17.5)	25	3 (5.75)	22 (19.25)	25
U	10 (11)	15 (14)	25	7 (7.5)	18 (17.5)	25	6 (5.75)	19 (19.25)	25
F	14 (11)	11 (14)	25	12 (7.5)	13 (17.5)	25	13 (5.75)	12 (19.25)	25
Total	44	56	100	30	70	100	23	77	100

$$x^2 = 3.24 \qquad x^2 = 6.26 \qquad x^2 = 18.69 \quad p. > .001$$

*Includes both very much and much

TABLE 197

ITEM 51: CHOOSING CLOTHES THAT ARE BECOMING TO ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	22 (17.25)	3 (7.75)	25	14 (15.75)	11 (9.25)	25	17 (16)	8 (9)	25
S	15 (17.25)	10 (7.75)	25	15 (15.75)	10 (9.25)	25	17 (16)	8 (9)	25
U	15 (17.25)	10 (7.75)	25	16 (15.75)	9 (9.25)	25	15 (16)	10 (9)	25
F	17 (17.25)	8 (7.75)	25	18 (15.75)	7 (9.25)	25	15 (16)	10 (9)	25
Total	69	31	100	63	37	100	64	36	100

$$x^2 = 6.12 \qquad x^2 = 1.50 \qquad x^2 = .69$$

TABLE 198

ITEM 57: EFFECT OF COLORS ON ME

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (12.75)	12 (12.25)	25	12 (12.25)	13 (12.75)	25	13 (12)	12 (13)	25
S	14 (12.75)	11 (12.25)	25	14 (12.25)	11 (12.75)	25	12 (12)	13 (13)	25
U	10 (12.75)	15 (12.25)	25	11 (12.25)	14 (12.75)	25	11 (12)	14 (13)	25
F	14 (12.75)	11 (12.25)	25	12 (12.25)	13 (12.75)	25	12 (12)	13 (13)	25
Total	51	49	100	49	51	100	48	52	100

$$x^2 = 1.72 \qquad x^2 = .76 \qquad x^2 = .32$$

TABLE 199

ITEM 63:   CAREERS IN THE CLOTHING FIELD

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (12.25)	14 (12.75)	25	7 (10.5)	18 (14.5)	25	5 (8.5)	20 (16.5)	25
S	11 (12.25)	14 (12.75)	25	12 (10.5)	13 (14.5)	25	10 (8.5)	15 (16.5)	25
U	12 (12.25)	13 (12.75)	25	9 (10.5)	16 (14.5)	25	10 (8.5)	15 (16.5)	25
F	15 (12.25)	10 (12.75)	25	14 (10.5)	11 (14.5)	25	9 (8.5)	16 (16.5)	25
Total	49	51	100	42	56	100	34	66	100

$$x^2 = 1.72 \qquad x^2 = 4.76 \qquad x^2 = 3.03$$

TABLE 200

ITEM 69:   MAKING SOMETHING FOR MY LITTLE SISTER OR BROTHER

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (9.75)	13 (15.25)	25	8 (8.75)	17 (16.25)	25	4 (6)	21 (19)	25
S	9 (9.75)	16 (15.25)	25	6 (8.75)	19 (16.25)	25	5 (6)	20 (19)	25
U	8 (9.75)	17 (15.25)	25	7 (8.75)	18 (16.25)	25	5 (6)	20 (19)	25
F	10 (9.75)	15 (15.25)	25	14 (8.75)	11 (16.25)	25	10 (6)	15 (19)	25
Total	39	61	100	35	65	100	24	76	100

$$x^2 = 1.47 \qquad x^2 = 6.81 \qquad x^2 = 4.62$$

*Includes both very much and much

TABLE 201

ITEM 75: CHOOSING CLOTHES THAT ARE SUITABLE FOR THE THINGS I DO

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	15 (13)	10 (12)	25	10 (13.25)	15 (11.75)	25	12 (11.75)	13 (13.25)	25
S	12 (13)	13 (12)	25	17 (13.25)	8 (11.75)	25	11 (11.75)	14 (13.25)	25
U	12 (13)	13 (12)	25	9 (13.25)	16 (11.75)	25	9 (11.75)	16 (13.25)	25
F	13 (13)	12 (12)	25	17 (13.25)	8 (11.75)	25	15 (11.75)	10 (13.25)	25
Total	52	48	100	53	47	100	47	53	100

$$x^2 = .96 \qquad x^2 = 9.11 \quad p. > .05 \qquad x^2 = 3.01$$

TABLE 202

ITEM 81: PUTTING CLOTHES TOGETHER SO THEY LOOK NICE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	15 (15.25)	10 (9.75)	25	10 (14.5)	15 (10.5)	25	8 (12.75)	17 (12.25)	25
S	11 (15.25)	14 (9.75)	25	16 (14.5)	9 (10.5)	25	12 (12.75)	13 (12.25)	25
U	16 (15.25)	9 (9.75)	25	14 (14.5)	11 (10.5)	25	13 (12.75)	12 (12.25)	25
F	19 (15.25)	6 (9.75)	25	18 (14.5)	7 (10.5)	25	18 (12.75)	7 (12.25)	25
Total	61	39	100	58	42	100	51	49	100

$$x^2 = 5.50 \qquad x^2 = 5.74 \qquad x^2 = 9.2 \quad p. > .05$$

TABLE 203

ITEM 87: PLANNING A SIMPLE FASHION SHOW

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (8.5)	14 (16.5)	25	8 (7.5)	17 (17.5)	25	6 (7.5)	19 (17.5)	25
S	6 (8.5)	19 (16.5)	25	7 (7.5)	18 (17.5)	25	7 (7.5)	18 (17.5)	25
U	7 (8.5)	18 (16.5)	25	6 (7.5)	19 (17.5)	25	10 (7.5)	15 (17.5)	25
F	10 (8.5)	15 (16.5)	25	9 (7.5)	16 (17.5)	25	7 (7.5)	18 (17.5)	25
Total	34	66	100	30	70	100	30	70	100

$$x^2 = 3.03 \qquad x^2 = .95 \qquad x^2 = 1.71$$

TABLE 204

ITEM 93: WHY CLOTHES SELL FOR DIFFERENT PRICES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High *	Low	T	High *	Low	T	High *	Low	T
P	14 (14.75)	11 (10.25)	25	10 (11.75)	15 (13.25)	25	11 (12)	14 (13)	25
S	11 (14.75)	14 (10.25)	25	13 (11.75)	12 (13.25)	25	9 (12)	16 (13)	25
U	16 (14.75)	9 (10.25)	25	11 (11.75)	14 (13.25)	25	11 (12)	14 (13)	25
F	18 (14.75)	7 (10.25)	25	13 (11.75)	12 (13.25)	25	17 (12)	8 (13)	25
Total	59	41	100	47	53	100	48	52	100

$$x^2 = 4.42 \qquad x^2 = 1.03 \qquad x^2 = 5.77$$

*Includes both very much and much

TABLE 205

ITEM 99: HOW CLOTHES AFFECT THE WAY I FEEL

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	7 (12.25)	18 (12.75)	25	11 (10.75)	14 (14.25)	25	10 (9)	15 (16)	25
S	11 (12.25)	14 (12.75)	25	10 (10.75)	15 (14.25)	25	7 (9)	18 (16)	25
U	13 (12.25)	12 (12.75)	25	7 (10.75)	18 (14.25)	25	6 (9)	19 (16)	25
F	18 (12.25)	7 (12.75)	25	15 (10.75)	10 (14.25)	25	13 (9)	12 (16)	25
Total	49	51	100	43	57	100	36	64	100

$$x^2 = 10.04 \quad p. > .05 \qquad x^2 = 5.34 \qquad x^2 = 5.21$$

TABLE 206

ITEM 105: SHARING THE FAMILY CLOTHING BUDGET

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	7 (7.5)	18 (17.5)	25	6 (6)	19 (19)	25	1 (4.75)	24 (20.25)	25
S	6 (7.5)	19 (17.5)	25	4 (6)	21 (19)	25	5 (4.75)	20 (20.25)	25
U	7 (7.5)	18 (17.5)	25	3 (6)	22 (19)	25	4 (4.75)	21 (20.25)	25
F	10 (7.5)	15 (17.5)	25	11 (6)	14 (19)	25	9 (4.75)	16 (20.25)	25
Total	30	70	100	24	76	100	19	81	100

$$x^2 = 1.71 \qquad x^2 = 8.33 \quad p. > .05 \qquad x^2 = 8.51 \quad p. > .05$$

TABLE 207

ITEM 111: UNDERSTANDING WHY I WISH TO WEAR BOYS CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	4 (6.25)	21 (18.75)	25	4 (6.25)	21 (18.75)	25	6 (5.25)	19 (19.75)	25
S	7 (6.25)	18 (18.75)	25	6 (6.25)	19 (18.75)	25	3 (5.25)	22 (19.75)	25
U	4 (6.25)	21 (18.75)	25	5 (6.25)	20 (18.75)	25	3 (5.25)	22 (19.75)	25
F	10 (6.25)	15 (18.75)	25	10 (6.25)	15 (18.75)	25	9 (5.25)	16 (19.75)	25
Total	25	75	100	25	75	100	21	79	100

$x^2 = 5.28$ $x^2 = 4.43$ $x^2 = 5.96$

TABLE 208

ITEM 117: DECORATING CLOTHES FOR A PLEASING EFFECT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	13 (11.25)	12 (13.75)	25	11 (11.5)	14 (13.5)	25	5 (10)	20 (15)	25
S	11 (11.25)	14 (13.75)	25	13 (11.5)	12 (13.5)	25	9 (10)	16 (15)	25
U	9 (11.25)	16 (13.75)	25	8 (11.5)	17 (13.5)	25	12 (10)	13 (15)	25
F	12 (11.25)	13 (13.75)	25	14 (11.5)	11 (13.5)	25	14 (10)	11 (15)	25
Total	45	55	100	46	54	100	40	60	100

$x^2 = 1.41$ $x^2 = 3.38$ $x^2 = 7.66$

TABLE 209

ITEM 4: LEARNING HOW TO CARE FOR MY CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			**II**			**III**		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (11.5)	20 (13.5)	25	6 (8)	19 (17)	25	4 (6.75)	21 (18.25)	25
S	9 (11.5)	16 (13.5)	25	9 (8)	16 (17)	25	3 (6.75)	22 (18.25)	25
U	15 (11.5)	10 (13.5)	25	6 (8)	19 (17)	25	7 (6.75)	18 (18.25)	25
F	17 (11.5)	8 (13.5)	25	11 (8)	14 (17)	25	13 (6.75)	12 (18.25)	25
Total	46	54	100	32	68	100	27	73	100

$$X^2 = 14.65 \quad p. > .01 \qquad X^2 = 3.31 \qquad X^2 = 12.33 \quad p. > .01$$

TABLE 210

ITEM 10: WASHING MY SWEATERS

Group	Developmental Levels of Early Adolescent Girls								
	I			**II**			**III**		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	15 (17)	10 (8)	25	11 (13.75)	14 (11.25)	25	11 (12.75)	14 (12.25)	25
S	12 (17)	13 (8)	25	16 (13.75)	9 (11.25)	25	10 (12.75)	15 (12.25)	25
U	22 (17)	3 (8)	25	15 (13.75)	10 (11.25)	25	14 (12.75)	11 (12.25)	25
F	19 (17)	6 (8)	25	13 (13.75)	12 (11.25)	25	16 (12.75)	9 (12.25)	25
Total	68	32	100	55	45	100	51	49	100

$$X^2 = 10.66 \quad p. > .05 \qquad X^2 = 2.38 \qquad X^2 = 3.64$$

*Includes both very much and much

TABLE 211

ITEM 16: CARING FOR A COTTON FABRIC

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	13 (14.25)	12 (10.75)	25	8 (10)	17 (15)	25	6 (9)	19 (16)	25
S	11 (14.25)	14 (10.75)	25	9 (10)	16 (15)	25	5 (9)	20 (16)	25
U	16 (14.25)	9 (10.75)	25	11 (10)	14 (15)	25	10 (9)	15 (16)	25
F	17 (14.25)	8 (10.75)	25	12 (10)	13 (15)	25	15 (9)	10 (16)	25
Total	57	43	100	40	60	100	36	64	100

$$x^2 = 3.71 \qquad x^2 = 1.66 \qquad x^2\ 10.76 \quad p. > .05$$

TABLE 212

ITEM 22: STEPS TO FOLLOW IN WASHING CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	14 (15.75)	11 (9.25)	25	9 (13.5)	16 (11.5)	25	8 (10)	17 (15)	25
S	13 (15.75)	12 (9.25)	25	14 (13.5)	11 (11.5)	25	8 (10)	17 (15)	25
U	19 (15.75)	6 (9.25)	25	16 (13.5)	9 (11.5)	25	10 (10)	15 (15)	25
F	17 (15.75)	8 (9.25)	25	15 (13.5)	10 (11.5)	25	14 (10)	11 (15)	25
Total	63	37	100	54	46	100	40	60	100

