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A STUDY OF THE ECONOMIC WASTE IN CLOTHING
AMONG YOUNG WOMEN
EMPLOYED IN
GREENSBORO, NORTH CAROLINA

by

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4220

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Approved by

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CHAPTER I

INTRODUCTION

Origin and Importance of the Problem

In the spring of 1947 at a meeting of home economists and social scientists at Teachers College, Columbia University, areas of research in textiles and clothing which are related to the social sciences were explored.¹ It was felt by this group that the research most needed in textiles and clothing was research related to consumption. Much more is known about the food habits of American families than is known about their clothing habits.² The need for more study on the waste in clothing was emphasized at a conference of college textiles and clothing teachers at Corvallis, Oregon in the fall of 1947.³ More and recent information on the purchase and use of clothing is needed by educators, welfare workers, housewives, fiber producers, and the textile industry.

1. Muriel Brasie and others, "Research Areas of Textiles and Clothing," Journal of Home Economics, XXXIX (December, 1947), 620.

2. United States Department of Agriculture, Office of Information, Food and Home Notes, Bulletin No. 192. Washington, D. C.: The Office of Information, 1949. p. 5. Mimeographed.

3. Ava B. Milam, "Present Status of Home Economics," Proceedings of the Conference of College Teachers of Textiles and Clothing, Western Region, Corvallis, Oregon: The Conference, 1947. p. [6]. Mimeographed.

Statement of the Problem

The present study is entitled: A Study of the Economic Waste in Clothing Among Young Women Employed in Greensboro, North Carolina.

Objectives to be Obtained

The purposes of the study are: to determine the degree of waste existing in the wardrobes investigated; to ascertain the reasons for economic waste in the wardrobes; to relate the factors which seem to influence the waste existing in the wardrobes; and to determine the usual methods of disposing of clothing.

Method

Personal interviews investigating the wardrobes of a selected group of participants were recorded on a survey sheet prepared by the investigator. The information collected was tabulated, analyzed, and conclusions were drawn from the findings.

Review of Literature

In order to secure background information on the topic and to avoid duplicating previous work, numerous bibliographies were consulted. This complete list of sources consulted appears as an appendix.

No studies were found which were directly related to the economic waste in clothing. The following literature was helpful in planning the study:

Related Literature

Esther K. Thor and May L. Cowles reported the findings of a survey on the consumers' purchasing habits in the August, 1933 issue of

the Journal of Home Economics.⁵ Two hundred customers selecting ready-made dresses in an independent department store in Madison, Wisconsin were surveyed. Price, style, quality, and personal suitability were found to be the major factors in the selection of garments by the customers observed. The following are specific findings of this survey which are indirectly related to the present study:

Nearly one-half of the customers were accompanied by one to three persons.

Of those customers who refused to buy, the largest number gave price as the reason for refusal, and the second largest number refused because white collars or fronts increased the probable cost of upkeep.

Nearly one-fourth of the customers expressed a desire to have their dresses in the latest fashion.

The fit of the garment was stressed more than any other factor in suitability of garment to person.

No record was made of the success of the purchases; therefore, the study did not in any way indicate the waste involved in the selections.

Mildred Naomi Jordan in 1942, at Pennsylvania State College, reported in thesis form a study which was sponsored by the United States Office of Experiment Stations. The thesis was entitled: A Comparative Study of Consumer Satisfaction in Clothing Fabrics.⁶ Worn out garments were studied in conjunction with expressions of dissatisfaction which the

5. Esther K. Thor and May L. Cowles, "How Women Select Dresses," Journal of Home Economics, XXV (August, 1933), 573-576.

6. Mildred Naomi Jordan, A Comparative Study of Consumer Satisfaction in Clothing Fabrics. Master's Thesis, State College, Pennsylvania: Pennsylvania State College, 1942. 71 pp.

wearers gave at the time garments were discarded. The study included cotton, rayon, silk, and wool textiles used in women's and children's wearing apparel. Laboratory data on the initial fabrics were compared with statements of owners regarding the satisfaction of wear received from them. Reasons for discarding, listed among the findings of the survey, were: failure of strength, 57 garments; fading of some type, 40 garments; out of style, 31 garments; no longer fit, 20 garments; unbecoming, 16 garments; tired of, 12 garments; shrinkage, 5 garments.

Paul M. Gregory has written two articles pertaining to the economic waste in clothing which were published in the July and October, 1947 issues of the Southern Economic Journal.

In the article entitled "A Theory of Purposeful Obsolescence," Gregory declares fashion to be a cause of economic waste, and blames producers for artificial stimulation. The following was taken from the article:

Fashion is founded on the contradictory desires to conform and to be different. Women hate to be seen in last season's hat, yet they want to wear what 'everybody' is wearing. Do they want to appear different, or the same? Probably both. Women want to conform to the prevailing style and still be different in detail.⁷
.....

There is an incredible amount of waste in the American economy. . . . Fashion changes waste labor, materials and equipment. A sudden style change may make expensive shoe lasts or dress patterns worthless. Frequent style rotation limits the output of each model; anticipated style changes require hand-to-mouth purchases of certain raw materials; this prevents optimum output and increases production costs.

7. Paul M. Gregory, "A Theory of Purposeful Obsolescence," Southern Economic Journal, XIV (July, 1947), 32.

Because of uncertainty as to the popularity of the new style, or the length of time it will last, retailers must charge a higher price to protect against possible inventory losses from markdowns.⁸

In another article entitled "An Economic Interpretation of Women's Fashions," Gregory gives additional reasons for economic waste in women's wardrobes:

. . . the real losers from fashion are consumers.⁹

[Due to fashion,] perfectly good clothes are worn only a short time and then are discarded or left to hang unused in closets.¹⁰

. . . wear and tear cause depreciation, while monotony, conspicuous waste, and, of course, fashion, all cause obsolescence. Even in the absence of wear and tear, it is usually claimed that long use of the same article is sometimes monotonous, and its utility will decline because people like change and novelty for its own sake.¹¹

A clothing survey is in progress, being conducted by family economists of the Bureau of Human Nutrition and Home Economics, to determine the amount of clothing American families keep on hand, buy, and make at home. "It is the first Federal survey aimed at giving a complete picture of family clothing in this country, even to such details as choice of fabrics for particular items of apparel."¹²

The survey is not directed at measuring waste in the wardrobes, although its findings may indirectly indicate the degree of waste present.

8. *Ibid.*, p. 39.

9. Paul M. Gregory, "An Economic Interpretation of Women's Fashions," *Southern Economic Journal*, XIV (October, 1947), 150.

10. *Ibid.*, p. 151.

11. *Ibid.*, p. 152.

12. United States Department of Agriculture, *op. cit.*, p. 5.

CHAPTER II

COLLECTION OF DATA

Procedure and Source of Data

This study was conducted during November and December of 1948. Thirty young women in various types of employment in Greensboro, North Carolina were surveyed. The participants were all unmarried and were from twenty-three to twenty-eight years of age.

A survey sheet was prepared for the use of the investigator in personal interviews with the participants. This sheet was designed to record indications of economic waste in the participants' wardrobes.

Information concerning the participants which might have a bearing on the topic under discussion was collected. This included the type of employment, source of training in clothing selection, type of clothing plan, amount of clothing storage space, shopping practices, experience in selection, availability and use of sewing machine, sewing practices, and usual methods of clothing disposal.

A selected group of garments was considered in the study. This group included outer wear of the following classifications: coats, suits, business-sport dresses, dressy dresses, blouses, skirts, and evening dresses. All of the garments which fell under these classifications in the wardrobes of the thirty participants, with the exception of garments worn only in summer, were inventoried (Survey Sheet, pp. 8, 9). Those

garments which were in full use were only counted; those in partial use and those not in use were investigated more thoroughly in order to find out why they were not in full use and what factors were related to the waste they represented.

Delimitation of the Problem

For uniformity and to limit the study, the wardrobes of only one age group were investigated. The age range for the group was six years. The minimum age was set at twenty-three, which was considered high enough for the wardrobes to be the participants' own selections instead of carry-overs from those selected by parents.

To provide further uniformity for comparative purposes, a selected group of garments was considered which included outer wear only. Other articles of clothing were not included as the classifications included constituted the basic wardrobes of the participants and were sufficient for the study.

Since the study was made in the fall after summer garments had been stored, garments worn only in summer were omitted.

The actual cost of the garments was ruled out of the survey as the study was not one of clothing expenditures.

SURVEY SHEET

Information about participant

Name _____ Ability in selection improved with
 Type of work _____ experience Yes _____
 No _____

Training in clothing selection

College _____
 High School _____
 Home _____
 Other _____
 None _____

Sewing machine

Availability Use
 Own _____ Yes _____
 Rent _____ No _____
 Access to _____
 None _____

Clothing plan

Written
 Complete _____
 Partial _____
 Mental
 Complete _____
 Partial _____
 Haphazard _____
 No plan _____

Sewing practices

Done by
 Self _____
 Other _____
 Dressmaker _____
 None done _____

For

Pleasure _____
 Economy _____
 Better garments _____
 Availability _____

Clothing storage space

Limited _____
 Ample _____

Usual methods of disposal

Sell _____
 Clothing drives _____
 Family or friends _____
 Destroy _____
 Household use _____

Shopping practices

Shop alone _____
 Shop with help _____

Years selected own clothes _____

Inventory of garments

Garment Groups	: Number in full use	: Number in partial use	: Number not in use	: Total on hand
Coats	:	:	:	:
Suits	:	:	:	:
Business- sport dresses	:	:	:	:
Dressy dresses	:	:	:	:
Blouses	:	:	:	:
Skirts	:	:	:	:
Evening dresses	:	:	:	:

