

AN ABSTRACT OF THE THESIS OF

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Title: Factors Associated With Use of Care Labels by Home Sewers

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The Federal Trade Commission promulgated a consumer protection regulation concerning provision of care instructions with ready-to-wear and piece goods intended for home-constructed items which became effective in 1972. Research has been conducted relative to the ready-to-wear aspects of the Care Labeling of Textile Wearing Apparel and Leather Products regulation. Little research has been conducted concerning the piece goods portion. An investigation was undertaken to determine the extent to which care labels are being received and used by home sewers, and to evaluate the relationship of label usage to variety of care coded fabrics used, satisfaction with care outcomes, socio-economic level, age, and education.

A questionnaire was designed to be distributed in three fabric stores in the Salem, Oregon area whose care label distribution procedures varied from giving labels with all fabric purchases to not giving labels unless specifically requested.

A sample of 239 women was obtained (store A, 79; store B, 71; and store C, 89) by distributing questionnaires to all willing participants during the period from mid-July to mid-August, 1978. Descriptive data provided a picture of the sample as concentrated in the middle

socio-economic class (35.6%), between 20-29 years of age (33.5%), having completed one year of college (34.7%), and being employed outside the home (65.7%).

A mean score for label usage (6.84) was found for 14 statements designed to measure amount and kind of usage by home sewers. Labels were reported as being used to refurbish home sewn garments (71.5%) by greater numbers than reported receiving care labels (59.4%). Slightly more than one-third reported attaching labels to all garments sewn.

Variety of care coded fabrics used was measured by use of the nine code triangle system used by most fabric stores. Four or fewer care codes were used by 80% of the sample. The three most frequently used codes (\triangle_3 , \triangle_4 , and \triangle_1) require similar care which may be achieved by home refurbishable methods.

Satisfaction with care outcomes was found to be relatively high (mean score, 17.2). Due to high non-response, three statements were removed from a ten-statement measure designed to test general satisfaction as well as specific performance characteristics. Lowest satisfaction was given to characteristics of permanent press "no-iron" fabrics and grease retention of fabrics.

Pearson r correlation coefficients of the six variables which composed the hypotheses indicated that only one pair of variables was significantly related, label usage and variety of care coded fabrics used ($r = .1413$ $p < .05$). An additional variable not hypothesized, amount of sewing, was found to be significantly related to four variables: label usage ($r = .1074$ $p < .05$), variety of care coded fabrics used ($r = .4472$ $p < .001$), satisfaction with care outcomes ($r = .1380$ $p < .05$), and socio-economic level ($r = .1383$ $p < .05$).

Factors Associated With Use of
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Factors Associated With the Use of Care Labels by Home Sewers

I. INTRODUCTION

One effort of the consumer movement has been to provide the consumer with protection from unfair or deceptive practices by manufacturers and retailers of consumer goods. Labeling of products and packages has been a part of this movement. The Federal Trade Commission (FTC), which was formed in 1951, has been responsible for writing regulations and supervising the compliance of the business community (U. S. Government Manual, 1976, p. 498).

The Care Labeling of Textile Wearing Apparel is a protective regulation designed to aid consumers in the care of ready-to-wear and garments made from piece goods (Federal Trade Commission, 1971). It is the intent of the regulation to provide care instruction which will aid consumers in obtaining satisfactory laundry performances with ready-to-wear and home-sewn items.

History of Care Labeling

Origin

As is recorded in the "Statement of Basis and Purpose of the Care Labeling of Textile Wearing Apparel" regulation of December 16, 1971, care labeling is not a concern of the 1970s alone, but is an older concern (Federal Trade Commission, 1971, p. 23884). The issue received attention in the late 1930s. Brightman (1937) suggests that retailers were aware of the value to vendors and consumers. He states

the consumer is best safeguarded, if manufacturers will, whenever practicable, place a label on all goods they sell us, giving all the pertinent facts that will enable our customers to know at the time they are actually purchasing whether the article is just exactly what they want. (p. 74).

Further recommendations resulted from the Industry Advisory Committee on Textile Information. This committee formulated and adopted "A Voluntary Guide for Improved and Permanent Care Labeling for Consumer Textile Products" (Industry Advisory Committee, 1966). It recommended that manufacturers voluntarily attach permanent labels to goods which (a) "require special information, and (b) wherever it is not obvious to the consumer that the item can be successfully refurbished by available conventional means" (Fynn, 1967, p. 25).

As textile technology brought many successive changes to the marketplace, complaints concerning labeling continued to be directed to such people as Mrs. Virginia Knauer, President's Advisor on Consumer Affairs. Complaints frequently cited included: lack of care instructions, too little information on labels, and a need for care instructions printed on fabric (Ray, 1970, p. 45).

The consumer was faced with decisions which involved choosing between labeled and not labeled articles. This dilemma, coupled with a concern for the "problems of the inarticulate consumer, who may be unaware of the channels of communication" and the consumer who is not motivated to communicate his opinion, has been responsible for a drive to standardize care labeling through government action (Does the Consumer, 1969, p. 18).

Promulgation of Federal Trade Regulation

It became the responsibility of the FTC to define and enact a regulation for care labeling of textiles for the United States. An FTC notice appeared in the Federal Register to initiate proceedings for a new regulation concerning care labeling (Federal Trade Commission, 1969, p. 17776-17777). Comments were solicited and hearings were held which directly affected the formulation of the ruling as adopted on December 9, 1971 (Federal Trade Commission, 1971, p. 23890). The ruling included the following section relative to piece goods:

It is an unfair method of competition and an unfair or deceptive act or practice to sell, in commerce, ... any textile product in the form of piece goods, made for the purpose of immediate conversion by the ultimate consumer into a finished article of wearing apparel, which is not accompanied by a label or tag which:

- 1) Clearly discloses instructions for the care and maintenance of such goods, and
- 2) Is provided by the person or organization that directed or controlled manufacture of such goods, and
- 3) Can, by normal household methods, be permanently affixed to the finished article by the ultimate consumer. (Federal Trade Commission, 1971, p. 23884)

Further, the ruling defines piece goods as "textile products sold on a piece by piece basis from bolts, piece, or rolls" (p. 23884).

The regulation became effective July 3, 1972. The FTC recognized a major concern at the time of promulgation -- that it did not have a staff to police the retail outlets for compliance with the regulation (Federal Trade Commission, 1971, p. 23890). Two conditions were written into the regulation to allow the FTC to modify the rule if later revision was deemed necessary. First was the right to add other products in the future (Federal Trade Commission, 1971, p. 23884), the second

was the right to "proceed in stages in the care labeling field" (Federal Trade Commission, 1971, p. 23890).

Review and Revision

With review in mind, a call for comments on the Care Labeling of Textile Wearing Apparel regulation appeared April 2, 1974 (Federal Trade Commission, 1974, p. 12036). Among the responses were those relating to piece goods. A summary of the comments received indicated that 75% of those respondents were not being furnished with labels for piece goods purchases at the retail level, that care information was often inaccurate and/or incomplete, and that 91% favored the inclusion of care labels for all piece goods used to make any textile article (Federal Trade Commission, 1976, p. 3750).

FTC hearings and subsequent evaluation of comments from the public resulted in the revised regulation of January 26, 1976 (Federal Trade Commission, 1976, p. 3747). The title of the regulation was changed to Care Labeling of Textile Products and Leather Wearing Apparel. The section dealing with piece goods was retained. There was no change in the ruling concerning distribution procedure for the labels designed to accompany piece goods purchases.

Shortcomings of the Regulation

The responses to the call for comment which are described above are part of over 9000 responses received by the FTC. The report does not identify the types of organizations or individuals who responded. Whether the comments represent special interest groups, such as textile

manufacturers and home economists rather than the general consumer, is not known.

The FTC cannot control the behavior of the retailer of piece goods through the use of the regulation. The regulation currently in force indicates that the "manufacturer is specifically required to provide the retailer with labels. Retailers, as before, have no responsibility with regard to their distribution to the ultimate consumer" (Federal Trade Commission, 1976, p. 3750). The FTC also lacks the power to regulate the behavior of the consumer. The intent of the regulation is to make available care labels for consumers of piece goods, thereby facilitating consumer activities such as reading and following the care instructions, and affixing the label to completed items made from piece goods. In a study of consumer usage of voluntary care labeling, Agent (1973) identified some factors associated with reading of garment labels or failure to read them. Reasons for not reading the labels were:

1. Already familiar with care instructions
2. Look only at garment appearance
3. Can't find labels
4. Information not available
5. Don't understand them
6. Information not valid
7. Are not appealing (p. 55).

Reading or not reading is not the only factor in care label usage.

Norwick of Beaunit Corporation points out that

the hard facts indicate that consumers toss many things into the wash together, whether or not they know that the process is the optimum for each and every item in that wash. They do it as a matter of economy, practicality or to save time (Textile Committee Working, 1972, p. 29).

If one assumes that the consumer wants to read and follow the care label instructions, then another comment is significant. "There is nothing in the FTC rule which says the label must be truthful. The only requirement is that the garment have a label with 'care instructions'" (Now You Can Tell, 1972, p. 43). Two separate studies have tested the reliability of label information received with selected piece goods. In each study, the selected fabrics were laundered five times according to the label instructions. Mace (1974) evaluated four similar fabrics. "Only one fabric, ... met minimum requirements for all performance characteristics evaluated. The other three fabrics demonstrated serious changes in performance characteristics" (p. 40). Thirty-five fabrics tested by DeVries (1974) performed with varying results. Unacceptable shrinkage occurred in 54% of the samples (p. 41).

When a specific fabric's performance was found to be poor in any of the areas evaluated, it was usually extreme. This indicates a possible mislabeling or inaccuracy of care instructions for individual fabrics rather than a general inaccuracy of all fabrics with a specific care label (p. 41).

DeVries also noted whether labels were voluntarily given by the retail outlet at the time of purchase of her test fabrics, and reported that "only 22.85% of the retailers in the study actively complied with the Permanent Care Labeling Rule" (p. 39). Lack of control over retail distribution practices with care labels, and possible inaccuracies of the labels distributed, may contribute to fabric or garment failures which have occurred since the care labeling regulation became effective.

Statement of the Problem

The distribution by the retailer of the care label with each purchase, and the attachment and use of the label by the consumer, are voluntary. The lack of control of distribution at the retail level results in a variety of distribution practices. Not all purchasers receive labels. There is great variation in use of care labels in the home.

It would be of value to the FTC and to manufacturers and retailers of textiles to know how effective care labeling of piece goods has been in reducing consumers' dissatisfaction resulting from care failures. If use of labels for piece goods is positively related to the satisfaction of the consumer with care performance, then the retail outlets may need to participate more fully in providing them. If participation will occur only through extension of the authority of the FTC's Care Labeling of Textile Products and Leather Wearing Apparel regulation, the findings of this study may give impetus to the revision of the section concerning distribution practices of care labels for piece goods.

Little research attention appears to have been directed toward consumer use and satisfaction with care labeling of piece goods.

Purpose of the Study

The general purpose of this study was to examine home sewers' use of care labels, variety of fabrics used in home sewing, and satisfaction with laundry outcomes. In addition to these variables, socioeconomic level, age, and education were assessed in order to describe the sample.

Objectives

The objectives of this study were as follows:

1. To determine the extent to which home sewers usually receive, use, and attach care labels to constructed garments.
2. To determine the extent to which home sewers sew with a variety of care coded fabrics.
3. To compare home sewers in relation to their satisfaction with care performance of laundered and dry-cleaned home sewn garments.
4. To describe home sewers in relation to their socio-economic level, age, and educational level.

The Hypotheses

The specific hypotheses tested were:

- H_0 1: For home sewers, label usage is independent of:
- a. variety of care coded fabrics used
 - b. satisfaction with care outcomes
 - c. socio-economic level
 - d. age
 - e. education
- H_0 2: For home sewers, variety of care coded fabrics used is independent of:
- a. satisfaction with care outcomes
 - b. socio-economic level
 - c. age
 - d. education

H₀ 3: For home sewers, satisfaction with care outcomes is independent of:

- a. socio-economic level
- b. age
- c. education

Definitions

For this study the following definitions have been assigned to the terms used.

Care Code Category - any one of the nine care methods suggested for use with over-the-counter fabrics.

Care Label - printed label containing care instructions provided at the time of purchase as required by the Care Labeling of Textile Products and Leather Wearing Apparel regulation of 1972 and revised in 1976.

Dry Cleaning - refurbishing of clothing items at a professional or coin-operated dry cleaning establishment.

FTC - Federal Trade Commission.

Home Sewer - woman who sews garments for herself and/or for others.

Label Usage - composed of the following activities:

- a. choice of store relative to label distribution practices,
- b. receipt of care label,
- c. attachment of label to completed garment,
- d. reading of label information, and
- e. following label instructions when caring for garment.

Laundry - washing of clothing items by hand or machine at home or at a laundromat.

Piece Goods - retail fabric sold by the yard and intended for home sewing.

Refurbish - to care for clothing by dry cleaning, hand washing, or machine washing.

Satisfaction With Care Outcomes - met expectations and/or absence of problems in care and wear performance of textile products used in home sewing.

Assumptions

Following is a list of assumptions on which the study is based:

1. It is assumed that women in the Salem, Oregon area are representative of all women home sewers.
2. It is assumed that the women understood the directions and the statements in the questionnaire, and that they have answered honestly.
3. It is assumed that the instrument used to test the variables is valid and reliable.

Limitations of the Study

The following limitations should be kept in mind when interpreting the findings of the study:

1. The population was limited to women since the number of men who are home sewers and home launderers would be too small to be statistically significant.
2. The sample consisted of only those home sewers in the Salem area who patronized one of three fabric stores while the investigator was conducting the study.