$$x^2 = 3.90 \qquad x^2 = 4.66 \qquad x^2 = 4.00$$

*Includes both very much and much

TABLE 213

ITEM 28:   IRONING DIFFERENT TYPES OF CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	15 (13.75)	10 (6.25)	25	13 (15.75)	12 (9.25)	25	12 (14.25)	13 (10.75)	25
S	19 (13.75)	6 (6.25)	25	16 (15.75)	9 (9.25)	25	12 (14.25)	13 (10.75)	25
U	13 (13.75)	7 (6.25)	25	15 (15.75)	10 (9.25)	25	15 (14.25)	10 (10.75)	25
F	23 (13.75)	2 (6.25)	25	19 (15.75)	6 (9.25)	25	18 (14.25)	7 (10.75)	25
Total	75	25	100	63	37	100	57	43	100

$$x^2 = 6.99 \qquad x^2 = 3.21 \qquad x^2 = 4.04$$

TABLE 214

ITEM 34:   EXPERIMENTING WITH SOAPS, STARCHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	15 (13.5)	10 (11.5)	25	5 (9.5)	20 (15.5)	25	6 (8)	19 (17)	25
S	12 (13.5)	13 (11.5)	25	10 (9.5)	15 (15.5)	25	8 (8)	17 (17)	25
U	14 (13.5)	11 (11.5)	25	11 (9.5)	14 (15.5)	25	8 (8)	17 (17)	25
F	13 (13.5)	12 (11.5)	25	12 (9.5)	13 (15.5)	25	10 (8)	15 (17)	25
Total	54	46	100	38	62	100	32	68	100

$$x^2 = .80 \qquad x^2 = 4.92 \qquad x^2 = 1.47$$

*Includes both very much and much

TABLE 215

ITEM 46: DARNING ANKLE SOX

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	8 (13.75)	17 (11.25)	25	9 (12.25)	16 (12.75)	25	6 (9.75)	19 (15.25)	25
S	16 (13.75)	9 (11.25)	25	11 (12.25)	14 (12.75)	25	7 (9.75)	18 (15.25)	25
U	13 (13.75)	12 (11.25)	25	11 (12.25)	14 (12.75)	25	11 (9.75)	14 (15.25)	25
F	18 (13.75)	7 (11.25)	25	18 (12.25)	7 (12.75)	25	15 (9.75)	10 (15.25)	25
Total	55	45	100	49	51	100	39	61	100

$$x^2 = 10.56 \quad p. > .05 \qquad x^2 = 4.70 \qquad x^2 = 9.19 \quad p. > .05$$

TABLE 216

ITEM 40: PATCHING MY CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	9 (10.75)	16 (14.25)	25	6 (8.75)	19 (16.25)	25	4 (8)	21 (17)	25
S	5 (10.75)	20 (14.25)	25	8 (8.75)	17 (16.25)	25	5 (8)	20 (17)	25
U	14 (10.75)	11 (14.25)	25	8 (8.75)	17 (16.25)	25	11 (8)	14 (17)	25
F	15 (10.75)	10 (14.25)	25	13 (8.75)	12 (16.25)	25	12 (8)	13 (17)	25
Total	43	57	100	35	65	100	32	68	100

$$x^2 = 10.56 \quad p. > .05 \qquad x^2 = 4.70 \qquad x^2 = 9.19 \quad p. > .05$$

*Includes both very much and much

TABLE 217

ITEM 52:   CARING FOR WOOLEN CLOTHING

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	4 (6.25)	21 (18.75)	25	7 (4.75)	18 (20.25)	25	1 (5.25)	24 (19.75)	25
S	5 (6.25)	20 (18.75)	25	4 (4.75)	21 (20.25)	25	5 (5.25)	20 (19.75)	25
U	8 (6.25)	17 (18.75)	25	1 (4.75)	24 (20.25)	25	6 (5.25)	19 (19.75)	25
F	8 (6.25)	17 (18.75)	25	7 (4.75)	18 (20.25)	25	9 (5.25)	16 (19.75)	25
Total	25	75	100	19	81	100	21	79	100

$$x^2 = 2.72 \qquad x^2 = 6.43 \qquad x^2 = 7.39 \quad p. > .05$$

TABLE 218

ITEM 53:   REMOVING SPOTS AND STAINS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (5.75)	20 (19.25)	25	3 (5.25)	22 (19.75)	25	1 (5.25)	24 (19.75)	25
S	4 (5.75)	21 (19.25)	25	4 (5.25)	21 (19.75)	25	5 (5.25)	20 (19.75)	25
U	6 (5.75)	19 (19.25)	25	6 (5.25)	19 (19.75)	25	8 (5.25)	17 (19.75)	25
F	8 (5.75)	17 (19.25)	25	8 (5.25)	17 (19.75)	25	7 (5.25)	18 (19.75)	25
Total	23	77	100	21	79	100	21	79	100

$$x^2 = 1.97 \qquad x^2 = 3.55 \qquad x^2 = 6.93$$

TABLE 219

ITEM 64: ARRANGING STORAGE SPACE FOR MY CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	4 (7)	21 (18)	25	4 (6)	21 (19)	25	2 (5)	23 (20)	25
S	8 (7)	17 (18)	25	6 (6)	19 (19)	25	4 (5)	21 (20)	25
U	6 (7)	19 (18)	25	5 (6)	20 (19)	25	4 (5)	21 (20)	25
F	10 (7)	15 (18)	25	9 (6)	16 (19)	25	10 (5)	15 (20)	25
Total	28	72	100	24	76	100	20	80	100

$$x^2 = 3.96 \qquad x^2 = 3.07 \qquad x^2 = 9.00 \quad p. > .05$$

TABLE 220

ITEM 70: DAILY CARE OF MY CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (10.25)	17 (14.75)	25	6 (8)	19 (17)	25	6 (8)	19 (17)	25
S	9 (10.25)	16 (14.75)	25	6 (8)	19 (17)	25	5 (8)	20 (17)	25
U	10 (10.25)	15 (14.75)	25	7 (8)	18 (17)	25	6 (8)	19 (17)	25
F	14 (10.25)	11 (14.75)	25	13 (8)	12 (17)	25	15 (8)	10 (17)	25
Total	41	59	100	32	68	100	32	68	100

$$x^2 = 3.43 \qquad x^2 = 6.25 \qquad x^2 = 12.13 \quad p. > .01$$

TABLE 221

ITEM 76: SEASONAL CARE OF MY CLOTHES

Group	Developmental Level of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	9 (8.5)	16 (16.5)	25	5 (7.5)	20 (17.5)	25	4 (7)	21 (18)	25
S	8 (8.5)	17 (16.5)	25	10 (7.5)	15 (17.5)	25	7 (7)	18 (18)	25
U	10 (8.5)	15 (16.5)	25	6 (7.5)	19 (17.5)	25	6 (7)	19 (18)	25
F	7 (8.5)	18 (16.5)	25	9 (7.5)	16 (17.5)	25	11 (7)	14 (18)	25
Total	34	66	100	30	70	100	28	72	100

$$x^2 = 0.39 \qquad x^2 = 3.24 \qquad x^2 = 5.16$$

TABLE 222

ITEM 82: CARING FOR CLOTHES MADE FROM NYLON, DACRON

Group	Developmental Level of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	18 (19.5)	7 (5.5)	25	10 (15.75)	15 (9.25)	25	9 (13.5)	16 (11.5)	25
S	17 (19.5)	8 (5.5)	25	16 (15.75)	9 (9.25)	25	10 (13.5)	15 (11.5)	25
U	22 (19.5)	3 (5.5)	25	19 (15.75)	6 (9.25)	25	15 (13.5)	10 (11.5)	25
F	21 (19.5)	4 (5.5)	25	18 (15.75)	7 (9.25)	25	20 (13.5)	5 (11.5)	25
Total	78	22	100	63	37	100	54	46	100

$$x^2 = 3.96 \qquad x^2 = 8.36 \quad p. > .05 \qquad x^2 = 12.40 \quad p. > .01$$

*Includes both very much and much

TABLE 223

ITEM 68: HOW TO LET OUT HEMS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (14)	14 (11)	25	9 (11.5)	16 (13.5)	25	4 (9.5)	21 (15.5)	25
S	11 (14)	14 (11)	25	11 (11.5)	14 (13.5)	25	9 (9.5)	16 (15.5)	25
U	15 (14)	10 (11)	25	10 (11.5)	15 (13.5)	25	10 (9.5)	15 (15.5)	25
F	19 (14)	6 (11)	25	16 (11.5)	9 (13.5)	25	15 (9.5)	10 (15.5)	25
Total	56	44	100	46	54	100	38	62	100

$$x^2 = 7.14 \qquad x^2 = 4.66 \qquad x^2 = 10.35 \quad p. > .05$$

TABLE 224

ITEM 94: HOW TO CLEAN CLOTHES ECONOMICALLY

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	3 (5.5)	22 (19.5)	25	7 (5.75)	18 (19.25)	25	2 (5.25)	23 (19.75)	25
S	6 (5.5)	19 (19.5)	25	5 (5.75)	20 (19.25)	25	3 (5.25)	22 (19.75)	25
U	5 (5.5)	20 (19.5)	25	4 (5.75)	21 (19.25)	25	4 (5.25)	21 (19.75)	25
F	8 (5.5)	17 (19.5)	25	7 (5.75)	18 (19.25)	25	12 (5.25)	13 (19.75)	25
Total	22	78	100	23	77	100	21	79	100

$$x^2 = 3.03 \qquad x^2 = 1.52 \qquad x^2 = 15.12 \quad p. > .01$$

*Includes both very much and much

TABLE 225

ITEM 100: CARING FOR MY SHOES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	18 (20.75)	7 (4.25)	25	12 (15)	13 (10)	25	16 (15.75)	9 (9.25)	25
S	22 (20.75)	3 (4.25)	25	17 (15)	8 (10)	25	12 (15.75)	13 (9.25)	25
U	20 (20.75)	5 (4.25)	25	12 (15)	13 (10)	25	15 (15.75)	10 (9.25)	25
F	23 (20.75)	2 (4.25)	25	19 (15)	6 (10)	25	20 (15.75)	5 (9.25)	25
Total	83	17	100	60	40	100	63	37	100

$$x^2 = 4.18 \qquad x^2 = 6.33 \qquad x^2 = 5.61$$

TABLE 226

ITEM 106: CARING FOR RAYON ARTICLES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	12 (15)	13 (10)	25	7 (11.5)	18 (13.5)	25	5 (9)	20 (16)	25
S	12 (15)	13 (10)	25	12 (11.5)	13 (13.5)	25	7 (9)	18 (16)	25
U	18 (15)	7 (10)	25	13 (11.5)	12 (13.5)	25	9 (9)	16 (16)	25
F	18 (15)	7 (10)	25	14 (11.5)	11 (13.5)	25	15 (9)	10 (16)	25
Total	60	40	100	46	54	100	36	64	100

$$x^2 = 6.00 \qquad x^2 = 4.66 \qquad x^2 = 9.72 \quad p. > .05$$

*Includes both very much and much

TABLE 227

ITEM 112: USING BLEACH WITH CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High*	Low	T	Interest High*	Low	T	Interest High*	Low	T
P	13 (15.25)	12 (9.75)	25	7 (12.75)	18 (12.25)	25	10 (11.25)	15 (13.75)	25
S	15 (15.25)	10 (9.75)	25	12 (12.75)	13 (12.25)	25	8 (11.25)	17 (13.75)	25
U	14 (15.25)	11 (9.75)	25	14 (12.75)	11 (12.25)	25	8 (11.25)	17 (13.75)	25
F	19 (15.25)	6 (9.75)	25	18 (12.75)	7 (12.25)	25	19 (11.25)	6 (13.75)	25
Total	61	39	100	51	49	100	45	55	100

$X^2 = 3.49$ $X^2 = 10.04$ $p > .05$ $X^2 = 13.37$ $p. > .01$

TABLE 228

ITEM 118: CARING FOR A GARMENT MADE FROM SILK

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest High*	Low	T	Interest High*	Low	T	Interest High*	Low	T
P	12 (15.75)	13 (9.25)	25	6 (10.75)	19 (14.25)	25	6 (10.5)	19 (14.5)	25
S	14 (15.75)	11 (9.25)	25	15 (10.75)	10 (14.25)	25	9 (10.5)	16 (14.5)	25
U	20 (15.75)	5 (9.25)	25	10 (10.75)	15 (14.25)	25	11 (10.5)	14 (14.5)	25
F	17 (15.75)	8 (9.25)	25	12 (10.75)	13 (14.25)	25	16 (10.5)	9 (14.5)	25
Total	63	37	100	43	57	100	42	58	100

