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#### ABSTRACT

# ANALYSIS OF THE DECISION PROCESS INVOLVED IN THE PURCHASE OF A LARGE HOUSEHOLD APPLIANCE

#### by Janice Heckroth

Economic decisions are made every day by homemakers. Some of these decisions involve small amounts of money; others involve a considerable amount of money. Decisions involving larger amounts of money are not as easily changed as those involving smaller amounts of money, so satisfaction with a decision is important.

This survey, conducted with homemakers who had recently purchased a major appliance, attempted to determine how a homemaker made her decision and if the decision was satisfactory. Also this study investigated reasons for dissatisfaction with the decision.

The sample consisted of 400 women who had purchased an automatic washer in the past six months. Data was collected through a mailed questionnaire.

Homemakers were asked questions relating to primarily two areas of a decision model that included seeking alternative solutions and accepting responsibility for the decision. The hypotheses that homemakers who are satisfied with the purchase of a major appliance have sought more preshopping information than homemakers who are not satisfied and that external factors such as service and the dealer influence the dissatisfaction of the homemaker with her decision were supported by the findings.

#### CRITIQUE OF RESEARCH

Gross and Crandall in their book "Management for Modern Families" discuss a five step decision model. This model was the basis for this study. Not all of the five steps were covered equally in the study. Consentration was on seeking alternatives and accepting responsibility for the decision. Because only two areas were covered with any depth this study does not analyze the entire decision—raking process.

To make this study more of a true management study other questions could have been asked. Such as why did the homemaker decide to purchase an automatic washer rather than use a wringer washer, or coin-operated laundry, why did she feel this washer suited her needs, why did she select the dealer she did? The reasons behind what she did were not asked. We know therefore, very little from this study as to why she bought what she did.

We know what sources were of most help to her, how many dealers and brands she considered, and if she needed service with her new washer. Satisfaction with the product was also found by the study.

This study has other limitations. The respondents were not controlled according to age group, income level and location of residence such as city or rural.

About 50 percent of the warranty cards are returned on new washer purchases. The questionnaire was sent to each of those who returned a warranty card so only 23 percent of the total purchasers of the washer were reached. This 23 percent may be more conscious shoppers as they took the time to send in the warranty cards and also return the cuestionnaire.

Another problem was the number of warranty cards returned by the Southern Union Gas Company. The company returns the cards for the purchasers and about 25 percent of the respondents were from New Mexico and Texas and purchased the washer from the utility company.

The questionnaire was not pretested. If it had been pretested, some of the sources could possibly have been eliminated. There were five sources not used by at least 90 percent of the respondents.

About six percent were dissatisfied with the decision. The figure may have been higher if each person had been contacted personally. One respondent wrote on a question-naire she was satisfied with the washer but could something be done about the lint screen. No questions were asked the respondents about what changes they would like to see on the washer. This might have given a better response for satisfaction. If they liked everything about the washer then they were satisfied. If there was something they disliked about the washer, such as controls, lint screen, color then they could be considered dispatisfied.

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By amount

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#### A PROBLEM

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THESIS

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#### CHAPTER I

#### INTRODUCTION

Decisions are made every day by the homemaker. Some decisions involve small amounts of money; others involve a considerable amount of money.

If a homemaker is dissatisfied with an inexpensive purchase she can make another selection without great financial consequence. Decisions involving larger sums of money are not as easily changed as those involving smaller amounts of money. The homemaker must "live" with her decision longer.

In a recent financial decision-making study by Schoemaker of 100 farm families, 13 families were asked to discuss a decision of theirs that was not satisfactory to them. Schoemaker (9) states "comparison of satisfactory and unsatisfactory decision making revealed that the problem was discussed to a greater extent in the family and with persons outside the family in satisfactory than in unsatisfactory decisions. More sources such as magazines, bulletins, and newspapers were consulted and more risks and alternatives were considered in satisfactory decisions." Schoemaker also suggested "other differences revealed or these differences might be proven significant if a larger number than 18 unsatisfactory decisions could be obtained for analysis."

Decision-making is an important part of home management.

The last step of a five step decision-making model discussed by Gross and Crandall (5:65) is accepting responsibility for the decision.

Festinger (4) says that in accepting responsibility for the decision, there can be a feeling of dissonance. He (4:123) also states "how severe and how long in duration the regret period is would be determined by how quickly dissonance can be reduced ... If dissonance were difficult to reduce, the regret period might be strong and of long duration."

This study focuses primarily on two steps of the decision model as discussed by Gross and Crandall. The two steps are seeking alternative solutions and accepting responsibility for the decision. It also focuses on the satisfied and dissatisfied owners of a new major appliance and the factors relating to the satisfaction or dissatisfaction.

# Objectives

The specific objectives of the study were:

1. To identify these persons who feel satisfied or dissatisfied and to analyze the factors contributing to the degree of satisfaction (a) related to the decision-making process which includes preshopping techniques and (b) related to external factors such as service and dealer.

- 2. To draw implications for educators when teaching in the areas of home management and the decision-making process.
- 3. To draw implications for Home Economists in Business when helping manufacturers design and sell major appliances.

# Operational Definitions

Distinctions are made among satisfied and dissatisfied homemakers on a basis of the answers to certain questions.

The homemaker satisfied with her washer will have answered the following questions from the questionnaire with the following answers:

- 1. Are you satisfied with your new washer? Yes.
- 2. Would you recommend to someone else to buy the brand washer you did? Yes.
- 5. If you could change your decision, would you change brands? No.

A homemaker was considered dissatisfied with her washer if she answered any one of the above differently.

Schoemaker (9) suggested differences other than consulting people and references may determine satisfaction so questions were asked the homemaker about the dealer and service.

The external factors in this study are dealer and service.

If the homemaker was satisfied with her dealer she answered the following questions with the following answers:

1. If you could change your decision, would you change dealers? No.

2. Would you recommend the dealer you purchased the washer from to someone else? Yes.

If the homemaker was dissatisfied with the dealer she answered either of the above questions opposite the given answer.

The other external factor was the need for service and service received. The homemaker was considered satisfied with service if she had not needed a service call or if she answered the following questions in the following way.

- 1. Was it corrected by the service man? Yes.
- 2. Are you satisfied with the way it was corrected? Yes.
- 3. If you could change your decision, would you change service? No.