3. The sample was limited to women who were willing to fill out the questionnaire.
4. The respondents shop in a city of 80,000 population in the Pacific Northwest.
5. Variety of care coded fabrics used by respondents was limited to variety of fabrics available for purchase in stores in the year prior to the study.

II. REVIEW OF LITERATURE

Consumerism has become an important movement in the United States.

Consumerism may be defined as

activities of government, business and independent organizations that are designed to protect individuals from practices that infringe upon their rights as consumers. This view of consumerism emphasizes the direct relationship between the individual consumer and the business firm (Aaker, 1971, p. 3).

The Care Labeling of Textile Products and Leather Wearing Apparel regulation, set down by the Federal Trade Commission in 1972 and revised in 1976, is one example of a government activity designed to protect consumers of textile apparel and piece goods. The relationship between the designers of the regulation and the textile piece goods consumer who is to be the beneficiary is not close. A much closer relationship exists between the consumer and the retail outlet or outlets from which textile piece goods are purchased.

To understand the consumer of piece goods better, literature will be examined concerning the home sewer in relation to selected aspects of the care labeling regulation, variety of fabrics used by the consumer for home sewing, and the consumer's satisfaction with performance of laundered and dry-cleaned articles.

The Home Sewer

According to one estimate, one-fourth of 300 million of the garments worn are home sewn. The home sewing consumer helped expand the retail fabric business into one of the ten fastest growing businesses in the United States in the early 1970s (Home Sewing, 1972, p. 82). Increased spending by the home sewing consumer stemmed from a wider

choice of available fabrics. Availability of fabrics and patterns increased to allow the consumer to make garments that were current in style and fabric. "Once a dumping ground for unwanted fabric, ... there's hardly a large textile company that isn't supplying the home sewing market direct[ly] ... with their own staff of professionals (Home Sewing, 1972, p. 82).

Robbins (1973) credited the following factors for the rapid growth of sales of home sewing products: rising affluence combined with greater leisure time, the increasing disparity between the cost of home sewn clothing and the cost of ready-to-wear, the decline of quality of the average ready-to-wear item, increased availability of sewing instructions, use of sewing as an inexpensive way to remain current with fashion trends, and the reasonable cost and quality of home sewing equipment and supplies (p. 70-71). In the same article, a speech by Dr. Joyce Brothers, given before an American Fashion Home Sewing Council Convention, is reported which cites these additional reasons:

- a. The homemaker has a desire for self-sufficiency.
- b. She has a desire for originality.
- c. Home sewing has both practical and creative advantages.
- d. Sewing provides a tension reducing outlet.
- e. Such activities are ego building in that they provide a feeling of accomplishment and establish self-confidence.
- f. Home sewing helps structure the time of someone alone and provides a relief from boredom.
- g. It is a traditional activity which many women find pleasing to their husbands (Robbins, 1973, p. 71-72).

In a 1977 study of home sewers conducted by Research and Perspective for the National Home Sewing Association "motivation for sewing for all groups included fun, a sense of accomplishment, economy, relaxation, creativity, individuality, a dissatisfaction with ready-to-wear, ..."

(Survey for NHSA, 1977, p. 3). In the four years between the two reports women sewers studied have not changed reasons for sewing. In the same time period, the United States saw an economic recession in 1974 and has witnessed an increase in the consumer price index for women's and girls' apparel of 28.7 points or a 33% increase over 1970 prices (U. S. Department of Commerce, 1977, p. 479). The number of women in the labor force has also increased. Between 1970 and 1976, 5,447,000 more women entered the work force. This represents an increase of 19% (U. S. Department of Commerce, 1977, p. 389).

If the home sewing consumer chooses to sew for both economic and creative reasons, with perhaps less leisure time as a working woman, the home sewer cannot afford to lose garments through improper care procedures or through lack of sufficient information about the fabrics chosen. It should be to the consumer's advantage that the FTC has regulated the distribution of care labels for piece goods.

Label Usage

Considerable research emphasis has been directed toward the consumer and many different aspects of care labeling, prior to and subsequent to the promulgation of the Care Labeling of Textile Products and Leather Wearing Apparel regulation, i.e., awareness of (Agent, 1972), understanding of (King, 1972; Lowe, 1972; Mullis, 1972; Huffman, 1974; and Spero, 1974), use of (Arbaugh, 1974; Critz, 1975; Honchul, 1972; Joyner, 1972; and Skaggs, 1973), acceptance of (Ambry, 1974; and Dignes, 1975), and dissatisfaction with care labels (Wall, 1974). Ready-to-wear labels have been the subject of research on use of care labels in the studies

listed above with the exception of Dignes (1975) and Spero (1974).

The FTC regulation provides that, except in very inexpensive items, all ready-to-wear for both sexes and all ages have a care label permanently affixed where it can easily be seen by the consumer (Federal Trade Commission, 1971, p. 23884). The manufacturer's compliance allows the consumer to use the label at the time of selection of a garment and through the useful life of the garment, and satisfies the consumer "right to be informed". Huffman (1974) found that more than "93 percent of the respondents [n=181] reported always or sometimes looking for permanent care labels when shopping for ready-made garments" and that care label information "always influenced the final purchase decisions for 55 percent" (p. 58).

The regulation provides for the piece goods segment of textile products by requiring the manufacturer to make labels available which can be distributed to the purchaser of piece goods. The consumer may, upon construction of the garment, affix the appropriate care label to the garment for information referral. Label usage by the consumer of piece goods is possible only when a label is received at the time of purchase. Dignes (1975) found that only 26% of her sample (n=70) received labels with all fabric purchases, and 73% said that they never received labels without asking for them (p. 37-39). DeVries (1974) received labels voluntarily from fewer than one-fourth of the retailers when obtaining the fabrics to be tested for label accuracy in her study (p. 39). When labels are not offered to the piece goods consumer at the time of purchase, the label cannot be used as part of selection decision-making process. Spero (1974) found the bolt end or hang tag was used by 51.9%

of the home sewers in her study as the source of information about care and wear at the time of purchase (p. 57). Huffman (1974) questioned homemakers about use of the label for sorting and refurbishing clothing. "Over 87 percent of the homemakers stated that they always looked for a permanent care label before laundering or cleaning a garment for the first time" (p. 57). However, the number of those who reported always following the instructions was lower; 67% followed the washing instructions, 54% followed the drying instructions, and 68% followed the dry cleaning instructions (p. 57). Gahring (1975) interviewed 26 individuals about practices with their own or the family laundry. Previous experience and experimentation were stated as sources of information for care problems (p. 110). Critz (1975) reports that reasons for non-use of permanently attached labels "were that labels complicated the washing task and reliance on personal judgment" (p. 28). Gahring also found that availability of adequate laundry facilities and choice of settings on the machine (p. 111) as well as size of laundry loads influenced decisions to follow optimum care instructions (p. 107).

Dignes (1975) states that the women in her sample used care labels for refurbishing; "... (96%) appear to rely heavily on permanent care label information" (p. 42). However, her questionnaire did not specifically ask about use of care labels on home sewn articles. The respondents may have answered the question by describing behavior with ready-to-wear where labels are attached.

The consumer who does not receive a care label at the time of purchase and who uses the bolt end in the selection process will need to remember the care instructions in order to correctly refurbish the

garment made from the selected piece good. The consumer may or may not remember the written bolt information. The consumer may or may not follow the suggested instructions because of inadequate laundry equipment or may be more concerned about economy of laundry loads than about optimum care procedure.

In order for the consumer of piece goods to benefit from the "right to be informed" the correct care label must be obtained at point of purchase. The consumer has the responsibility to use the information given. Consumer protection in the area of care instructions for piece goods is only as good as the distribution practices of the fabric outlets the consumer patronizes and willingness and ability of the consumer to follow the care instructions provided.

Variety of Fabrics Used

Varieties of fiber contents and multiplicity of end use of fabric purchases may be related to use of labels by home sewing consumers. The potential fabric purchaser is continually confronted by advances in textile technology and changing trends in fiber fashion. The home sewer may shop where a large selection is available from which to choose.

In the time period since the promulgation of the FTC care labeling regulation, fiber fashion has moved from an emphasis on polyester double-knits to a greater availability of natural fibers or blends of naturals and synthetics for the "natural look" of the late 70s.

Textile World indicates that sale of polyester double-knits "has decreased 30-35% over the last two or three years" (Outlook 1977, 1977,

p. 43). In 1976, sales of cotton fabrics were up 25% (Cotton Makes a Comeback, 1978, p. 24).

In addition to a change in fabric and fiber emphasis since 1972, there has been an increase in sales of fabrics for home sewing not intended for clothing items. Sew Business states that "perhaps as much as 25% of over the counter yardage now being purchased [is] for home decorating" (Home Decorating: Update, 1978, p. 11).

Spero (1974) did not ask respondents for fabric preference by fabric type. Performance preference was used. The most important characteristic indicated was ease of care. The second was "would take hard wear" (p. 64). Cranor (1974) asked home sewers living in urban and rural communities questions about their fabric shopping habits. Her sample (n=172 urban and n=172 rural) indicated concern for the following qualities when fabric shopping: at least 80% always consider care requirements (p. 27), at least 50% always consider ease of handling (difficulty for construction) (p. 28), and special performance qualities (wrinkling resistant, permanent press, etc.) were always considered by at least 65% (p. 29). The two studies indicate that consumers are concerned with care and performance requirements when selecting fabrics, thus variety may be limited to fabrics which meet these criteria.

Satisfaction With Laundry Practices and Care Outcomes

Satisfaction with laundry outcomes may be described in terms of met expectations or in terms of lack of complaints or failure of items to meet advertised performance characteristics. Ryan (1966) indicates

two of the components of general satisfaction with a garment are "ease-of-care" and "performance in use over time (shrinkage, fading, pilling, etc.)" (p. 180). Swan and Combs (1976) describe performance characteristics as "instrumental performance" or a "means to a set of ends" (p. 26). Unmet expectations of product performance are described as "instrumental" failures. A person's feelings or response to clothing "relate to a 'psychological' level of performance" and "an end in itself" and is referred to as an expressive outcome (p. 26). Met expectations or satisfaction with a product are more likely to be related to psychological characteristics of the product which are assessed subjectively, while unmet expectations or dissatisfaction are more likely to be related to physical performance of fabric or garment constructed. Swan and Combs found that a "satisfactory product may involve both expressive and instrumental outcomes, while the dissatisfactory item is likely to involve more instrumental than expressive outcomes" (p. 30). Steiniger and Dardis (1971) found that while 70% of the people who responded to a mailed survey rated the overall performance of textile products as above average in satisfactory performance, the problems they listed were specific. Problems with no-iron fabrics, and staining and soiling with related difficulty in removal, were listed as well as more general categories such as "wear and durability, ... ease of care" (p. 34). "The majority of faults occurred during laundry for clothing" (p. 35).

Wall (1974) found that "satisfied consumers were likely to perceive themselves as

- not prone to having clothing performance problems
- informed about fabrics and their care
- satisfied with permanent press and not prone to having problems with permanent press
- a competent home sewer (p. 154).

She also found "product performance problems constituted the most effective predictor and discriminator between consumers who were satisfied and those who were not satisfied" (p. 161). In her sample, those using care labels for care information were more satisfied with clothing performance (p. 156).

Piece goods purchasers are also purchasers of ready-to-wear. It may be assumed that similar home sewn articles and ready-to-wear clothing are laundered in the same way and have an expectation level of care performance placed on them by the consumer. Met fabric expectations may bring satisfaction while unmet expectations in the form of "instrumental" failures may bring dissatisfaction. Proper application of the care label instructions rather than the "trial and experimentation" method is one way to decrease dissatisfaction with care outcomes for home sewn items.

Demographic Data

Data describing socio-economic level, age, and educational level are useful in determining characteristics of consumers who represent the population of home sewers. It is also helpful to be able to compare demographic data collected for studies of consumer use of care labels, and laundry practices. The following summarizes the data from other studies, by variable, and when possible separates studies using ready-to-wear from studies of fabric relative to label usage, and satisfaction with laundry outcomes.

Socio-economic Level

Robbins (1973) summarized data from studies of fabric sales by income level, and compared six income groups by percent of households represented, percent of yardage purchased, and percent of dollars spent. Seventy-eight percent of the yardage purchases were made by persons in the upper three income groups, which represent an income range from \$7,000 to above \$15,000. This same upper half included 67% of the households represented and 82% of the dollars spent for fabric purchases (p. 72). Spero (1974) found almost "one third of the respondents were in the upper socio-economic levels (I and II)" based on Hollingshead's Two Factor Index of Social Position (1957) (p. 45-46). Spero also cited the greatest usage of labels for care-wear information in this group (p. 67). Dignes' (1975) sample reported a high level of use of labels in all income levels, as source of information about refurbishing (p. 80). Arbaugh (1974) cited a higher likelihood of label usage in the higher socio-economic levels (p. 136). Wall (1974) indicated that dissatisfaction with care performance of clothing increased in the lower middle income group (p. 124). She indicated that satisfaction is related to label use. It is in the lower socio-economic levels where care failures represent a greater economic loss, that label usage may be of greatest service to the consumer.

Age

"Today's average sewer is 23 to 25 years old and more than 90% of the 45 million sewers in the United States are less than 45 years old" according to studies summarized by Robbins (1973, p. 73). Dignes' (1975)

sample of Extension homemakers in Rhode Island represented an exception since 94% of the sample were older than 25 years of age and 54% were over 45 years of age. Spero (1974) found the distribution to be approximately 65% aged 45 or younger and approximately 35% over 45 years of age. The home sewer in the younger age groups is less likely to have acquired the experience in fabric selection of older sewers or the competence felt by more experienced launderers.

Education

Home sewers come from higher income groups and have more education. Robbins (1973) indicated that 80% of home sewers had a high school education. Of the total, 40% had at least some college (p. 73). Spero (1974) found a higher proportion of the sample completed high school (98.6%). Over half of the 177 women in her study had some college training (p. 45). Education is positively related to label usage. It is at the higher educational levels that labels are more used for care information (Arbaugh, 1974; Spero, 1974; and Wall, 1974).