$X^2 = 6.30$ $X^2 = 6.97$ $X^2 = 8.70$ $p. > .05$

*Includes both very much and much

TABLE 229

ITEM 5: USING DIFFERENT PIECES OF SEWING EQUIPMENT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (6.75)	17 (13.25)	25	8 (8)	17 (17)	25	1 (5.75)	24 (19.25)	25
S	3 (6.75)	22 (13.25)	25	3 (8)	22 (17)	25	5 (5.75)	20 (19.25)	25
U	6 (6.75)	19 (13.25)	25	8 (8)	17 (17)	25	7 (5.75)	18 (19.25)	25
F	10 (6.75)	15 (13.25)	25	13 (8)	12 (17)	25	10 (5.75)	15 (19.25)	25
Total	27	73	100	32	68	100	23	77	100

$$x^2 = 5.42 \qquad x^2 = 9.19 \quad p.>.05 \qquad x^2 = 9.65 \quad p. >.05$$

TABLE 230

ITEM 11: LEARNING TO USE A SEWING MACHINE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (9)	20 (16)	25	13 (11.25)	12 (13.75)	25	2 (7.5)	23 (17.5)	25
S	8 (9)	17 (16)	25	5 (11.25)	20 (13.75)	25	6 (7.5)	19 (17.5)	25
U	10 (9)	15 (16)	25	12 (11.25)	13 (13.75)	25	9 (7.5)	16 (17.5)	25
F	13 (9)	12 (16)	25	15 (11.25)	10 (13.75)	25	13 (7.5)	12 (17.5)	25
Total	36	64	100	45	55	100	30	70	100

$$x^2 = 5.90 \qquad x^2 = 9.17 \quad p.>.05 \qquad x^2 = 12.58 \quad p. >.01$$

TABLE 231

ITEM 17:   PREPARING A FABRIC BEFORE CUTTING

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High *	Low	T	High *	Low	T	High *	Low	T
P	12 (16.5)	13 (8.5)	25	11 (12.5)	14 (12.5)	25	6 (13.5)	19 (11.5)	25
S	14 (16.5)	11 (8.5)	25	10 (12.5)	15 (12.5)	25	14 (13.5)	11 (11.5)	25
U	19 (16.5)	6 (8.5)	25	14 (12.5)	11 (12.5)	25	15 (13.5)	10 (11.5)	25
F	21 (16.5)	4 (8.5)	25	15 (12.5)	10 (12.5)	25	19 (13.5)	6 (11.5)	25
Total	66	34	100	50	50	100	54	46	100

$$X^2 = 9.44 \quad p. > .05 \qquad X^2 = 2.72 \qquad X^2 = 14.33 \quad p. > .01$$

TABLE 232

ITEM 23:   MAKING AND ATTACHING A COLLAR

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High *	Low	T	High *	Low	T	High *	Low	T
P	13 (13.25)	12 (11.75)	25	10 (13.5)	15 (11.5)	25	6 (12)	19 (13)	25
S	10 (13.25)	15 (11.75)	25	12 (13.5)	13 (11.5)	25	12 (12)	13 (13)	25
U	11 (13.25)	14 (11.75)	25	18 (13.5)	7 (11.5)	25	13 (12)	12 (13)	25
F	19 (13.25)	6 (11.75)	25	14 (13.5)	11 (11.5)	25	17 (12)	8 (13)	25
Total	53	47	100	54	46	100	48	52	100

$$X^2 = 7.824 \quad p. > .05 \qquad X^2 = 5.63 \qquad X^2 = 9.93 \quad p. > .05$$

*Includes both very much and much

TABLE 233

ITEM 29: FITTING A PATTERN

Group	I Interest High	Low	T	II Interest High	Low	T	III Interest High	Low	T
P	10 (9)	15 (16)	25	6 (7)	19 (18)	25	3 (7.5)	22 (17.5)	25
S	5 (9)	20 (16)	25	4 (7)	21 (18)	25	7 (7.5)	18 (17.5)	25
U	6 (9)	19 (16)	25	7 (7)	18 (18)	25	10 (7.5)	15 (17.5)	25
F	15 (9)	10 (16)	25	11 (7)	14 (18)	25	10 (7.5)	15 (17.5)	25
Total	36	64	100	28	72	100	30	70	25

Developmental Levels of Early Adolescent Girls

$$x^2 = 10.76 \quad p. > .05 \qquad x^2 = 5.16 \qquad x^2 = 6.28$$

TABLE 234

ITEM 35: USING THE DIRECTION SHEET IN A COMMERCIAL PATTERN

Group	I Interest High*	Low	T	II Interest High*	Low	T	III Interest High*	Low	T
P	15 (14.5)	10 (10.5)	25	15 (15)	10 (10)	25	11 (13.5)	14 (11.5)	25
S	10 (14.5)	15 (10.5)	25	15 (15)	10 (10)	25	14 (13.5)	11 (11.5)	25
U	13 (14.5)	12 (10.5)	25	14 (15)	11 (10)	25	12 (13.5)	13 (11.5)	25
F	20 (14.5)	5 (10.5)	25	16 (15)	9 (10)	25	17 (13.5)	8 (11.5)	25
Total	58	42	100	60	40	100	54	46	100

Developmental Levels of Early Adolescent Girls

$$x^2 = 3.70 \quad p. > .05 \qquad x^2 = 0.33 \qquad x^2 = 3.38$$

*Includes both very much and much

TABLE 235

ITEM 41: SEWING ON BUTTONS AND SNAPS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	8 (15)	17 (10)	25	3 (9.25)	22 (15.75)	25	2 (5.75)	23 (19.25)	25
S	16 (15)	9 (10)	25	11 (9.25)	14 (15.75)	25	3 (5.75)	22 (19.25)	25
U	15 (15)	10 (10)	25	13 (9.25)	12 (15.75)	25	7 (5.75)	18 (19.25)	25
F	21 (15)	4 (10)	25	10 (9.25)	15 (15.75)	25	11 (5.75)	14 (19.25)	25
Total	60	40	100	37	63	100	23	77	100

$$X^2 = 14.33 \quad p. > .01 \qquad X^2 = 9.73 \quad p. > .05 \qquad X^2 = 11.46 \quad p. > .01$$

TABLE 236

ITEM 47: USING DIFFERENT SEAM FINISHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	12 (13.5)	13 (11.5)	25	5 (10.25)	20 (14.75)	25	6 (11.25)	19 (13.75)	25
S	10 (13.5)	13 (11.5)	25	11 (10.25)	14 (14.75)	25	10 (11.25)	15 (13.75)	25
U	12 (13.5)	13 (11.5)	25	12 (10.25)	13 (14.75)	25	13 (11.25)	12 (13.75)	25
F	20 (13.5)	5 (11.5)	25	13 (10.25)	12 (14.75)	25	16 (11.25)	9 (13.75)	25
Total	54	46	100	41	59	100	45	55	100

$$X^2 = 9.50 \quad p. > .05 \qquad X^2 = 6.40 \qquad X^2 = 8.84 \quad p. > .05$$

*Includes both very much and much
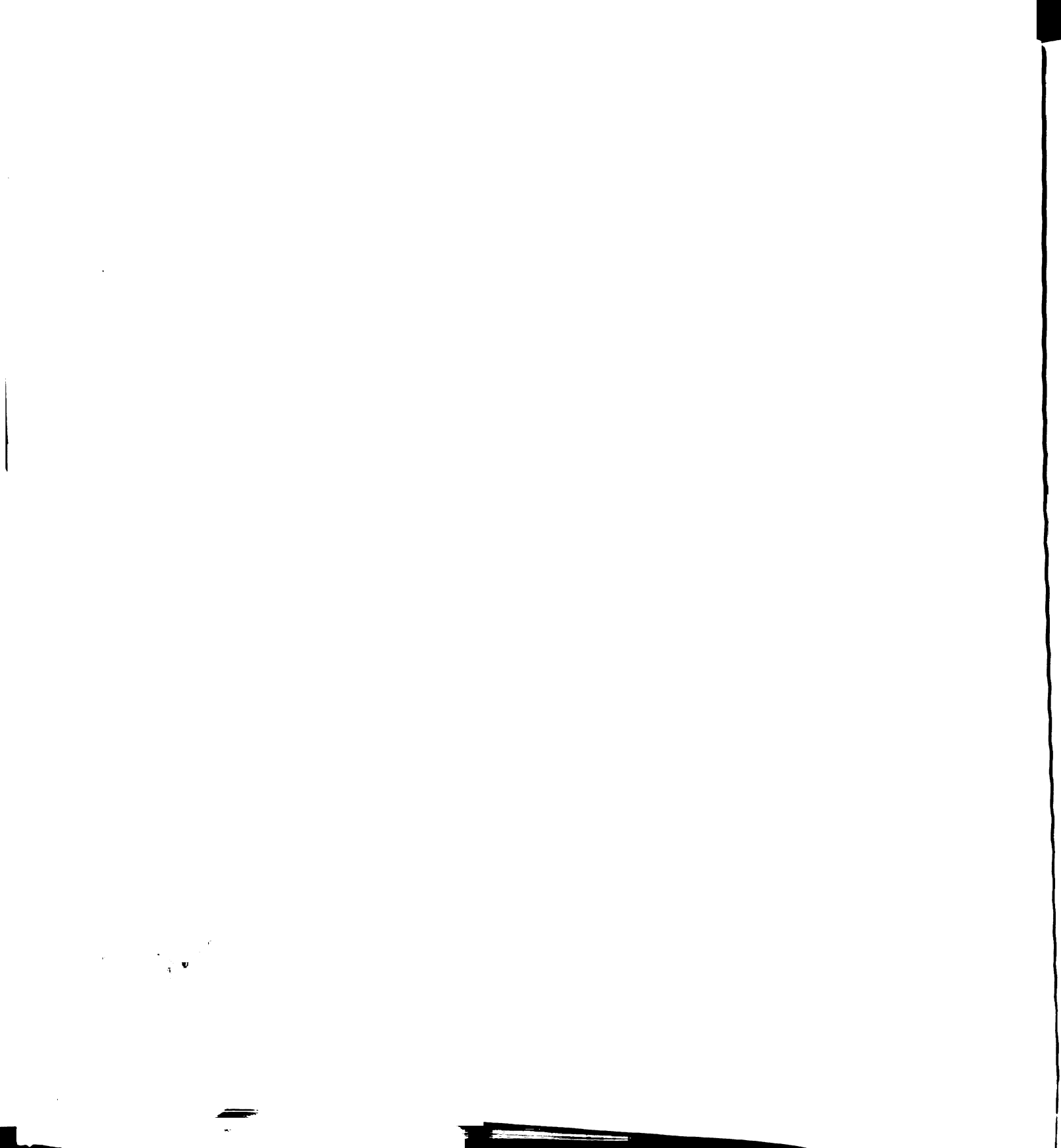
TABLE 237

ITEM 53:   MAKING BUTTONHOLES WITH THE MACHINE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	9 (13.25)	16 (11.75)	25	13 (14.25)	12 (10.75)	25	11 (12.5)	14 (12.5)	25
S	15 (13.25)	10 (11.75)	25	7 (14.25)	18 (10.75)	25	13 (12.5)	12 (12.5)	25
U	13 (13.25)	12 (11.75)	25	18 (14.25)	7 (10.75)	25	10 (12.5)	15 (12.5)	25
F	16 (13.25)	9 (11.75)	25	19 (14.25)	6 (10.75)	25	16 (12.5)	9 (12.5)	25
Total	53	47	100	57	43	100	50	50	100

$$x^2 = 4.61 \qquad x^2 = 14.31 \quad p.>.01 \qquad x^2 = 3.36$$

TABLE 238

ITEM 59:   TAKING BODY MEASUREMENTS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	17 (19)	3 (6)	25	9 (13)	16 (12)	25	13 (12.25)	12 (12.75)	25
S	16 (19)	9 (6)	25	14 (13)	11 (12)	25	12 (12.25)	13 (12.75)	25
U	20 (19)	5 (6)	25	14 (13)	11 (12)	25	11 (12.25)	14 (12.75)	25
F	23 (19)	2 (6)	25	15 (13)	10 (12)	25	13 (12.25)	12 (12.75)	25
Total	76	24	100	52	48	100	49	51	100

$$x^2 = 6.58 \qquad x^2 = 3.52 \qquad x^2 = 0.44$$

*Includes both very much and much

TABLE 239

ITEM 65: DIFFERENT WAYS OF FINISHING HEMS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	12 (14)	13 (11)	25	5 (10.25)	20 (14.75)	25	7 (11.25)	18 (13.75)	25
S	12 (14)	13 (11)	25	9 (10.25)	16 (14.75)	25	8 (11.25)	17 (13.75)	25
U	15 (14)	10 (11)	25	11 (10.25)	14 (14.75)	25	14 (11.25)	11 (13.75)	25
F	17 (14)	8 (11)	25	16 (10.25)	9 (14.75)	25	16 (11.25)	9 (13.75)	25
Total	56	44	100	41	59	100	45	55	100

$$x^2 = 2.92 \qquad x^2 = 10.37 \quad p. > .05 \qquad x^2 = 9.49 \ p. > .05$$

TABLE 240

ITEM 71: PUTTING IN A ZIPPER

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	13 (13.75)	12 (11.25)	25	15 (14)	10 (11)	25	14 (15.75)	11 (9.25)	25
S	10 (13.75)	15 (11.25)	25	11 (14)	14 (11)	25	15 (15.75)	10 (9.25)	25
U	15 (13.75)	10 (11.25)	25	13 (14)	12 (11)	25	16 (15.75)	9 (9.25)	25
F	17 (13.75)	8 (11.25)	25	17 (14)	8 (11)	25	18 (15.75)	7 (9.25)	25
Total	55	45	100	56	44	100	63	37	100