# Hypotheses

- 1. Homemakers who are satisfied with the purchase of a major appliance have sought more preshopping information than homemakers who are not satisfied with their decision.
- 2. There are external factors such as service and dealer that influence the dissatisfaction of the homemaker concerning the purchase of a major appliance.

# Assumption

- 1. The homemaker knows if she is satisfied or dissatisfied with her decision.
- 2. The homenaker was involved in the decision of purchasing the appliance.

- 5. The homemaker can recall the decision-making process.
- 4. The homemaker had an opportunity to work with the washer.
- 5. The washer had been installed long enough for mechanical or other problems to occur.

#### CHAPTER II

#### REVIEW OF LITERATURE

Decision-making is an integral part of management.

Gross and Crandall (5:63) have said, "decision-making is the heart or crux of management." A five-step model of decision-making includes: defining the problem, seeking alternatives, thinking through alternatives, selecting an alternative and accepting responsibility for the decision (5:63). Brim's (1:9) decision process consists of six phases: identification of the problem, obtaining necessary information, production of possible solutions, evaluation of such solutions, selecting a strategy for performance, actual performance of an action or actions and subsequent learning and revision.

Studies have been done by Katona and Mueller (8:50-87), Schoemaker (9) and others on the first four steps (Gross and Crandall) or five steps (Brim) of the decision-making process.

Katz (6) has studied satisfaction and dissatisfaction as reasons for changing a purchase but not as a final result of the decision process. Little research has been done on the degree of satisfaction or dissatisfaction with the final decision or on factors contributing to satisfaction. Except for a small part of the studies done by Katona and Mueller and Schoemaker, previous research seems to end before reaching this final phase in the decision-making process.

Gross and Crandall (5:63) state, "this step," (referring to accepting the consequences of the decision) "not always included, is however, fundamental." Festinger (4) feels in accepting responsibility for the decision, there can be a feeling of dissonance. How severe and how long in duration the regret period is would be determined by how quickly dissonance can be reduced. If dissonance were difficult to reduce, the regret period might be strong and of long duration. Gross and Crandall (5:69) state, "Where dissonance exists there is unrest and usually some effort to reduce it." The rationalization of alternatives may be why so few unsatisfactory decisions are reported in research studies (5:69).

The Katona and Mueller (8:30-87) studies were on consumer purchases of household goods and the process in which information was sought and gained. Mueller found that over half of the buyers purchasing large household appliances got advice from acquaintances who owned these appliances. A third of the buyers bought a brand they had seen in someone's home. It also appeared from this study that information seeking from relatives, friends, neighbors was of greater importance than information seeking from shopping around in stores. Mueller found the desire for new features in older appliances gives rise to plans to replace appliances that are neither worn out nor in poor condition.

The Katona and Mueller studies provide information for the first four (Gross and Crandall) or five (Brim) step decision-making process.

The Schoemaker (9) study supports the Katona and Mueller study. In the Schoemaker study of 100 farm families, 13 families were asked to discuss a financial decision that was not satisfactory. Schoemaker states, "comparison of satisfactory and unsatisfactory decision-making revealed that the problem was discussed to a greater extent in the family and with persons outside the family in satisfactory than in unsatisfactory decisions. More sources such as magazines, bulletins, and newspapers were consulted and more risks and alternatives were considered in satisfactory decisions." She also felt other differences in the decision-making practices might be revealed or these differences might prove significant if more than 18 unsatisfactory decisions could be obtained from analysis.

Mueller and Katona (8:30-87) felt that "it is probable that previous experience with a product will influence the manner in which consumers go about acquiring a new model."

Cronback and Gleser (3) state, "One might ultimately evaluate a decision by its actual outcome, but this appears inappropriate since factors beyond the ken of the decision-maker influence the ultimate event."

Burk (2:25) states, "(1) From a new product, a consumer expects to obtain satisfaction by matching its attributes (characteristics) to his needs for service arising from his activities and he also expects that the product will have the desired attributes. (2) For a product with which he has had experience, a consumer has learned and established the relationships, but they are subject to changes in perception based on changes in needs and on feedback from other experiences."

Merton (7:894-904) states that the success or failure of an action depends on luck, ignorance and many other factors that lie outside the control of man, no matter how much care he exercises in his choice. Festinger (4-128) states, "It is quite possible that precisely those conditions which produce a measurable regret phenomenon also produce instability of the dissonance reduction in a situation where external aids to dissonance reduction are unavailable."

There appears to be a conflict in the theory of decision satisfaction. One general theory is that the greater the person has discussed or researched the possible alternatives the more satisfied he will be. The other theory of product satisfaction would be that no matter how much care was taken in making the decision, the external factors — factors over which the decision-maker has no control — determine the satisfaction or dissatisfaction.

#### CHAPTER III

#### METHODOLOGY

## Sample

Norge Division, Borg-Warner Corporation gave to the researcher all of the returned warranty cards for the automatic washer model AWJ-1830. This washer was selected as it could not have been purchased by the respondents before August, 1967.

All of the warranty cards were used except those returned by a company or institution such as a school or convent. Fortyfive states were covered in this study. Appendix A shows states used in study and response rate.

# Development of an Instrument

A questionnaire was developed for this study. Fixedalternative questions were used to determine the homemaker's
decision-making process and satisfaction with her washer.
Questions were designed to find out what sources the homemaker
used for information and which sources helped her the most
in the decision. Also, questions were asked about the satisfaction with the washer, service and dealer. Questions were
also asked relating to the age, income, education and number
of people in household.

#### Collection of Data

A questionnaire was mailed to each name on the 906 returned warranty cards. All envelopes were addressed to Mrs. . A self-addressed stamped envelope was included for returning the questionnaire. A reminder letter was sent to all those who had not returned the questionnaire after two weeks. At the end of one month, 45.5 percent or 400 questionnaires were returned and used in compiling the information.

There were 33 or 4.14 percent returned for insufficient address. There were 231 or 32 percent returned before the reminder letter was sent. The reminder letter resulted in the return of 128 additional questionnaires, an increase of 14.78 percent. Nine returned questionnaires could not be used because of insufficient information, the washer was a gift, or a member of the respondent's family worked for Norge.