Summary

In 1972, the FTC's care labeling regulation became effective. One section requires that piece goods have care labels provided at the time of purchase which will allow the consumer to properly refurbish the fabric purchase. Numerous studies have been conducted to gain understanding of the care label as it pertains to ready-to-wear as regulated. Little research has been done on the piece goods aspect of the regulation.

Sewing is important as a creative outlet and as a means of obtaining a fashionable wardrobe that is competitive in price and quality with ready-to-wear (Robbins, 1973). The home sewer today is young, has at least a high school education, and is in the average and above average income groups.

Labels are not always given by fabric outlets. When given, labels are not always followed (Spero, 1974). Ease-of-care and performance characteristics are most important in the fabric selection process (Cranor, 1974) and consumers may sew with a limited variety of fabrics in order to meet these criteria.

Satisfaction with care outcomes is related to lack of physical or instrumental failures by textile products (Swan and Combs, 1976). Label usage is related to higher satisfaction with performance of clothing and laundry outcomes.

It is important to discover the relationship between label usage by home sewers and freedom from or little problem with fabric performance problems. It is also important to learn the extent to which sewing with a limited number of fabrics or familiar fabrics is associated with the home sewer's use of labels, and with the level of satisfaction with met expectations with fabrics selected.

III. PROCEDURE

The procedure chapter contains the following sections: development and scoring of the instrument, collection of the data, preparation for analysis, and statistical analysis.

Development and Scoring of the Instrument

A questionnaire was developed to assess care label usage, variety of care code categories sewn, and satisfaction with laundry care outcomes of home sewn garments for home sewers. Demographic data were collected in order to describe the sample and to compare the results with other studies relevant to this investigation (Appendix B).

Pretest

Nine open-ended interviews were conducted in a Flat Pattern class at Oregon State University in the summer of 1976 to explore the need for this study and to help determine the extent of use of labels by home sewers, amount of sewing done by home sewers, kinds of stores patronized for fabric purchases, and laundry practices which might involve use of the label. Five interviews were conducted in Corvallis, Oregon fabric stores to learn the procedure used to distribute labels, the attitude of the store staff toward distribution of the labels, and the staff perception of customer attitude toward receipt of the labels.

From these interviews and a study of instruments used in relevant studies, a questionnaire was developed and tested for readability. Suggestions for revision were solicited. Some modifications were made.

The questionnaire was then tested on 17 undergraduates in a clothing construction class at Oregon State University in January, 1978. The format was then changed to closely resemble the present format. It was tested again with seven community women ranging in age from 20 to 40 years old. The only change was the addition of the word Usually above the choice column in the label usage measure.

Label Usage

The Measure

Label usage was defined as choice of store relative to label distribution practices, receipt of care labels, attachment of label to completed garment, reading label information, and following label information when refurbishing the garment. Fourteen statements were designed to determine use of labels at any or all the steps from selection of store to attachment of label to completed garment. Eight statements were positively worded and six were negatively worded in an effort to keep respondents from presuming which column or answer was "correct." Response to each statement was made by checking Yes or No. The word Usually above the Yes and No was designed to prevent checks in both columns or misrepresentative answers based on one or two exceptions.

Scoring

A value of "1" was assigned to the appropriate response to indicate label use. The table on page 26 shows the value given to each

Table 1. Values assigned for label usage measure listed for each statement in numerical order.

Statement number	Appropriate response to receive a value of one	
	Yes	No
1		X
2		X
3	X	
4		X
5	X	
6	X	
7		X
8	X	
9	X	
10		X
11	X	
12	X	
13	X	
14		X
	8	6
	Total = 14	

statement. A value of "0" was assigned to the inappropriate response to each statement. When neither column was checked, no hole was punched in the computer card, thus indicating a missing value. A summed score was computed for each respondent, with 14 representing the highest possible score. Failure to fill in the label usage measure resulted in removal of the questionnaire from the analysis. Two respondents failed to complete this measure.

Variety of Care Code Categories

The Measure

The measurement of variety of care coded fabrics was based on the nine category triangle system of care labeling followed by manufacturers and retailers of over-the-counter fabrics. Since some of the respondents might not be familiar with the care code categories, and since not all receive labels with fabric purchases, a list of typical fabrics and/or fiber contents currently available was used to illustrate each category. It was hoped that the list would aid respondents in accurately recalling the care procedure for the garments made in the past 12 months. The respondents were asked to write the number of garments sewn in the last year in the appropriate care code column.

Scoring

The number of care code categories in which a number was placed was used to score the breadth or degree of variety of fabrics sewn in the last year, eg., if the respondent filled in only one category, a score of "1" was given. A maximum summed score of "9" was possible to indicate the greatest variety of care code categories used for sewing. Failure to put a number in any column in this measure rendered the entire questionnaire unuseable and it was eliminated. Five respondents failed to fill in this measure.

Satisfaction With Laundry Care Outcomes

The Measure

The measure of satisfaction with laundry care outcomes was adapted from the Ohio State University agricultural research project from which the Arbaugh (1974) and Wall (1974) dissertations were completed. Ten statements were selected to represent satisfaction with the performance of fabrics in laundry or dry cleaning. One general satisfaction statement was followed by nine specific performance statements. The specific performance statements were designed to assess what Swan and Combs (1976) referred to as "instrumental" or product performance failures (p. 26). Four statements were positively worded and six were negatively worded. Only statements about fabric care failures were included because notions and trims were not included in the FTC regulation at the time of the study. Respondents were asked to check the one column which most closely represented their experience with each performance problem. The columns provided two strongly directional choices, Frequently and Almost Never, and a mid-range choice, Sometimes.

Scoring

It was assumed that reported experience reflected one of three levels of satisfaction: low, medium, or high. A value of three was assigned to the response that corresponded to most satisfied or high satisfaction. A value of two was assigned to a check in the Sometimes column. A value of one was assigned to the response that corresponded to least satisfied or low satisfaction level. Table 2 shows the

Table 2. Values assigned for satisfaction with performance outcomes listed for each statement in numerical order.

Statement number	Value assignment for responses		
	Frequently	Sometimes	Almost never
1	3	2	1
2	1	2	3
3	1	2	3
4	1	2	3
5	1	2	3
6	3	2	1
7	1	2	3
8	1	2	3
9	3	2	1
10	3	2	1

assigned values for each of the ten statements. When no column was checked, indicating a lack of experience with the performance problem, no value was assigned to indicate a missing value. Two respondents failed to complete this measure and were removed from the sample. Possible scores ranged from ten for low satisfaction to 30 for the highest possible satisfaction.

Social Status Characteristics

The Measure

The Hollingshead Two Factor Index of Social Position as presented in Myers and Bean (1968) was used to measure the socio-economic level of the respondents. The score for each individual was computed by

formula based on the primary wage earner's occupation and education. Respondents were asked to check the highest level of education attained by the primary wage earner. A description of the occupation of the primary wage earner was also obtained. The socio-economic score was based on the respondent's education and occupation if she was the primary wage earner.

There are seven positions on the occupation scale. Listed below, the number order is also the rank order. The highest professional occupations receive a value of "1".

1. executives and proprietors of large concerns and major professionals
2. managers and proprietors of medium concerns and minor professionals
3. administrative personnel of large concerns, owners of small independent businesses, and semiprofessionals
4. owners of little businesses, clerical and sales workers, and technicians
5. skilled workers
6. semiskilled workers
7. unskilled workers (Myers and Bean, 1968, p. 235).

Where assignment of score for an occupation was in question, aid was obtained from the occupation table provided by Warner (1960, p. 140-141) or from the Survey Research Center on OSU campus.

There are seven levels on the education scale also. They are listed in order from highest to lowest with highest receiving a value of "1".

1. graduate professional training
2. standard college or university graduation
3. partial college training
4. high school graduation
5. partial high school
6. junior high school
7. less than seven years of school (Myers and Bean, 1968, p. 236).

Scoring

The score for occupation is weighted by multiplying by a factor weight of seven. The score for education is weighted by multiplying by a factor weight of four. The range of computed scores and the arrangement of social class positions is as follows:

<u>Social class</u>	<u>Range of computed scores</u>		
I	11	-	17
II	18	-	27
III	28	-	43
IV	44	-	60
V	61	-	77

(Myers and Bean, 1968, p. 236-237).

Age

The Measure

The respondent was asked to indicate age by checking the appropriate age group. The groups were as follows:

under twenty years

20 - 29

30 - 39

40 - 49

50 - 59

sixty and over

Scoring

The age groups were scored to give the lowest value to the oldest group. Thus, the category of "over sixty" was assigned a value of "1" and the category of "under twenty" was assigned a value of "6".

Education

The Measure

The scale for computation of the socio-economic level was used to obtain the educational level of the respondents. Each respondent was asked to check the highest level of education attained, even if not the primary wage earner.

Scoring

The seven levels of education were scored in the same manner as for the socio-economic level, with the highest education (graduate professional training) receiving a value of "1".

Collection of the Data

Selection of the Population

The study was limited to women who sew, and a sample of women who purchase fabrics in their local over-the-counter fabric outlets was sought.

Salem, Oregon was selected as the city in which to conduct the investigation. According to the Center for Population Research and

Census, the city had a corporate population of 83,390 in September, 1978 (Supplement to Certificate, 1978). It is the seat of Marion county and state capitol of Oregon. Employment is created by a diversity of industries. Among them are: state government, pulp and paper mills, and production of a variety of consumer products ranging from processed foods to radios and storage batteries. Salem has a trade area of approximately 209,900 persons, with an estimated radius of 30 miles (Salem City Directory, 1978, p. IX-XI). The city is located in the Willamette Valley on Interstate 5, 49 miles south of Portland.

Salem was selected for the following reasons.

1. Nineteen fabric stores are listed in the Salem telephone directory, and the respondents have a good selection of fabric stores in the local area (Salem Telephone Directory, 1977-78, p. 190).
2. Practices of distribution of care labels in the fabric stores were observed by the investigator, and were found to vary greatly.
One store was found which makes a point of giving care labels to all fabric purchasers. Another was found which does not make any effort to give care labels.
3. Salem has a variety of employment opportunities.
4. Salem is situated within the geographic limitations of the investigator.

Selection of the Sample

The sample was obtained from customers who patronized one of three fabric stores in the Salem area. The three stores were selected to represent a range of practices in distribution of care labels. The

stores were all located within the Salem city limits.

Store A is an independently owned fabric store operated in conjunction with sewing machine and vacuum cleaner sales. It is located in the central downtown shopping area. It carries a wide variety of fabric, in terms of price and care requirements. All major garment pattern companies are represented and a good supply of notions is available. The store occupies 4600 square feet of sales area on two floors and employs a staff of three fulltime (including manager) and two part-time sales people. The care label distribution practice is uneven. Consumer receipt of labels depends on the clerk and how busy the clerk is. The store owner and the fabric area manager indicated willingness to cooperate and interest in participating in the study.

Store B is a small independently owned fabric specialty store, also located in the central downtown shopping area. It carries a wide range of fabrics, including specialty imported fabric and an extensive supply of quality wools. It carries all major garment patterns and a good supply of notions. It occupies 2500 square feet of sales area and its staff includes two full time (owner/managers) and four part-time employees. The care label distribution practice is to make sure each fabric purchase is accompanied by the proper care label. The owner/managers were interested in the study and willing to allow questionnaires to be distributed in the store.

Store C is a branch of a fabric chain. It is located on a main street between I-5 (north-south interstate freeway) and downtown Salem. It carries a large inventory of popular, moderately priced fabric, plus home furnishing fabric and notions as well as patterns of the

major companies. Information on size of sales area was not available. Three fulltime (including manager) and five part-time sales persons are employed. Care labels are not provided unless specifically requested by consumers at the time of fabric purchase. The store manager was willing to cooperate by allowing the investigator to distribute questionnaires in the store.

The sample was obtained by distributing the questionnaires to all willing participants who shopped at one of the three stores on randomly selected days of the week, from July 18, to August 19, 1978 (see Appendix C). All stores were visited by the investigator on at least one Saturday to reduce any possible differences which might occur between midweek shoppers and Saturday shoppers.

Sample Size

A sample of 200 respondents was desired for statistical analysis. For a sample of 200 to be obtained it was estimated that 600 questionnaires would have to be distributed. However, 292 questionnaires were distributed and 247 questionnaires were returned, of which 239 were complete and useable. The total return rate for questionnaires distributed and returned complete was 82%. Of the 247 returned, there was a 97% rate of useable questionnaires.

An effort was made to make the distribution process even among the stores. However, all useable questionnaires were included in the study. The total of 239 useable questionnaires was divided among the stores as follows: store A, 79; store B, 71; and store C, 89.

Collection Procedure

The store managers of the three stores selected for the study were contacted in the spring (1978) to discuss the study and its value to the store. All were contacted again in early July (1978) for confirmation of the agreement and to arrange dates to distribute the questionnaires.

The two periods of heaviest customer traffic in the stores were determined to be the lunch break (11:30 am to 1:00 pm) and at the end of the normal workday. The investigator attempted to distribute questionnaires during the same period (11:00 am to 5:00 pm) on each visit and in each store.

Four visits were made to stores A and C to distribute enough questionnaires to guarantee 67 or more useable returns, to represent one third of the sample. Five visits to store B were necessary. At the time of data collection, a new parking garage under construction decreased available parking and redirected the usual foot traffic past the store. Also, the temperature was over 100°F. (40°C.) on at least two visits to the unairconditioned store.