Information about garments not in full use

Garment groups	:	:	:	:	:	:	:
In partial use	:	:	:	:	:	:	:
Not in use	:	:	:	:	:	:	:
Seasons not in use	:	:	:	:	:	:	:
Wear expected	:	:	:	:	:	:	:
Wear received	:	:	:	:	:	:	:
Unsatisfactory wear	:	:	:	:	:	:	:
Bought: regular price	:	:	:	:	:	:	:
sale price	:	:	:	:	:	:	:
Made	:	:	:	:	:	:	:
Condition: poor	:	:	:	:	:	:	:
fair	:	:	:	:	:	:	:
good	:	:	:	:	:	:	:
excellent	:	:	:	:	:	:	:
Reasons not in full use	:	:	:	:	:	:	:
Selection factors:	:	:	:	:	:	:	:
incorrect fit when	:	:	:	:	:	:	:
bought: comfort	:	:	:	:	:	:	:
appearance	:	:	:	:	:	:	:
unbecoming	:	:	:	:	:	:	:
misfit in wardrobe when	:	:	:	:	:	:	:
bought	:	:	:	:	:	:	:
limited occasions for	:	:	:	:	:	:	:
wear	:	:	:	:	:	:	:
tired of garment	:	:	:	:	:	:	:
costly upkeep	:	:	:	:	:	:	:
too many similar	:	:	:	:	:	:	:
disliked	:	:	:	:	:	:	:
worn out	:	:	:	:	:	:	:
shrank	:	:	:	:	:	:	:
faded	:	:	:	:	:	:	:
other reason	:	:	:	:	:	:	:
Other factors:	:	:	:	:	:	:	:
incorrect fit later:	:	:	:	:	:	:	:
comfort	:	:	:	:	:	:	:
appearance	:	:	:	:	:	:	:
misfit in wardrobe later	:	:	:	:	:	:	:
out of fashion	:	:	:	:	:	:	:
out of order	:	:	:	:	:	:	:
other reason	:	:	:	:	:	:	:
Reason retained:	:	:	:	:	:	:	:
to sell	:	:	:	:	:	:	:
to give away	:	:	:	:	:	:	:
to wear later	:	:	:	:	:	:	:
to alter	:	:	:	:	:	:	:
to remodel	:	:	:	:	:	:	:
to re-dye	:	:	:	:	:	:	:
for another garment	:	:	:	:	:	:	:
no reason	:	:	:	:	:	:	:
other reason	:	:	:	:	:	:	:

Definitions of Terms Used

General Terms

Following are general terms in the study which require explanation:

Economic waste.--This was considered the failure to receive maximum satisfactory wear from garments as measured in these terms:

1. The number of garments in partial use and not in use compared with the number in full use
2. The number of wear seasons garments had been on hand while not in use
3. Wear received compared with wear expected from garments no longer in full use
4. Wear received without satisfaction
5. Condition of garments not in full use
6. Reasons for retaining garments not in use

Wear seasons.--Based on four seasons in a year, the possible seasons that a particular garment might be worn were considered wear seasons.

Terms Used on Survey Sheet

Following are definitions and explanations of terms used on the survey sheet, in the order in which they appear on the sheet:

Information about participant:

Name--The name of the participant was recorded only as a measure of accuracy in case errors were found when tabulating which would necessitate re-taking the inventory.

Type of work--The general type of work was recorded in order to seek correlation between the type of employment and economic waste.

Training in clothing selection--The source of training which the participant felt was most influential in her clothing selection training was recorded. College training does not necessarily mean that the participant has received a degree in home economics, as a single clothing course stressing selection may be considered college training in clothing selection.

Clothing plan--The type of plan, either written or mental, and the degree of completeness ranging from complete to haphazard, judged by the participant were recorded. If the participant considered her wardrobe entirely unplanned, this was also recorded.

Clothing storage space--The participants' judgment of the adequacy of storage space available for their clothes, either limited or ample, was recorded.

Shopping practices--The practice of shopping alone or with help for major purchases was recorded. The garments costing more money such as coats, suits, and dresses were considered major purchases.

Years selecting own clothes--The number of years that the participants had been responsible for the selection of their own clothes was recorded. During this time, they did not have to be independent, either financially or of helpful suggestions, as many girls of high school age are responsible for selecting their own clothes.

Ability in selection--The participants' opinions as to whether or not their ability to make more satisfactory selections had improved with experience was recorded.

Sewing machine--If a sewing machine was owned, rented, or accessible, it was recorded. If none was available, this was checked. If the machine was used by the participants, this was recorded.

Sewing practices--If sewing or alteration was done for the participant either by herself, by a family member or friend without charge, or by a dressmaker, this was recorded. If none was done except store alteration, or if so little was done that the participant did not claim it to be a practice, "none done" was checked. If sewing or alteration was done, the reasons for it were recorded. When more than one reason applied, the reasons were numbered in rank of importance.

Usual methods of disposal--The methods by which the participants usually dispose of garments when they are discarded were recorded. When more than one method was used by a single participant, the methods were numbered in rank of prevalence.

Inventory of garments:

Garment groups--The classifications of garments included in the study follow:

Coats--The protective outer garments which included winter, spring, and all-season coats, raincoats, and evening wraps came in this classification.

Suits--These were considered as jacket and skirt combinations made of wool or wool and rayon, depending on weight. Those very light in weight were considered as two-piece dresses.

Business-sport dresses--Either one-piece or two-piece, tailored or semi-tailored dresses which might be worn for work, shopping or for sport came under this classification.

Dressy dresses--Dresses of informal length which might be worn for church, parties or dates were classified as dressy dresses.

Blouses--Garments which were worn as waists under suits or with separate skirts were classified as blouses.

Evening dresses--Formal or semi-formal, floor or ankle length dresses which were worn for dress occasions were classified as evening dresses.

Number in full use--The number of garments giving the wear expected when purchased was recorded.

Number in partial use--The number of garments giving less wear than was expected when purchased was recorded.

Number not in use--The number of garments from which no wear was being received was recorded.

Total on hand--The total of all garments in full use, in partial use, and not in use constituted the total on hand which was also recorded.

Information about garments not in full use.--Detailed information about garments in partial use or not in use was recorded on this part of the survey sheet.

Garment groups--The same classifications of garments used in the preceding inventory were inserted above the columns in which individual garments were scored.

In partial use--A garment not giving as much wear as was expected was considered in partial use and this was checked.

Not in use--A garment not in use was checked.

Seasons not in use--The actual number of wear seasons that the garment had been on hand while not in use was recorded.

Wear expected--The total number of wear seasons the participant expected to wear the garment when purchased was recorded. Expectation was based on past practices for garments similar in type and quality.

Wear received--The total number of wear seasons the garment had been worn was recorded.

Bought: regular price--A garment purchased at first price was checked.

Bought: sale price--A garment purchased at a reduced price was checked.

Made--A garment made at home or by a dressmaker was checked.

Condition--The opinion of the participant as to the present condition of the garment--either poor, fair, good, or excellent--was checked.

Reasons not in full use--The reasons responsible for the garments being in partial use or not in use were checked. If more than one fault existed in one particular garment, the one most limiting its use was checked.

Selection factors--Garments not in full use were regarded as unsuccessful selections if better selection could have prevented the lack of service. From the following list, the factor which applied to the individual garment was checked.

Incorrect fit when bought: comfort--The garment did not fit comfortably at the time it was purchased.

Incorrect fit when bought: appearance--The appearance of the garment was marred by improper fit when purchased.

Unbecoming--The garment was not becoming to the purchaser in either color or line.

Misfit in wardrobe when bought--The garment did not harmonize with the accessories or other garments with which it was to be worn.

Limited occasions for wear--The occasions for which the garment could be worn were fewer than the owner had anticipated.

Tired of garment--The garment was not in full use because of the desire for change on the part of the owner.

Costly upkeep--The garment required the expenditure of more time, energy or money for keeping it in proper condition for wear than the owner could afford.

Too many similar--The garment was not needed due to a number of others which served the same wear purposes.

Disliked--The garment did not appeal to the owner for psychological or aesthetic reasons.

Worn out--The condition of the garment was considered too poor to be of use.

Shrank--The garment decreased in size when cleaned.

Faded--The beauty of the color of the garment was lessened by either washing methods or exposure to sunlight.

Other reason--Any reason due to selection not listed above which rendered the garment not in full use was added.

Other factors--If the garments were in partial use or not in use due to reasons other than selection, the proper reason from the following list was checked for the individual garment.

Incorrect fit later: comfort--The increase or decrease in the size of the participant after the garment was bought made it fit uncomfortably.

Incorrect fit later: appearance--The increase or decrease in the size of the participant after the garment was bought affected its fit from the standpoint of appearance.

Misfit in wardrobe later--The garment no longer belonged in the wardrobe due to additions and/or deletions of other garments.

Out of fashion--Fashion changes made the style of the garment obsolete.

Out of order--The garment was in need of repair or minor adjustment.

Other reason--Any reason due to a factor other than selection which was not listed was added.

Reason retained--The reasons for which the garments were kept rather than discarded after their periods of wear were ended were checked.

To sell--The garment was to be sold.

To give away--The garment was to be given away.

To wear later--The garment was kept to be worn later in its present condition by the owner.

To alter--The garment was kept for minor changes which would put it in condition for further use.

To remodel--The garment was kept for major changes which would put it in condition for further use.

For another garment--The garment was retained for the purpose of being made into another garment.

No reason--The garment was kept for no reason other than failure to be discarded.

Other reason--Any reason not listed was added if a garment was retained for reasons other than the ones included on the survey sheet.

CHAPTER III

ANALYSIS OF DATA

Indications of Waste

One indication of economic waste in clothing is the use made of garments on hand. This is measured by the number of garments which are not in use and the number in partial use, as these garments represent those which are not giving maximum service. For comparative purposes in this study, percentages of garments not in use, in partial use and in full use were used for this method of indicating waste.

Another indication of the degree of waste is the length of time garments have not been in use. The longer garments have been on hand while not in full use, the less possibility there is of their being put back into use. Therefore, in this study it was considered that the more wear seasons garments had not been in use, the greater the waste.

The amount of wear already received from garments not in use or in partial use affects the degree of waste represented by the garments. Since there is no standard by which to measure the maximum service that a garment could give, the wear that the participants anticipated at the time of purchase was used for judging the adequacy of the service rendered. Anticipations were based on past practices for garments of similar type and quality. Therefore, garments not in full use which had given less wear than was expected indicated more waste than those which had given as much or more wear than had been expected.