# Description of Sample

questions were asked the respondent about her age, total family income, employment, education and number of people she washes clothes for -- indicating number of people in household -- and how many wash loads she does in a week. Appendix C.

Almost half of the respondents were between the ages of 21-35. About 40 percent were between the ages of 36-55. Fifty-six percent of the respondents were not employed. Over 41 percent of the homemakers had a high school education. In addition, 23 percent had some college education or were college graduates.

Two-fifths of the families consisted of three or four members. Almost one-third of the respondents washed six to eight loads a week. A smaller proportion washed three to five loads a week.

# Analysis of Data

# Coding

The questionnaire was designed to obtain information on the decision-making process and the satisfaction with the washer. The homemaker was asked information relating to the five steps of the decision process and her satisfaction with the washer, dealer and service. The answers given for each question were then run against satisfaction with the washer.

## Machine Tabulations

One card was punched for each respondent. Other cards were punched for cross reference to washer satisfaction.

# Computations Done

The punched cards were sent to the Computer Center for computation of frequency distribution. Each of the questions asked was cross-referenced to the homemaker's satisfaction with the washer.

#### CHAPTER IV

#### FINDINGS AND ANALYSIS

The decision to purchase a major appliance which involves a large sum of money is an important decision in family finance. The decision to purchase a particular appliance such as an automatic washer is made approximately every seven to ten years. It is not a decision that is made every day and therefore cannot be considered a habit decision (5:64).

The study of a decision that is not made frequently offers the opportunity to study conscious decision-making to ascertain the level of satisfaction with the action taken and analyze factors related to satisfaction.

A five step model to decision-making is comprised of the following steps:

- 1. Defining the problem to be decided.
- 2. Seeking alternative solutions.
- 3. Thinking through alternatives.
- 4. Selecting an alternative.
- 5. Accepting responsibility for the decision.

The findings in this study relate primarily to steps two and five.

# Defining the Problem

Clarifying the problem is the first step in decisionmaking. There were no questions asked concerning the reasons for having to make the decision. The purchase of an automatic washer could have several alternatives. The homemaker could have purchased a wringer washer, a used automatic washer or used a laundry and dry cleaning center. Each of the respondents chose to purchase an automatic washer.

The respondents were asked how long they had been considering the purchase of an automatic washer. Seventy percent of the respondents said they had been thinking about the purchase over one month. This amount of time would allow for use of a number of sources of preshopping information.

TABLE 1
WASHER SATISFACTION BY LENGTH OF TIME THINKING ABOUT PURCHASE

Tine	Number of Respondents	Percent of Total	Eatis Number	fied Percent	Dissat Number	isfied Percent
1 week or less	57	14.25	51	89.5	6	10.5
1 - 2 weeks	23	5 <b>-7</b> 5	55	95.7	1	4.3
2 - 3 weeks	23	5.75	52	95•7	1	4.3
3 - 4 weeks	12	3.00	10	83.3	2	16.7
over 1 month	283	70.75	254	89.8	23	10.2

# Seeking Alternative Solutions

Seeking alternative solutions can involve the use of many sources of information such as magazines, friends and salesmen. The seeking of alternatives through these sources help in determining what brand and model washer to purchase for the particular family need.

In this study the most used source of information was the salesman from whom the washer was purchased. One-half of the respondents said they received very much information from the salesmen. Also 34 percent were satisfied with the washer. This does not agree with Katona and Mueller who found information from relatives, friends and neighbors was of greater importance than shopping in stores.

The homemaker's husband provided the second source of information. However, only 24 percent said they received very much information from their husbands. Among respondents whose husbands provided very much information, 95 percent were satisfied with the washer.

A greater number of the homemakers were satisfied if the decision about the purchase of the washer was discussed with a neighbor, relative or husband compared with those who did not discuss the decision with a neighbor, relative or husband.

Table 2 shows the relationship of washer satisfaction to the amount of information received from the sources.

TABLE 2

WASHER SATISFACTION BY AMOUNT OF INFCRMATION

Satisfied		Very Much			Some			None	
Sources	Percent Number Respond	Percent and Number of Total Respondents	Percent . Satisfied	Fercent Rumber Total R	and of	Percent Satisfied		Percent and Number of Total Res- pondents	Percent Satis- fied
TV Programs	ഗ	2.3	83.9	23	22.6	92.9	260	74.9	89.3
TV Ads	æ	٠ <u>٠</u>	ଫ ଅନ୍ତ ଆ	は	26.1	92.9	250	71.6	89.3
Magazine Articles	10	2.9	80.9	29	19.2	94.4	212	6.77	89.5
Magazine Ads	10	2.9	100.0	9	24.7	92.5	252	72.4	69.7
Newspaper Articles	19	5.5	95.0	52	14.9	33.1	223	9.64	90.8
Rewspaper Ads	к. <b>'</b> В	11.0	92.7	23	22.5	2006	231	9.99	69.6
Salesman from whom you purchased washer	173	50.9	o. ₹5	દુ	28.0	0. €.	24	21.1	80.2
Other Dealer Salesmen	63	4.9	95.7	4.2	21.4	86.0	250	72.3	91.2
Neighbor	29	స్త్రాల్లు బ	2.96	59	16.9	95.2	361	7.4.8	83 <b>.</b> 8
Relatives	3.4	15.6	93.1	53	15.3	9*:6	240	<b>2.</b> (9	88.9
Husband	\$ \$	24.1	23.3	9	19.0	95.7	193	56.9	97.6
In-Store Display	26	21.8	92.7	110	31.6	39.4	162	9.97	90.0
Utility Company	69	19.8	88.5	35	10.0	83.3	24.5	70.2	92.1

TABLE 2 -- Continued

Satisfied		Very Much	đ		Some	•		None	
Bources	Percent and Number of Respondent	nt and ir of fotal ndents	Percent Satisfied	Per Fot	Percent and Number of Total Res- pondents	Percent Satisfied	Percent Number o Total Re	Percent and Number of Total Res- pondents	Percent Satia-
County Extension Service	N	ø.	100.0	~	2.0	87.5	340	540 97.4	4*06
Night or Evening School	Н	₩,	100.0	-	×,	50.0	347	4.66	90.6
Dealer Demonstration	56	16.1	93.3	99	19.0	97.1	225	6. 8.	87.9
Government Publications	8	φ.	75.0	6	2.6	100.0	337	96.6	90•3
Consumer Digest or Consumer Report	r 16	\$• <b>4</b>	94.1	37	10.6	92.5	5%	8.48	90.0
Other	ส	6.1	100.0	œ	2.3	80.0	315	91.6	90.5

Schoemaker (9) states "the comparison of satisfactory and unsatisfactory decision-making revealed that the problem was discussed to a greater extent in the family and with more persons outside the family in the satisfactory than in the unsatisfactory decision. More sources such as magazines, bulletins and newspapers were consulted ... in satisfactory decisions." Table 5 verifies Schoemaker's findings.