$$x^2 = 4.32 \qquad x^2 = 3.24 \qquad x^2 = 1.50$$

*Includes both very much and much

TABLE 241

ITEM 77: MAKING A SIMPLE SKIRT

Group	I Interest High	I Interest Low	I T	II Interest High	II Interest Low	II T	III Interest High	III Interest Low	III T
	— Developmental Levels of Early Adolescent Girls								
P	13 (9.5)	12 (15.5)	25	12 (11.75)	13 (13.25)	25	4 (8)	21 (17)	25
S	6 (9.5)	19 (15.5)	25	11 (11.75)	14 (13.25)	25	10 (8)	15 (17)	25
U	7 (9.5)	18 (15.5)	25	12 (11.75)	13 (13.25)	25	7 (8)	18 (17)	25
F	12 (9.5)	13 (15.5)	25	12 (11.75)	13 (13.25)	25	11 (8)	14 (17)	25
Total	38	62	100	47	53	100	32	68	100

$$x^2 = 6.28 \qquad x^2 = 0.12 \qquad x^2 = 5.51$$

TABLE 242

ITEM 83: MAKING A SIMPLE BLOUSE

Group	I Interest High	I Interest Low	I T	II Interest High	II Interest Low	II T	III Interest High	III Interest Low	III T
	— Developmental Levels of Early Adolescent Girls								
P	11 (9.25)	14 (15.75)	25	9 (10.75)	16 (14.25)	25	2 (8.5)	23 (16.5)	25
S	5 (9.25)	20 (15.75)	25	7 (10.75)	18 (14.25)	25	8 (8.5)	17 (16.5)	25
U	3 (9.25)	17 (15.75)	25	11 (10.75)	14 (14.25)	25	10 (8.5)	15 (16.5)	25
F	13 (9.25)	12 (15.75)	25	16 (10.75)	9 (14.25)	25	14 (8.5)	11 (16.5)	25
Total	37	63	100	43	57	100	34	66	100

$$x^2 = 5.50 \qquad x^2 = 7.30 \qquad x^2 = 13.37 \quad p > .01$$

TABLE 243

ITEM 89: DOING HAND SEWING, SUCH AS BASTING

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (14.5)	14 (10.5)	25	10 (12.75)	15 (12.25)	25	5 (9.75)	20 (15.25)	25
S	15 (14.5)	10 (10.5)	25	11 (12.75)	14 (12.25)	25	9 (9.75)	16 (15.25)	25
U	13 (14.5)	12 (10.5)	25	14 (12.75)	11 (12.25)	25	13 (9.75)	12 (15.25)	25
F	19 (14.5)	6 (10.5)	25	16 (12.75)	9 (12.25)	25	12 (9.75)	13 (15.25)	25
Total	58	42	100	51	49	100	39	61	100

$$x^2 = 5.74 \qquad x^2 = 3.64 \qquad x^2 = 6.51$$

TABLE 244

ITEM 95: MARKING PATTERN DARTS, TUCKS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (5.5)	20 (19.5)	25	6 (6.75)	19 (18.25)	25	3 (7)	22 (18)	25
S	3 (5.5)	22 (19.5)	25	5 (6.75)	20 (18.25)	25	6 (7)	19 (18)	25
U	3 (5.5)	22 (19.5)	25	3 (6.75)	22 (18.25)	25	9 (7)	16 (18)	25
F	11 (5.5)	14 (19.5)	25	13 (6.75)	12 (18.25)	25	10 (7)	15 (18)	25
Total	22	78	100	27	73	100	28	72	100

$$x^2 = 10.02 \quad p.>.05 \qquad x^2 = 11.51 \quad p.>.01 \qquad x^2 = 5.95$$

*Includes both very much and much

TABLE 245

ITEM 101: SEWING IN SLEEVES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (5)	20 (20)	25	4 (7)	21 (18)	25	5 (7.5)	20 (17.5)	25
S	3 (5)	22 (20)	25	4 (7)	21 (18)	25	6 (7.5)	19 (17.5)	25
U	4 (5)	21 (20)	25	6 (7)	17 (18)	25	8 (7.5)	17 (17.5)	25
F	8 (5)	17 (20)	25	12 (7)	13 (18)	25	11 (7.5)	14 (17.5)	25
Total	20	80	100	28	72	100	30	70	100

$$x^2 = 3.50 \qquad x^2 = 8.73 \quad p. > .05 \qquad x^2 = 4.00$$

TABLE 246

ITEM 107: MAKING A DRESS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	12 (12)	13 (13)	25	14 (13.25)	11 (11.75)	25	9 (11.75)	16 (13.25)	25
S	9 (12)	16 (13)	25	9 (13.25)	16 (11.75)	25	12 (11.75)	13 (13.25)	25
U	9 (12)	16 (13)	25	14 (13.25)	11 (11.75)	25	12 (11.75)	13 (13.25)	25
F	18 (12)	7 (13)	25	16 (13.25)	9 (11.75)	25	14 (11.75)	11 (13.25)	25
Total	48	52	100	53	47	100	47	53	100

$$x^2 = 3.65 \quad p. > .05 \qquad x^2 = 4.29 \qquad x^2 = 2.04$$

TABLE 247

ITEM 113: MAKING OVER A GARMENT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	5 (7.25)	20 (17.75)	25	5 (5.75)	20 (19.25)	25	2 (5)	23 (20)	25
S	5 (7.25)	20 (17.75)	25	3 (5.75)	22 (19.25)	25	4 (5)	21 (20)	25
U	5 (7.25)	20 (17.75)	25	4 (5.75)	21 (19.25)	25	8 (5)	17 (20)	25
F	14 (7.25)	11 (17.75)	25	11 (5.75)	14 (19.25)	25	6 (5)	19 (20)	25
Total	29	71	100	23	77	100	20	80	100

$$x^2 = 11.80 \quad p. > .01 \qquad x^2 = 8.75 \quad p. > .05 \qquad x^2 = 5.00$$

TABLE 248

ITEM 119: MATCHING PLAIDS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (11.5)	14 (13.5)	25	8 (9.75)	17 (15.25)	25	4 (9)	21 (16)	25
S	9 (11.5)	16 (13.5)	25	12 (9.75)	13 (15.25)	25	10 (9)	15 (16)	25
U	11 (11.5)	14 (13.5)	25	7 (9.75)	18 (15.25)	25	11 (9)	14 (16)	25
F	15 (11.5)	10 (13.5)	25	12 (9.75)	13 (15.25)	25	11 (9)	14 (16)	25
Total	46	54	100	39	61	100	36	64	100

$$x^2 = 3.06 \qquad x^2 = 3.48 \qquad x^2 = 5.90$$

TABLE 249

ITEM 6: PLANNING A WARDROBE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	14 (11)	11 (14)	25	13 (13.25)	12 (11.75)	25	14 (12.75)	11 (12.25)	25
S	10 (11)	15 (14)	25	14 (13.25)	11 (11.75)	25	13 (12.75)	12 (12.25)	25
U	6 (11)	19 (14)	25	12 (13.25)	13 (11.75)	25	8 (12.75)	17 (12.25)	25
F	14 (11)	11 (14)	25	14 (13.25)	11 (11.75)	25	16 (12.75)	9 (12.25)	25
Total	44	56	100	53	47	100	51	49	100

$$x^2 = 7.14 \qquad x^2 = 0.44 \qquad x^2 = 5.56$$

TABLE 250

ITEM 12: MAKING A PLAN FOR THE CLOTHES I NEED

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (10.5)	14 (14.5)	25	6 (7.5)	19 (17.5)	25	8 (8.25)	17 (16.75)	25
S	9 (10.5)	16 (14.5)	25	7 (7.5)	18 (17.5)	25	6 (8.25)	19 (16.75)	25
U	9 (10.5)	16 (14.5)	25	7 (7.5)	18 (17.5)	25	8 (8.25)	17 (16.75)	25
F	13 (10.5)	12 (14.5)	25	10 (7.5)	15 (17.5)	25	11 (8.25)	14 (16.75)	25
Total	42	58	100	30	70	100	33	67	100

$$x^2 = 1.30 \qquad x^2 = 1.71 \qquad x^2 = 2.31$$

TABLE 251

ITEM 18: MAKING DECISIONS WHETHER TO BUY OR MAKE A GARMENT

| Group | Developmental Levels of Early Adolescent Girls | | | | | | | | |
| | I | | | II | | | III | | |
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	18 (16)	7 (9)	25	9 (14.5)	16 (10.5)	25	13 (10.5)	12 (14.5)	25
S	12 (16)	13 (9)	25	15 (14.5)	10 (10.5)	25	6 (10.5)	19 (14.5)	25
U	17 (16)	8 (9)	25	16 (14.5)	9 (10.5)	25	9 (10.5)	16 (14.5)	25
F	17 (16)	8 (9)	25	18 (14.5)	7 (10.5)	25	14 (10.5)	11 (14.5)	25
Total	64	36	100	58	42	100	42	58	100

$$x^2 = 3.82 \qquad x^2 = 7.39 \qquad x^2 = 6.73$$

TABLE 252

ITEM 24: HOW MUCH MONEY TO HAVE FOR A CLOTHES ALLOWANCE

| Group | Developmental Levels of Early Adolescent Girls | | | | | | | | |
| | I | | | II | | | III | | |
	Interest High	Low	T	Interest High	Low	T	Interest High	Low	T
P	12 (9.75)	13 (15.25)	25	6 (11.75)	19 (13.25)	25	8 (8)	17 (17)	25
S	6 (9.75)	19 (15.25)	25	13 (11.75)	12 (13.25)	25	8 (8)	17 (17)	25
U	8 (9.75)	17 (15.25)	25	13 (11.75)	12 (13.25)	25	8 (8)	17 (17)	25
F	13 (9.75)	12 (15.25)	25	15 (11.75)	10 (13.25)	25	8 (8)	17 (17)	25
Total	39	61	100	47	53	100	32	68	100

$$x^2 = 5.50 \qquad x^2 = 7.50 \qquad x^2 = 0.0$$

TABLE 253

ITEM 30:   FIGURING OUT THE COST OF A WARDROBE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	10 (10.5)	15 (14.5)	25	6 (7)	19 (18)	25	5 (7.5)	20 (17.5)	25
S	9 (10.5)	16 (14.5)	25	9 (7)	16 (18)	25	5 (7.5)	20 (17.5)	25
U	10 (10.5)	15 (14.5)	25	6 (7)	19 (18)	25	8 (7.5)	17 (17.5)	25
F	13 (10.5)	12 (14.5)	25	7 (7)	18 (18)	25	12 (7.5)	13 (17.5)	25
Total	42	58	100	28	72	100	30	70	100

$$x^2 = 1.48 \qquad x^2 = 1.187 \qquad x^2 = 6.28$$

TABLE 254

ITEM 36:   DECIDING THE MOST SUITABLE PATTERNS FOR ME TO WEAR

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	11 (12)	14 (13)	25	9 (12.5)	16 (12.5)	25	8 (10.5)	17 (14.5)	25
S	8 (12)	17 (13)	25	12 (12.5)	13 (12.5)	25	11 (10.5)	14 (14.5)	25
U	12 (12)	13 (13)	25	12 (12.5)	13 (12.5)	25	10 (10.5)	15 (14.5)	25
F	17 (12)	8 (13)	25	17 (12.5)	8 (12.5)	25	13 (10.5)	12 (14.5)	25
Total	48	52	100	50	50	100	42	58	100

$$x^2 = 6.73 \qquad x^2 = 5.28 \qquad x^2 = 2.13$$

TABLE 255

ITEM 42: STUDYING THE QUALITY IN READY-MADE CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	16 (15.5)	9 (9.5)	25	10 (13)	15 (12)	25	9 (11.75)	16 (13.25)	25
S	12 (15.5)	13 (9.5)	25	11 (13)	14 (12)	25	10 (11.75)	15 (13.25)	25
U	15 (15.5)	10 (9.5)	25	14 (13)	11 (12)	25	10 (11.75)	15 (13.25)	25
F	19 (15.5)	6 (9.5)	25	17 (13)	8 (12)	25	18 (11.75)	7 (13.25	25
Total	62	38	100	52	48	100	47	53	100

$$x^2 = 4.24 \qquad x^2 \ 4.80 \qquad x^2 = 8.47 \quad p. > .05$$

TABLE 256

ITEM 48: FITTING OF GARMENTS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	6 (8)	19 (17)	25	3 (7.25)	22 (17.75)	25	5 (5.75)	20 (19.25)	25
S	7 (8)	18 (17)	25	9 (7.25)	16 (17.75)	25	5 (5.75)	20 (19.25)	25
U	7 (8)	18 (17)	25	9 (7.25)	16 (17.75)	25	3 (5.75)	22 (19.25)	25
F	12 (8)	13 (17)	25	8 (7.25)	17 (17.75)	25	10 (5.75)	15 (19.25)	25
Total	32	68	100	29	71	100	23	77	100

$$x^2 = 4.04 \qquad x^2 = 4.80 \qquad x^2 = 6.04$$

*Includes both very much and much

TABLE 257

ITEM 54: JUDGING HOW WELL MY GARMENT IS MADE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	16 (16.5)	9 (8.5)	25	8 (12.75)	17 (12.25)	25	12 (14)	13 (11)	25
S	14 (16.5)	11 (8.5)	25	11 (12.75)	14 (12.25)	25	9 (14)	16 (11)	25
U	15 (16.5)	10 (8.5)	25	13 (12.75)	12 (12.25)	25	18 (14)	7 (11)	25
F	21 (16.5)	4 (8.5)	25	19 (12.75)	6 (12.25)	25	17 (14)	8 (11)	25
Total	66	34	100	51	49	100	56	44	100

$$x^2 = 5.17 \qquad x^2 = 10.36 \quad p.>.05 \qquad x^2 = 8.76 \quad p.>.05$$

TABLE 258

ITEM 60: CHOOSING A SUITABLE PATTERN FOR A SEWING PROJECT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (8.5)	17 (16.5)	25	8 (6.75)	17 (18.25)	25	4 (6.25)	21 (18.75)	25
S	7 (8.5)	18 (16.5)	25	5 (6.75)	20 (18.25)	25	5 (6.25)	20 (18.75)	25
U	5 (8.5)	20 (16.5)	25	4 (6.75)	21 (18.25)	25	7 (6.25)	18 (18.75)	25
F	14 (8.5)	11 (16.5)	25	10 (6.75)	15 (18.25)	25	9 (6.25)	16 (18.75)	25
Total	34	66	100	27	73	100	25	75	100

$$x^2 = 8.02 \quad p.>.05 \qquad x^2 = 4.61 \qquad x^2 = 3.15$$

*Includes both very much and much

TABLE 259

ITEM 66: DEVELOPING A PLAN OF WORK FOR MAKING A GARMENT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	16 (15)	9 (10)	25	11 (11.5)	14 (13.5)	25	12 (12)	13 (13)	25
S	11 (15)	14 (10)	25	7 (11.5)	18 (13.5)	25	7 (12)	18 (13)	25
U	12 (15)	13 (10)	25	12 (11.5)	13 (13.5)	25	12 (12)	13 (13)	25
F	21 (15)	4 (10)	25	16 (11.5)	9 (13.5)	25	17 (12)	8 (13)	25
Total	60	40	100	46	54	100	48	52	100

$$X^2 = 10.33 \quad p. > .05 \qquad X^2 = 6.60 \qquad X^2 = 8.01 \quad p. > .05$$