According to the definition of economic waste which was used in this study, satisfaction already received from garments not in full use is a fourth indication of waste. Garments which had given unsatisfactory wear were considered greater waste than those which had given satisfactory wear.

The degree of waste represented by garments not in full use is also indicated by the condition of those garments not in use and in partial use. Garments in excellent and good condition were considered greater waste than those in fair or poor condition, as those in better condition failed more completely in giving maximum wear.

The reasons for which garments not in use are retained indicate a lesser or greater degree of waste. Garments retained without reason have little possibility of giving further service, and they were considered as more complete waste than those retained for reasons which would provide for further service. Those garments retained with the anticipation of further use by the owners were considered as less personal waste than those kept with the intention of selling or giving away; however, the latter ones were not considered as complete social waste.

All Garments

The following indications of waste were found in the thirty wardrobes investigated:

Of the 954 garments included in the survey, 159 were not in use, and sixty-eight were in partial use, leaving only 76 per cent of the garments in full use (Table I). The 159 garments had not been in use for a total of 344 wear seasons, an average of more than two wear

TABLE I
GARMENT USE

Garments	Not in use	In partial use	In full use	Total on hand
	(number of garments)			
Blouses	37	27	232	296
Suits	37	10	120	167
Coats	30	13	107	150
Business-sport dresses	20	7	73	100
Dressy dresses	15	3	76	94
Skirts	14	6	72	92
Evening dresses	<u>6</u>	<u>2</u>	<u>47</u>	<u>55</u>
All garments	<u>159</u>	<u>68</u>	<u>727</u>	<u>954</u>
	(Per cent of garments)			
Blouses	13	9	78	100
Suits	22	6	72	100
Coats	20	9	71	100
Business-sport dresses	20	7	73	100
Dressy dresses	16	3	81	100
Skirts	15	7	78	100
Evening dresses	<u>11</u>	<u>4</u>	<u>85</u>	<u>100</u>
All garments	<u>17</u>	<u>7</u>	<u>76</u>	<u>100</u>
	(Average number of garments per person)			
Blouses	1.23	.90	7.73	9.86
Suits	1.23	.33	4.00	5.56
Coats	1.00	.43	3.56	5.00
Business-sport dresses	.66	.23	2.43	3.33
Dressy dresses	.50	.10	2.53	3.13
Skirts	.46	.20	2.40	3.06
Evening dresses	<u>.20</u>	<u>.06</u>	<u>1.56</u>	<u>1.83</u>
All garments	<u>5.30</u>	<u>2.26</u>	<u>24.23</u>	<u>31.80</u>

seasons per garment (Table II). Of the 159 garments not in use, eighty-five had been worn a total of 363 wear seasons less than was expected of

TABLE II
NUMBER OF WEAR SEASONS GARMENTS WERE NOT IN USE

Garments	Wear Seasons							Total***	Average per garment
	1*	2	3	4	5	6	7 or more**		
	(number of garments)								
Suits	12	11	10	2	-	2	-	84	2.27
Blouses	22	8	3	1	1	1	1	70	1.88
Coats	8	13	5	3	-	1	-	67	2.23
Evening dresses	-	-	2	1	-	1	2	47	7.83
Business- sport dresses	11	9	-	-	-	-	-	29	1.45
Dressy dresses	9	3	3	-	-	-	-	24	1.60
Skirts	7	5	2	-	-	-	-	23	1.64
All garments								344	2.16

*One suit, two dressy dresses, and one skirt had been on hand less than one wear season while not in use. Less than one wear season was scored as one wear season.

**One blouse had been on hand for eight wear seasons while not in use, and one evening dress for twenty-four wear seasons. When the number was more than seven, the actual number of wear seasons not in use were used in securing the total wear seasons.

***Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons they were not in use.

them when purchased; fifty-six had been worn the number of wear seasons expected; and eighteen had been worn a total of sixty-six wear seasons more than expected (Table III). Of the sixty-eight garments in partial use, thirty-seven had been worn a total of 179 wear seasons less than

TABLE III

WEAR RECEIVED COMPARED WITH WEAR EXPECTED
FROM GARMENTS NOT IN USE

Garments	Wear Seasons														
	Less than Expected							Same	More than Expected						
	7	6	5	4	3	2	1	as	1	2	3	4	5	6	7
or more*							Expec- ted							or more*	
(number of garments)															
Blouses	2	1	1	4	1	4	2	19	-	1	2	-	-	-	-
Coats	3	3	-	2	3	8	3	4	-	3	-	1	-	-	-
Suits	1	4	1	2	6	1	1	13	1	-	2	-	1	3	1
Business- sport dresses	-	-	-	1	-	1	9	7	1	1	-	-	-	-	-
Skirts	1	-	-	2	-	3	1	7	-	-	-	-	-	-	-
Dressy dresses	-	-	-	-	3	2	4	5	-	-	-	-	-	1	-
Evening dresses	4	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Totals:															
Garments	85							56							18
Wear seasons**	363														66

*Actual wear seasons more and less than expected were used in securing the total wear seasons when the wear seasons worn more and less than seven exceeded seven.

The following garments were worn more than seven seasons less than expected:

One blouse was worn eight seasons and one twelve seasons less than expected.

One coat was worn nine seasons, one twelve, and one sixteen seasons less than expected.

One suit was worn nine seasons less than expected.

One skirt was worn twelve seasons less than expected.

Two evening dresses were worn nine, one was worn twenty-four, and one thirty-nine seasons less than expected.

The following garment was worn more than seven seasons more than expected:

One suit was worn nine seasons more than expected.

**Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons the garments were worn more or less than expected.

expected; twenty-two garments had been worn the number of wear seasons expected; and nine had been worn a total of forty wear seasons more than expected (Table IV). Of the 159 garments not in use, twenty-four had

TABLE IV
WEAR RECEIVED COMPARED WITH WEAR EXPECTED
FROM GARMENTS IN PARTIAL USE

Garments	Wear Seasons														
	Less than Expected							Same	More than Expected						
	7 or more*	6	5	4	3	2	1	as Expec- ted	1	2	3	4	5	6	7 or more*
	(number of garments)														
Blouses	1	-	-	2	5	2	1	9	1	3	-	1	-	1	1
Coats	-	-	-	-	2	1	-	9	-	-	-	-	-	-	1
Suits	2	3	-	1	1	-	2	1	-	-	-	-	-	-	-
Business- sport dresses	-	-	1	-	1	-	3	1	-	-	1	-	-	-	-
Skirts	-	-	1	-	2	1	-	2	-	-	-	-	-	-	-
Dressy dresses	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Evening dresses	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals: Garments	37							22			9				
Wear seasons**	179							40							

*Actual wear seasons more and less than expected were used in securing the total wear seasons when the wear seasons worn more and less than expected exceeded seven.

The following garments were worn more than seven seasons less than expected:

One blouse was worn nine seasons less than expected.

One suit was worn nine seasons less than expected; another was worn ten seasons less than expected.

Two evening dresses were worn twenty-eight seasons each less than expected.

The following garments were worn more than seven seasons more than expected:

One blouse was worn twelve seasons more than expected.

One coat was worn eight seasons more than expected.

**Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons the garments were worn more or less than expected.

been worn thirty-nine wear seasons, an average of approximately one and one-half wear seasons per garment, while giving unsatisfactory service (Table V). Of the sixty-eight garments in partial use, twenty-eight had

TABLE V
SEASONS GARMENTS WERE WORN WITHOUT SATISFACTION

Garments	Unsatisfactory Wear						Total wear seasons**	Average wear seasons per garment
	Number of garments worn given number of wear seasons							
	1*	2	3	4	5	6		
Not in use							39	1.62
Skirts	3	-	1	-	-	1	12	2.40
Blouses	1	2	-	-	-	1	11	2.75
Coats	8	-	-	-	-	-	8	1.00
Suits	3	1	-	-	-	-	5	1.25
Dressy dresses	1	-	-	-	-	-	1	1.00
Business-sport dresses	1	-	-	-	-	-	1	1.00
Evening dresses	1	-	-	-	-	-	1	1.00
In partial use							54	1.92
Blouses	3	3	2	-	-	1	21	2.33
Coats	2	3	-	2	-	-	16	2.28
Suits	2	3	-	-	-	-	8	1.33
Skirts	1	1	-	-	-	-	3	1.50
Dressy dresses	1	1	-	-	-	-	3	1.50
Business-sport dresses	3	-	-	-	-	-	3	1.00
Evening dresses	-	-	-	-	-	-	-	-

*Less than one wear season was counted as one wear season.

**Total wear seasons were calculated by multiplying the number of wear seasons by the number of garments.

been worn fifty-four wear seasons, an average of nearly two wear seasons per garment, while giving unsatisfactory service. Of the garments not in

use and in partial use, more than half were in good condition, approximately one-fourth were in excellent condition, and the smallest percentages were in poor condition (Tables VI and VII). More than 50 per cent of the garments not in use were retained for further use by the participants; 30 per cent were to be given away and/or sold; and 17 per cent were kept without reason (Table VIII).

TABLE VI
CONDITION OF GARMENTS NOT IN USE

Garments	Condition				Totals
	Excellent	Good	Fair	Poor	
	(number of garments)				
Blouses	2	16	10	9	37
Suits	10	26	1	-	37
Coats	9	15	6	-	30
Business-sport dresses	9	9	2	-	20
Dressy dresses	7	8	-	-	15
Skirts	5	8	1	-	14
Evening dresses	<u>4</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>6</u>
All garments	<u>46</u>	<u>84</u>	<u>20</u>	<u>9</u>	<u>159</u>
	(Per cent of garments)				
Blouses	5	43	28	24	100
Suits	27	70	3	-	100
Coats	30	50	20	-	100
Business-sport dresses	45	45	10	-	100
Dressy dresses	47	53	-	-	100
Skirts	36	57	7	-	100
Evening dresses	<u>67</u>	<u>33</u>	<u>-</u>	<u>-</u>	<u>100</u>
All garments	28	53	13	6	100

TABLE VII
CONDITION OF GARMENTS IN PARTIAL USE

Garments	Condition				Totals
	Excellent	Good	Fair	Poor	
	(number of garments)				
Blouses	5	14	5	3	27
Suits	3	5	2	-	10
Coats	1	8	4	-	13
Business-sport dresses	1	5	1	-	7
Dressy dresses	3	-	-	-	3
Skirts	1	5	-	-	6
Evening dresses	2	-	-	-	2
All garments	16	37	12	3	68
	(Per cent of garments)				
Blouses	19	51	19	11	100
Suits	30	50	20	-	100
Coats	8	61	31	-	100
Business-sport dresses	14	72	14	-	100
Dressy dresses	100	-	-	-	100
Skirts	17	83	-	-	100
Evening dresses	100	-	-	-	100
All garments	24	54	18	4	100

TABLE VIII
REASONS FOR RETAINING GARMENTS NOT IN USE

Reasons	Garments	
	Number	Per Cent
To wear later	37	23
To remodel	24	15
To alter	16	10
Household use	4	3
For another garment	2	1
To re-dye	1	1
	84	53
To give away	44	27
To sell	5	3
	49	30
No reason	26	17
All reasons	159	100

Particular Garments

Waste for particular garments varied greatly according to the methods of indicating waste.