Just over half of the respondents used less than five sources of information and 87 percent of these respondents were satisfied with the washer. As the number of informative sources used increased so did the percent of respondents satisfied with the washer.

It is interesting to note that only 31 respondents or almost nine percent of the total used more than 10 sources of information. However, there was ample time to consult other sources as 71 percent had thought about the purchase for over one month.

TABLE 3
WASHER SATISFACTION BY COMBINED SOURCE OF INFORMATION

Number o Sources	) <b>T</b>	Sati	sfied		Diss	atisfied
	Perce	er and ent of ondents	Percent of Total	Pero Rea	ber and cent of pundents	Percent of Total
Below 5	135	51.4	87.3	27	67.5	12.7
5 - 10	144	40.0	92.3	12	<b>30.0</b>	7.7
11 - 13	25	6.9	96 <b>.</b> 2	1	2.5	3.8
over 15	6	1.7	100.0	0	0	0

Two other questions were asked the respondents about seeking alternatives.

The first question asked was about the number of dealers visited or phoned when they were seeking information about the purchase of the washer.

Fifty-four percent stated they phoned or visited only one dealer. Ninety percent of that group was satisfied with their washer. Of the total respondents only 13 percent said they visited three dealers. This group had the highest number of respondents satisfied with the washer. Seven percent said they phoned or visited five or more dealers. This group had the lowest number satisfied with their washer. Gross and Crandall's (5-66) statement "Important as it is to have many alternatives, there is a danger of confusion with a wide variety of choices" may help explain the low washer satisfaction.

TABLE 4
WASHER SATISFACTION BY NUMBER OF DEALERS CONTACTED

Number of Dealers Contacted	Number of Respondents	Percent of Total	Percent of Total Satisfied
One	209	5 <b>3.9</b>	89.5
Two	76	19.0	92.1
Three	50	12.9	94.0
Tour	26	6.7	88.5
Five or more	27	7.0	77.8

The other question asked the homemaker related to the number of brands she considered when purchasing the washer.

Forty-one percent of the respondents considered only one brand and 93 percent of that group were satisfied with the decision. Two brands were considered by 39 percent of the respondents and 86 percent were satisfied with the decision.

It is interesting to note there appears to be no pattern to the number of brands considered and satisfaction with washer. The group that was 100 percent satisfied considered five or more brands. The statement by Gross and Crandall discussing danger of confusion with a wide variety of choices is not confirmed.

The number of dealers visited or phoned and the number of brands considered in relationship to washer satisfaction is inconclusive. It should be noted that 54 percent of the respondents considered one dealer and 41 percent considered one brand.

TABLE 5
WASHER SATISFACTION BY NUMBER OF BRANDS CONSIDERED

Number of Brands	Number of Respondents	Percent of Total	Percent of Total Satisfied
One	159	41.3	92.5
Two	151	39.2	86.1
Three	51	13.2	92.2
Four	15	3.9	0.08
Five or more	9	2.3	100.0

The respondents were asked about previous ownership of an automatic washer. In Table 6, 42 percent had purchased an automatic washer for the first time. The table also shows a lower percentage of previous owners of an automatic washer were satisfied with their new washer.

WASHER SATISFACTION BY FIRST AUTOMATIC WASHER OWNERSHIP TABLE 6

	Mumber of Respondents	Percent of Total		Ω	Satisfied	<b>,-</b>	)issat	Dissatisfied
			Numbe Perce Respo	Number and Percent of Respondents	Percent of Total	Number and Percent of Respondents	and of lents	Percent of Total
Yes	169	42.3	157	43.6	92.9	12 30	30.0	7.1
No	231	57.8	203	56.4	87.9	23 70	70.0	12.1

Another question asked those who had owned an automatic washer before was the age of the washer replaced by the new one. Forty-two percent replaced an automatic washer that was over eight years old. Thirty-two percent replaced a washer that was five to eight years old.

The respondents replacing a washer over eight years old had the least percentage satisfied with their new washer. Those who replaced an automatic washer that was from one to three years old had the highest percent of satisfied with their new washer.

The third question asked relating to previous experiences with an automatic washer concerned the previous use of this brand washer. Sixty-one percent of the respondents who purchased this washer had no previous experience with it and 83 percent of these respondents were satisfied with the washer.

Of the homemakers who previously used this washer brand in someone else's home, 97 percent were satisfied with the washer. Of the homemakers who previously owned this brand washer and purchased another, 90 percent were satisfied with the washer. Minety-five percent of the respondents who had used the washer in a laundry or dry cleaning center were satisfied with the washer. One hundred percent of the homemakers who had used this brand washer in a neighbor's or relative's home and also in the laundry center were satisfied.

WASHER BATISFACTION BY AGE OF PREVIOUS AUTOMATIC WASHER TABLE 7

	Number of Respondents	Percent of Total Respondents	Percent of Previous Automatic Washer Owners	Satisfied	fied	FG	Dissatisfied	fied
				Number and Fercent of Res-	Percent of Total	Numb and Perc of R	Number Percent and of Percent Total of Res-	rcent
1 - 3 years	15	3.75	6.4	14 6.8	93.3	H	3.6	6.7
3 - 5 years	4.6	11.50	19.6	42 20.5	91.3	4	14.3	8.7
5 - 8 years	75	18.75	31.9	63 32.9	6.06	2	25.0	9.3
over 8 years	66	24.75	42.1	83 40.1	85.8	16	16 57.1	16.2

One hundred percent of the homemakers who had used this brand washer in a neighbor's or relative's home and also in the laundry center were satisfied.