Questionnaires were distributed to all willing participants who sew and who also care for or refurbish the clothes they sew. Approaches were made to 390 women and 292 questionnaires were distributed (see Appendix D). Respondents were cautioned by the investigator that negatively worded statements might be hard to follow. In the measure for label usage, the investigator suggested verbally to each participant that "yes" or "true" and "no" or "false" might be used

interchangeably (Appendix A). Each questionnaire was coded with a dot or series of dots on the return address page. The location of the dot(s) indicated the store location. The number of dots indicated the visit to the store. Thus, four dots in the lower left hand corner indicated the fourth visit to store A.

Questionnaires could be returned in one of two ways. Those respondents willing to fill out the questionnaire in the store were able to return the completed questionnaire to the investigator; 108 women chose this method and 105 of these questionnaires were complete and useable. Those respondents not willing or able to fill out the questionnaire in the store were given a self-addressed, stamped questionnaire to be returned to the investigator at Oregon State University. Mail return was chosen by 184 women; 141 questionnaires were returned and 134 were complete and useable. The original mailed return deadline was July 28, 1978. Because of the high summer temperatures, fewer questionnaires were distributed in the first few days. The mail return deadline was extended to August 30, 1978, 11 days after the last date of distribution. The investigator included all useable questionnaires returned to the University by September 6, 1978.

Preparation for Analysis

The subjects recorded their answers on the questionnaire, and the investigator hand-scored each questionnaire in preparation for card-punching. The data were punched onto the computer cards from Fortran[®] sheets.

Identification

Each questionnaire was given a six-digit identification number. The first three digits indicated the questionnaire number and store location. Table 3 shows the assignment of numbers to the three stores.

Table 3. Number assignment for store identification.

A	B	C
001 - 100	101 - 200	201 - 300

The fourth digit indicated which visit to a particular store the questionnaire represented. The number range was from one to five (Appendix B). The fifth digit represented the day of the week, with Sunday as day one and Saturday as day seven. The sixth digit indicated the return method used. A one was assigned to all in-store returns and a two for all mailed returns. Thus, an identification number could be used to give the following:

- a. store origin of questionnaire
- b. return number
- c. visit order
- d. shopping day, and
- e. return method.

Statistical Analysis

Two methods were used to test for differences among the consumers of the three stores to determine if they could be combined. Chi-square

tests of independence were used to test the demographic variables of socio-economic level, age, education, and work status. An analysis of variance was used to test the sample by store origin of questionnaire and by return method.

Descriptive statistics were obtained from frequency distributions of the variables, and a histogram of the amount of sewing (by groups of garments reported as sewn in the last 12 months).

Internal consistency of two variables, label usage and satisfaction with care outcomes, was tested through an item analysis of the statements designed to test both variables.

Pearson r correlation coefficients of the variables under study were used to test the hypotheses. The .05 level of significance was determined as minimum for rejection of the null hypotheses.

IV. FINDINGS AND DISCUSSION

Results of the statistical analysis of data are presented in the following order: description of sample by demographic factors, homogeneity of sample, label usage, variety of care coded fabrics used, amount of sewing, satisfaction with care performance, and correlations between the variables.

Description of the Sample

The sample contained 239 women patrons of three Salem fabric stores. The sample was distributed among the three stores as follows: 79 from store A, 71 from store B, and 89 from store C. Data on socio-economic level, age, and educational level were sought for each respondent. All respondents provided age and education level, while 33 (13.8%) failed to provide information needed to compute the socio-economic level.

Socio-economic Level

Table 4 shows the distribution of socio-economic level by stores. The largest group (85 women - 35.6%) of respondents was in the middle social class. Respondents in the upper middle social class formed the second largest group (52 women - 21.8%). Almost equal numbers were found in the upper social class (32 women - 13.4%) and the lower middle social class (33 women - 13.8%). Only four respondents' (1.7%) scores placed them in the lower social class. There were so few respondents in the lowest class that for statistical analysis they were combined

Table 4. Socio-economic level of respondents by store.

Socio-economic level (scores)	Stores						Total	
	A		B		C			
	No.	%	No.	%	No.	%	No.	%
I upper social class (11 - 17)	17	21.5	7	9.9	8	9.0	32	13.4
II upper middle social class (18 - 27)	16	20.3	20	28.2	16	18.0	52	21.8
III middle social class (28 - 43)	25	31.6	21	29.6	39	43.8	85	35.6
IV lower middle social class (44 - 60)	6	7.6	12	16.9	15	16.9	33	13.8
V lower social class	2	2.5	1	1.4	1	1.1	4	1.7
Non-response	9	11.4	10	14.1	7	7.9	26	10.9
Non-calculable	4	5.1	0	0.0	3	3.4	7	2.9
Totals	79	100.0	71	100.1 ^a	89	100.1 ^a	239	100.1 ^a

$$\chi^2 = 10.94 \quad p > .05 \quad \text{d.f.} = 5$$

^a Does not total 100 due to rounding off of percentiles

with respondents in the lower middle class group. A higher number of respondents was found in the upper social class at store A than at stores B and C. The highest single concentration of respondents was at the middle social class for store C (43.8%).

Age

Respondents between 20 - 29 years of age represented the greatest concentration for the total sample and for the three stores as well. Table 5 shows distribution of respondents' age groups by store. Respondents under 40 represented 65.7% of the sample.

The findings of a concentration of women in the 20 - 29 year age group is consistent with data from Robbins (1973). However, although the age divisions were not the same, this sample had a lower proportion of sewers at or below age 45. Robbins (1973) found that 90% of all home sewers were younger than 45 years old (p. 73), and 78.7% of the present sample were under 49 years of age.

Educational Level

The largest category of educational attainment was the first year of college level (83 women - 34.7%). Almost 24% of the sample (57 women) had graduated from high school. Forty-one women (17.2%) had completed a four-year college education and 36 women (15.5%) had completed graduate professional training. No respondents had less than seven years of education. Table 6 shows distribution of education by store. Cumulative educational attainment shows that more than 90% of the sample had completed educational levels at or above a high school

Table 5. Age groups of respondents by store.

Age group	Stores						Total	
	A		B		C			
	No.	%	No.	%	No.	%	No.	%
Under 20	14	17.7	9	12.7	8	9.0	31	13.0
20 – 29	25	31.6	25	35.2	30	33.7	80	33.5
30 – 39	13	16.5	13	18.3	20	22.5	46	19.2
40 – 49	10	12.7	11	15.5	10	11.2	31	13.0
50 – 59	11	13.9	8	11.3	10	11.2	29	12.1
60 and over	6	7.6	5	7.0	11	12.4	22	9.2
Totals	79	100.0	71	100.0	89	100.0	239	100.0

$$\chi^2 = 5.89 \quad p > .05 \quad \text{d.f.} = 7$$

Table 6. Educational levels of respondents by store.

Educational level	Stores						Total	
	A		B		C			
	No.	%	No.	%	No.	%	No.	%
under seven yrs	0	0	0	0	0	0	0	0
junior high	5	6.3	2	2.8	2	2.3	9	3.8
one or two yrs high school	5	6.3	4	5.6	4	4.5	13	5.4
high school grad	16	20.3	15	21.1	26	29.2	57	23.8
one year college	31	39.2	24	33.8	28	31.5	83	34.7
four year college degree	12	15.2	15	21.1	14	15.7	41	17.2
graduate profes- sional training	10	12.7	11	15.5	15	16.9	36	15.1
Totals	79	100.0	71	99.9 ^a	89	100.1 ²	239	100.0

$$\chi^2 = 5.69 \quad p > .05 \quad \text{d.f.} = 6$$

^aColumn does not add to 100% due to rounding of percentiles

diploma. Sixty-seven percent of the respondents had one year of college or more. The cumulative data are used to compare the sample with data from other studies.

The findings are similar to those of other studies. The percent of high school graduates is higher than that reported by Robbins (1973) who found that 80% of the home sewers had completed high school. The proportion of women with some college training (67%) was higher than found by Spero (1974) who reported that 59.3% had at least some college training (p. 44).

Work Status

Approximately two-thirds of all respondents were employed outside the home. The division between working and non-working women was approximately even at store A, while the ratio was close to 3:1 in favor of working women at stores B and C. Table 7 shows the distribution of respondents by store.

Table 7. Work status of respondents by store.

Work status	Stores						Total	
	A		B		C			
	No.	%	No.	%	No.	%	No.	%
working outside the home	40	50.6	54	76.1	63	70.8	157	65.7
not working out- side the home	39	49.4	17	23.9	26	29.2	82	34.3
Totals	79	100.0	71	100.0	89	100.0	239	100.0

$$x^2 = 18.74 \quad p < .01 \quad d.f. = 3$$

Homogeneity of the Sample

The sample (n=239) was obtained in 13 visits to three fabric stores in Salem, Oregon. The completed questionnaires were returned to the investigator by one of two methods, in the store at the time of completion or by mail to Oregon State University. Possible differences which might have occurred as a result of variation of demographic data among patrons of the three stores were tested by the chi-square test of independence. No significant differences at the .05 level were found for socio-economic level, age, or education; however, a significant difference among the stores was found for work status (Table 7).

Differences which might have occurred as a result of variation in questionnaire return method or store patronized were tested by analysis of variance for each of the following measures: label usage, care code categories, and satisfaction with care outcomes. Using a .05 level of confidence, no significant differences were found among the respondents for the three variables for return method used. No significant differences were found among patrons of the three stores for label usage and care code categories. A near significant difference occurred ($p = .053$) for level of satisfaction among the respondents of the three stores. Table 8 shows the results of the analysis of variance.

Label Usage

The measure for label usage contained 14 statements designed to test the extent to which respondents obtain and use care labels for home sewn garments (Appendix A). Although a checked response was

Table 8. Analysis of variance for label usage, care code categories, and satisfaction with care outcomes, using three stores and two methods of return.

Source of variation	Label usage			Care code categories			Satisfaction with care		
	F	Significance level	d.f.	F	Significance level	d.f.	F	Significance level	d.f.
Main effects	1.516	.211	3	1.210	.301	3	1.986	.117	3
return	.794	.374	1	.434	.511	1	.004	.951	1
store	1.916	.150	2	1.436	.240	2	2.977	.053	2
Two-way interaction									
return - store	1.892	.153	2	1.027	.360	2	.057	.945	2
	n=238			n=239			n=239		

requested for each of the 14 statements, not all respondents answered every statement. Non-response may reflect a lack of experience with the behavior mentioned in a specific statement. However, it might also reflect a misunderstanding of the statement or the instructions to be followed for that measure. Non-response was highest for statement 11 which was designed to measure accuracy in following instructions for washable wools found on the care label. Twenty-one respondents (9%) did not check this statement. A possible reason may be lack of sewing experience with washable wools. Statement 12 received 13 non-responses. A possible reason for non-response to this statement on attachment of labels to gift items may be that not all sewers make garments for other people.

In order to test the measure of label usage for internal consistency, it was subjected to an item analysis. Table 9 shows the results of the analysis. The internal consistency score was .609. The number of steps in label usage included in the measure may be reflected in the score for internal consistency. Sub-variables such as receipt of label, importance of receipt of label, following of label instructions, and attachment of labels have been grouped together in this measure.

Table 10 shows the frequency distribution in descending order from statements checked most often to statements checked least often. The highest response (87.9%) was for statement 9, "I follow the care instructions on the bolt end when I launder, or send to the drycleaners, those garments I sew." Statement 10 concerning label use in caring for garments was checked by 71.5% of the respondents. However, both statements 1 and 2 concerning receipt and importance of receipt of care

Table 9. Item analysis of statements in measure of label usage.

Statement number	Total appropriate responses (n=239)	Percent appropriate responses	Difficulty index	Discrimination index	Answer selected by value assigned		
					1	0	no response
1	142	59	.59	.23	142	93	4
2	140	59	.59	.44	140	97	2
3	81	34	.34	.58	81	158	0
4	95	40	.40	.56	95	143	1
5	104	44	.44	.55	104	132	3
6	26	11	.11	.39	26	210	3
7	99	41	.41	.29	136	99	4
8	176	74	.74	.30	176	58	5
9	210	88	.88	.18	210	27	2
10	171	72	.72	.48	171	62	6
11	156	65	.65	.24	156	62	21
12	80	33	.33	.50	80	146	13
13	70	29	.29	.45	70	167	2
14	85	36	.36	.43	85	150	4

Mean score for label usage = 6.84

Internal consistency = .609

Table 10. Frequency distribution for statements in measure for label usage in order of level of usage (n=239).

State- ment number	Characteristic of use ^a	Rank	Response to use					
			Appropriate response		Inappropriate response		No response	
			No.	%	No.	%	No.	%
9	Follow care instructions on bolt end when refurbishing	1	210	87.9	27	11.3	2	.8
8	Read and remember care instructions from bolt end	2	176	73.6	58	24.3	5	2.1
10	Use label instructions to refurbish	3	171	71.5	62	25.9	6	2.5
11	Wash machine washable wool fabrics at home	4	156	65.3	62	25.9	21	8.8
1	Stores shopped in give labels	5	142	59.4	93	38.9	4	1.7
2	Getting label matters	6	140	58.6	97	40.6	2	.8
5	Prefer to shop where labels always given	7	104	43.5	132	55.2	3	1.3
7	Don't buy fabrics for which a label is not available	8	99	41.4	136	56.9	4	1.7
4	Ask for label when not offered one	9	95	39.7	143	59.8	1	.4
14	Attach labels to all garments	10	85	35.6	150	62.8	4	1.7
3	Make sure to get a label	11	81	33.9	158	66.1	0	0
12	Attach labels to garments made but not cared for	12	80	33.5	146	61.1	13	5.4
13	Attach labels to new or unfamiliar fabrics	13	70	29.3	167	69.9	2	.8
6	Always shop where labels are always given	14	26	11.9	210	87.9	3	1.3

^a See page 26 for table of values for positively and negatively worded statements in the questionnaire.

labels received 59.4% and 58.6% response respectively. Approximately one-third of the responses indicated that respondents made sure they got care labels for the fabrics they sew. Perhaps the higher percentage of response to statement 10 reflects the respondents' desire to appear responsible about use of care sources when caring for home sewn garments. It may also be a result of anticipating what the investigator appeared to want.