TABLE 260

ITEM 72: DECIDING WHEN AND WHAT MAKE-UP TO WEAR

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	20 (15.25)	5 (9.75)	25	10 (12.75)	15 (12.25)	25	12 (13)	13 (12)	25
S	12 (15.25)	13 (9.75)	25	14 (12.75)	11 (12.25)	25	11 (13)	14 (12)	25
U	11 (15.25)	14 (9.75)	25	11 (12.75)	14 (12.25)	25	11 (13)	14 (12)	25
F	18 (15.25)	7 (9.75)	25	16 (12.75)	9 (12.25)	25	18 (13)	7 (12)	25
Total	61	39	100	51	49	100	52	48	100

$$X^2 = 9.87 \quad p. > .05 \qquad X^2 = 3.64 \qquad X^2 = 5.45$$

*Includes both very much and much

TABLE 261

ITEM 78:   LEARNING HOW TO WORK WITH OTHERS WHEN SEWING

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	4 (7.75)	21 (17.25)	25	4 (6.5)	21 (18.5)	25	5 (5.5)	20 (19.5)	25
S	4 (7.75)	21 (17.25)	25	5 (6.5)	20 (18.5)	25	3 (5.5)	22 (19.5)	25
U	7 (7.75)	18 (17.25)	25	7 (6.5)	18 (18.5)	25	3 (5.5)	22 (19.5)	25
F	16 (7.75)	9 (17.25)	25	10 (6.5)	15 (18.5)	25	11 (5.5)	14 (19.5)	25
Total	31	69	100	26	74	100	22	78	100

$$X^2 = 18.09 \quad p. > .001 \qquad X^2 = 4.36 \qquad X^2 = 10.02 \quad p. > .05$$

TABLE 262

ITEM 84:   WORKING INDEPENDENTLY

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	7 (6.75)	18 (18.25)	25	6 (6.25)	19 (18.75)	25	2 (6)	23 (19)	25
S	3 (6.75)	22 (18.25)	25	1 (6.25)	24 (18.75)	25	7 (6)	18 (19)	25
U	6 (6.75)	19 (18.25)	25	8 (6.25)	17 (18.75)	25	4 (6)	21 (19)	25
F	11 (6.75)	14 (18.25)	25	10 (6.25)	15 (18.75)	25	11 (6)	14 (19)	25
Total	27	73	100	25	75	100	24	76	100

$$X^2 = 6.64 \qquad X^2 = 9.55 \; p. > .05 \qquad X^2 = 10.08 \quad p. > .05$$

TABLE 263

ITEM 90:   PLANNING THE ARRANGEMENT OF DRESSER DRAWERS

Group	Developmental Levels Of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	8 (8.75)	17 (16.25)	25	5 (7.25)	20 (17.75)	25	3 (6)	22 (19)	25
S	7 (8.75)	18 (16.25)	25	10 (7.25)	15 (17.75)	25	4 (6)	21 (19)	25
U	7 (8.75)	18 (16.25)	25	6 (7.25)	19 (17.75)	25	8 (6)	17 (19)	25
F	13 (8.75)	12 (16.25)	25	8 (7.25)	17 (17.75)	25	9 (6)	16 (19)	25
Total	35	65	100	29	71	100	24	76	100

$$x^2 = 4.35 \qquad x^2 = 2.36 \qquad x^2 = 5.70$$

TABLE 264

ITEM 96:   SELECTING A FABRIC SUITABLE FOR A CERTAIN GARMENT

Group	Developmental Levels Of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	6 (8)	19 (17)	25	6 (6.75)	19 (18.25)	25	6 (9)	19 (16)	25
S	7 (8)	18 (17)	25	4 (6.75)	21 (18.25)	25	3 (9)	22 (16)	25
U	6 (8)	19 (17)	25	6 (6.75)	19 (18.25)	25	11 (9)	14 (16)	25
F	13 (8)	12 (17)	25	11 (6.75)	14 (18.25)	25	16 (9)	9 (16)	25
Total	32	68	100	27	73	100	36	64	100

$$x^2 = 6.25 \qquad x^2 = 5.42 \qquad x^2 = 17.01 \quad p. > .001$$

TABLE 265

ITEM 102: TAKING CARE OF A SEWING MACHINE

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (15.25)	14 (9.75)	25	10 (12.5)	15 (12.5)	25	7 (11.25)	18 (13.75)	25
S	15 (15.25)	10 (9.75)	25	13 (12.5)	12 (12.5)	25	8 (11.25)	17 (13.75)	25
U	14 (15.25)	11 (9.75)	25	10 (12.5)	15 (12.5)	25	13 (11.25)	12 (13.75)	25
F	21 (15.25)	4 (9.75)	25	17 (12.5)	8 (12.5)	25	17 (11.25)	8 (13.75)	25
Total	61	39	100	50	50	100	45	55	100

$$x^2 = 8.87 \quad p. > .05 \qquad x^2 = 5.28 \qquad x^2 = 10.46 \quad p. > .05$$

TABLE 266

ITEM 108: DIFFERENT TYPES OF STORES WHICH SELL CLOTHES

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High	Low	T	High	Low	T	High	Low	T
P	6 (5.25)	19 (19.75)	25	7 (6.75)	18 (18.25)	25	6 (6.25)	19 (18.75)	25
S	3 (5.25)	22 (19.75)	25	6 (6.75)	19 (18.25)	25	5 (6.25)	20 (18.75)	25
U	5 (5.25)	20 (19.75)	25	6 (6.75)	19 (18.25)	25	4 (6.25)	21 (18.75)	25
F	7 (5.25)	18 (19.75)	25	8 (6.75)	17 (18.25)	25	10 (6.25)	15 (18.75)	25
Total	21	79	100	27	73	100	25	75	100

$$x^2 = 2.11 \qquad x^2 = 0.55 \qquad x^2 = 4.43$$

*Includes both very much and much

TABLE 267

ITEM 114: UNDERSTANDING INFORMATION FOUND ON LABELS

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (14.75)	14 (10.25)	25	7 (13.5)	18 (11.5)	25	8 (9.75)	17 (15.25)	25
S	13 (14.75)	12 (10.25)	25	11 (13.5)	14 (11.5)	25	7 (9.75)	18 (15.25)	25
U	13 (14.75)	12 (10.25)	25	15 (13.5)	10 (11.5)	25	8 (9.75)	17 (15.25)	25
F	22 (14.75)	3 (10.25)	25	21 (13.5)	4 (11.5)	25	16 (9.75)	9 (15.25)	25
Total	59	41	100	21	46	100	39	61	100

$X^2 = 12.03$ p. $>$ .01 $X^2 = 17.23$ p. $>$ .001 $X^2 = 8.87$ p. $>$ .05

TABLE 268

ITEM 120: BUYING SEWING EQUIPMENT

Group	Developmental Levels of Early Adolescent Girls								
	I			II			III		
	Interest			Interest			Interest		
	High*	Low	T	High*	Low	T	High*	Low	T
P	11 (15.75)	14 (9.25)	25	10 (13.75)	15 (11.25)	25	8 (12)	17 (13)	25
S	13 (15.75)	12 (9.25)	25	13 (13.75)	12 (11.25)	25	10 (12)	15 (13)	25
U	17 (15.75)	8 (9.25)	25	15 (13.75)	10 (11.25)	25	15 (12)	10 (13)	25
F	22 (15.75)	3 (9.25)	25	17 (13.75)	8 (11.25)	25	15 (12)	10 (13)	25
Total	63	37	100	55	45	100	48	52	100

$X^2 = 12.14$ p. $>$ .01 $X^2 = 4.32$ $X^2 = 6.09$

*Includes both very much and much

APPENDIX C

DIRECTIONS FOR THE USE OF CLOTHING TOOLS

RATING SCALE FOR USE OF CLOTHING TOOLS

HALF-SIZE BLOUSE PATTERN

CORRELATION BETWEEN THE DAT SPACE RELATIONS TEST AND
THE ABILITY TO USE CLOTHING CONSTRUCTION TOOLS

SCORES OBTAINED ON RATING SCALE FOR USE OF CLOTHING
CONSTRUCTION TOOLS

DIFFERENTIAL APTITUDE TEST--SPACE RELATIONS

DIRECTIONS USED IN GIVING TESTS FOR USING CLOTHING CONSTRUCTION TOOLS

Sewing Machine

Place the paper with the square and straight lines on it under the presser foot. Carefully lower the unthreaded needle into one corner of the square on the paper by turning the balance wheel with your right hand. Make sure the edges of the paper are parallel to the edges of the machine. Carefully lower the presser foot to the paper to hold it in place. Keep your right hand near the balance wheel so that it will be ready to stop and start the machine as needed. Use your left hand to guide the paper. Do not pull or push the paper as the feed pushes it along at just the right speed. Slow down as you approach the corner, stopping just as the needle arrives at the corner. Turn the corner by leaving the needle in the paper, lifting the presser foot, turning the paper until the next edge of the paper is parallel to the edge of the presser foot, and lower the presser foot. Proceed as before, until there is stitching on all four sides.

Place the paper with the circle under the presser foot so that the ends of the guide line fall near the presser foot and the circle falls to the left of it. Lower the needle into the paper so that it punctures the end of the line. Swing the paper as needed to make the guide line parallel to the presser foot. Lower the presser foot. Stitch slowly, holding the paper between the thumb and fingers of your left hand and guiding it so that the

stitching keeps parallel to the curved line. Continue
stitching for at least five rows.

Shears

Use long slashes with the cutting shears in prefer-
ence to short choppy ones. Cut exactly along the pattern
line. Curves are especially important, so cut them with
great care. There are notches on the edge of the pattern to
aid in the construction of the garment. It is a good idea
to cut them out, when the fabric is cut.

Put your left hand near the place you are cutting to
help hold the material in place. When cutting around the
edge of a pattern, cut as near the pattern as possible,
keeping your work flat on the table to prevent it from
slipping or stretching out of shape.

Have the edge of the pattern to the right and place
your left hand on the pattern and cloth near that edge to
keep them from slipping on the table while you are cutting.
Hold shears in your right hand, thumb in round handle,
fingers in oval handle, and keep them steady by resting the
under blade on the table while you cut. Open the shears
wide to make each cut a long one. The longer each cut is,
the less rough the edge is likely to be and the sooner you
will finish. Cut along the edge of each pattern and as near
the edge as you can cut without cutting the pattern, until
you come to the notches. Cut notches out, that is, cut them
out into the extra material. When cutting corners or short

places, you will find it helpful to cut with the points of the shears.

Tracing Wheel

Run the tracing wheel along the seamlines and dart lines of the pattern. Place a ruler along the straight lines in order to have a more accurate line. Handling the wheel takes some practice, so try it out on the edge of the material.

Place the garment section, with the pattern still pinned to it, on a piece of cardboard in order to protect the table top. Run the tracing wheel along the edge of the lines only once. Use a firm, steady motion. Curves are more easily marked if the handle of the tracing wheel is slightly slanted inward toward the center of the curve.

Needle

You will be given a needle (Sharp number 9), black thread (number 60) about 18 inches long, and a strip of white batiste about 3 inches by 12 inches. Thread the needle and knot the thread.

Put on your thimble and hold the cloth so that you can sew from right to left along its longer length. Hold it as though you were about to gather a ruffle. Take even stitches about one-fourth inch in from the upper edge. Make a row of stiches along the edge of the cloth; the quicker you take your stitches, the more even they will be. Fasten the thread at the end and pull out the needle.