The group with the lowest percent of satisfaction with the washer were those respondents who had no previous experience with this brand washer. Those respondents with the highest percent of satisfaction had used the washer in more than one place.

## Thinking Through Alternatives

The next phase in decision-making is thinking through the alternatives. It takes time to think through the alternatives and to determine if all possible alternatives have been sought.

The respondents were asked the length of time it took them to make the decision after they had started shopping for a new automatic washer.

Sixty-six percent of the respondents said they took one week or less to make the decision and 89 percent of that group were satisfied with their washer. In an earlier question about length of time in thinking about the purchase, over 70 percent of the respondents had thought about the purchase for over a month.

One hundred percent of the respondents who took two to three weeks to make the decision were satisfied with the washer.

TABLE 3

WASHIR SATISFACTION BY PREVIOUS EXPERIENCE WITH VACHER BRAND

Number (Respond	er of	Percent of Total		Sat	Satisfied		Dissatisfied	sfied
			Numbe Perce Respo	Number and Percent of Respondents	Percent of Total	Humb Pero Resp	Number and Percent of Respondents	Percent of Total
None	243	61.1	214	59.8	83.1	&	72.5	11.9
Yes, used neighbor's or relative's	50	8.	32	σ· α	0.76	н	5.5	W)
Yes, previously owned one	96	19.1	8	19.0	89.5	හ	0.00	10.5
Yes, used one in laundry and dry cleaning center	42	10.6	04	11.2	95.2	N	;Ç	4.
Yes, used neighbor's and laundry center	#	1.0	্ব	1.1	100.0	0	9	O

Those respondents least satisfied with the washer took over one month to make the decision. Making a decision too quickly or too slowly appears to increase the percent of people dissatisfied with the washer.

TABLE 9
WASHER SATISFACTION BY LENGTH OF TIME MAKING A DECISION

Time	Number of Respondents	Percent of Total		tisfied Percent		tisfied Percent
l week or less	265	66.9	235	83.7	30	11.3
1 - 2 weeks	62	15.7	57	91.9	5	12.5
2 - 3 weeks	19	4.8	19	100.0	0	0
3 - 4 weeks	16	4.0	15	93.8	1	2.5
over 1 month	34	8.6	30	88.2	4	11.8

## Selecting An Alternative

The fourth step in decision-making is selecting or choosing an alternative. The alternative had already been selected as the respondent had already determined which washer and model she wanted when the study began. Questions were asked concerning how she made the selection but no questions were asked the respondents about why she made a particular brand and model decision.

The most prominent source of information used in making this decision was the salesman from whom she purchased the washer. This one person may have been the person who convinced her to choose this brand washer to purchase. Because 51 percent used five or fewer sources of information, those they used appear to have a great influence on the choosing of one alternative.

### Accepting Responsibility for the Decision

This last step, though often not included, is a very fundamental step in decision-making.

The homemaker must accept the responsibility for her decision about a particular item. The homemaker's satisfaction with her washer decision could depend on how satisfied she was with the dealer from whom she purchased the washer, if she needed a service call on her new washer and if the service she received was good.

Some examples of problems the homemaker could have had are late delivery, poor installation, no instructions given on how to operate washer, slow response to a service call and the washer not fixed the first time the service man came.

when a problem does occur with a new product, the homemaker may have the feeling of "dissonance." She may ask herself why the bought this washer and not some other brand. She is then dissatisfied with her purchase. Table 10 shows 34 percent of the respondents in this study were satisfied with their washer, indicating they were happy with the decision about model and brand of washer purchased. There are, however, six percent of the respondents who are not satisfied with the washer.

TABLE 10 SATISFACTION WITH WASHER

	Number of Respondents	Parcent of Total
Yes	371	<b>3•9</b>
Mo.	24	6.1

Several questions were asked the respondents about the external factors which were defined for this study as service and dealer.

Seventy-five percent of the respondents did not have to call a service man for their washer and of this group 95 percent satisfied with the washer. Twenty-five percent did have to call a service man and 86 percent of those needing a service call were satisfied with the washer. The group of respondents who needed a service call were less satisfied with the washer than those who did not need a service call.

Seventy-four percent of the group needing a service call were satisfied with the service received. Of this group who were satisfied with the service, 94 percent were also satisfied with the washer. Of the 25 percent not satisfied with the service received, only 54 percent were satisfied with the washer. This relates to Festinger (4:123) dissonance theory; "If dissonance were difficult to reduce the regret period might be strong and of long duration."

The type of service call needed was the subject of another question. Forty-eight percent of those respondents who needed a service call had a mechanical problem with the washer and 85 percent of the respondents were satisfied with the washer. Seventy-two percent of the respondents needed a service call because of poor installation of the washer and 90 percent of these respondents were satisfied with the washer. Those homemakers who had several problems with the washer had the lowest percent of satisfaction with the washer. Only 43 percent were satisfied with the washer.

Another of the external factors was the dealer. Almost nine percent of the respondents would not recommend their dealer to someone else and would themselves change dealers if they could.

TABLE 11 WASHER SATISFACTION BY NEED OF A SERVICE CALL

K.	Number of Respondents	Percent of Total	Sati	Satisfied	Dissatisfied	sfied
			Kumber of Respondents	Percent of Total	Mumber of Respondents	Percent of Total
Report no service call	80 80 81	77°C	280	25.7	22	7.3
Leport service call	0.5	0°52	22	35.6	13	रं <b>°</b> श्

TABLE 12 WASHIR SATISFACTION BY SERVICE REPAIR SATISFACTION

	Number of Respondents	Percent of Ecspondents	r ag	Satisfied	Dissatinfied	infied
			Number of Respondents	Fercent of Total	Number of Percent Respondents of Total	Percent of Total
Yes	22	74.2	છુ	. t.	#	9*5
No	ର	<u>ئ</u> ئ	13	52.0	12	48.0

TABLE 13
WASHER CATISFACTION BY TYPE OF SERVICE CALL

Type	Mumber of Resydddents	Percent of Sarvice Calls Reported		Percent Satiafied
			Number of Respondents	Percent of Total
Poor Installation	7	21.6	1.9	600-5
Vashing Results	(Vi	2.1	α	100.0
Demonstration Required	<b>*</b>	4.1	4	100.0
Mechanical	27	48.5	04	85.1
Other	36	16.5	£	31.5
Combination of above	2	7.8	ю	\$7.5°

Of the group who would resonated their dealers, 94 percent were satisfied with the washer. Of the nine percent who would not recommend the dealer only 69 percent were satisfied with the washer.