The range of scores on label usage was from 0 to 14 and the mean was 6.84. Table 11 shows the distribution of summed scores for label usage. The highest concentration of respondents (n=40) was below both the median and the mean, appropriately responding to five of the label usage statements. The number of respondents in the lower half (below the median) was larger (n=116) than the number above (n=88). Distribution of scores for label usage was skewed low with 111 women responding appropriately to between five and seven statements. Forty-one women (17%) responded appropriately to more than nine statements on the label usage measure.

Table 12 shows frequency distribution for receipt of labels. Receiving a label was of some importance to the respondents as indicated by response levels of 34% and above to statements concerning importance of receipt of labels. However, respondents did not appear to restrict their shopping to stores which always gave labels. Twenty-six respondents (11.9%) indicated by their responses that they shopped only at stores where labels were given.

Table 13 shows frequency of attachment of labels. Statements 12, 13, and 14 were designed to determine the extent of attachment.

Table 11. Frequency distribution of scores and mean score for label usage.

Summed score for label usage	No. of respondents	Percent of total
14	1	.4
13	2	.8
12	7	2.9
11	12	5.0
10	19	8.0
9	25	10.5
8	22	9.2
7	35	14.6
6	36	15.1
5	40	16.7
4	21	8.9
3	10	4.2
2	5	2.1
1	3	1.3
0	1	.4
Totals 14	239 respondents	100.1 ^a
Median = 7 Mean Score = 6.84 s.d. = 2.59		
^a Total does not equal 100 due to rounding of percentiles		

Table 12. Frequency distribution of label distribution and acquisition as reported by respondents in label usage measure (n=239).

Means of acquisition	Statement number	Appropriate response		Inappropriate response		No response	
		No.	%	No.	%	No.	%
stores patronized give labels	1	142	59.4	93	38.9	4	1.7
getting a label matters	2	140	58.6	97	40.6	2	.8
prefer stores that always give labels	5	104	43.5	132	55.2	3	1.3
ask for a label	4	95	39.7	143	59.8	1	.4
make sure to get a label	3	81	33.9	158	66.1	0	0
shop only at stores where labels are always given	6	26	11.9	210	87.9	3	1.3

Table 13. Frequency distribution of label attachment as reported by respondents in label usage measure (n=239).

Type of garment for which attachment was used	Statement number	Appropriate response		Inappropriate response		No response	
		No.	%	No.	%	No.	%
attach to all garments sewn	14	85	35.6	150	62.8	4	1.7
attach to garments not cared for	12	80	33.5	146	61.1	13	5.4
attach to new or unfamiliar fabrics	13	70	29.3	167	69.9	2	.8

Thirty-five percent of the respondents reported attachment of labels to all garments. Twenty-nine percent of the respondents indicated by their response to statement 13 that they attached labels to new or unfamiliar fabrics. Table 14 helps explain why the number of respondents who attach labels to new or unfamiliar fabrics is lower than the number who attach to all garments sewn. More than 70% of the sample reported sewing with fabrics in care code categories $\triangle 1$, $\triangle 3$, and $\triangle 4$. Limitation of variety in care procedures and probable similarity of fabrics may create reduced apparent need for attached care instructions.

Variety of Care Coded Fabrics Used

The measure of variety of fabrics sewn provided respondents with care code numbers, care instructions, and examples of fabrics and/or fiber contents which would be labeled for care by that method. Table 14 shows the frequency distribution of categories checked by respondents. Heaviest use was reported for codes $\triangle 3$, $\triangle 4$, and $\triangle 1$. The instructions for care in codes $\triangle 3$ and $\triangle 4$ are similar so that fabric consumers who purchase only code $\triangle 3$ and $\triangle 4$ fabrics could care for them identically by following a combination of both code instructions. It is possible that code $\triangle 1$ fabrics could also be cared for by the same combination method. If in fact respondents do combine fabrics in washer loads as reported by Gahring (1975, p. 107), it may help to account for the fact that 40% of the sample do not consider it important to obtain a care label for fabric purchased. Support for this possibility may be found in the low percentage of respondents who sew with fabrics requiring special handling (codes $\triangle 2$, $\triangle 5$, and $\triangle 9$).

Table 14. Frequency distribution of care categories by number of respondents who sew with fabrics in each care code category.

Care Code number	Care instructions	Examples of fiber/fabric information	# Respondents	% ^a of total
△3	Machine Wash Warm Tumble Dry Remove Promptly	Poly/Cotton Kettle-cloth, Poly/Cotton Corduroy, Blouse Woven Blends, Washable Velveteen	203	84.9
△4	Machine Wash Warm Delicate Cycle Tumble Dry Low	Polyester Gabardine Polyester Double Knits, Qiana Knits, Interlock Knits, Washable Wools	187	78.2
△1	Machine Wash Warm	Poly/Cotton Chino Quilted Cotton	174	72.8
△6	Hand Wash Separately Use Cool Iron	Lace, Very Delicate Fabrics	69	28.9
△7	Dry Clean Only	Wool not processed for home laundry Rayon Velvet Acetate, Satin and Taffeta	67	28.0
△2	Machine Wash Warm Line Dry	Rayon Challis	61	25.5
△5	Machine Wash Warm Do Not Dry Clean	Acrylic Sweater, Washable Vinyls	24	10.0
△8	Dry Clean, Pile Fabric Method Only	Fake Furs	18	7.5
△9	Wipe with Damp Cloth Only	Oil Cloth, Vinyl Rainwear Fabrics	11	4.6

^a Percents do not add to 100 since respondents were asked to check all care code categories used for garment fabrics.

More than 80% of the women limited garment-making to four or fewer care categories. Table 15 shows distribution by number of categories in which garments were made by respondents in the last year. No respondent sewed in all nine care categories. If wide variety were measured by sewing in more than six categories, only 3.7% of the respondents would qualify as sewers in a wide variety of care categories.

Amount of Sewing

The measure for variety of care coded fabrics used permitted grouping of sewers by amount of sewing done in the last year. Table 16 shows the distribution by grouped numbers of garments reported as sewn in the last year. The range of total garments sewn was from 1 to 125. The highest proportion of respondents (28.5%) sewed from six to ten garments in the time period. Closely following were respondents (25.9%) who sewed 11 to 15 garments in the year. The two groups (6-10 and 11-15 garments sewn) represented 130 women (54.4%) of the sample. Fifteen women sewed more than 40 garments in the year.

The figures indicate a greater number of completed garments were represented by this sample than indicated by the study for the American Home Sewing Association, which defines a heavy sewer as one who completes six or more garments a year (Survey for NHSA, 1977, p. 1). The figures are similar to those of Spero (1974) who found that the median number of articles sewn in the previous year was 15, with 62.8% of the sample sewing between 4 and 20 articles in that year (p. 50).

Table 15. Frequency distribution by number of care categories sewn by respondents and mean score for variety.

Number of codes reported	Number of respondents	Percent of total
1	17	7.1
2	49	20.5
3	73	30.5
4	56	23.4
5	20	8.3
6	15	6.2
7	7	2.9
8	2	0.8
9	0	0
Totals	239	99.7 ^a

Mean Score = 3.26

^aTotal does not equal 100 due to rounding of percentiles.

Table 16. Frequency distribution of number of garments sewn in the last 12 months, as reported by respondents.

Number of items sewn ^a	Number of respondents	Percent of total
1 - 5	28	11.7
6 - 10	68	28.5
11 - 15	62	25.9
16 - 20	29	12.1
21 - 30	27	11.3
31 - 40	10	4.2
41 - 50	8	3.3
50 or more	7	2.9
Totals	239	99.9 ^b

^a Groups do not represent even segments.

^b Total does not equal 100 due to rounding of percentiles.

Satisfaction With Laundry Care Outcomes

The measure for satisfaction with care outcomes contained ten statements designed to test general satisfaction with fabric performance. Nine of the statements were specific performance characteristics. Table 17 shows the frequency distribution for the ten statements in descending order. General satisfaction received the highest percentage (84%) of high satisfaction reported. Statements concerning color stability and color retention also received high satisfaction reports. At least two-thirds of the sample indicated high satisfaction with design color stability, lack of dye transfer due to crocking, and resistance to fading. More than half the respondents indicated high satisfaction with results of drycleaning their home sewn garments, and with shrinkage resistance of the fabrics used in sewing.

Less than 20% of the sample were highly satisfied with the performance of their permanent press fabrics. Grease retention of fabrics received the lowest percentage of responses indicating high satisfaction. Perhaps the grease retention problem reported (34% were dissatisfied and 44% sometimes satisfied) may be related to the high percentage of code $\triangle 3$ (84.9%) and code $\triangle 4$ (78.2%) fabrics used for sewn garments (Table 15). Fabrics coded $\triangle 3$ and $\triangle 4$ often contain 100% polyester or a blend of polyester and cotton, and the care instructions for both codes require a warm water wash. Polyester is an oleophilic fiber and hot water and/or solvent laundry aids are often required to remove grease. Findings of low satisfaction with permanent press "no-iron" performance, and with stain and dirt retention, were similar to those

Table 17. Frequency distribution for statements on performance characteristics in the measure of satisfaction with care outcomes, in order of highest satisfaction (n=239).

State- ment no.	Performance characteristic	Rank	High		Medium		Low		No response	
			No.	%	No.	%	No.	%	No.	%
1	General satisfaction	1	200	83.7	33	13.8	3	1.3	3	1.3
8	Design color bleeding onto background	2	196	82.0	35	14.6	3	1.3	5	2.1
2	Fabric dye crocking	3	179	74.9	52	21.8	6	2.5	2	.8
3	Fabric color fading	4	157	65.7	67	28.0	10	4.2	5	2.1
6	Dry cleaning*	5	145	60.7	17	7.1	16	6.7	61	25.5
5	Shrinkage	6	126	52.7	93	38.9	17	7.1	3	1.3
10	Shape retention* (dimensional stability of acrylics)	7	102	42.7	75	31.4	16	6.7	46	19.2
9	Graying or dis- coloration of nylon fabric*	8	98	41.0	84	35.1	22	9.2	35	14.6
4	"No-iron" needs pressing	9	44	18.4	131	54.8	62	25.9	2	.8
7	Grease retention	10	41	17.2	104	43.5	81	33.9	13	5.4

^a See page 29 for values assigned for positively and negatively worded statements in the questionnaire.

* Performance statements deleted from statistical analysis due to high percentage of non-response.

of Wall (1974). More than 30% of her sample reported low satisfaction with "problems of 'no-iron' fabrics needing ironing (42.7%)," and "stains and dirt hard to remove (34.5%)" (p. 121).

The number of items for which high satisfaction was reported ranged from one to nine. Table 18 shows the frequency distribution for high satisfaction with care outcomes. No respondent indicated high satisfaction for all statements, or for no statements. Each respondent indicated at least one statement about which she was highly satisfied.

The measure for satisfaction with care outcomes was subjected to an item analysis (see Table 19). The internal consistency score for the ten statements was .398. The lowness of the score may be attributed to independence of the specific performance characteristics grouped together for this measure. It may also be attributed to the high level of general satisfaction reported when compared with levels of high satisfaction of less than 50% (statements 9 and 10) and 20% (statements 4 and 7) respectively for four of the specific characteristics mentioned. Non-response may also play a role in the low score for internal consistency.

Statements 6, 9, and 10 were omitted from final statistical analysis because of the high non-response levels. Non-response may reflect lack of experience with the fabric types or performance characteristics mentioned in these statements. Since the questionnaire did not provide a place to check "no experience", respondents may have chosen to indicate it by not checking any column for performance problems not encountered. The highest non-response was for satisfaction with dry cleaning (26%). Twenty-eight percent (67 women) reported sewing garments in

Table 18. Frequency distribution by number of statements with high satisfaction with care outcomes reported by respondents.

No. of statements with high satisfaction	No. of respondents	Percent of total
10	0	0
9	9	3.8
8	18	7.5
7	36	15.1
6	54	22.7
5	48	20.1
4	40	16.7
3	24	10.0
2	5	2.1
1	5	2.1
0	0	0
Totals	239	100.1 ^a

^a Total does not equal 100 due to rounding of percentiles.

Table 19. Item analysis for statements on performance characteristics reported as high level in the measure for satisfaction with care outcomes.

Statement number	Total high satisfaction responses ^a (n=239)	Percent high satisfaction responses	Difficulty index	Discrimination index	Answers selected by value assigned			
					1	2	3	No response
1	200	84	.84	.36	3	33	200	3
2	179	75	.75	.42	6	52	179	2
3	157	66	.66	.54	10	67	157	5
4	44	18	.18	.28	62	131	44	2
5	126	53	.53	.49	17	93	126	3
6*	145	61	.61	.23	16	17	145	61
7	41	17	.17	.37	81	104	41	13
8	196	82	.82	.35	3	35	196	5
9*	98	41	.41	.41	22	84	98	35
10*	102	43	.43	.45	16	75	102	46

^a Number of respondents who indicated high satisfaction with performance characteristic mentioned (Table 2 gives value assignment for each statement)
Internal consistency = .398

* Items dropped from further analysis due to percent of non-responses.

care code $\triangle 7$ (Dry Clean Only) and 7.5% reported sewing garments in care code $\triangle 8$ (Dry Clean, Pile Fabric Method Only) (Table 14). Critz (1975) found, in a study of consumers' use of care labels and laundry practices, that "40.5 percent replied that they had washed an item labeled 'dry clean only'" (p. 28). It is possible that non-response may reflect lack of experience or not following suggested care procedure. Non-response was 19% for shape retention of acrylics. Only ten percent of the sample reported sewing with code $\triangle 5$ fabrics. Arbaugh (1974) recorded the fiber content of garments selected by consumers in her sample. The relationship of care label usage and fiber content was tested by contingency table analysis. The acrylic fiber category was not well enough represented to be evaluated (p. 111). The findings seem to indicate a lack of interest in the use of acrylic fabrics. The percentage of acrylic fabrics available in the three fabric stores was not assessed at the time of data collection. Non-response was 15% for the statement which dealt with graying or discoloration of nylon fabrics. This may be due to the above mentioned lack of experience with certain fabrics, or a lack of textile knowledge. It may be that the respondents had sewn with nylon fabrics, such as interlock knits, without knowing or remembering the fiber content.