RATING SCALE FOR USE OF CLOTHING CONSTRUCTION TOOLS

Student_____ Grade_____

Date_____ School_____ Score_____

1	2	3	4	5	Score

Tracing Wheel

Unable to follow lines accurately on both straight lines or curves.	Able to follow straight lines with continuous strokes but not curves.	Able to follow both straight and curved lines with continuous strokes.	1.___

Sewing Machine

Unable to follow lines evenly, turn corners, or follow curves. Stops and starts machine with jerks.	Able to follow straight lines and turn corners. Unable to follow curves smoothly.	Able to stitch on both straight and curved lines and turn corners without stopping machine and starting again.	2.___

Shears

Cuts with jagged uneven strokes.	Able to cut with straight even strokes on straight edges but has difficulty with curves.	Able to cut with straight, even strokes on both straight lines and curves.	3.___

Needle

Holds material, thimble and needle awkwardly and makes uneven stitches.	Awkward in handling needle and thimble, but can hold material. Stitches are sometimes uneven.	Able to hold material and handle needle skillfully, using thimble. Produces even stitches.	4.___

TABLE 269

CORRELATION BETWEEN THE DIFFERENTIAL APTITUDE TEST FOR
SPACE RELATIONS AND THE ABILITY TO USE CLOTHING
CONSTRUCTION TOOLS FOR DEVELOPMENTAL LEVEL I

X*	Y**	X	Y	X	Y	X	Y
27	8	38	6	17	4	17	6
50	8	36	10	26	10	13	5
35	6	33	7	26	6	28	8
37	4	13	4	28	5	34	11
21	5	22	4	50	5	11	7
29	5	22	9	24	8	14	5
15	7	34	7	45	7	62	11
38	8	36	6	14	5	46	7
61	5	15	7	24	4	19	7
42	6	43	10	11	5	9	5
48	10	3	7	29	6	12	6
8	5	40	7	38	5	12	7
11	5	20	7	7	4	1	5
47	5	17	7	15	5	17	6
26	7	34	6	14	4	19	4
47	4	9	8	19	5	30	7
19	11	33	6	11	7	1	6
11	5	14	7	3	5	27	9
23	4	41	10	30	6	52	8.
24	7	62	11	15	5	8	5
9	8	7	5	13	4	23	8
46	6	51	10	40	9	22	5
62	11	42	9	36	5	71	13
50	8	17	6	32	7	29	7
29	10	30	7	33	10	52	9

$\Sigma X = 2756$ $\Sigma Y = 674$ $\Sigma XY = 20,168$

$\Sigma X^2 = 100,272$ $\Sigma Y^2 = 4964$ $N = 100$

$r = .4976$

* Raw Scores obtained on Differential Aptitude Test for
Space Relations.

** Raw Scores obtained on Rating Scale for the Ability to
Use Clothing Construction Tools.

TABLE 270

CORRELATION BETWEEN THE DIFFERENTIAL APTITUDE TEST FOR SPACE RELATIONS AND THE ABILITY TO USE CLOTHING CONSTRUCTION TOOLS FOR DEVELOPMENTAL LEVEL II

X*	Y**	X	Y	X	Y	X	Y
30	5	19	5	37	9	24	8
73	12	5	4	3	4	19	4
43	8	43	9	34	7	61	10
89	5	27	8	19	5	8	5
46	8	29	8	35	8	30	8
28	8	16	5	17	6	58	11
10	5	41	9	30	6	46	11
59	10	32	7	52	10	37	8
38	6	44	8	35	7	16	6
6	7	21	6	8	4	11	5
58	8	38	6	38	8	8	4
30	7	1	4	36	7	3	5
9	5	11	5	38	8	27	8
49	11	62	10	15	4	39	9
25	5	11	6	19	5	36	7
10	5	26	8	8	4	59	11
41	8	8	5	59	11	20	4
45	9	5	4	17	6	19	5
54	10	46	8	5	4	1	5
9	4	30	5	6	5	8	5
66	12	49	5	7	4	65	12
46	8	15	5	6	4	30	8
29	7	31	6	10	6	11	5
10	5	46	8	32	9	46	8
65	8	24	7	27	8	60	9

$\Sigma X = 2983$ $\Sigma Y = 687$ $\Sigma XY = 23,862$

$\Sigma X^2 = 126,147$ $\Sigma Y^2 = 5201$ $N = 100$

$r = .7965$

* Raw Scores obtained on Differential Aptitude Test for Space Relations.

** Raw Scores obtained on Rating Scale for the Ability to Use Clothing Construction Tools.

TABLE 271

CORRELATION BETWEEN THE DIFFERENTIAL APTITUDE TEST FOR
SPACE RELATIONS AND THE ABILITY TO USE CLOTHING
CONSTRUCTION TOOLS FOR DEVELOPMENTAL LEVEL III

X*	Y**	X	Y	X	Y	X	Y
35	9	2	5	54	7	56	9
2	5	36	4	43	8	42	8
30	7	27	6	15	4	21	5
40	8	52	8	15	9	24	7
13	6	22	5	1	5	34	4
40	6	66	14	21	9	10	6
38	8	26	7	17	5	55	8
45	8	41	9	12	6	42	7
40	8	3	6	14	5	12	6
32	6	28	9	49	6	49	11
34	11	44	4	32	7	50	9
8	7	43	7	69	11	47	7
79	12	50	8	34	9	47	12
70	7	64	10	26	6	60	11
53	7	24	6	13	7	56	11
46	8	58	7	12	5	45	9
62	9	23	6	27	6	12	6
28	9	32	7	24	5	18	4
63	11	43	4	1	4	49	9
56	8	46	9	43	8	51	11
39	6	26	5	15	6	38	6
24	7	28	7	5	4	68	10
29	4	37	5	6	6	33	7
58	8	70	14	53	8	26	5
52	8	3	4	14	5	69	13

$\Sigma X = 3539$ $\Sigma Y = 731$ $\Sigma XY = 28,898$

$\Sigma X^2 = 161,229$ $\Sigma Y^2 = 5875$ $N = 100$

$r = .6924$

* Raw Scores obtained on Differential Aptitude Test for
Space Relations.

** Raw Scores obtained on Rating Scale for the Ability to
Use Clothing Construction Tools.

TABLE 272

SCORES OBTAINED ON THE RATING SCALE FOR THE USE OF CLOTHING CONSTRUCTION TOOLS BY EARLY ADOLESCENT GIRLS IN DEVELOPMENTAL LEVEL I

Tracing Wheel				Machine				Shears				Needle			
P	S	U	F	P	S	U	F	P	S	U	F	P	S	U	F*
3	3	2	2	3	1	2	2	2	2	1	1	3	1	2	2
4	2	2	3	2	2	1	3	2	1	2	2	2	2	1	3
2	3	2	2	2	1	1	3	1	1	1	3	3	1	1	3
1	3	1	2	2	3	1	2	2	2	1	2	1	2	1	1
2	4	2	3	1	3	1	2	1	2	1	1	1	1	1	1
3	4	2	1	4	3	2	2	3	1	1	1	1	3	1	1
2	2	2	2	3	2	1	2	2	1	1	1	1	1	1	1
1	3	2	2	2	2	2	1	1	2	3	1	1	3	2	1
1	2	2	3	2	1	3	1	1	1	2	2	1	1	3	1
1	2	1	3	1	2	1	2	1	1	1	2	1	2	1	1
4	2	1	2	1	3	2	1	1	2	2	1	1	2	1	1
3	3	1	4	2	1	1	4	1	1	1	3	1	2	1	2
1	1	1	2	1	3	1	2	1	1	2	2	1	1	1	1
1	2	2	3	1	3	1	1	1	1	1	2	1	1	1	1
3	3	2	4	3	1	2	2	2	1	2	1	2	2	2	1
2	2	2	3	1	2	1	1	1	1	1	3	1	3	1	2
3	3	2	3	2	1	1	2	2	1	1	2	1	1	1	2
1	1	3	1	2	2	2	1	1	2	3	2	1	2	2	1
1	2	1	2	2	2	2	2	1	1	1	1	2	2	1	1
4	2	2	1	1	2	2	1	1	1	2	1	1	1	1	1
2	1	3	3	1	1	1	3	1	1	1	1	1	1	1	1
2	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1
1	2	1	2	3	1	1	1	1	2	1	1	1	2	1	1
3	4	2	1	2	2	1	2	2	1	1	1	1	2	1	1
4	2	1	2	1	3	1	2	2	4	2	1	1	1	1	1

*Key: P = Professional;   S = Skilled;   U = Semi-unskilled;
F = Farming
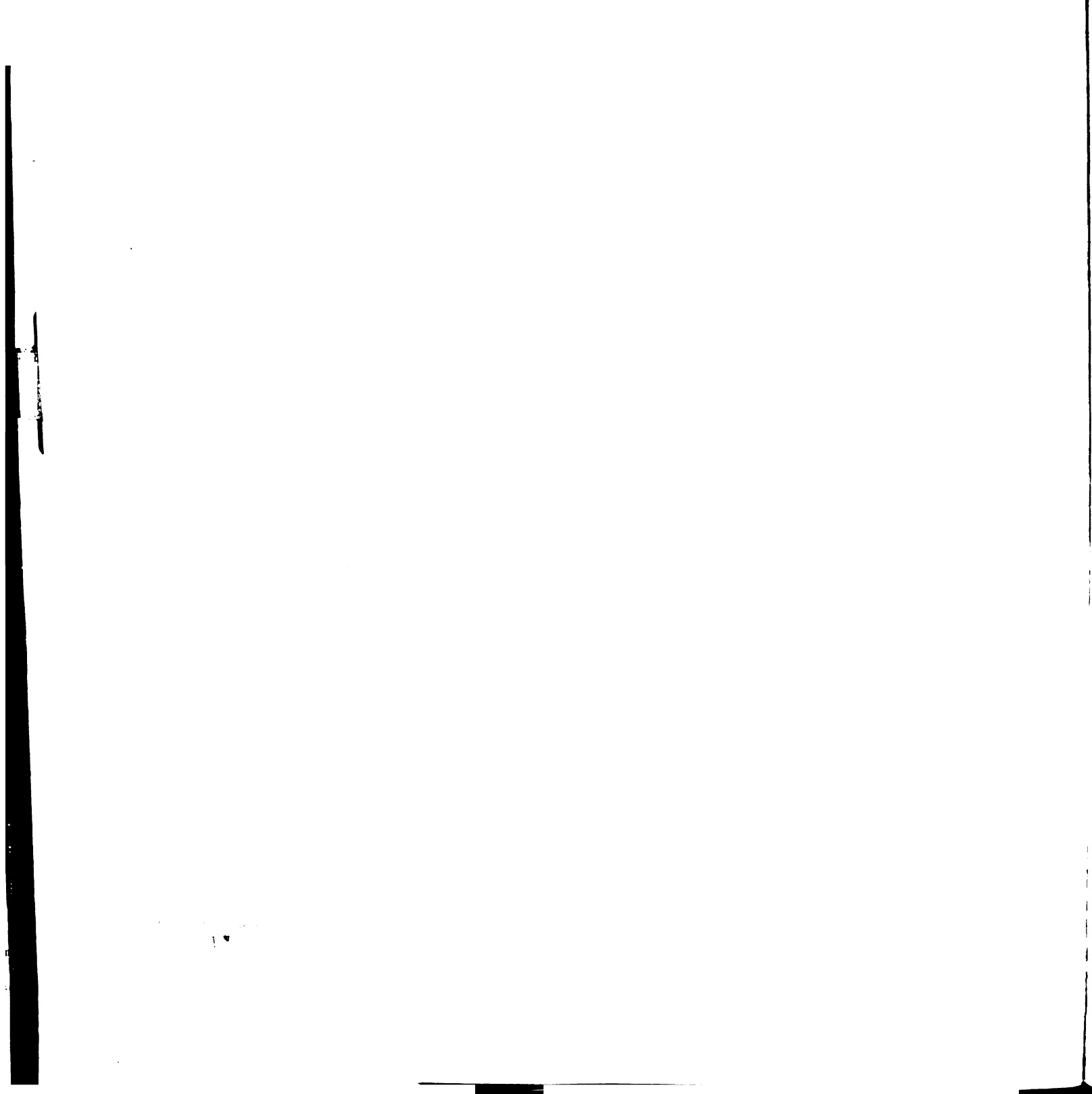
TABLE 273

SCORES OBTAINED ON THE RATING SCALE FOR THE USE OF
CLOTHING CONSTRUCTION TOOLS BY EARLY ADOLESCENT
GIRLS IN DEVELOPMENTAL LEVEL II