The most waste was found in coats on the basis of garment use. Twenty per cent of the 150 coats that were considered in the investigation were not in use, 9 per cent were in partial use, and 71 per cent were in full use. By this same indication, the least waste was found in the evening dresses investigated. Of the fifty-five evening dresses, only 11 per cent were not in use; only 4 per cent were in partial use; and 85 per cent were in full use.

According to the length of time not in use, the most waste was found in the evening dresses investigated. Six evening dresses had not been in use for an average of nearly eight wear seasons per garment. By this same indication, the least waste was found in the business-sport dresses investigated. Twenty business-sport dresses had not been in use for less than one and one-half wear seasons per garment.

On the basis of wear already received from garments, the most waste was found in the coats not in use and the suits in partial use, as these garments had failed to the greatest degree to give the wear expected of them. Of the thirty coats not in use, twenty-two had been worn a total of ninety-one wear seasons less than expected; only four had been worn the number of wear seasons expected; and only four had been worn a total of ten wear seasons more than expected of them when purchased. Of the ten suits in partial use, nine had been worn a total of forty-six wear seasons less than expected of them; only one had been worn as much as expected; none had been worn more than expected. By

this same indication, the least waste was found in the blouses not in use and the coats in partial use. Of the thirty-seven blouses not in use, fifteen had been worn a total of sixty wear seasons less than expected; nineteen had been worn the number of wear seasons expected; and three had been worn a total of eight wear seasons more than expected of them. Of the thirteen coats in partial use, only three had been worn a total of eight wear seasons less than expected; nine had been worn the number of wear seasons expected; and one had been worn eight wear seasons more than expected.

Using unsatisfactory wear as an indication of waste, skirts not in use and blouses in partial use were found to represent the most waste. Of the fourteen skirts not in use, five had been worn for a total of twelve wear seasons or nearly one and one-half wear seasons per garment while the service received was considered satisfactory. Of the twenty-seven blouses in partial use, nine were worn a total of twenty-one wear seasons or more than two wear seasons per garment while the service received was unsatisfactory. By this same indication, the least waste was found in the dressy dresses, business-sport dresses, and evening dresses not in use; and in the evening dresses in partial use. Only one dressy dress, one business-sport dress, and one evening dress not in use had been worn one wear season each while service was unsatisfactory. Of the two evening dresses in partial use, none had been worn while giving unsatisfactory service.

Using the condition of garments not in full use as a further indication of waste, the most waste was found in evening dresses. Of the six evening dresses not in use, 67 per cent were in excellent

condition and 33 per cent were in good condition. The two evening dresses in partial use were in excellent condition. By this same indication, the least waste was found in blouses. Of the thirty-seven blouses not in use, only 5 per cent were in excellent condition; 43 per cent were in good condition; 28 per cent were in fair condition; and 24 per cent were in poor condition. Of the twenty-seven blouses in partial use, 19 per cent were in excellent condition; 51 per cent were in good condition; 19 per cent were in fair condition; and 11 per cent were in poor condition.

With reasons for retaining garments as an indication of waste, the most waste was found in blouses. Thirty per cent of the thirty-seven blouses not in use were retained for no reason; 24 per cent were to be given away; and only 46 per cent were kept with the intention of further use by the owners (Table IX). By this same indication, the least waste was found in evening dresses. All of the six evening dresses not in use were retained with the anticipation of being worn later by the owners.

TABLE IX
REASONS FOR RETAINING PARTICULAR GARMENTS NOT IN USE

Reasons	Per Cent of Garments						
	Blouses	Suits	Coats	Business- sport dresses	Dressy dresses	Skirts	Evening Dresses
To wear later	30	19	13	15	47	7	67
To remodel	-	19	13	35	-	43	-
To alter	5	19	10	-	-	29	-
Household use	11	-	-	-	-	-	-
For another garment	-	-	-	-	-	-	33
To re-dye	-	3	-	-	-	-	-
	<u>46</u>	<u>60</u>	<u>36</u>	<u>50</u>	<u>47</u>	<u>79</u>	<u>100</u>
To give away	24	16	44	30	47	21	-
To sell	-	5	7	5	-	-	-
	<u>24</u>	<u>21</u>	<u>51</u>	<u>35</u>	<u>47</u>	<u>21</u>	<u>-</u>
No reason	<u>30</u>	<u>19</u>	<u>13</u>	<u>15</u>	<u>6</u>	<u>-</u>	<u>-</u>
All reasons	100	100	100	100	100	100	100

Reasons for Waste

The reasons garments were not in use and in partial use were grouped according to those due to selection and those due to other factors. This second group of reasons included uncontrollable factors such as changes in fashion, and changes in the size of the owners; as well as neglect in caring for garments.

All Garments

Factors other than selection were responsible for the largest percentage of the 159 garments not being in use. Sixty per cent of these garments were out of fashion (Table X). The effect of the fashion turmoil of 1947 was still evident in the wardrobes of the participants,

TABLE X
REASONS GARMENTS WERE NOT IN USE OR IN PARTIAL USE

Reasons	Garments			
	Number		Per cent	
	Not in use	In par- tial use	Not in use	In par- tial use
Due to selection	56	35	35	51
Too many similar	12	7	7	10
Disliked	12	5	7	8
Worn out	8	2	5	3
Unbecoming style	5	3	3	4
Tired of garment	3	3	2	4
Incorrect fit when bought:				
appearance	3	3	2	4
comfort	2	3	1	4
Shrank	3	2	2	3
Limited occasions for wear	2	3	1	4
Misfit in wardrobe when bought	3	-	2	-
Costly upkeep	-	2	-	3
Fabric injured in cleaning	1	1	1	2
Color faded	-	1	-	2
Seams pulled	1	-	1	-
Color bled	1	-	1	-
Due to other factors	103	33	65	49
Out of fashion	96	12	60	18
Misfit in wardrobe later	6	8	4	12
Out of order	-	7	-	10
Incorrect fit later:				
comfort	-	4	-	6
appearance	-	2	-	3
Became stained	1	-	1	-

as was shown by the length of time the garments had been on hand while not in use and the reasons for which they were not in use. Of these garments not in use, selection factors were responsible for only 35 per cent not being in use. Of these factors, too many similar and disliked were each responsible for 7 per cent of the garments; while the 21 per cent not in use were due to a variety of reasons.

Of the sixty-eight garments in partial use, 51 per cent were not in use due to selection factors. The individual reasons varied widely, with too many similar and disliked again responsible for the larger percentages of the garments being in partial use. For the thirty-three garments in partial use due to factors other than selection, changes in fashion brought about the greatest waste, since 18 per cent of the total garments in partial use were out of fashion. Twelve per cent no longer fit into the wardrobes of the owners, and 10 per cent of the garments were out of order.

More garments were not in use and in partial use because they were out of fashion than for any other single reason, suggesting that fashion changes create more economic waste in clothing than any other influence.

. . . unfashionable clothes do not so readily find their way to poor people, either through charity or through second-hand clothing markets. . . . There is some social stigma attached to wearing secondhand clothes. Last season's clothes are often discarded or left to hang in closets. Thus fashion in clothing may create . . . waste . . . socially as well as personally.¹

1. Paul M. Gregory, "An Economic Interpretation of Women's Fashions," Southern Economic Journal, XIV (October, 1947), 154-155.

More of the garments were not in use than were in partial use, which is further evidence of the strong influence of fashion on economic waste. Shakespeare's ". . . the fashion wears out more apparel than the man"² holds true today.

Particular Garments

In most cases there can be no general statement regarding the reasons that particular garments were not in use or were in partial use. However, selection factors were the chief reasons for evening dresses and blouses not being in full use, while factors other than selection were chiefly responsible for the other garments not being in full use (Table XI).

2. William Shakespeare, Much Ado About Nothing, edited by George Lyman Kittredge, Boston: Ginn and Company, 1941. p. 46.

TABLE XI
REASONS PARTICULAR GARMENTS WERE
NOT IN USE OR IN PARTIAL USE

Reasons	Garments			
	Number		Per cent	
	Not in use	In par- tial use	Not in use	In par- tial use
	(Blouses)			
Due to selection	34	17	92	63
Due to other factors	<u>3</u>	<u>10</u>	<u>8</u>	<u>37</u>
All reasons	37	27	100	100
	(Suits)			
Due to selection	1	3	3	30
Due to other factors	<u>36</u>	<u>7</u>	<u>97</u>	<u>70</u>
All reasons	37	10	100	100
	(Coats)			
Due to selection	9	7	29	54
Due to other factors	<u>21</u>	<u>6</u>	<u>71</u>	<u>46</u>
All reasons	30	13	100	100
	(Business-sport dresses)			
Due to selection	-	1	-	14
Due to other factors	<u>20</u>	<u>6</u>	<u>100</u>	<u>86</u>
All reasons	20	7	100	100
	(Dressy dresses)			
Due to selection	3	2	20	66
Due to other factors	<u>12</u>	<u>1</u>	<u>80</u>	<u>34</u>
All reasons	15	3	100	100
	(Skirts)			
Due to selection	3	4	21	67
Due to other factors	<u>11</u>	<u>2</u>	<u>79</u>	<u>33</u>
All reasons	14	6	100	100
	(Evening dresses)			
Due to selection	6	1	100	50
Due to other factors	<u>-</u>	<u>1</u>	<u>-</u>	<u>50</u>
All reasons	6	2	100	100

Factors Related to Waste

Type of Employment

A higher percentage of business women were interviewed than any other employment group. Of these, practically all were office workers. Most of the professional women whose wardrobes were included in the survey were teachers. Only three industrial women were interviewed, these being textile mill workers (Table XII).