Table 20 shows the frequency distribution of summed scores for the measure on satisfaction with care outcomes. The summed scores were based on the seven statements answered by most respondents. An adjusted score was calculated for respondents who did not answer statements remaining in the measure (Table 17). The adjusted summed score was calculated by the following formula:

Table 20. Frequency distribution of adjusted summed scores for total satisfaction with care outcomes from high to low satisfaction.

Adjusted summed scores ^a	No. of respondents	Percent of total
21	7	2.9
20	24	10.0
19	32	13.4
18	62	25.9
17	33	13.8
16	34	14.2
15	23	9.6
14	15	6.3
13	4	1.7
12	3	1.3
11	2	.8
Totals	239	100.0

^a Based on seven statements, due to high non-response for statements 6, 9, and 10.

$$\frac{\text{sum of values assigned to respondent's answers} \times \text{number of statements possible (7)}}{\text{number of statements answered}}$$

The possible range of scores for the measure was 7 to 21; the actual range was 11 to 21. The mean score for satisfaction with care outcomes was 17.2, and the distribution was skewed toward high satisfaction.

Correlation of the Variables

The Pearson r correlation coefficients for the six variables which form the hypotheses are shown in Table 21. The additional variable "amount of sewing" was included to examine possible relationships with label usage and satisfaction with care outcomes.

It was not possible to calculate the socio-economic level for 33 respondents. Hence the number of cases (n=206) calculated with socio-economic level represents only part of the full sample of 239. The summed scores for label usage and satisfaction with care outcomes were based on percentage scores which compensated for missing values in each measure (see Tables 10 and 17 for percentage of non-response).

Label Usage

Label usage was found to be positively correlated to variety of care code categories used by home sewers ($r = .1413$, $p < .05$). Low care label usage by home sewers is positively correlated to limitation in variety of care codes chosen for home sewn garments. Factors which may clarify the relationship are summarized as follows: 33.9% of the respondents indicated by their response that they make sure to get a

Table 21. Pearson r correlation coefficients between seven variables: label usage, variety of care codes used, satisfaction with care outcomes, age, education (n=239), socio-economic level (n=206), and amount of sewing (n=239).

Variable	Variety of care code used	Satisfaction with care outcomes	Age ^a	Education ^a	Socio-economic level ^a (n=206)	Amount of sewing
Label usage	.1413*	.0257	-.0777	-.0312	-.0481	.1074*
Variety of care codes used		.0046	.0873	-.0064	.0101	.4472**
Satisfaction with care outcomes			-.0334	-.0223	-.0402	.1380*
Age ^a				.0570	.0365	-.0477
Education ^a					.3906*	-.0782
Socio-economic level ^a						.1383*

^a Scale reversed; low score = high on variable

* p < .05

** p < .001

label with fabric purchases, 58.6% of the responses indicated that obtaining a label mattered to them, and more than 70% of the respondents sewed in only four or fewer care code categories, and those most often checked are quite similar in required care instructions.

Label usage is not significantly related to satisfaction with care outcomes ($r = .0257$). Satisfaction with those performance characteristics listed in the measure does not appear to be associated with receipt and use of care labels. Home sewers' satisfaction with care outcomes may reflect a perceived ability as a good launderer or the degree of successful past experience with refurbishing similar fabrics. Wall (1974) found that "consumers who believed themselves to be experienced in clothing care tended to be satisfied with clothing performance" (p. 103). Since only two statements were given a low satisfaction rating by more than ten percent of the respondents and none were rated low by more than one-third, the satisfaction scores may reflect a wide range of expectation levels. Some women may have reported high satisfaction with fabrics which met high expectation while others reported high satisfaction with fabrics based on much lower expectation levels. Neither perceived competence of respondents' laundry abilities nor expectation levels of fabric performance was measured in this study, so further evaluation cannot be made. Arbaugh (1974) reported that "satisfaction of Users [of labels] concerning specific garment characteristics was not significantly different from that of Non-Users" (p. 119). However, Wall (1974) found that "more satisfied consumers than not satisfied consumers reported themselves as users of label information on clothing" (p. 163).

Label usage was not significantly related to the demographic factors of age ($r = -.0777$), education ($r = -.0312$), or socio-economic level ($r = -.0481$). This finding is not consistent with that of Arbaugh (1974) who reported that "education of the respondents and the social class level were significant beyond the .05 level. Users, as compared to Non-Users, had attained a higher level of education and were of a higher social class level" (p. 133, 136). Her definition of use of care labels on ready-to-wear included use in both selection and care practices. Lack of significant findings in the present study may reflect treatment of the data. No attempt was made to classify respondents into two categories (users and non-users); rather distribution of the scores approached a normal distribution curve (see Table 11).

Variety of Care Coded Fabrics Used

Variety of care code categories used for home sewing was not significantly related to satisfaction with care outcomes for home sewn garments ($r = .0046$). The majority of the respondents reported sewing with fabrics requiring a limited variation in care methods. Substantial numbers of women failed to respond to satisfaction statements concerning drycleaning, color scavenger nature of nylon fabrics, and shape retention of acrylics; when these statements were deleted from the measure, the resulting mean satisfaction level was high (17.2).

Variety of care code categories used was not significantly related to age ($r = .0873$), education ($r = -.0064$), or socio-economic level ($r = .0101$). Perhaps the concentration of fabric purchases in a few

similar care categories has been found to be most satisfactory for the majority of home sewers. Cranor (1974) found that ease of handling was "always" an important criterion for 62.2% of her urban sample and 59.9% of her rural sample when shopping for yardage (p. 28). It appears that variety of fabrics sewn is independent of age, level of education, and social class level.

Satisfaction With Care Outcomes

Satisfaction with care outcomes is not significantly related to age ($r = -.0334$), education ($r = -.0223$), or socio-economic level ($r = -.0402$). Contrary to the findings in this study, Wall (1974) found when age was cross-tabulated with high, medium, and low satisfaction that older women were higher in satisfaction (p. 126). However, Wall's findings for education and socio-economic levels were similar to this study. She reported that "higher social class was not related to higher clothing performance satisfaction; higher education of the consumers was not related to higher clothing performance satisfaction" (p. 122).

Age, Education, and Socio-economic Level

Age was not significantly related to education ($r = .0570$) or socio-economic level ($r = .0365$) among the women in this sample. Education was significantly related to socio-economic level ($r = .3906$, $p < .05$). The found relationship is logical since the values assigned for education level were also used to calculate the education factor used in the Hollingshead Two Factor Index of Social Position.

Amount of Sewing

No hypotheses were formulated concerning the relationship of amount of sewing done by home sewers to other variables. However, the measure for variety of care code categories provided data from which a score on amount of sewing could be obtained. As supplementary information, correlations were computed between amount of sewing and the six variables under study. Amount of sewing was found to be significantly related to four variables: label usage, variety of care coded fabrics used, satisfaction with care outcomes, and socio-economic level.

Amount of sewing was positively correlated with label usage ($r = .1074$, $p < .05$). Label usage was greatest among those who sewed the most. Knowledge of the permanent care regulation was not measured in this study; however, Dignes (1975) attempted to determine the extent of fabric consumers' awareness of selected aspects of the permanent care regulation. "Scores ranged from three to twelve and the mean score was 8.74 out of a possible fourteen points" (p. 47). Women who construct many garments in a year may be more aware of the availability of the care labels and the aid labels may provide in care decision-making; those who do not sew much may not be familiar with the availability of care labels in the fabric stores.

Amount of sewing was positively correlated with variety of care coded fabrics used ($r = .4472$, $p < .001$). Those who sew a large number of garments may be more confident about their sewing ability and therefore use a greater variety of fabrics. It is also logical to assume that if a larger number of garments were sewn the variation in type of garment, and the number of family members for whom garments were sewn,

would increase creating a greater diversity of fabrics selected. However, one respondent reported sewing 125 garments in the last year, of which 103 garments were recorded in code $\triangle 4$.

There was a significant relationship between amount of sewing and satisfaction with care outcomes ($r = .1380$, $p < .05$). The greater the amount of sewing the greater the satisfaction with care performance of fabrics chosen for garments sewn. Wall (1974) found that one descriptor of a satisfied consumer was her perception of herself as a competent home sewer (p. 154). Since more than 80% of the women in this study sewed all garments in four or fewer care categories, repeated selection of fabrics which are relatively easy to care for at home may build a success rate which gives higher satisfaction, and may in turn lead the home sewer to expand her experience to a greater variety of fabrics.

Amount of sewing was not significantly related to age ($r = -.0477$), or education ($r = .0782$).

Amount of sewing was significantly related to socio-economic level ($r = .1383$, $p < .05$). A high score on socio-economic level indicates lower socio-economic level; therefore, women in the lower socio-economic groups sew more than those in the higher socio-economic groups. Women in the higher socio-economic groups probably have a greater disposable income which might be spent on ready-to-wear. One reason given by home sewers for sewing is the high cost of ready-to-wear (Robbins, 1973, p. 70). Perhaps women in the lower socio-economic groups feel that home sewn garments are a more economical use of their smaller disposable incomes.

Summary

A sample of 239 women home sewers from the Salem, Oregon area provided data which have been summarized below.

The largest concentration of women may be described as: in the middle socio-economic group, between 20 - 29 years old, having completed one year of college training, and employed outside the home.

The mean score for label usage was 6.84 out of 14. More women reported using labels in refurbishing home sewn garments than reported receiving labels or making sure to get labels in fabric stores. Approximately one-third reported attaching labels to all completed garments.

Home sewers chose fabrics in four or fewer care code categories, all of which require home refurbishing methods and which are similar to each other in care requirements.

The greatest concentration of number of garments reported as sewn in the last year was between six and ten garments. Fifteen women sewed more than 40 garments in the last year.

Satisfaction with care outcomes was relatively high (17.2 mean score out of 21). Three performance characteristics received high non-response levels and were removed from further analysis. Lowest satisfaction with specific performance characteristics was reported for permanent press fabrics needing pressing and grease retention of fabrics.

Correlation of the variables selected for the study were not significant, with the exception of label usage and variety of care coded fabrics used. The additional variable of amount of sewing was significantly related to four of the variables: label usage, variety of care coded fabrics used, satisfaction with care outcomes, and socio-economic level.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on evaluation and discussion of the descriptive statistics and the correlation coefficients of the six variables under study (label usage, variety of care coded fabrics used, satisfaction with care outcomes, socio-economic level, age, and education), the following conclusions have been drawn relative to the hypotheses posed:

H_0 1a. For home sewers, label usage is independent
of variety of care coded fabrics used.

The null hypothesis must be rejected. A significant correlation ($r = .1413$, $p < .05$) was found between label usage and variety of care coded fabrics used by respondents. Almost 59% of the respondents indicated by their responses that getting a care label with fabric purchase mattered to them, and 33.9% indicated by their responses that they made sure to obtain a label with fabric purchases. The mean score for label usage was 6.84 from a possible 14. The mean score for variety of care coded fabrics used was 3.26 of a possible nine. Low label usage is related to limited variety of care codes selected for home sewn garments. Selection of fabrics whose care instructions are similar, and non-selection of fabrics with care codes which require special handling appear to be related to low usage of care labels.

H_0 1b. For home sewers, label usage is independent
of satisfaction with care outcomes.

The null hypothesis cannot be rejected. No significant relationship was found between label usage and satisfaction with care outcomes. The receipt and use of care labels does not appear to be associated

with higher satisfaction with care outcomes. In this sample, the number of consumer responses indicating use of the label instructions to refurbish garments made from fabrics (n=171) were almost 13% higher than response indicating that getting a label mattered (n=140).

Performance characteristics receiving the lowest satisfaction ("no-iron" garments need pressing, and grease retention) are characteristics frequently associated with fabrics listed in the care code categories most often checked. Perhaps label information presently available is not adequate to solve instrumental failures in fabric performance. It is also possible that since the water temperature for five of the seven home refurbishable categories suggest warm water wash consumers tend to ignore differences in the care code categories, such as "remove promptly" and "tumble dry low" which might affect the appearance of permanent press garments. A third possibility is that suggested by Gahring (1975). Inadequate laundry facilities may prevent optimum use of label instructions. The lack of high internal consistency scores for measures of label usage and satisfaction with care outcomes may also be partly responsible for the lack of significant relationship.

H₀ 1c. For home sewers, label usage is independent of socio-economic level.

The null hypothesis cannot be rejected. No significant relationship was found between label usage and socio-economic level. The finding is contrary to that of Arbaugh (1974) who found users of care labels on ready-to-wear to be in the higher socio-economic levels (p. 90).

H_0 1d. For home sewers, label usage is independent of age.

The null hypothesis cannot be rejected. No significant relationship was found between label usage and age. The finding is similar to Arbaugh (1974) whose respondents' ages were not significantly related to use or non-use of care labels permanently attached to ready-to-wear (p. 90).

H_0 1e. For home sewers, label usage is independent of education.

The null hypothesis cannot be rejected. No significant relationship was found between label usage and education. This result is not consistent with the findings of Arbaugh (1974) who found ready-to-wear care label usage to be significantly related to education in the higher education levels (p. 90).

H_0 2a. For home sewers, variety of care coded fabrics used is independent of satisfaction with care outcomes.