When the respondents were asked if they would change dealers, nine percent said "yes." Of the nine percent, 69 percent were satisfied with the washer. Minety-four percent of the respondents who would not change dealers were satisfied with the washer.

The group of respondents who would change dealers and would not recommend their dealers to someone class included fewer people who were satisfied with the washer twen did the group who would recommend the dealer and who would not change dealers.

TABLE 14 WASHER SATISFACTION BY DESIRE TO CHANGE

	Total	1		Satisfied	fled		Dissatisfied	fied
	Number of Respondents	Percent of Total	Numl Resi Number	Number of Respondents Number Percent	Percent of Total	Kumb Resp Number	Mumber of Percent Respondents of Tutal Number Percent	Percent of Total
Yes	35	6•8	₹2	6.7	63.6	11	33.3	31.4
No	358	91.1	336	93.9	93.9	22	66.7	6.1

TABLE 15
WASHER SATISFACTION AND DEALER RECOMMENDATIONS

	To	Total		Sati	Satisfied		Dissat	Dissatisfied
	Number of Respondents	Percent of Total	Numbe Perce Respo	Number and Percent of Respondents	Percent of Total	Numb Perc Resp	Number and Percent of Respondents	Percent of Total
Tes	559	91.1	336	93.3	93.6	23	67.6	6.4
Mo	ić.	8.9	54	6.7	9°89	ส	32.4	31.4

#### CHAPTER V

#### SUMMARY AND IMPLICATIONS

#### SUMMARY

Purchasing a major appliance, which involves a large sum of money, is an important decision in the area of family finance. The satisfaction of that decision is the selection of a satisfactory product which meets the family needs and financial situation.

This study focuses primarily on two steps of the decision model as discussed by Gross and Crandall (5:65). The two steps are seeking alternative solutions and accepting responsibility for the decision. It also focuses on the satisfied and dissatisfied owners of a new major appliance and the factors relating to the satisfaction or dissatisfaction.

Appendix C provides information about the homemaker herself and washer satisfaction. The under 20 age group was the least satisfied with the washer. The age group of 36-55 had the next largest percent of homemakers dissatisfied.

The respondents who previously owned an automatic washer for over eight years and replaced it with a new one also had a lower number of respondents satisfied with the washer. This could relate to the age group of 36-55 and washer satisfaction.

The difference in income and satisfaction with the washer are not great. Those who did have an income of over \$10,000 had a lower percent satisfied with the washer, however.

Little difference is found in the percent of homemakers satisfied with the washer and the amount of time employed or not employed.

The education level of the wife in relation to washer satisfaction is inconclusive. The highest percent satisfied with the washer were those who graduated from college. The second highest percent satisfied were those with an eighth grade education.

Again, the number of people for whom a homemaker washes clothes for in relation to washer satisfaction is inconclusive, as is the number of wash loads done a week.

### Defining the Problem

Those homemakers who thought about the purchase from one to three weeks had the largest percent of respondents satisfied with the washer.

# Sesking Alternative Solutions

As the number of sources used by the respondents went up so did the percent satisfied with the washer. However, the majority of the respondents used fewer than five sources of information. Fifty-three percent of the respondents contacted only one dealer and 41 percent shopped only one brand.

## Thinking Through Alternatives

The group of respondents who had the highest percent satisfied with the washer took 2-3 weeks to make the decision. However, the majority of the respondents took less time to make the decision.

## Selecting an Alternative

Each respondent selected the same model and brand washer.

No information was sought concerning why she selected that

particular model and brand.

## Accepting Responsibility for the Decision

Three-fourths of the respondents did not have to have a service call. A higher percent of these respondents were satisfied with their washer than were those respondents needing a service call.

Those respondents who were dissatisfied with the service received had a much lower percent satisfied with the washer than did those who were satisfied with the service or those respondents not needing a service call.

About nine percent of the respondents were not satisfied with their dealer. Those respondents not satisfied with the dealer also had a much lower percent satisfied with the washer.

The need for service, type of service received and the satisfaction with the dealer do play a part in the washer satisfaction. There are external factors which influence the satisfaction of the washer decision.

#### IMPLICATIONS FOR TEACHERS

#### AND EXTENSION

The consumer has become of prime importance to Home Economists who are educators. The job of educating both Junior High and High School students to be aware of the decision-making process in the purchasing of household items is very important. Education of adults in this same very important area is also receiving a great deal of emphasis by the government and private organizations.

This study shows educators some of the areas where there is a need for more emphasis in teaching the decision-making process.

There were two age groups which were more dissatisfied with the washer decision than other groups. The youngest purchasers of an automatic washer had the most dissatisfaction with the purchase of the washer. This perhaps tells us they are not receiving information about major appliances relating to the care of clothing, food preparation and preservation. With the highest percent of young women marrying at the age of 18 than any other age this is a very important area that should be taught in the schools.

The other age group that is of concern is the 35-55 year old homemakers. Their satisfaction with the washer could be lack of knowledge about the uses for the features on the washer and how to launder the present day fabrics.

They may also be the hardest to educate because they feel they have been doing the laundry for so many years they know what and how it should be done.

Over 50 percent of the respondents received very much information from the salesman. It is important to educate students and homemakers on how to purchase a major appliance and how to shop for a dealer as well as service. Because the dealer is so important, educators may want to ask a dealer and/or service man to discuss buying appliances in the classroom or discussion group. The Extension Home Economist may also consider a display in the retailer's store showing information available to the consumer to help her make a decision about the purchase.

Educating not only the homemaker, but the entire family is important. Husbands, friends and relatives were consulted about the purchase of the appliance.

#### IMPLICATIONS FOR HOME ECONOMISTS

#### IN BUSINESS

Home Economists in Business can play an increasing role in helping the consumer select the products available on the market most suited to her needs.

