



A study of the buying characteristics of farm families in the Livingston, Montana, trade area
by Robert Ortmeyer

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the
Degree of Master of Science in Agricultural Economics at Montana State College
Montana State University
© Copyright by Robert Ortmeyer (1942)

Abstract:

This study is an attempt to determine the rural consumer buying characteristics in the retail market. It deals specifically with problems related to the reasons why farm people patronise certain retail stores and is based on the opinions of rural persons.

A survey of 85 farm families was conducted in November, 1941 in the rural trade area of Livingston, Montana. It is believed that the sample cases interviewed were representative for the area in terms of certain indexes. Forty-six commodities purchased for farm, household and personal use were included in the survey. Normal or typical buying characteristics of these farm families were analysed.

The families studied patronised 198 retail stores in making 2,440 purchases. They made 40 percent of their choices between stores on the basis of price advantage, 34 percent on the basis of convenience, and 26 percent for social, personal and merchandising reasons. Type of commodity purchased, type of store patronised, and site and location of trading centers influenced farm family choice of retail store patronage. Gross farm income, size of farm and family, distance from trading center, type of farm enterprise and tenure status of the farm operator were other factors influencing choices among stores.

In the opinion of the interviewer, the farm families surveyed, as a group, did not desire fundamental changes in their retail buying market. They tended to regard their patronage problems as individual matters and sought to adjust themselves as best they could. It is doubtful whether, in the near future, group pressure for more efficient buying opportunities will come from these buyers. Social reasons appeared to be strong underlying factors in determining the particular store and trading center patronized. Social accommodations such as convenient rest rooms and waiting and visiting room facilities would meet certain needs of farm buyers. Retailers who wish to adapt their sales facilities to the needs and desires of farm families must consider rural family attitudes and other factors involved.

A STUDY OF THE BUYING CHARACTERISTICS OF FARM FAMILIES
IN THE LIVINGSTON, MONTANA, TRADE AREA.

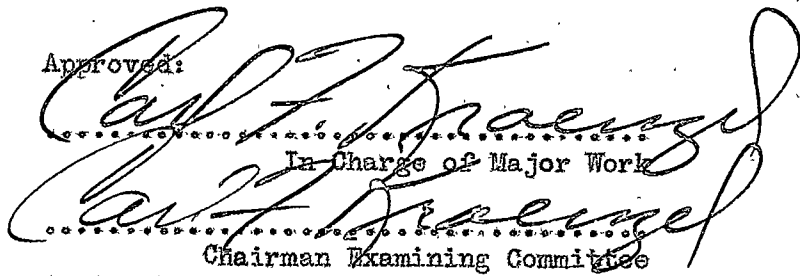
by

ROBERT ORTMEYER

A THESIS

Submitted to the Graduate Committee
in partial fulfillment of the requirements
for the Degree of Master of Science
in Agricultural Economics at
Montana State College

Approved:



.....
In Charge of Major Work
.....
Chairman Examining Committee

.....
Chairman Graduate Committee

Bozeman, Montana
May, 1942

N378
Or 8a
cop. 2

TABLE OF CONTENTS

Page

LIST OF TABLES. 4

ABSTRACT. 6

PART I: INTRODUCTION 7

Farm Family Retail Buying. 7

Review of Literature 8

Purpose of the Study 10

Methodology. 11

 Commodities Included in the Farm Schedules. 11

 Reasons for Patronage 13

 Additional Information. 15

Description of the Survey. 16

 Area Surveyed. 16

 Map of Livingston Trade Area. 18

 Sampling Method. 19

 Survey Procedure. 20

PART II: THE BUYING CHARACTERISTICS OF FARM FAMILIES IN THE
LIVINGSTON, MONTANA, TRADE AREA. 23

Total Purchases Made By 85 Farm Families 23

The Relationship of Types of Commodities Purchased and
 Farm Family Buying Characteristics. 26

 Farm Commodities. 26

 Household Commodities 28

 Personal Commodities. 28

Store and Trading Center Factors as Related to Farm
 Family Buying Characteristics 31

Farm and Family Factors as Related to Farm Family
 Buying Characteristics. 36

 Gross Income. 36

 Size of Family. 39

Thesis cop. 2

8 22 '42

Distance from the Trading Center.	43
Type of Farm Enterprise.	45
Tenure Status.	47
Size of Farm.	50

Phases of The Problem Meriting Additional Study. 56

Underlying Reasons.	56
Conveniences.	57
Additional Farm and Family Factors.	57
Distance.	58
General Attitudes	58
Retail Merchant - Farm Family Relationships	59
Retail Merchant - Farm Family Opportunities	60

PART III: SUMMARY AND CONCLUSIONS. 62

Summary. 62

Conclusions. 66

ACKNOWLEDGMENTS 68

LITERATURE CITED AND CONSULTED. 69

APPENDIX A. 70

APPENDIX B. 73

List of Tables

	Page
Table I.--A percentage comparison of the farm and family characteristics of the 85 farm families studied in the Livingston trade area and all farm families in Park County, Montana.....	21
Table II.--The total purchases of 85 farm families in the Livingston, Montana, trade area, classified by type of purchase and reasons for store patronage.....	24
Table III.--Farm family retail buying of 16 farm commodities classified by type of commodity and reasons for store patronage.....	27
Table IV.--Farm Family retail buying of 17 household commodities classified by type of commodity and reasons for store patronage.....	29
Table V.--Farm family retail buying of 13 personal commodities classified by type of commodity and reasons for store patronage.....	30
Table VI.--Farm family retail buying of 46 commodities classified by ownership of store patronized and reasons for store patronage.....	32
Table VII.--Farm family retail buying of 46 commodities classified by type of store patronized and reasons for store patronage.....	34
Table VIII.--Farm family retail buying of 46 commodities classified by trading centers patronized and reasons for patronage of stores located in these trading centers.....	35
Table IX.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by gross farm income and type of purchase.....	37
Table X.--Reasons for retail store patronage by farm families classified by gross farm income and type of purchase.....	40
Table XI.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by size of family and type of purchase.....	41
XII.--Reasons for retail store patronage by farm families classified by size of family and type of purchase.....	42