The null hypothesis cannot be rejected. No significant relationship was found between variety of care coded fabrics used by home sewers and satisfaction with care outcomes of the performance characteristics chosen for the study. Almost three-fourths of the respondents sewed in only two, three, or four care code categories. The categories receiving the highest response ($\triangle 3$, $\triangle 4$, and $\triangle 1$) have similar care instructions. By combining the instructions to the following formula all three categories could be cared for together:

Machine Wash Warm
 Delicate Cycle
 Tumble Dry Low
 Remove Promptly.

General satisfaction with care outcomes was given a high satisfaction rating by 83.7% of the respondents. The mean score for satisfaction was high (17.2 of 21 possible). The two performance characteristics receiving the lowest ratings were related to problems with permanent press and grease retention. These problems are often associated with polyester fabrics or blends containing polyester. Although following the correct procedures for codes $\triangle 3$, $\triangle 4$, and $\triangle 1$ should give optimum results with permanent press fabrics, grease soil might not be removed by a warm water wash.

H_0 2b. For home sewers, variety of care coded fabrics used is independent of socio-economic level.

The null hypothesis cannot be rejected. No significant relationship was found between variety of care coded fabrics used and socio-economic level. The high concentration of garments sewn in four or fewer care categories indicated that greater disposable income is not associated with greater breadth of care requirements chosen for home sewing.

H_0 2c. For home sewers, variety of care coded fabrics used is independent of age.

The null hypothesis cannot be rejected. No significant relationship was found between variety of care coded fabrics used and age. Evidently differences in lifestyles, and sewing experience between young women and older women are not reflected in variety of fabrics sewn. Most women appear to prefer easy-care fabrics.

H₀ 2d. For home sewers, variety of care coded fabrics used is independent of education.

The null hypothesis cannot be rejected. No significant relationship was found between variety of care coded fabrics used and education. Easy-care fabrics appear to be selected by most women at all education levels.

H₀ 3a. For home sewers, satisfaction with care outcomes is independent of socio-economic level.

The null hypothesis cannot be rejected. No significant relationship was found between satisfaction with care outcomes and socio-economic level. Wall (1974) found a similar lack of significant correlation between satisfaction with care performance of ready-to-wear and socio-economic level. However, she reported that women in the lower and in the higher socio-economic levels tended to be satisfied with clothing care performance, but that women in the lower middle socio-economic level were less satisfied (p. 124). The number of women in the lowest group was too small in the sample used for this study to have an effect on satisfaction at the lower end of the socio-economic scale.

H₀ 3b. For home sewers, satisfaction with care outcomes is independent of age.

The null hypothesis cannot be rejected. No significant relationship was found between satisfaction with care outcomes and age. Years of laundry experience combined with years of sewing experience do not appear to be reflected in the satisfaction levels of older women. Independent of age, most respondents indicated a relatively high satisfaction with performance characteristics.

H_0 3c. For home sewers, satisfaction with care outcomes is independent of education.

The null hypothesis cannot be rejected. No significant relationship was found between satisfaction with care outcomes and education. Higher education does not appear to influence the satisfaction of home sewers with specific care performance characteristics of fabrics.

Summary

The six variables chosen for the study were tested by Pearson r correlation coefficients of paired variables. Of the pairs tested, only label usage and variety of care coded fabrics used were significantly related ($r = .1413$, $p < .05$). Thus, the only part of the first group of null hypotheses rejected was H_0 1a. None of the other hypotheses posed in the study could be rejected.

Recommendations for the Use of This Study

Although the majority of the women in this study sewed garments in four or fewer care categories, a significant relationship was found between label usage and variety of care coded fabrics used. It may be useful to fabric stores to provide labels, especially with unusual fabrics or those fabrics requiring special handling. The relatively low scores for label usage may be a result of consumers' lack of awareness of care label availability. Provision of information about care labels in fabric stores may result in greater use of labels by home sewers using fabrics requiring all nine care methods.

Low satisfaction with permanent press fabrics and grease retention

of fabrics may indicate a need to increase the information which care labels provide. The FTC may need to act on recommendations to provide home sewing consumers with more detailed care instructions.

Consumer dissatisfaction with the "no-iron" characteristic of permanent press fabrics is a continuing problem. Steiniger and Dardis (1971) and Wall (1974) reported consumer dissatisfaction with performance characteristics of permanent press. Expectations for fabric appearance without recourse to pressing or touch-up are apparently not being met. Confirmation is found in the present study. Eighteen percent of the respondents indicated high satisfaction with permanent press. The rest of the responses indicated moderate (54.8%) or low satisfaction (25.9%). Evaluation of advertised claims and the resulting consumer expectation level may lead to change in advertising claims or to better consumer understanding of the performance limits of permanent press finishes.

The low internal consistency score for satisfaction with care outcomes indicates a need to approach measurement of home sewing consumer satisfaction differently. Open-ended interviews with home sewers about specific performance problems, such as grease retention, may lead to a better measurement of instrumental failures of fabrics which lead to dissatisfaction with fabric performance.

Recommendations for Improvement of This Study

Label users were not divided from non-label users by separation of high scores from low scores. Data collected could have been used to determine the relationship between label usage by high scoring

respondents and low scoring respondents and variety of care coded fabrics used and satisfaction with care outcomes. Analyzing the data in this manner might help answer the question of whether high scoring label users were more highly satisfied with care outcomes than low scoring label users or non-label users.

Respondents in this study were not asked specific questions about laundry practices. From the data it is impossible to determine the effect of laundry facilities on label usage and satisfaction with care outcomes. Two possible factors which may influence label usage and may merit investigation are:

1. lack of available laundry equipment which allows choice of wash settings and water temperatures, and choice of drying temperatures in order to follow care instructions precisely, and
2. combination of similar care coded fabrics in one washing in order to save time and resources such as water and electricity.

Recommendations for Further Study

Data on variety of care coded fabrics used appear to indicate that most fabrics are selected in a few easy-care categories. It might be of value to contact fabric customers at point of fabric purchase to study the decision-making process used by consumers and to clarify the role that recommendations for care of fabrics play in the selection process. It might be possible to learn whether preselection of fabrics with similar care requirements is related to apparent lower dependence on care label instructions.

A comparison study of selection of care methods by consumers of

fabric intended for home sewing and purchasers of ready-to-wear might allow further use and development of the care code measure developed for this study.

Not all garments are constructed from only one fabric. Some garments are constructed from a combination of fabrics, or trimmed with a second fabric; other garments are made with underlayers, such as underlinings and/or linings. Care decisions may involve a compromise among various care label instructions. It is recommended that investigation of care decisions made for garments constructed from fabrics with different care code instructions be made in order to better understand consumer behavior relative to label usage and satisfaction with care outcomes.

Employment of the home sewer may influence practices related to fabric selection and care. A comparison of employed and non-employed home sewers on the variables of label usage, variety of care codes used, satisfaction with care outcomes, and amount of sewing might expand understanding of interrelations among these variables.

VI. SUMMARY

In 1972, a new FTC regulation became effective. The purpose of this regulation is to protect consumers of textile wearing apparel and over-the-counter fabric from unfair trade practices related to care information. The regulation specifically requires the manufacturer of piece goods (yardage) to provide care labels to the retail fabric outlets. It is assumed that store employees will distribute the labels with each fabric purchase, that consumers will attach the label to the completed articles, and will follow the instructions when caring for those items.

The distribution by the retailer of the care label with each purchase, and the attachment and use of the label by the consumer, are voluntary. The lack of control of distribution at the retail level results in a variety of distribution practices so that not all purchasers receive labels. There is great variation in use of care labels in the home.

The regulation was promulgated as a consumer protection measure. However, little research has been conducted specifically on the piece goods aspect of this measure.

Purpose of the Study

The general purpose of this study was to compare home sewers in relation to use of care labels, variety of care coded fabrics used, and satisfaction with care outcomes. In addition to these variables, the subjects' socio-economic level, age, and education were used to describe the sample.

The specific hypotheses tested were:

H₀ 1: For home sewers, label usage is independent of:

- a. variety of care coded fabrics used
- b. satisfaction with care outcomes
- c. socio-economic level
- d. age
- e. education

H₀ 2: For home sewers, variety of care coded fabrics used is independent of:

- a. satisfaction with care outcomes
- b. socio-economic level
- c. age
- d. education

H₀ 3: For home sewers, satisfaction with care outcomes is independent of:

- a. socio-economic level
- b. age
- c. education

The Sample

The sample consisted of 239 women sewers from the Salem, Oregon area who patronized one of three stores; the stores were selected to represent variation in care label distribution practices. The sample was distributed among the stores as follows: 79 at store A, 71 at store B, and 89 at store C.

Data Collection

Questionnaires were distributed to all willing participants on randomly selected days of the week between July 18, and August 19, 1978. Respondents had a choice of completing the questionnaire in the store or returning the questionnaire by mail to Oregon State University. Useable questionnaires were returned in the three stores by 106 women, and 133 useable questionnaires were returned by mail before September 6, 1978.

Questionnaires were coded and data were transferred to computer cards for statistical analysis. Data were analyzed by frequency distributions and item analysis; analysis of variance and chi-square test of independence were used to establish the homogeneity of the sample. Pearson r correlation coefficients were computed to test the relationship among the seven variables: label usage, variety of care coded fabrics used, satisfaction with care outcomes, socio-economic level, age, education, and amount of sewing.

Summary of the Findings

The largest concentration for socio-economic level was in the middle socio-economic group (35.6%) with another 21.8% in the upper socio-economic group. Women in the 20 - 29 year age group formed the largest concentration (33.5%) in the sample. One year of college training was the highest education attained for 34.7% of the women. Almost two-thirds of the women were employed outside the home at the time data were collected.

To determine possible significant differences among respondents from the three stores and possible effects of two return methods, the sample was tested by chi-square tests of independence for the demographic factors and an analysis of variance among the stores and between return methods. No significant differences ($p < .05$) were found among the sub-groups or for demographic factors, except work status, and the data were combined for subsequent analysis.

Label Usage

The measure for label usage contained 14 statements designed to test the level of usage of care labels from receipt to attachment of care labels to completed home sewn garments. The range of scores for label usage was from 0 to 14, and the mean score was 6.84. The two statements with highest non-response dealt with washable wools (statement 11) and sewing garments for other people (statement 12) and may indicate little or no experience in those aspects of home sewing. Women indicated using label instructions in caring for home sewn garments in higher proportion (71.5%) than they reported the importance of getting a label for fabric purchases (58.6%). Only 11.9% reported limiting their fabric shopping to stores where labels are always given. Thirty-five percent of the respondents reported attaching labels to all garments.

Variety of Care Coded Fabrics Used and Amount of Sewing

The measure of variety of care coded fabrics used was based on the nine code triangle system used on labels provided by most fabric stores.

Respondents were asked to record the number of garments made in the last year in each care category. The measure also permitted computation of quantity of sewing completed by respondents in the last year.

The code receiving the greatest reported selection was code $\triangle 3$, with 203 women (84.9%) sewing fabrics in the category. Codes $\triangle 4$ and $\triangle 1$ were also chosen by more than 70% of the sample. Women most frequently sewed fabrics in three care categories (30.5%). Reports of sewing fabrics in four or fewer care categories was reported by 80% of the respondents. Approximately four percent of the women sewed fabrics in more than six categories. Fabrics in the most used care categories ($\triangle 1$, $\triangle 3$, and $\triangle 4$) require similar and simple care.

The greatest concentration of respondents sewed between 11 and 15 garments in the last year. The range of garments reported sewn was from 1 to 125 in the last year. Fifteen women sewed more than 40 garments in the time period.

Satisfaction With Care Outcomes

The measure for satisfaction with care outcomes was designed to test general satisfaction and nine specific performance characteristics that might show instrumental failures of fabric care performance. Three statements received non-response levels above 14%: dry cleaning (25.5%), shape retention of acrylic fabrics (19.2%), and graying or color scavenging of nylon fabric (14.6%). Non-response may reflect a lack of experience sewing with fabrics which involve these characteristics. The three statements mentioned (6, 10, and 9) were removed from further analysis. The mean score for the remaining seven statements was

17.2, indicating a high general satisfaction level. The range of summed scores was from 11 to 21. The two characteristics most frequently rated "low in satisfaction" were: garments made from "no-iron" fabrics needed pressing (25.9%), and grease retention of fabrics (33.9%). The majority of the garments recorded in the variety of care coded fabrics measure were in care codes suggesting a warm water wash. Fabrics coded $\triangle 3$ and $\triangle 4$ often contain polyester. The findings may explain the low satisfaction rating for grease removal. Perhaps the suggestion of Gahring (1975, p. 29) that consumers tend to economize by combining washer loads also is relevant. The combination of various care coded garments may not provide optimum care for each garment in the load.

Correlation Between the Variables

Relationships between pairs of variables (label usage, variety of care coded fabrics used, satisfaction with care outcomes, socio-economic level, age, and education) were tested by Pearson r correlation coefficients. In addition, relationship of amount of sewing to the six variables was tested.

Among the variables which formed the hypotheses only label usage and variety of care coded fabrics used were found to be significantly correlated ($p < .05$). However, amount of sewing was significantly correlated to label usage ($p < .05$), variety of care coded fabrics used ($p < .001$), satisfaction with care outcomes ($p < .05$), and socio-economic level ($p < .05$).

Conclusions

The following conclusions have been drawn concerning the hypotheses selected for the study. Of the null hypotheses posed, only one was rejected.

H_0 1a. For home sewers, label usage is independent
of variety of care coded fabrics used.

The null hypothesis was rejected. Label usage was significantly correlated to variety of care coded fabrics used ($r = .1413$, $p < .05$). The mean score for label usage and variety of care coded fabrics used were both below the median. The fiber content of fabrics found in the most frequently chosen care categories is polyester and blends containing polyester. Although fabric construction trends have moved away from polyester double knits toward woven constructions, preference for easy-care fabrics remains the same since Arbaugh's (1974) study. She did not associate label usage with care categories, however; she did find that the majority of ready-to-wear garments selected by her respondents were polyester. Respondents in this study selected fabrics from four or fewer easy-care categories and apparently do not depend on care labels as a source of information about the fabrics chosen.