One of the most important areas is the source used for obtaining information. Over 50 percent of the respondents said the dealer salesman gave them very much information about the washer. If the homemakers are relying so heavily on the advice of the salesmen then perhaps there should be more Home Economists talking with dealers about what a women wants to know when she is purchasing an appliance.

Perhaps the salesmen need to be kept more up to date as to what and how the appliance benefits the homemaker. With nine percent of the respondents not satisfied with the dealer, this area should be a great concern to both the Home Economist and the dealer.

The type of in-store display provided either very much or some information to over 50 percent of the respondents. Home Economists should become involved and help guide the design of the display material. Also the in-store display of merchandise is important. What attracts a homemaker to a particular brand or model washer? Is it the color of the appliance, display material on the appliance, design of the appliance itself? Each of these questions should be of concern to the Home Economists in Business.

A larger group of homemakers who have had previous experience with the washer brand were satisfied with the washer than were those who had no previous experience. The school consignment programs could be of help in achieving greater satisfaction providing the schools also teach the use and care of the product.

The opportunity to use the appliance appears to be beneficial. Perhaps the dealer should have connected appliances in his store for demonstration to the homemaker.

Those women who have not had the opportunity to use a particular product previously will need very clear and easily understood operating instructions with the new appliance.

The group of homemakers who had not previously owned this brand washer before had fewer satisfied with the washer and the percent satisfied may have increased with better and easier to read operating instruction.

More up-to-date educational materials about major appliances should be made available to the educators for their use in the classroom.

### NEED FOR FURTHER STUDY

One of the areas for further study would be the consumer aged 20 and under. Why was her satisfaction considerably lower than the average?

Another area of concern is the homemaker who has an older washer and purchases a new one and is dissatisfied. Is she not being kept up-to-date with what's new? How can we keep her up-to-date?

A study of how a homemaker selects her dealer and service man could find ways to prevent some of the problems caused by these external factors which therefore can cause dissatisfaction.

A follow-up study of the same 400 respondents would also be of value in comparing the satisfaction and dissatisfaction of owning the washer for a longer period of time.

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APPENDIX A Questionnaire

March 1, 1968

#### Hello:

One of the basic functions of a Home Economist in any job is to find the best means of informing the consumer about the product she has purchased or is about to purchase. We are very interested in knowing how you, as the consumer, obtain information about the more expensive items purchased. We are also very interested in finding out how many people are disappointed about a purchase after using the item. The disappointment could stem from the product itself, the dealer and/or the service needed and received.

Your answers on the enclosed questionnaire will help us who are Home Economics Teachers, Extension Home Economists, Utility Home Economists and Home Economists in Business plan future lessons, programs and written material. We will be able to determine how we can best inform you of features on new products, how to use the new products and how to eliminate some of the problems that occur after the purchase of an expensive item.

The questionnaire will take about five minutes for you to fill out. All answers given are in strictest confidence. After the enclosed numbered questionnaire is returned your name will be removed from my list.

This study is part of my graduate program in Home Economics at Michigan State University in East Lansing, Michigan. Norge has cooperated with me by giving me your name from the returned warranty card you sent to Norge after you purchased your washer. This is not a Norge survey.

After you have answered the questions in the questionnaire please return the questionnaire in the enclosed stamped envelope.

Thank you for cooperating with me in this study.

Sincerely,

Janice Heckroth

Dr. Garof Shaffer
Dr. Carol Shaffer
MICHIGAN STATE JULYERSITY

## CONSUMER INFORMATION STUDY

this the first automatic washer you have owned?	(5) 1 2 pes no
this is not the first automatic washer you have owned, how old was the washer it replaced?	(6) 1
this the first time you have used this brand washer?	yes no, used neighbor's no, previously or relatives owned one  4   no, used one in laundry and dry cleaning
The source of the second	center
w many dealers did you visit or phone before you purchased your washer?	(8) 1 2 3 4 5 0 one two three four five or more
bw many different brands of washers did you consider buying?	(9) 1 2 3 4 5 0 one two three four five or more
ow long had you been thinking about buying a new washer?	(10) 1 2 3 1 1 week or less 1-2 weeks 2-4 weeks  4 3-4 weeks over 1 month
shopping for a washer, how long did it take you to make a decision?	(11) 1 2 3 1 weeks or less 1-2 weeks 2-3 weeks  4 3 4 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7

How much information did you receive from the following:		very much	some	none
TV programs	(12)	1 🔲	2	3 🔲
TV ads	(13)	1 🔲	2	3 🔲
Magazine articles	(14)	1 🗌	2 🔲	3 🔲
Magazine ads	(15)	1 🔲	2	3 🔲
Newspaper articles	(16)	1 🔲	2 🔲	3 🔲
Newspaper ads	(17)	1 🔲	2	3 🗌
Sal <b>esman</b> from whom you purchased washer	(18)	1 🔲	2 🔲	3 🗌
Other dealer salesmen	(19)	1 🔲	2 🗍	3 🔲
Neighbor	(20)	I 🗌	2	3 🔲
Relatives	(21)	1 🔲	2	3 🔲
Husband	(22)	1 🔲	2 🔲	3 🔲
In-store display	(23)	1 🔲	2 🔲	3 🔲
Utility Company	(24)	1	2	3 🗌
County Extension Service	(25)	1 🔲	2 🔲	3 🗌
Night or evening school	(26)	1 🔲	2 🔲	3 🔲
Dealer demonstration	(27)	1 🔲	2 🔲	3 🔲
Government publications	(28)	1 🔲	2 🔲	3 🗌
Consumer Digest or Consumer Report	(29)	1 🔲	2 🔲	3 🔲
Other	(30)	1 🔲	2 🔲	3

Do you feel the warranty is written clearly?	(31)	1 2 pes no	(40)	Your age?
Would you purchase an extended warranty if it were available?	(32)	1 2 2 yes no		What is your votal
Have you ever had to call a service man to repair your new washer?	(33)	1 2 pes no		
What was the nature of your complaint?	(34)	poor installation	2 washing results 5 other	
Was it corrected by the service man?	(35)	1 2 pes no		you have bed?
Are you satisfied with the way it was corrected?	(36)	l 2 pes no	(\$42)	For how seny people
If you could change your decision, would you change: brands	(37)	yes no	(61)	How many loads of an action of the color of you week?
dealers service	(38) (39)			
Are you satisfied with your new washer?	(40)	l 2 pes no		
Would you recommend to someone else to buy the brand washer you did?	(41)	1 2 pes no	sed <sup>m</sup>	
Would you recommend the dealer you purchased the washer from to someone else?	(42)	l 2 pes no		

Your age?	(43)	1 [ be
What is your total family income before taxes?	(44)	1 [ 1e 4,
		6[ 15 or
Are you employed?	(45)	1 [ no
What is the highest level of education you have had?	(46)	l[ 8t; gr
For how many people do you wash clothes?	(47)	
How many loads of clothes do you wash a week?	(48)	1[1-
How many of the above loads:	(49)	co
Standard Co.		fi: 3/4

Thank yo



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 38860, CHICAGO, ILL.