Tracing Wheel				Machine				Shears				Needle			
P	S	U	F	P	S	U	F	P	S	U	F	P	S	U	F*
1	1	1	2	1	1	1	2	1	2	1	2	1	1	1	2
2	2	1	3	1	1	1	3	1	1	1	2	1	1	1	2
2	3	1	1	2	2	1	1	1	2	1	1	3	1	1	1
4	1	2	3	2	1	2	3	4	1	2	2	2	1	2	3
3	1	2	3	1	2	1	3	2	1	1	2	1	3	1	3
1	2	2	1	3	3	2	1	1	1	1	1	1	2	2	2
2	1	2	4	2	2	1	1	1	1	1	1	3	1	1	2
2	1	2	1	1	2	2	2	1	1	3	1	4	1	1	1
3	4	1	1	3	1	1	1	1	2	1	1	3	1	1	2
2	1	1	1	1	1	1	2	2	2	1	1	3	2	3	1
1	1	2	2	2	2	1	2	1	1	1	3	1	2	2	1
1	1	2	1	2	1	3	2	1	1	2	1	3	2	1	1
2	1	2	1	1	2	3	2	1	1	2	1	1	2	2	1
2	3	3	1	2	1	2	3	2	1	1	2	1	1	2	3
2	3	3	1	1	3	2	3	1	2	2	1	1	2	3	2
4	2	3	2	3	1	2	4	1	1	2	1	1	1	1	4
4	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1
3	2	2	1	3	4	1	1	3	2	1	2	3	1	3	2
1	1	3	2	2	1	3	3	1	2	2	2	1	1	1	1
2	2	1	2	2	2	2	3	2	2	1	1	2	2	1	2
1	3	1	2	2	2	2	3	1	1	2	2	1	2	1	1
1	3	3	1	2	2	3	1	2	1	4	1	3	1	1	1
1	4	2	1	1	1	1	2	1	2	1	1	2	1	2	1
2	3	1	1	3	1	1	5	1	3	1	2	2	2	1	4
2	1	1	2	3	2	1	2	3	2	1	2	2	1	1	3

*Key: P = Professional;   S = Skilled;   U = Semi-unskilled;
F = Farming

TABLE 274

SCORES OBTAINED ON THE RATING SCALE FOR THE USE OF
CLOTHING CONSTRUCTION TOOLS BY EARLY ADOLESCENT
GIRLS IN DEVELOPMENTAL LEVEL III

Tracing Wheel				Machine				Shears				Needle			
P	S	U	F	P	S	U	F	P	S	U	F	P	S	U	F*
3	1	1	1	2	3	2	1	2	1	2	2	1	1	1	2
2	1	1	3	1	1	1	5	3	1	1	2	1	1	2	2
3	1	3	3	2	3	2	1	3	1	1	2	1	3	2	1
1	1	1	2	2	1	1	1	2	2	1	2	3	1	1	3
1	4	1	2	2	4	2	4	1	3	2	2	1	3	2	3
3	1	1	4	3	2	2	3	3	1	1	2	2	1	1	2
2	1	2	1	1	2	2	2	2	1	3	2	1	2	2	2
1	3	1	1	1	3	4	3	1	2	3	3	3	1	1	2
1	1	2	2	2	1	1	3	1	1	1	4	3	1	1	2
3	3	2	1	4	3	2	3	2	1	3	1	3	2	1	1
1	2	2	2	1	2	1	2	2	1	1	2	2	2	1	1
1	4	3	1	4	1	2	1	1	1	3	2	2	1	3	1
1	4	1	2	1	1	2	3	3	2	2	3	3	2	1	1
3	1	2	1	2	2	1	1	2	2	3	1	1	2	3	1
3	1	1	1	2	2	1	3	2	1	2	3	2	1	2	1
1	1	3	1	2	1	1	1	2	1	2	1	3	2	1	1
1	2	2	2	2	2	1	2	1	2	2	1	3	1	2	1
2	2	2	2	1	2	2	3	3	1	1	3	2	2	3	2
3	1	1	4	1	2	1	2	2	2	2	3	1	1	1	4
1	2	1	1	2	3	2	1	2	3	2	2	1	1	1	1
1	2	1	1	2	2	1	3	3	1	1	1	1	1	1	2
2	4	2	1	2	1	1	2	1	3	1	2	1	2	1	1
1	1	1	2	1	1	2	4	1	1	2	1	1	1	1	2
5	3	1	4	2	3	1	3	2	5	1	2	2	3	1	2
1	1	2	4	3	1	1	2	2	1	1	1	1	1	2	2

*Key: P = Professional; S = Skilled; U = Semi-unskilled;
F = Farming

CORPORATION

THE PSYCHOLOGICAL

Ψ

DIFFERENTIAL
APTITUDE
TESTS

George K. Bennett
Harold G. Seashore
Alexander G. Wesman

55-186
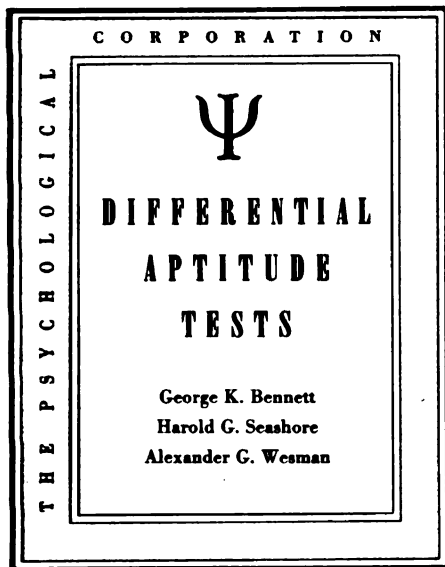
SPACE RELATIONS

FORM A

Do not open this booklet until you are told to do so.

On your SEPARATE ANSWER SHEET, print your name, address, and other requested information in the proper spaces.

In the space after **Form,** print **an A.**

Then wait for further instructions.

DO NOT MAKE ANY MARKS IN THIS BOOKLET

SPACE RELATIONS

DIRECTIONS

This test consists of forty patterns which can be folded into figures. For each pattern, five figures are shown. You are to decide which of these figures can be made from the pattern shown. The pattern always shows the outside of the figure. Here is an example:

EXAMPLE X
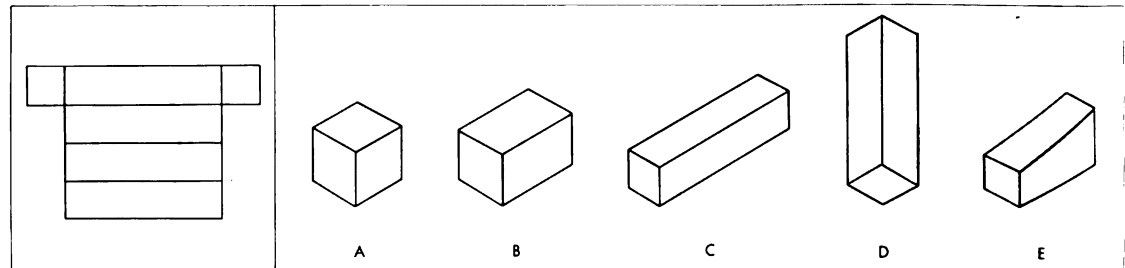
A   B   C   D   E

Which of these five figures — A, B, C, D, E — can be made from the pattern in **Example X**? **A** and B certainly cannot be made; they are not the right shape. C and D **are** correct both in shape and size. You cannot make E from this pattern.

— In the test there will always be a row of five figures for each pattern.

— In every row there is at least one correct figure.

— Usually **more** than one is correct. In fact, in some cases, all five may be correct.

Now look at the pattern for Example Y and the five choices for it. Note that when the pattern is folded, the figure must have two **gray** surfaces. One of these is a large surface which could be **either** the top or bottom of a box. The other is a small surface which would be one end of the box.
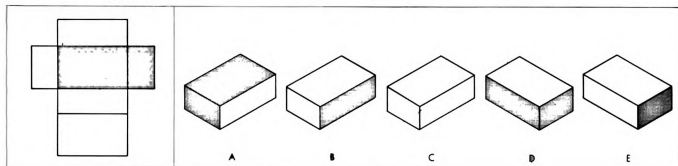
Notice — all the "boxes" made from this pattern are correct in **shape**, but the sides which you see are different. Some of these figures can be made from this pattern while others cannot. Let us look at them.

— Figure A is correct. If the large gray surface is shown as the top, then the end surface of gray can be shown facing towards you.

— Figure B is wrong. The **long, narrow** side is not gray in the pattern.

— Figure C is correct. The two gray surfaces can both be hidden by placing the large gray surface at the bottom and the gray end to the back.

— Figure D is wrong. The gray end is all right, but there is no long gray side in the pattern.

— Figure E is correct. One can show the box so that the large gray surface is at the bottom (as it was in C), but with the gray end showing at the front.

So, you see, there are three figures (A, C and E) which can be made from the pattern in Example Y, and two figures (B and D) which cannot be made from this pattern.

Remember that the surface you see in the pattern must always be the OUTSIDE surface of the completed figure.

Now let's see how we mark our answers on the separate Answer Sheet. A sample is shown here.

For Example X we found that only figures C and D could be made, so the spaces under C and D opposite X have been blackened. For Example Y, A is a correct figure, C is correct, and E is correct, so opposite Y we have blackened in the spaces under A, C and E.

SAMPLE OF ANSWER SHEET

In taking the test:

— Study each pattern.

— Decide which of the figures can be made from the pattern.

— Show your choices on the Answer Sheet by blackening in the little space under the letter which is the same as that of the figure you have chosen in the booklet.

— If you decide a certain figure cannot be made from the Pattern, make no mark on the Answer Sheet.

Do Not Write Anything in This Booklet
**Use Separate Answer Sheet**
**You Will Be Told When to Begin**

6
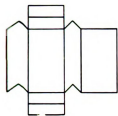
A   B   C   D   E

7
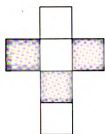
A   B   C   D   E

8
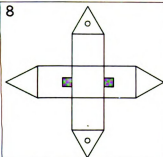
A   B   C   D   E

9
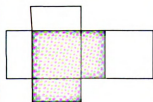
A   B   C   D   E

10
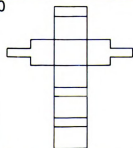
A   B   C   D   E
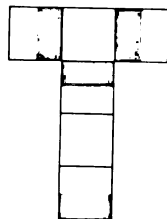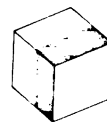
11 A B C D E
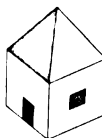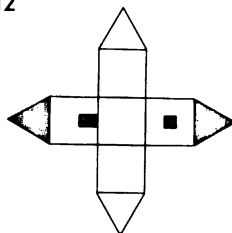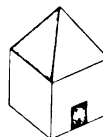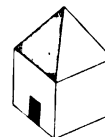
12 A B C D E
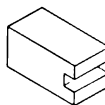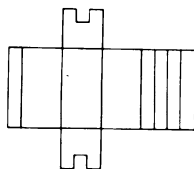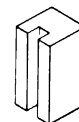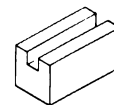
13 A B C D E