H_0 1: For home sewers, label usage is independent of

- b. satisfaction with care outcomes
- c. socio-economic level
- d. age
- e. education.

The null hypotheses cannot be rejected. No significant relationships were found between label usage and four of the five variables to

be tested in the first group of hypotheses. Label usage was also found not to be significantly related to satisfaction with performance outcomes by Arbaugh (1974, p. 119); however, Wall (1974) found that more satisfied consumers reported using label information on ready-to-wear (p. 163).

Label usage was found to be associated with higher socio-economic levels and higher education by Arbaugh (1974, p. 133, 136).

- H₀ 2: For home sewers, variety of care coded fabrics used is independent of:
- a. satisfaction with care outcomes
 - b. socio-economic level
 - c. age
 - d. education.

The null hypotheses cannot be rejected. No significant relationships were found between variety of care coded fabrics used and the four variables tested in the second group of hypotheses. Easy-care, home refurbishable fabrics appear to be preferred by the majority of the sample. Cranor (1974) found that "ease of handling" was an important criterion in fabric selection. Fabrics which provide easy-care often contain polyester. Two characteristics frequently associated with polyester received low satisfaction ratings by the respondents in the present study, permanent press "no-iron" needs pressing, and grease retention of fabrics. Low satisfaction was associated with permanent press properties by Steiniger and Dardis' sample (1971) as well as problems with grease soil. Consumer preference for easy-care fabrics and the continuing problems of low satisfaction with certain properties

of these fabrics appear not to be significant in terms of total satisfaction with care outcomes or choice of a variety of fabrics for the home sewer.

H₀ 3: For home sewers, satisfaction with care outcomes

is independent of:

a. socio-economic level

b. age

c. education.

The null hypotheses cannot be rejected. No significant relationships were found between satisfaction with care outcomes and the three variables tested in the third group of hypotheses. Wall's (1974) findings were similar for socio-economic level and education; however, she found that older women were more satisfied than younger women.

The conclusions drawn support all but one of the null hypotheses posed. The only significant relationship found was between label usage and variety of care coded fabrics used. The lack of significant relationship between label usage and satisfaction with care outcomes seems to indicate one of two things: either that home sewers depend on the fabric bolt end for information and do not see a need for a take-home care information source, or that there is a need to change the manner in which care labels are distributed in order to increase awareness of availability of care labels and perhaps increase the label usage by home sewers.

The selection of easy-care fabrics in a few similar care methods appears to be the preference of the majority of home sewers in this sample. Although the relatively low variety of care coded fabrics used

score was not significantly related to the relatively high satisfaction with care outcomes score, the high non-response levels found for three of the performance characteristics chosen for inclusion in the satisfaction measure indicated that consumers' satisfaction may be a result of elimination of difficult-to-handle fabrics from those chosen for home sewing.

The recommendation of the investigator is two fold:

that the FTC reexamine the distribution policy of care labels for piece goods in order that consumers' "right to be informed" is achieved, and that further investigation of the relationship of label usage and satisfaction with care outcomes be carried out by additional research with home sewing consumers.

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APPENDICES

APPENDIX A

Verbal Interchange in Fabric Stores Between Investigator and Customers

Hello, I am a graduate student in Clothing and Textiles at Oregon State University. I'm in the store today to talk to home sewers about the fabrics they buy and how happy or satisfied they are with the way the fabrics perform in laundry care. Do you sew for yourself or other members of your family?

If No - I'm sorry, my study is limited to women who sew. Thank you for your time.

If Yes - Are you responsible for the laundry of the clothes you sew?

If No - I'm sorry, my study is limited to women who sew and who care for the clothes they sew. Thank you for your time.

If Yes - I have a questionnaire that I'm asking women to fill out for me. It asks questions about fabrics you buy and how satisfied you have been with the fabrics in laundry care. It takes about 10 minutes to complete. Would you be willing to fill out one for me?

If customer said she did not have the time - I have questionnaires which may be taken home to be filled out and returned in the mail. My return address is on the outside (point to it) and the postage is provided (point to stamp). Would you be willing to take one home to fill out?

To all women who accepted a questionnaire to fill out in the store or to take home - Let me show you the questionnaire. Some questions on page two and four are worded so that you need to think twice. Let's use this statement for an example. "The stores in which I buy my fabrics do not give care labels" (statement 1 in the label usage measure). If the stores do not give labels your answer would be Yes and if the stores do give labels your answer would be No. You may want to use True instead of Yes and False instead of No. Do you understand? (Pause, clarify if answer was No). There are no right or wrong answers. I just want to find out what your experience has been.

To those filling out the questionnaire in the store - You may return the questionnaire to me right here. Do you need a pencil?

To those taking a questionnaire to fill out at home - Please put it in the mail as soon as you can. I have put the return date on page one (point to it).

To all participants - Thank you so much for your help. I appreciate your taking the time to do the questionnaire.

APPENDIX B

School of
Home Economics



Corvallis, Oregon 97331 (503) 754-3551

Dear Fabric Purchaser,

I am a graduate student, working toward a master of science degree in Clothing, Textiles, and Related Arts, at Oregon State University. In order to complete my requirements, I am conducting a research project concerning home sewers. I am interested in learning what factors contribute to consumer satisfaction with the care performance of home sewn garments.

I would appreciate your time and consideration in completing this short questionnaire. It will take approximately 10 minutes of your time to fill out. The information will remain completely confidential. You may tape or staple the completed questionnaire closed, and mail it to me at no expense to yourself.

Your participation is voluntary and you are free to discontinue your participation in this study at any time. In order for your opinion to be voiced in this study, only those questionnaires returned by July 28th will be accepted.

Thank you for your help in this project.

Sincerely,

Dr. Ruth E. Gates
Associate Professor
Clothing, Textiles, and
Related Arts

H. Adele Gallaher
Graduate Student
Clothing, Textiles, and
Related Arts










Below is a series of statements concerning care labels and use of the labels by home sewers. Please read each statement and respond by checking YES if the statement describes what you usually do, or NO if the statement describes something you usually do not do. Please do not check both columns for any one statement.* There is no right or wrong answer. I am interested in what different people do in relationship to care labels.

	USUALLY		
	YES	NO	
1. The stores in which I buy my fabrics do not give care labels.			___ 4
2. It does not matter to me whether or not I get a care label for my fabric purchases.			___ 5
3. When I buy fabric, I make sure that I get the care label for it.			___ 6
4. If the clerk does not give me a label for my fabric, I do not ask for one.			___ 7
5. I prefer to shop for fabric in stores which always give care labels for fabric purchases.			___ 8
6. I always shop for fabric in stores which always give care labels with fabric purchases.			___ 9
7. I buy fabrics for which a label is not available, e.g., remnants, home furnishings fabrics.			___ 10
8. I read the care information for my fabric purchases in the store and remember how to care for each one.			___ 11
9. I follow the care instructions on the bolt end when I launder, or send to the drycleaners, those garments I sew.			___ 12
10. I do not use the care label instructions at home to decide what care each home sewn garment should have.			___ 13
11. I wash my machine washable wool clothes (if any) that I've sewn at home.			___ 14
12. I attach the care label to garments which I sew that I will not care for afterwards, e.g., when I make a gift for someone outside my home.			___ 15
13. I attach care labels to garments I sew when the fabric is new or unfamiliar to me.			___ 16
14. I do not attach care labels at all to garments I sew.			___ 17

*Note: Numbered blanks to the right on each page are for computer use only.

The permanent care labeling of textiles regulation has been in effect for six years now. This regulation requires that fabric bolts be labeled with a code number and care instructions for that fabric. Labels are available also to take home with the fabric purchased. Below is a chart, which shows the code system, the instructions which would accompany each number, and selected fabric/fiber content examples to refresh your memory about what would be cared for by one of the nine methods.

Please read these carefully and then record, in the right hand column, the approximate number of garments you have sewn from each care coded category in the last year.

CODE	CARE INSTRUCTIONS	EXAMPLES OR FIBER/FABRIC INFORMATION FOUND ON THE LABEL OR BOLT END	APPROXIMATE NUMBER OF SEWN GARMENTS IN THIS CODE, MADE IN THE LAST YEAR	
	Machine Wash Warm	Poly/Cotton Chino Quilted Cotton		___ 20
	Machine Wash Warm Line Dry	Rayon Challis		___ 21
	Machine Wash Warm Tumble Dry, Remove Promptly	Poly/Cotton Kettlecloth Poly/Cotton Corduroy Blouse Woven Blends Washable Velveteen		___ 22
	Machine Wash Warm Delicate Cycle Tumble Dry Low	Polyester Gabardine Polyester Double Knits Qiana Knits, Interlock Knit Washable Wools		___ 23
	Machine Wash Warm Do Not Dry Clean	Acrylic Sweater Bodies Washable Vinyls		___ 24
	Hand Wash Separately Use Cool Iron	Lace Very Delicate Fabrics		___ 25
	Dry Clean Only	Wool not processed for home laundry Rayon Velvet Acetate Satin and Taffeta		___ 26
	Dry Clean, Pile Fabric Method Only	Fake Furs		___ 27
	Wipe with Damp Cloth Only	Oil Cloth Vinyl Rainwear Fabrics		___ 28
				___ 29

Below is a list of statements which describe characteristics of fabric in laundry and dry cleaning. Some statements describe a fabric performance failure and some describe a performance attribute. Please think about the successes and failures of fabric care performance of your home sewn garments. Then check, in the appropriate column, the response which most closely describes your experience with each characteristic of care listed below. Make only one check for each statement. There is no right or wrong answer, I am interested in your opinion.

	Frequently	Sometimes	Almost never	
1. I am satisfied with the way my fabric has stood up to washing.				___ 30
2. I have had problems with color rubbing off my fabrics onto my underclothing.				___ 31
3. I have had problems with colors fading out quickly in the fabrics I buy.				___ 32
4. My fabrics that are supposed to be "no-iron" have to be ironed anyway.				___ 33
5. I have had problems with shrinkage in the fabrics I buy.				___ 34
6. I am satisfied with the way my fabric has stood up to dry cleaning.				___ 35
7. I have found that grease and oil stains are difficult to remove from my polyester blend fabrics.				___ 36
8. The colors in my print fabrics bleed on to the background color.				___ 37
9. My white or light colored nylon fabrics retain their whiteness or lightness.				___ 38
10. My acrylic knit fabrics retain their original shape.				___ 39
				___ 40 ___ 41

In order to interpret the data, I need some information about you. Please answer the following questions as honestly as possible. This information will remain confidential.

1. What is your age?

☐ under 20 years
☐ 20 to 29 years
☐ 30 to 39 years
☐ 40 to 49 years ☐ 42 ☐ 43 ☐ 44
☐ 50 to 59 years ☐ 45 ☐ 46 ☐ 47
☐ 60 and over

2. What is your highest level of formal education?

☐ completion of less than seven years of school
☐ completion of junior high or ninth grade
☐ completion of one or two years of high school
☐ high school graduation
☐ completion of at least one year of college
☐ completion of a four-year college degree
☐ completion of graduate professional training
 (more than four years of college)
☐ 48 ☐ 49

3. Are you the primary wage earner in your family? ☐ yes ☐ no
☐ equal wage earner

If you checked yes, please skip question 4 and go on to question 5.

4. What is the highest level of formal education of the primary wage earner, if other than yourself, or the equal wage earner?

☐ completion of less than seven years of school
☐ completion of junior high or ninth grade
☐ completion of one or two years of high school
☐ high school graduation
☐ completion of at least one year of college
☐ completion of a four-year college degree
☐ completion of graduate professional training
 (more than four years of college)
☐ 50 ☐ 51

5. Are you employed outside your home? _____ 52 _____ 53

_____ no

_____ yes - Please describe your occupation briefly _____

6. Please describe briefly the occupation of the primary wage earner or equal wage earner, other than yourself _____

_____ 54 _____ 55

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APPENDIX C

Visit Schedule to Fabric Stores for Questionnaire
Distribution, July 18 through August 19, 1978

Visit No.	Date	Day of Week	Store Visited
1	July 18	Wednesday	A
2	July 22	Saturday	B
3	July 27	Thursday	B
4	July 28	Friday	A
5	July 29	Saturday	C
6	August 2	Wednesday	C
7	August 9	Wednesday	B
8	August 10	Thursday	B
9	August 12	Saturday	C
10	August 14	Monday	A
11	August 17	Thursday	C
12	August 18	Friday	B
13	August 19	Saturday	A

APPENDIX D

Summary of Questionnaire Distribution

Women shoppers	Stores						Total	
	A		B		C			
	No.	%	No.	%	No.	%	No.	%
Approached	120	31.0	132	34.0	138	35.0	390	100.0
Refused	1	12.5	4	50.0	3	37.5	8	100.0
Don't sew	24	31.2	30	39.0	23	30.0	77	100.2 ^a
Don't launder	2	22.2	2	22.2	5	55.5	9	99.9
Received questionnaires	92	31.5	95	32.5	105	35.9	292	99.9
a. to complete in store	41	37.9	25	23.1	42	38.8	108	99.8
b. to return by mail	51	27.7	70	38.0	63	34.2	184	99.9
Returned questionnaires	82	33.0	74	29.9	91	36.8	247	99.7
a. in store	41	37.9	25	23.1	42	38.8	108	99.8
b. by mail	41	29.0	49	34.7	51	36.0	141	99.7
Returned questionnaires complete and useable	79	33.1	71	29.7	89	37.2	239	100.0
Returned unuseable								
a. in store							3	
b. by mail							7	

^aTotal does not equal 100 due to rounding of percentiles.