TABLE XII
DISTRIBUTION OF GROUP
ACCORDING TO TYPE OF EMPLOYMENT

Employment	Participants	
	Number	Per Cent
Business	19	63
Office workers	16	53
Salespeople	3	10
Professional	8	27
Teachers	5	18
Nurse	1	3
Commercial artist	1	3
Social worker	1	3
Industrial	3	10
All participants	30	100

The general type of employment did not seem related to the economic waste found in the wardrobes. In all groups, nearly one-fourth of the garments were either not in use or in partial use, with slightly more than three-fourths in full use (Table XIII). A difference was found, however, in the number of garments in the wardrobes. The professional women had the fewest garments per person and the industrial

women had the most; a difference of approximately eight garments.

TABLE XIII
TYPE OF EMPLOYMENT IN RELATION TO GARMENT USE

Employment	Garments			Total on hand
	Not in use	In par- tial use	In full use	
	(Per cent of garments)			
Business	18	6	76	100
Professional	14	8	78	100
Industrial	<u>13</u>	<u>10</u>	<u>77</u>	<u>100</u>
All participants	17	7	76	100
	(Average number of garments per person)			
Business	6.00	2.00	24.78	32.78
Professional	3.75	2.13	20.25	26.13
Industrial	<u>5.00</u>	<u>4.33</u>	<u>31.33</u>	<u>40.66</u>
All participants	5.30	2.26	24.23	31.80

Source of Training in Clothing Selection

Thirty-seven per cent, or eleven of the participants listed high school home economics as their chief source of training, although eight of them stated that they did not consider it too helpful in clothing selection (Table XIV). Twenty-three percent of the participants felt that home training had been of greatest benefit to them. Thirteen per cent gave credit to college training in home economics; half of these had received degrees in home economics, while half had elected a single clothing course. Thirteen per cent of the participants did not feel that they could be considered trained in clothing selection. Seven per cent gave credit to job training; either through merchandizing

courses, or through experience in textile testing. Seven per cent considered themselves self-trained, and had done so with the help of fashion magazines, newspapers, fashion showings, and through close observation of others.

TABLE XIV
CHIEF SOURCE OF TRAINING IN CLOTHING SELECTION

Source	Participants	
	Number	Per Cent
College	4	13
High school	11	37
Job	2	7
Home	7	23
Self	2	7
None	4	13
All participants	30	100

In general, the wardrobes of those participants who were self-, job-, and un-trained in clothing selection showed more economic waste than the wardrobes of the home-, college-, and high school-trained. It was also found that the average number of garments on hand decreased as the waste decreased in relation to training.

The wardrobes of those participants who were self-trained in clothing selection contained the highest percentage of garments not in use and the lowest percentage in full use: 32 per cent of the garments were not in use, 6 per cent were in partial use, and only 62 per cent were in full use (Table XV). The average number of garments per person on hand was highest for this group, an average of forty-three garments per person.

TABLE XV
SOURCE OF TRAINING IN CLOTHING SELECTION
IN RELATION TO GARMENT USE

Training	Garments			Total on hand
	Not in use	In par- tial use	In full use	
(Per cent of garments)				
College	15	5	80	100
High School	20	9	71	100
Job	13	7	80	100
Home	10	4	86	100
Self	32	6	62	100
None	12	9	79	100
All participants	17	7	76	100
(Average number of garments per person)				
College	4.50	1.50	24.00	30.00
High school	6.27	2.90	22.63	31.80
Job	3.50	3.00	21.50	27.00
Home	2.57	1.00	22.71	26.28
Self	14.00	2.50	26.50	43.00
None	4.75	3.50	31.75	40.00
All participants	5.30	2.26	24.23	31.80

The garments not in use for the self-trained had not been in use for a total of fifty-six wear seasons, an average of two wear seasons per garment (Table XVI). Fifty-three per cent of these garments not in use had been worn an average of more than six wear seasons per garment less than expected; and eighteen per cent had been worn an average of nearly five wear seasons per garment more than expected (Table XVII). Seven per cent of the garments not in use were retained for no reason, 22 per cent were to be given away, and 71 per cent were retained for further use by the participants (Table XVIII). Only 17 per cent of these garments were not in use due to selection factors (Table XIX).

TABLE XVI

SOURCE OF TRAINING IN CLOTHING SELECTION IN RELATION TO
NUMBER OF WEAR SEASONS GARMENTS WERE NOT IN USE

Training	Per cent of total garments not in use	Wear Seasons	
		Total*	Average per garment
College	15	35	1.94
High school	20	143	2.07
Job	13	22	3.14
Home	10	42	2.33
Self	32	56	2.00
None	12	46	2.56
For all	17	344	2.16

*Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons the garments were not in use.

TABLE XVII

SOURCE OF TRAINING IN CLOTHING SELECTION
IN RELATION TO WEAR RECEIVED COMPARED WITH WEAR EXPECTED
FROM GARMENTS NOT IN USE

Training	Wear received compared with wear expected		
	Less than expected	Same as expected	More than expected
	(Per cent of garments)		
College	44	56	-
High school	51	38	11
Job	100	-	-
Home	71	22	7
Self	53	29	18
None	37	42	21
All participants	54	35	11
	(Average wear seasons per garment)		
College	5.75		-
High school	2.94		2.37
Job	4.00		-
Home	4.07		9.00
Self	6.20		4.80
None	5.85		3.50
All participants	4.27		3.66

TABLE XIX

SOURCE OF TRAINING IN CLOTHING SELECTION
IN RELATION TO REASONS FOR WASTE

Training	Reasons					
	Not in use			In partial use		
	Due to selection	Due to other factors	All reasons	Due to selection	Due to other factors	All reasons
	(Per cent of garments)					
College	72	28	100	50	50	100
High school	29	71	100	37	63	100
Job	29	71	100	75	25	100
Home	44	56	100	44	56	100
Self	17	83	100	75	25	100
None	45	55	100	77	23	100
All participants	35	65	100	51	49	100

Of the garments in partial use for the self-trained participants, 40 per cent had been worn an average of twenty-eight wear seasons per garment less than expected; 20 per cent had been worn the number of wear seasons expected; and 40 per cent had been worn an average of one and one-half wear seasons per garment more than expected (Table XX). Seventy-five per cent of these garments were in partial use due to selection factors for this self-trained group.

The wardrobes of those participants who were home-trained in clothing selection contained the lowest percentage of garments not in use and the highest percentage in full use; only 10 per cent of the garments were not in use, 4 per cent were in partial use, and 86 per cent were in full use. The average number of garments on hand was lowest for this group, an average of approximately 26 garments per person.

TABLE XX
 SOURCE OF TRAINING IN CLOTHING SELECTION
 IN RELATION TO WEAR RECEIVED COMPARED WITH WEAR EXPECTED
 FROM GARMENTS IN PARTIAL USE

Training	Wear received compared with wear expected		
	Less than expected	Same as expected	More than expected
(Per cent of garments)			
College	67	33	-
High school	66	25	9
Job	100	-	-
Home	71	29	-
Self	40	20	40
None	<u>7</u>	<u>64</u>	<u>29</u>
All participants	55	32	13
(Average wear seasons per garment)			
College	4.50		-
High school	2.95		6.66
Job	4.75		-
Home	4.00		-
Self	28.00		1.50
None	<u>3.00</u>		<u>4.25</u>
All participants	4.83		4.44

For this home-trained group, the garments not in use had not been in use for a total of forty-two wear seasons, an average of less than two and one-half wear seasons per garment. Seventy-one per cent of the garments not in use had been worn an average of approximately four wear seasons per garment less than expected; 22 per cent had been worn the number of wear seasons expected; and 7 per cent had been worn an average of nine wear seasons per garment more than expected. Thirty-three per cent of the garments not in use were retained for no reason; only 18 per cent were retained for further use by the participants; 38 per cent were

to be given away; and 11 per cent were kept for the purpose of selling. The greatest waste for the home-trained group was indicated by the reasons for retaining garments.

Of the garments in partial use by the home-trained group, 71 per cent had been worn an average of four wear seasons less than expected; 29 per cent had been worn the number of wear seasons expected; and none of the garments had been worn more than expected.

The reasons for waste in the wardrobes of the home-trained group were the same for those garments not in use as for those in partial use: 44 per cent of the garments were not in full use due to selection factors, and 56 per cent were due to other factors.

Type of Clothing Plan

Sixty-five per cent of the participants used mental clothing plans, the majority of these being partial ones (Table XXI). Fourteen per cent used written plans, half of which were considered complete and half partial. Eleven per cent of the participants admitted they did no conscious wardrobe planning.

All of the fifteen participants who were college-, job-, home-, and self-trained in clothing selection used plans for their wardrobes (Table XXII). For the four college-trained and the two job-trained, half of the plans were written and half were mental. Only one of the home-trained participants used a written plan and none of the self-trained used written plans. Nine of the eleven high school-trained used mental plans and two used no plan. Half of the un-trained participants used mental plans and half used no plan.

TABLE XXI
TYPE OF CLOTHING PLAN

Plan	Participants	
	Number	Per cent
Written	4	14
Complete	2	7
Partial	2	7
Mental	22	75
Complete	8	28
Partial	11	37
Haphazard	3	10
No plan	4	11
All participants	30	100

TABLE XXII
TYPE OF CLOTHING PLAN IN RELATION TO SOURCE OF TRAINING
IN CLOTHING SELECTION

Plan	Training					
	College	High school	Job	Home	Self	None
(Number of participants)						
Written						
Complete	1	-	-	1	-	-
Partial	1	-	1	-	-	-
Mental						
Complete	-	2	1	4	-	1
Partial	2	4	-	2	1	1
Haphazard	-	3	-	-	1	-
No plan	-	2	-	-	-	2
All participants	4	11	2	7	2	4

Considering all indications of economic waste, more waste was found in the unplanned wardrobes than was found in the planned ones. In the planned wardrobes, the type of plan (either written or mental) made little difference in the waste found. The average number of garments on hand was highest for those participants with unplanned wardrobes and lowest for those who had used written plans.