14 A B C D E

15 A B C D E

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A   B   C   D   E

21

A B C D E

22

A B C D E

23

A B C D E

24

A B C D E

25
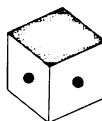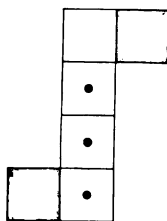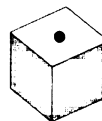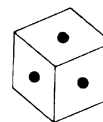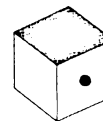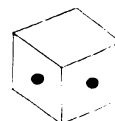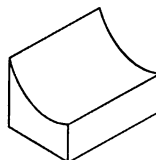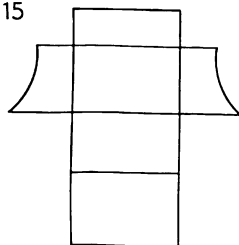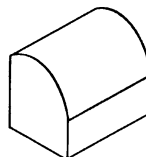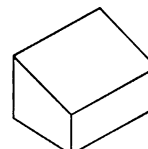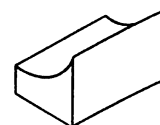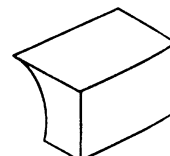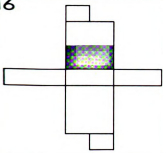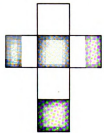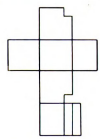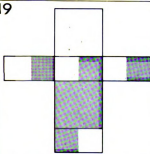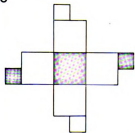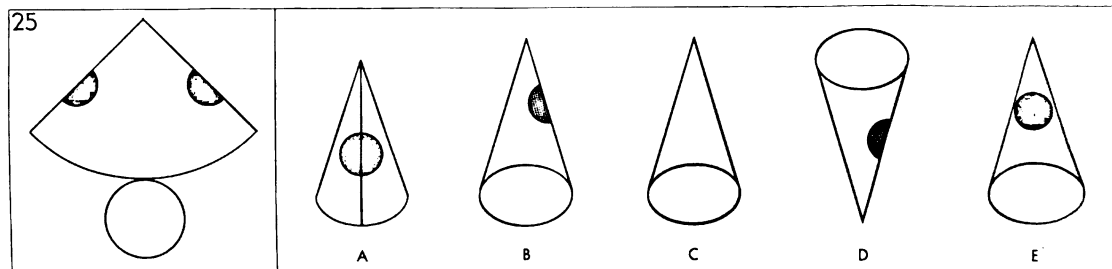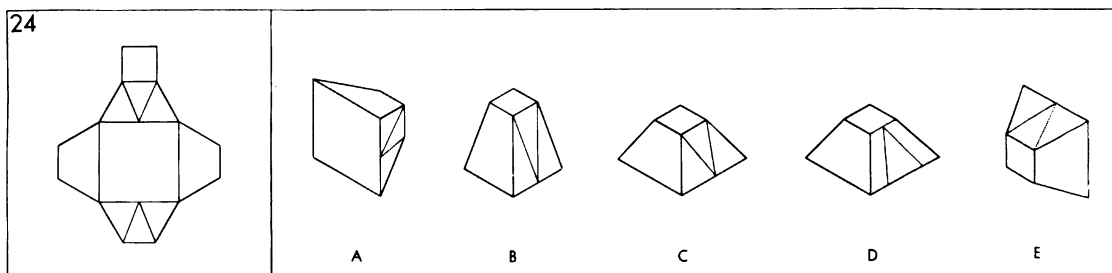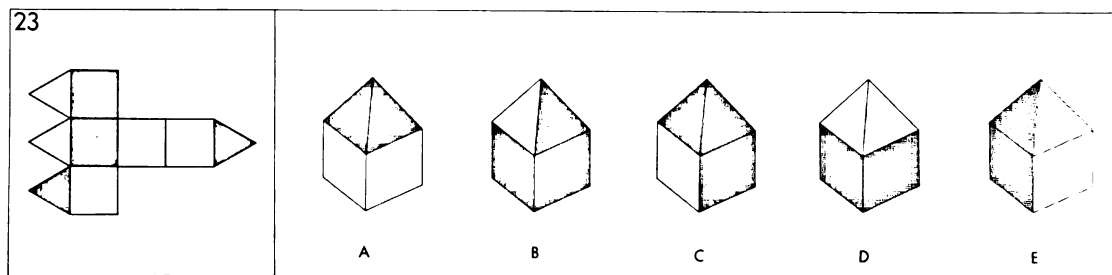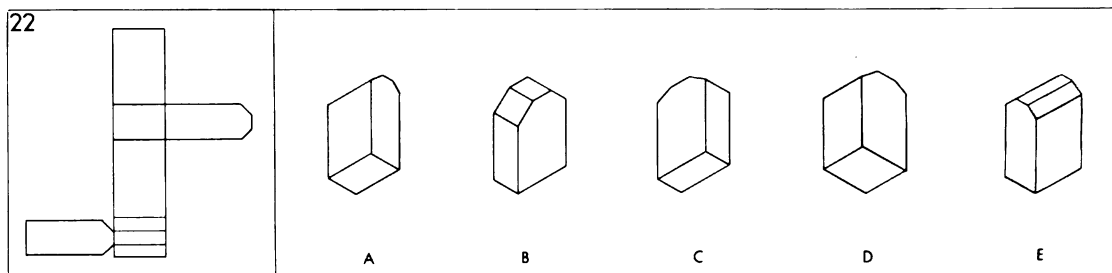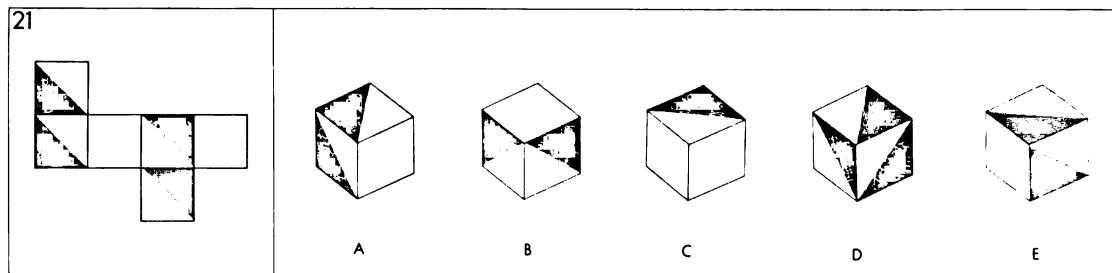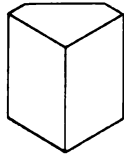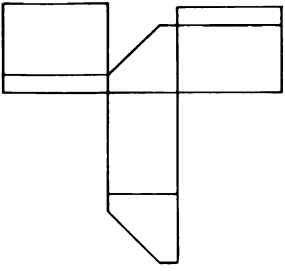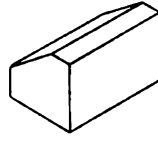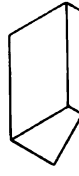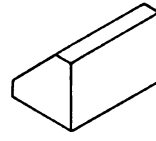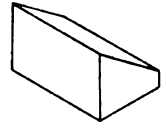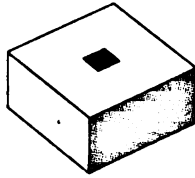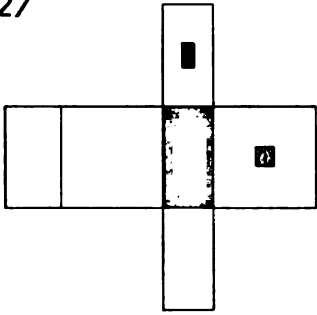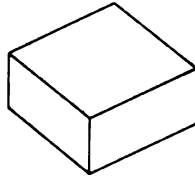
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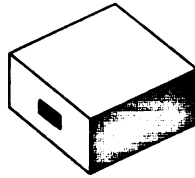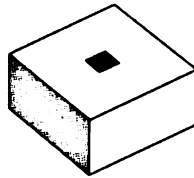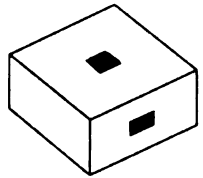
26		A	B	C	D	E
27		A	B	C	D	E
28		A	B	C	D	E
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30		A	B	C	D	E

31 A B C D E

32 A B C D E

33 A B C D E

34 A B C D E
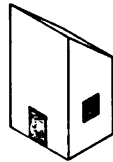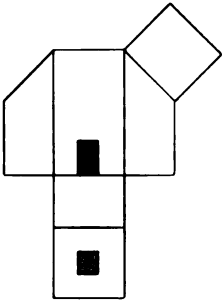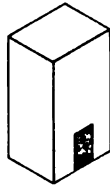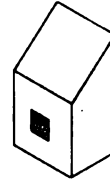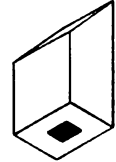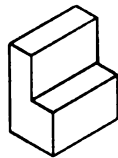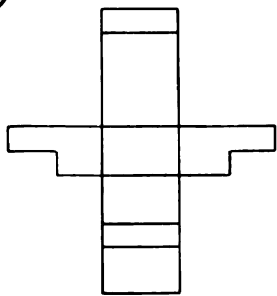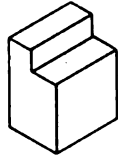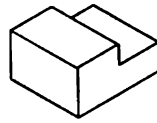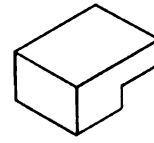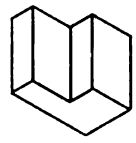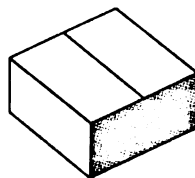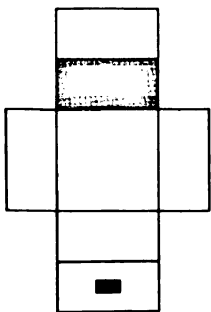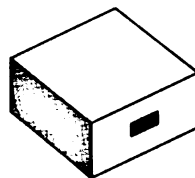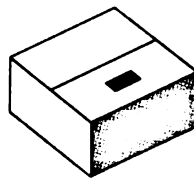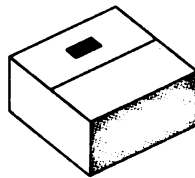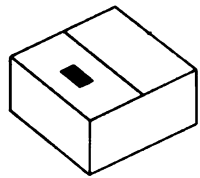
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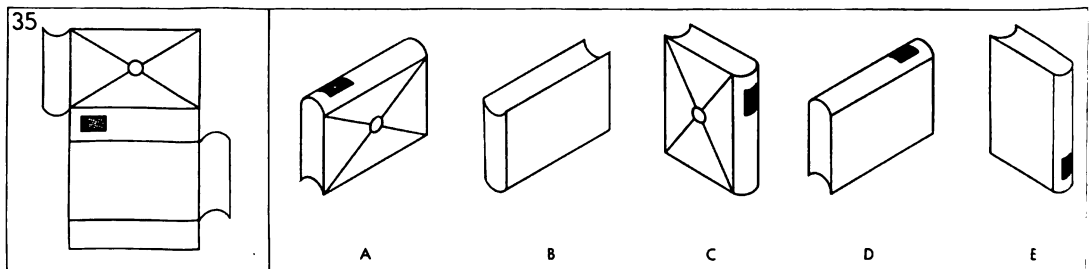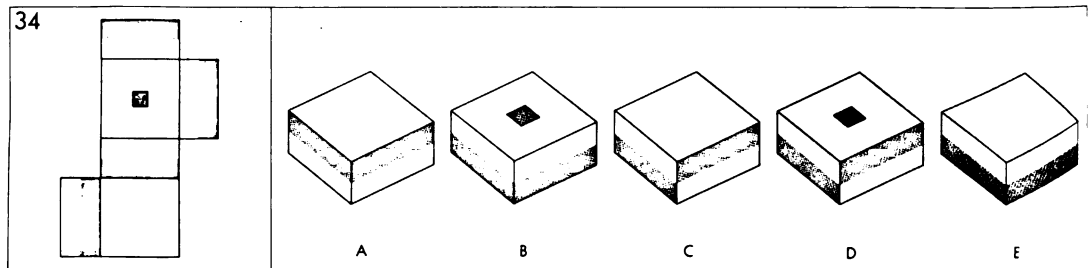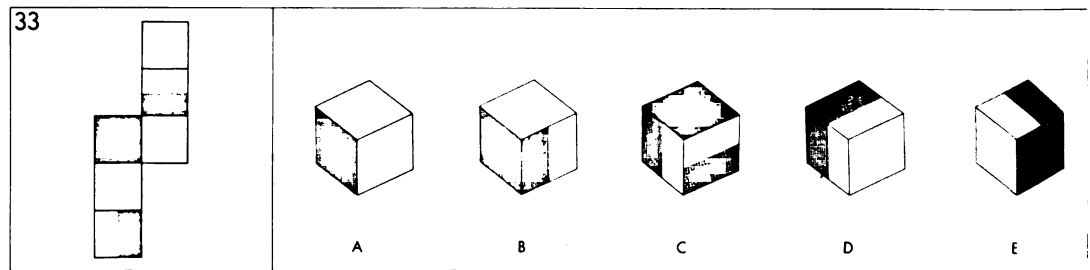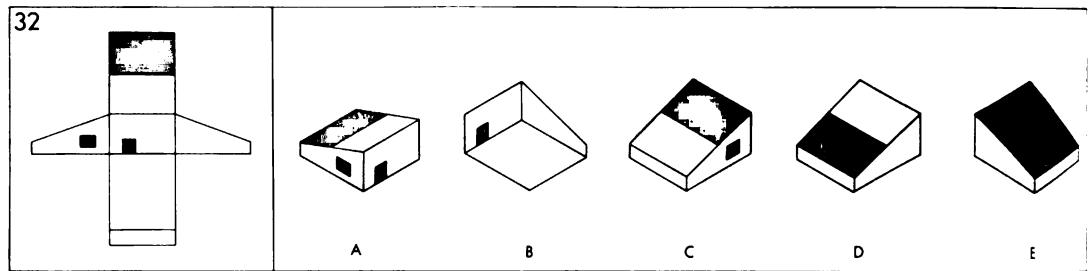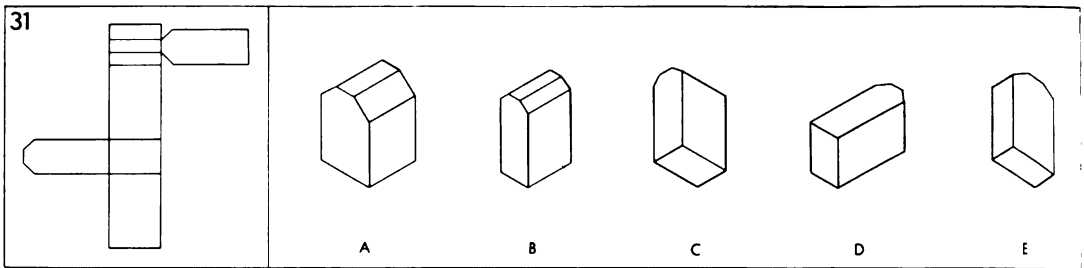
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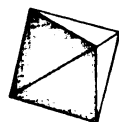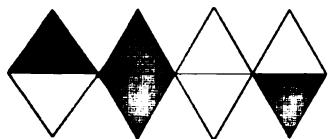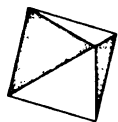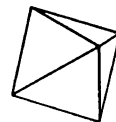
A   B   C   D   E

37
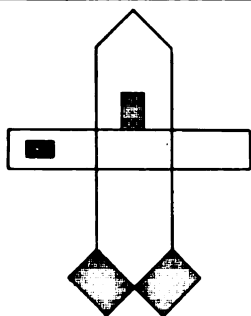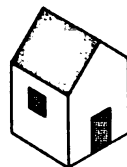
A   B   C   D   E

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A   B   C   D   E

39

A   B   C   D   E

40

A   B   C   D   E