Miss Janice Heckroth P. O. Box 3404 Merchandise Mart Plaza Chicago, Illinois 60654





beandoug por Page 4



March 15, 1968

Hello:

Several weeks ago I sent to you a questionnaire to be filled out and returned to me. It is a part of my graduate studies in Home Economics at Michigan State University.

Perhaps like so many of us, you said to yourself, "I'll do this later when I have more time." So today you have received this brief reminder that the questionnaire takes only five minutes to fill out. I do hope you will take the time to help me in this study.

Sincerely,

Janice Heckroth

sja



# APPENDIX B

States and Response Rate

TABLE 16
STATES AND RESPONSE RATE OF RESPONDENTS

State	Wrong Address	Number Returned and Useable	Number Sent	Percent of Useable Returns
Alabama	ı	4	11	40
Arizona	1	18	43	42.8
Arkansas	1	9	21	45
Alaska	0	O	0	0
California	0	14	52	26
Colorado	0	2	7	29.5
Connecticut	0	6	13	46
Delaware	1	0	1	0
Florida	0	O	3	0
Georgia	0	5	14	3 <b>6</b>
Hawaii	0	0	0	0
Idaho	0	1	3	33
Illinois	2	32	81	40
Indiana	2	12	23	46
Iowa	0	9	16	56
Kansas	1	11	15	79
Kentucky	0	4	7	<b>37</b>
Louisiana	O	5	14	33
Maine	0	7	11	64
Maryland	2	5	18	3 <b>0</b>

TABLE 16 - Continued

State	Wrong Address	Number Returned and Useable	Number Seat	Percent of Useable Returns
Massachusetts	0	7	15	47
Michigan	0	3	13	44
Minnesota	1	4	8	5 <b>7</b>
Mississippi	1	0	4	0
Missouri	5	9	21	47
Montana	0	1	6	17
Nebraska	0	4	6	67
Nevada	0	o	0	0
New Hampshire	0	3	6	33
New Jersey	1	4	11	40
New Mexico	6	52	113	46
New York	5	4	17	27
N. Carolina	5	4	14	33
North Dakota	0	1	3	33
Onio	2	16	3 <b>6</b>	47
Oklahoma	1	1	4	33
Oregon	0	9	15	60
Pennsylvania	5	36	63	55.5
Rhode Island	0	0	2	O
S. Carolina	0	6	9	67
South Dakota	0	O	٥	0

TABLE 16 - Continued

State	Wrong Address	Kumber Returned and Useable	Number Sent	Percent of Vscable Returns
Tennessee	C	6	12	50
Texas	2	33	99	<b>3</b> 3
Utah	C	3	3	100
Vermont	O	O	O	o
Virginia	1	6	12	<b>5</b> 5
Washington	3	3	10	43
W. Virginia	O	11	1.8	61
Wisconsin	0	12	17	71
Wyoming	1	3	6	હ
Total	<i>3</i> 3	400	906	

APPENDIA C
Washer Satisfaction

TABLE 17
WASHER SATISFACTION BY AGE OF WIFE

Age	Number of Respondents	Percent of Total	Percent Satisfied
Below 20	14	3.50	78.6
21 - 35	196	49 <b>.6</b>	93.4
36 <b>-</b> 55	160	40.5	36.3
56 - 65	21	5.3	90.5
over 63	4	1.0	100.0

THELE 13 WASHER SATISFACTION BY TOTAL FAMILY INCOME BEFORE TAXES

Income	Number of Respondents	Percent of Total	Percent Satisfied
Less than	26	7•3	92.3
4,000 to 5,999	58	16.1	91.4
6,000 to 7,999	94	26.1	91.5
8,000 to 9,999	69	19.5	92.8
10,000 to 14,999	81	21.9	83.9
15,000 or over	34	9.1	<b>ଌ</b> ଞ.2

TABLE 19
WASHER SATISFACTION BY EIGHDYM NOT OF WIFE

Employed	Number of Respondents	Percent of Total	Percent Satisfied
No	224	57.0	ε9 <b>.</b> 7
Part Time	50	12.7	90.0
Full Time	119	30 <b>.</b> 3	91.6

TABLE 20 WASHER SATESFACTION BY EDUCATION LEVEL OF WIFE

Education	Number of Respondents	Percent of Total	Percent Savisfied
Sth Grade	34	9.0	94.1
Some High School	76	19.7	92.1
High School Graduate	167	41.6	88 <b>.6</b>
Some College	63	15.4	87.3
College Graduate	30	3.1	96.7
Other	26	6.2	84.6

TABLE ?1
WASHER SATISFACTION BY NUMBER OF PEOPLE WIFE
WASHES CLOTHES FOR

Number of People	Number of Respondents	Percent of Total	Percent Satisfied
One	3	.8	100.0
Two	<b>7</b> 0	17.3	83 <b>.5</b>
Three	92	22.8	89.1
Four	<b>7</b> 4	19.5	94.6
Five	71	17.0	85.9
Six	41	10.6	92.7
Seven	21	5.0	85.7
Dight and over	26	7.0	96.2

TABLE 23
WASHER SATISFACTION BY NUMBER OF WASH LOADS A WELK

Number of Wash Loads	Number of Respondents	Percent of Total	Percent Satisfied
1 - 2	15	3 <b>.6</b>	86.7
3 - 5	114	29.4	92.1
6 - 8	130	<b>32.5</b>	89.2
9 - 12	78	19.3	88.5
over 12	59	15.1	91.5

Daries C