In relation to other groups, those participants who did not plan their wardrobes had the highest percentages of garments not in use and in partial use and the lowest percentage in full use; 30 per cent were not in use, 10 per cent were in partial use, and only 60 per cent were in full use (Table XXIII). These participants had an average of nearly thirty-nine garments per person on hand.

In the unplanned wardrobes, garments not in use had not been in use for a total of 104 wear seasons, an average of more than two wear seasons per garment (Table XXIV). Fifty-seven per cent of the garments had been worn an average of approximately three wear seasons per garment less than expected; 32 per cent had been worn the number of wear seasons expected; and 11 per cent had been worn an average of two wear seasons per garment more than expected (Table XXV). Thirty per cent of these garments were not in use due to selection factors; 70 per cent were due to factors other than selection (Table XXVI).

TABLE XXIII
TYPE OF CLOTHING PLAN IN RELATION TO GARMENT USE

Plan	Garments			
	Not in use	In par- tial use	In full use	Total on hand
(Per cent of garments)				
Written				
Complete	13	5	82	100
Partial	<u>7</u>	<u>9</u>	<u>84</u>	<u>100</u>
	11	7	82	100
Mental				
Complete	9	5	86	100
Partial	18	6	76	100
Haphazard	<u>14</u>	<u>12</u>	<u>74</u>	<u>100</u>
	14	7	79	100
No plan	<u>30</u>	<u>10</u>	<u>60</u>	<u>100</u>
All participants	17	7	76	100
(Average number of garments per person)				
Written				
Complete	5.00	2.00	30.50	37.50
Partial	<u>1.50</u>	<u>2.00</u>	<u>18.50</u>	<u>22.00</u>
	3.25	2.00	24.50	29.75
Mental				
Complete	2.50	1.37	24.12	28.00
Partial	5.90	2.00	24.45	32.36
Haphazard	<u>4.66</u>	<u>4.00</u>	<u>24.66</u>	<u>33.33</u>
	4.38	2.46	24.41	31.23
No plan	<u>11.75</u>	<u>3.75</u>	<u>23.25</u>	<u>38.75</u>
All participants	5.30	2.26	24.23	31.80

TABLE XXIV
 TYPE OF CLOTHING PLAN
 IN RELATION TO NUMBER OF WEAR SEASONS
 GARMENTS WERE NOT IN USE

Plan	Per cent of total garments not in use	Wear seasons	
		Total*	Average per garment
Written			
Complete	13	14	1.40
Partial	<u>7</u>	<u>6</u>	<u>2.00</u>
	11	20	1.70
Mental			
Complete	9	51	2.55
Partial	18	147	2.26
Haphazard	<u>14</u>	<u>22</u>	<u>1.59</u>
	14	220	2.13
No plan	<u>30</u>	<u>104</u>	<u>2.21</u>
For all	17	344	2.16

*Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons the garments were not in use.

TABLE XXV
 TYPE OF CLOTHING PLAN IN RELATION TO
 WEAR RECEIVED COMPARED WITH WEAR EXPECTED
 FROM GARMENTS NOT IN USE

Plan	Wear received compared with wear expected		
	Less than expected	Same as expected	More than expected
(Per cent of garments)			
Written			
Complete	30	70	-
Partial	<u>100</u>	<u>-</u>	<u>-</u>
	65	35	-
Mental			
Complete	60	35	5
Partial	49	36	15
Haphazard	<u>57</u>	<u>29</u>	<u>14</u>
	55	34	11
No plan	<u>57</u>	<u>32</u>	<u>11</u>
All participants	54	35	11
(Average wear seasons per garment)			
Written			
Complete	8.66		-
Partial	<u>2.33</u>		<u>-</u>
	5.50		-
Mental			
Complete	4.16		9.00
Partial	5.46		4.20
Haphazard	<u>2.50</u>		<u>2.50</u>
	4.71		3.91
No plan	<u>3.03</u>		<u>2.00</u>
All participants	4.27		3.66

TABLE XXVI

TYPE OF CLOTHING PLAN IN RELATION TO REASONS FOR WASTE

Plan	Reasons					
	Not in use			In partial use		
	Due to selection factors	Due to other factors	All reasons	Due to selection factors	Due to other factors	All reasons
(Per cent of garments)						
Written						
Complete	80	20	100	75	25	100
Partial	<u>67</u>	<u>33</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>100</u>
	73	27	100	62	38	100
Mental						
Complete	35	65	100	64	36	100
Partial	35	65	100	36	64	100
Haphazard	<u>14</u>	<u>86</u>	<u>100</u>	<u>49</u>	<u>51</u>	<u>100</u>
	27	73	100	50	50	100
No plan	<u>30</u>	<u>70</u>	<u>100</u>	<u>60</u>	<u>40</u>	<u>100</u>
All participants	35	65	100	51	49	100

Of the garments in partial use in the unplanned wardrobes, 33 per cent had been worn an average of two wear seasons per garment less than expected; 60 per cent had been worn the same as expected; and 7 per cent had been worn an average of eight wear seasons per garment more than expected (Table XXVII). Sixty per cent of these garments were in partial use due to selection factors; 40 per cent were due to factors other than selection.

TABLE XXVII
 TYPE OF CLOTHING PLAN IN RELATION TO
 WEAR RECEIVED COMPARED WITH WEAR EXPECTED
 FROM GARMENTS IN PARTIAL USE

Plan	Wear received compared with wear expected		
	Less than expected	Same as expected	More than expected
(Per cent of garments)			
Written			
Complete	25	75	-
Partial	<u>100</u>	<u>-</u>	<u>-</u>
	62	38	-
Mental			
Complete	46	8	46
Partial	73	23	4
Haphazard	<u>50</u>	<u>33</u>	<u>17</u>
	56	22	22
No plan	<u>33</u>	<u>60</u>	<u>7</u>
All participants	55	32	13
(Average wear seasons per garment)			
Written			
Complete	10.00		-
Partial	<u>3.50</u>		<u>-</u>
	4.80		-
Mental			
Complete	4.00		2.40
Partial	6.56		12.00
Haphazard	<u>3.33</u>		<u>1.50</u>
	5.37		3.37
No plan	<u>2.00</u>		<u>8.00</u>
All participants	4.83		4.44

For those participants who used mental clothing plans, 14 per cent of the garments on hand were not in use, 7 per cent were in partial use, and 79 per cent were in full use. The average number of garments on hand was slightly more than thirty-one garments per person.

Garments not in use in the mentally-planned wardrobes had not been in use for a total of 220 wear seasons, an average of slightly more than two wear seasons per garment. Fifty-five per cent of the garments not in use had been worn an average of nearly five wear seasons per garment less than expected; 34 per cent had been worn the same as expected; and 11 per cent had been worn an average of nearly four wear seasons per garment more than expected. Twenty-seven per cent of these garments were not in use due to selection factors, while 73 per cent were not in use due to factors other than selection.

Of the garments in partial use in the mentally-planned wardrobes, 56 per cent had been worn an average of more than five wear seasons per garment less than expected; 22 per cent had been worn the same as expected; and 22 per cent had been worn an average of more than three wear seasons per garment more than expected. Half of these garments were in partial use due to selection and half were due to factors other than selection.

For those participants who used written clothing plans, 11 per cent of the garments on hand were not in use, 7 per cent were in partial use, and 82 per cent were in full use. The average number of garments on hand was lowest for this group, less than thirty garments per person.

In the written-planned wardrobes, garments not in use had not been in use for a total of twenty wear seasons, an average of less than two wear seasons per garment. This average showed that garments were not kept as long while not in use by the participants using written clothing plans. Sixty-five per cent of the garments not in use had been worn an average of five and one-half wear seasons per garment less than expected; 35 per cent had been worn the same as expected; and none had been worn more than expected. Of these garments not in use, 73 per cent were not in use due to selection factors, and 27 per cent were not in use due to factors other than selection.

Of the garments in partial use for this same group, 62 per cent had been worn an average of nearly five wear seasons per garment less than expected; 38 per cent had been worn the same as expected; while none had been worn more than expected. Of these same garments, 62 per cent were in partial use due to selection factors, and 38 per cent were due to factors other than selection.

Amount of Storage Space

Fifty per cent of the participants considered their clothing storage space limited and 50 per cent considered it ample (Table XXVIII). Less waste and fewer garments on hand were found in the wardrobes of those who considered their storage space ample. These findings show that the participants judged the adequacy of their storage space by the number of garments they owned and by the garments not in use and in partial use which they kept stored.

TABLE XXVIII

AMOUNT OF STORAGE SPACE IN RELATION TO GARMENT USE

Storage space	Per cent of participants	Garments			
		Not in use	In partial use	In full use	Total on hand
(Per cent of garments)					
Limited	50	22	9	69	100
Ample	<u>50</u>	<u>11</u>	<u>5</u>	<u>84</u>	<u>100</u>
All participants	100	17	7	76	100
(Average number of garments per person)					
Limited		7.33	2.94	23.20	33.46
Ample		<u>3.26</u>	<u>1.60</u>	<u>25.26</u>	<u>30.13</u>
All participants		5.30	2.26	24.23	31.80

In the wardrobes of participants who considered their storage space limited, 22 per cent of the garments were not in use, 9 per cent were in partial use, and only 69 per cent were in full use. The average number of garments per person on hand was approximately thirty-three and one-half garments. The garments not in use had not been in use for a total of 225 wear seasons, an average of more than two wear seasons per garment (Table XXIX). Of these garments not in use, 22 per cent were retained for no reason; 43 per cent were kept with the anticipation of further use; and 35 per cent were to be given away and/or sold (Table XXX).

TABLE XXIX

AMOUNT OF STORAGE SPACE IN RELATION TO
NUMBER OF WEAR SEASONS GARMENTS WERE NOT IN USE

Storage space	Per cent of total garments not in use	Wear seasons	
		Total*	Average per garment
Limited	22	225	2.04
Ample	<u>11</u>	<u>119</u>	<u>2.42</u>
All participants	17	344	2.16

*Total wear seasons were calculated by multiplying the number of garments by the number of wear seasons the garments were not in use.

TABLE XXX

AMOUNT OF STORAGE SPACE IN RELATION TO REASONS FOR RETAINING
GARMENTS NOT IN USE

Reasons	Storage space		
	Limited	Ample	All participants
	(Per cent of garments)		
To wear later	15	41	23
To remodel	19	6	15
To alter	8	14	10
Household use	-	8	3
For another garment	-	4	1
To re-dye	1	-	1
To give away	32	19	27
To sell	3	4	3
No reason	<u>22</u>	<u>4</u>	<u>17</u>
All reasons	100	100	100

In the wardrobes of participants who felt they had ample storage space, only 11 per cent of the garments were not in use; only 5 per cent were in partial use; and 84 per cent were in full use. The garments not in use had not been in use for a total of 119 wear seasons, an average of nearly two and one-half wear seasons per garment. Only 4 per cent of the garments not in use were retained without reason; 23 per cent were to be given away and/or sold; and 73 per cent were kept with the anticipation of further use from them by the owners.

Method of Purchase

Of the garments not in use, 82 per cent had been purchased at regular price; 8 per cent had been purchased at sale price; and 10 per cent had been made either by the participant, a family member or friend without charge, or by a paid dressmaker (Table XXXI).

TABLE XXXI
METHOD OF PURCHASE IN RELATION TO GARMENT USE

Method of purchase	Per cent of garments	
	Not in use	In partial use
Regular price	82	81
Sale price	8	6
Made	10	13
All methods	100	100

Of the garments in partial use, 81 per cent had been purchased at regular price, 6 per cent had been purchased at sale price, and 13 per cent had been made for the participant.

The method of purchase made little difference in the reasons for waste. Of the garments bought at regular price, more of those not in use were due to factors other than selection; more of those in partial use were due to selection (Table XXXII). Of the garments bought at sale price, more of those not in use were due to factors other than selection; all of those in partial use were due to selection. Of the garments made for the participant, more of those not in use were due to selection; more of those in partial use were due to factors other than selection.

TABLE XXXII

METHOD OF PURCHASE IN RELATION TO REASONS FOR WASTE

Method of Purchase	Reasons					
	Not in use			In partial use		
	Due to se- lection	Due to other factors	All reasons	Due to se- lection	Due to other factors	All reasons
	(Per cent of garments)					
Regular price	32	68	100	51	49	100
Sale price	38	62	100	100	-	100
Made	62	38	100	33	67	100
All par- ticipants	35	65	100	51	49	100

Shopping Practices

Forty per cent of the participants shopped alone for major purchases, while 60 per cent preferred shopping with help (Table XXXIII). Little difference was found in the waste or in the number of garments in the wardrobes for those shopping alone and those shopping with help. Those who shopped alone, however, did have a slightly higher percentage

of garments not in use and a slightly lower percentage in full use. Those shopping alone had an average of approximately one more garment per person on hand than those who shopped with help.

TABLE XXXIII
SHOPPING PRACTICES IN RELATION TO GARMENT USE

Shopping practices	Per cent of participants	Garments			
		Not in use	In partial use	In full use	Total on hand
(Per cent of garments)					
Shop alone	40	20	7	73	100
Shop with help	60	15	7	78	100
All participants	100	17	7	76	100
(Average number of garments per person)					
Shop alone		6.33	2.33	23.83	32.50
Shop with help		4.61	2.22	24.50	31.33
All participants		5.30	2.26	24.23	31.80

Experience in Selection

Sixty-seven per cent of the participants had been responsible for the selection of their own clothes for six through ten years, and 33 per cent had assumed this responsibility for eleven through fifteen years (Table XXXIV). The waste was greater for those with more experience in selection than for those with less experience.

For those participants with more experience, 24 per cent of the garments on hand were not in use, 6 per cent were in partial use, and 70 per cent were in full use. This group had approximately three less garments per person on hand than the less experienced group.

For those participants with less experience, 14 per cent of the garments on hand were not in use, 8 per cent were in partial use, and 78 per cent were in full use.

When asked if experience had been beneficial in improving clothing selection habits, however, 87 per cent of the participants felt that it had been, 10 per cent did not feel that it had been beneficial, and 3 per cent were doubtful (Table XXXV).

TABLE XXXIV
EXPERIENCE IN SELECTION IN RELATION TO GARMENT USE

Experience	Per cent of participants	Garments			
		Not in use	In par- tial use	In full use	Total on hand
		(Per cent of garments)			
6-10 years	67	14	8	78	100
11-15 years	<u>33</u>	<u>24</u>	<u>6</u>	<u>70</u>	<u>100</u>
All participants	100	17	7	76	100
		(Average number of garments per person)			
6-10 years	25.88	4.88	2.62	25.88	33.45
11-15 years		<u>8.71</u>	<u>2.04</u>	<u>22.07</u>	<u>30.33</u>
All participants		5.30	2.26	24.23	31.80

TABLE XXXV
GROUP OPINION AS TO IMPROVEMENT IN
CLOTHING SELECTION WITH EXPERIENCE

Opinion as to improvement with experience	Per cent of participants
Affirmative	87
Negative	10
Doubtful	<u>3</u>
All participants	100

Sewing Practices

Forty-seven per cent of the participants did sewing and alteration; 10 per cent had it done for them by family members or friends without charge; 6 per cent had it done by a paid dressmaker; and 37 per cent of the participants neither sewed nor had any done for them except store alteration (Table XXXVI). Economy and availability were the chief reasons for sewing practices (Table XXXVII).

TABLE XXXVI
SEWING PRACTICES

Practices	Participants	
	Number	Per cent
Sewing done by self	14	47
Sewing done by family member or friend	3	10
Sewing done by paid dressmaker	2	6
No sewing except store alteration	<u>11</u>	<u>37</u>
All participants	30	100

TABLE XXXVII
REASONS FOR SEWING PRACTICES

Practices	Reasons					
	First	Second	Third			
(Per cent of participants*)						
Sewing done by self	Economy	57	Economy	40	Pleasure	50
	Avail- ability	36	Pleasure	30	Better garments	50
	Pleasure	7	Avail- ability	20		
			Better garments	10		
		100		100		100
Sewing done by family member or friend	Economy	67				
	Avail- ability	33	None		None	
		100				
Sewing done by paid dress- maker	Avail- ability	100	Economy	100	Better garments	100

*Percentages of participants were based on the number who had sewing and/or alteration done other than store alteration. For second and third reasons, percentages were based on the number of these participants who gave more than one reason.

The most waste was found in the wardrobes of those who had no sewing done except store alteration, and in the wardrobes of those who had sewing done by family members or friends: for those participants having none done, 19 per cent of the garments on hand were not in use, 7 per cent were in partial use, and only 74 per cent were in full use; for those participants having it done by family members or friends, 20 per cent of the garments were not in use, 5 per cent were in partial use, and 75 per cent were in full use (Table XXXVIII).

TABLE XXXVIII
SEWING PRACTICES IN RELATION TO GARMENT USE

Sewing practices	Per cent of garments			
	Not in use	In par- tial use	In full use	Total on hand
Done by self	16	7	77	100
Done by family member or friend	20	5	75	100
Done by paid dress- maker	4	7	89	100
No sewing except store alteration	<u>19</u>	<u>7</u>	<u>74</u>	<u>100</u>
All participants	17	7	76	100

The least waste was found in the wardrobes of those participants who had sewing done by a paid dressmaker, as only 4 per cent of their garments on hand were not in use, 7 per cent were in partial use, and 89 per cent were in full use.

Forty-three per cent of the participants had access to a sewing machine but did not use it; 34 per cent had access to a sewing machine and used it; 13 per cent owned and used a sewing machine; but no machine was available for the use of 10 per cent of the participants (Table XXXIX).

The most waste was found in the wardrobes of those who had access to a machine but who did not use. For these participants, 20 per cent of the garments on hand were not in use, 7 per cent were in partial use, and only 73 per cent were in full use.

The least waste was found in the wardrobes of those who owned and used a sewing machine and in the wardrobes of those who had no sewing machine available for use. For those who owned and used a sewing machine,

only 10 per cent of the garments on hand were not in use, 7 per cent were in partial use, and 83 per cent were in full use. For those with no sewing machine available, only 8 per cent of the garments on hand were not in use, 9 per cent were in partial use, and 83 per cent were in full use.

TABLE XXXIX
AVAILABILITY AND USE OF SEWING MACHINE
IN RELATION TO GARMENT USE

Sewing machine	Per cent of participants	Per cent of garments			
		Not in use	In partial use	In full use	Total on hand
Own and use	13	10	7	83	100
Access to, and use	34	19	6	75	100
Access to, but do not use	43	20	7	73	100
None available for use	<u>10</u>	<u>8</u>	<u>9</u>	<u>83</u>	<u>100</u>
All participants	100	17	7	76	100

Usual Methods of Disposal

Eighty per cent of the participants surveyed indicated the most commonly used method of disposing of garments was to give them to family members or friends (Table XL). Seven per cent disposed of garments by selling. Seven per cent took garments for household purposes. Three per cent gave them away through clothing drives, and 3 per cent destroyed their garments.

Only seventeen participants listed a second method of disposing of garments, and only six listed a third method.

Many comments were made to the effect that the participants would sell more clothes, but could find no market for them. Those who did sell clothes, sold most of them to maids at considerably less than actual value with payment oftentimes never received.

TABLE XL
USUAL METHODS OF DISPOSAL

Methods	Per cent of participants
First	
To family or friends	80
Sell	7
Household use	7
Clothing drives	3
Destroy	3
	<u>100</u>
Second	
Clothing drives	41
Household use	23
To family or friends	18
Sell	18
	<u>100*</u>
Third	
Sell	50
Destroy	33
Household use	17
	<u>100*</u>

*Percentages were based on the number of participants who used a second and a third method of disposing of clothing. Only seventeen participants used a second method, and only six used a third method.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purposes of this study were to indicate the degree of economic waste existing in the wardrobes of a selected group, to ascertain the reasons for the waste, to relate the factors which seem to influence the waste, and to determine the methods of disposal most commonly used. The wardrobes of a relatively unified group of thirty participants were surveyed by the investigator and recorded on a specially prepared survey sheet.

Conclusions

Indications of Waste

All Garments.—From the data collected in the above manner, a large degree of economic waste was found to exist in the wardrobes. Due to the many garments not in use or in partial use from which maximum wear had not been received, and since more garments were not in use than were in partial use, it may be concluded that the obligation toward utilization of undesirable garments is not felt to any great extent by the participants. The only findings which would indicate a desire to avoid economic waste were that many garments were retained, and most of them were retained with the anticipation of further use either by the participants or others.

Following are the findings which indicate waste:

Nearly one garment out of every four was not in full use, being either not in use or in partial use.

Almost twice as many garments were not in use as were in partial use.

Garments not in use had not been in use for an average of more than two wear seasons per garment.

More than half of the garments not in use were retained with the anticipation of further use by the owners; nearly one-third were kept to be given away and/or sold; and nearly one-sixth were kept without reason.

Half of the garments not in full use had been worn an average of four and one-half wear seasons per garment less than expected; one-third had been worn the number of wear seasons expected; and only one-ninth had been worn an average of less than two wear seasons per garment more than expected.

One-fourth of the garments not in full use had been worn an average of nearly two wear seasons per garment while giving unsatisfactory service.

More than half of the garments not in full use were in good condition; approximately one-fourth were in excellent condition; few were in fair or poor condition.

Since greater waste was found in the wardrobes containing the greatest number of garments, it may be concluded that smaller wardrobes are conducive to the avoidance of economic waste.

Particular Garments.---In relation to the percentages of all garments considered:

More coats were not in use or in partial use; fewer evening dresses were not in use or in partial use.

Evening dresses were kept on hand the greatest length of time while not in use; business-sport dresses were kept for the shortest time while not in use.

Coats not in use and suits in partial use had failed to the greatest degree to give the wear expected of them; blouses not in use and coats in partial use were most successful in giving as much and more wear than expected.

Skirts not in use and blouses in partial use had given the most unsatisfactory service; dressy dresses, business-sport dresses, and evening dresses had given the least unsatisfactory service.

More of the evening dresses not in use and in partial use were in excellent condition; fewer blouses not in use and in partial use were in good and excellent condition.

More blouses were retained for no reason; no evening dresses were retained without reason, all were retained with further use anticipated by the owners.

Reasons for Waste

Of the garments not in use, factors other than selection are responsible for the greatest economic waste; of the garments in partial use, selection factors are responsible for the greatest waste.

Considered collectively, factors other than selection are responsible for the greatest total waste.

Fashion is the chief single reason for waste, accounting for 108 of the 227 garments not in full use. Too many similar, and garments disliked are the second and third reasons for waste. The specific reasons for waste in all garments listed in descending order are:¹

1. *Out of fashion
2. Too many similar
3. Disliked
4. *Misfit in wardrobe later
5. Worn out
6. Unbecoming style
7. *Out of order
8. Tired of garment
9. Incorrect fit when bought
appearance
comfort
10. Shrank
11. Limited occasions for wear
12. *Incorrect fit later
appearance
comfort
13. Misfit in wardrobe when bought
14. Costly upkeep
15. Fabric injured in cleaning
16. Color faded
17. Color bled
18. Seams pulled
19. *Became stained

Selection is responsible for most of the waste in blouses and evening dresses, while factors other than selection are responsible for the most waste in the other groups of garments. Evening dresses and blouses were least affected by the fashion change of 1947 which involved a decided change in length.

1. Asterisks indicate reasons other than selection.

According to the survey conducted in 1933 by Thor and Cowles, a large number of customers refuse to buy garments because of a high probable cost of upkeep.² The present study found only two garments not in full use due to costly upkeep. From this finding, it may be concluded that cost of upkeep is a major consideration in selection, substantiating Thor and Cowles' conclusion that customers refuse to buy garments because of this probability.

Thor and Cowles also found that one-fourth of the customers desire their garments to be in the latest fashion;³ considerably more than one-fourth of the participants of the present survey desire their garments in the latest fashion, as an overwhelming majority of the garments not in full use are not in full use because they are out of fashion.

The fit of the garment is a major consideration in purchase, according to Thor and Cowles.⁴ Out of the 227 garments not in full use, the present survey found only eleven not in full use because they did not fit when purchased. This finding is in agreement with Thor and Cowles' conclusion that the fit of the garment is a major consideration in purchase.

The most common reasons for discarding garments listed among the findings of Jordan's survey do not coincide with the reasons for waste

2. Esther K. Thor and May L. Cowles, "How Women Select Dresses," Journal of Home Economics, XXV (August, 1933), 573-576.

3. Ibid.

4. Ibid.

found in the present study;⁵ Jordan lists failure of strength as the first reason for discarding, fading as the second, and out of style as the third reason; the present study found worn out to be the tenth reason for waste, fading to be the sixteenth, and out of fashion to be the first reason. These contradictory findings could be due to the differences in quality of materials and fashion customs of 1942 and 1948. Jordan's study was made during the war period when materials were scarce and of inferior quality; when fashion was relatively constant; and when there was a strong general feeling toward conservation and complete utilization of clothing.

The findings of the present study in regard to reasons for waste more nearly agree with Gregory's theory that fashion and monotony are the chief reasons for economic waste in clothing.⁶

Factors Related to Waste

Type of Employment.—The general type of employment does not seem related to the economic waste in the wardrobes. However, there is a difference in the average number of garments in the wardrobes. The professional women have the fewest garments per person and the women in industry have the largest number per person on hand.

Source of Training in Clothing Selection.—The average number of garments on hand decreases as the waste decreases in relation to training. In general, the wardrobes of those participants who are self-, job-, and un-

5. Mildred Naomi Jordan, A Comparative Study of Consumer Satisfaction in Clothing Fabrics, Master's Thesis, State College, Pennsylvania: Pennsylvania State College, 1942.

6. Paul M. Gregory, "An Economic Interpretation of Women's Fashions," Southern Economic Journal, XIV (October, 1947), 152.

trained in clothing selection show more economic waste than the wardrobes of the home-, college-, and high school-trained. The least waste exists in the wardrobes of the home-trained; the most in the self-trained.

Type of Clothing Plan.—Considering all indications of economic waste, more waste exists in the unplanned wardrobes than in the planned ones. In the planned wardrobes, the type of plan (either written or mental) makes little difference in the degree of waste.

Amount of Storage Space.—Less waste and fewer garments per person are found in the wardrobes of those participants who consider their storage space ample than in the wardrobes of those who consider their storage space limited. These findings show that the participants judge the adequacy of their storage space by the number of garments they own.

Method of Purchase.—Most of the garments not in full use were purchased at regular price. Comments were made by some that they had learned that sale garments are not bargains; others expressed the desire to attend sales, but cannot do so as their work limits their time for shopping.

Shopping Practices.—Little difference is found in the waste or in the number of garments in the wardrobes of those shopping alone and those shopping with help. Two-thirds of the participants prefer shopping with help and one-third prefer shopping alone. This shows a higher proportion

shopping with help than Thor and Cowles found in their survey. Nearly one-half of the customers they surveyed were accompanied by one to three persons.⁷

Experience in Selection.—More waste is found in the wardrobes of those participants who have been responsible for the selection of their own clothes for eleven through fifteen years than in the wardrobes of those who have selected their own clothes for six through ten years. However, the less experienced group have more garments per person on hand.

Although more than four out of five participants feel that experience has been beneficial to their clothing selection habits, the findings on the waste according to experience would make their opinions inaccurate, as the wardrobes of those participants with more experience contain more waste than the wardrobes of those with less experience.

The finding that waste is less in the wardrobes of the less experienced participants may be explained on the bases of the incomes and experience of the two groups. Those who have been selecting their clothes for a longer time have been working longer and have reached higher income levels; therefore, they do not feel as much necessity for economy in clothing. It is also possible that the more experienced participants have developed a more critical attitude concerning their clothes.

Sewing Practices.—More waste is found in the wardrobes of those participants who have no sewing done except store alteration and in the wardrobes of those who have sewing done by family members or friends.

7. Thor and Cowles, op. cit., pp. 573-576.

The least waste is found in the wardrobes of those who have sewing done by a paid dressmaker.

The most waste is found in the wardrobes of those who have access to a sewing machine but do not use it. The least is found in the wardrobes of those who own and use a sewing machine and in the wardrobes of those who have no sewing machine available for use. Those who own sewing machines use them to keep garments in wearable condition; those with no machine available do not keep garments after they are no longer in use since they have no way to restore them to wearable condition; while those with access to a machine keep garments because of the possibility of using the machine to restore garments.

Usual Methods of Disposal

The usual methods of disposal indicated by the participants, in order of prevalence, are: giving clothes to family members or friends, selling, using for household purposes, giving away through clothing drives, and destroying.

Many participants expressed the desire to sell more clothes, but can find no market for them.

Recommendations

Recommendations from this Study

To reduce economic waste due to the retention of garments not giving satisfactory service, some plan should be made whereby individuals would dispose of these garments. Clothing exchanges providing adequate returns from these unsatisfactory garments would serve as an incentive

to individuals to rid their closets of garments not in use. Such a program should be carried on by such civic organizations as women's clubs.

Since high school home economics training is the most advanced training the greatest number of people received, more emphasis should be placed on the economics of clothing selection. It is recommended that consideration be accorded the following in the high school curricula:

That smaller wardrobes are conducive to less economic waste.

That planned wardrobes result in less economic waste.

That planning should be done on the basis of individual needs as well as personal suitability.

That more training is needed in remodelling and alteration.

That retaining garments is economical only if the ability, time, and equipment available will prompt remodelling and alteration.

That planned use of available storage space may decrease economic waste.

Recommendations for Further Study

To verify or compare the findings of the present study, the same survey should be repeated in the same locality using an older age group, and in a different locality using these two age groups.

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APPENDIX

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