	Page
Table XIII.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by farm distance from Livingston and type of purchase.....	44
Table XIV.--Reasons for retail store patronage by farm families classified by farm distance from Livingston and type of purchase.....	46
Table XV.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by type of major farm enterprise and type of purchase.....	48
Table XVI.--Reasons for retail store patronage by farm families classified by type of major farm enterprise and type of store.....	49
Table XVII.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by tenure status of the farm operator.....	51
Table XVIII.--Reasons for retail store patronage of farm families classified by tenure status of the farm operator and type of purchase.....	52
Table XIX.--Farm family retail buying of 46 commodities in the Livingston trade area in 1941, classified by size of farm..	54
Table XX.--Reasons for retail store patronage of farm families classified by size of farm and type of purchase.....	55

A STUDY OF THE BUYING CHARACTERISTICS OF FARM FAMILIES

IN THE LIVINGSTON, MONTANA, TRADE AREA.

ABSTRACT

This study is an attempt to determine the rural consumer buying characteristics in the retail market. It deals specifically with problems related to the reasons why farm people patronize certain retail stores and is based on the opinions of rural persons.

A survey of 85 farm families was conducted in November, 1941, in the rural trade area of Livingston, Montana. It is believed that the sample cases interviewed were representative for the area in terms of certain indexes. Forty-six commodities purchased for farm, household and personal use were included in the survey. Normal or typical buying characteristics of these farm families were analyzed.

The families studied patronized 198 retail stores in making 2,440 purchases. They made 40 percent of their choices between stores on the basis of price advantage, 34 percent on the basis of convenience, and 26 percent for social, personal and merchandising reasons. Type of commodity purchased, type of store patronized and size and location of trading centers influenced farm family choice of retail store patronage. Gross farm income, size of farm and family, distance from trading center, type of farm enterprise and tenure status of the farm operator were other factors influencing choices among stores.

In the opinion of the interviewer, the farm families surveyed, as a group, did not desire fundamental changes in their retail buying market. They tended to regard their patronage problems as individual matters and sought to adjust themselves as best they could. It is doubtful whether, in the near future, group pressure for more efficient buying opportunities will come from these buyers. Social reasons appeared to be strong underlying factors in determining the particular store and trading center patronized. Social accommodations such as convenient rest rooms and waiting and visiting room facilities would meet certain needs of farm buyers. Retailers who wish to adapt their sales facilities to the needs and desires of farm families must consider rural family attitudes and other factors involved.

-17-

PART I: INTRODUCTION

Farm Family Retail Buying

The modern farm family has available a large number of retail stores from which to purchase commodities. ^{1/} Some of these stores emphasize price in selling their goods, while others emphasize service or quality as their chief sales appeal. There probably are few farm families who base their choice of retail stores upon any single one of these major appeals. The three tend to go together. In some stores lower price means a lower quality so that price alone would be an inadequate guide in deciding where to buy.

The decision where to buy cannot easily, nor always, be measured in money. Unlike the industrial buyers, the rural consumer does not buy only where a money profit is available. The rural consumer may select certain stores because of friendship for the proprietor or clerks, or because of the quick and cheerful service rendered. The variety and quality of commodities offered, or the size and arrangement of the display room may be important to the buyer. Some stores solicit trade upon a basis of social prestige. Some consumers place savings of time and effort above savings of money. Others emphasize price above any other considerations, at least, for certain types of commodities.

The many retailers whose business is made up in large part of farm trade are vitally affected by the extent and intensity of these various rural consumer desires. Retailers need to know how these desires affect their businesses. They also try to influence consumer desires. Most

^{1/} The term "retail stores" as used in this study includes mail order houses, agencies, private sellers, and all other retail outlets.

retailers who sell to rural families try to adapt their sales practices and services to the needs and desires of their customers. Knowledge concerning the factors which are important to farm families in making retail store selections is valuable to retailers in making adjustments to the needs of these buyers. This study is an attempt to obtain some knowledge of the buying characteristics of farm families as these characteristics affect their choices of retail stores.

Review of Literature

A major first attempt to bring together in book form the available facts concerning rural standards of living was made by Ellis Lore Kirkpatrick. His book, The Farmer's Standard of Living, was published in 1929. Dr. Kirkpatrick found that of the value of household goods used in one year by farm families in 11 states, an average of 57 percent was purchased and 43 percent was furnished by the farm. 2/ Dr. Jessie E. Richardson, of the Department of Home Economics, Montana Agricultural Experiment Station, found similar results from a study of 40 Montana farm families during 1929-30. 3/ Several other studies show comparable results. 4/

2/ Kirkpatrick, Ellis Lore, The Farmer's Standard of Living, The Century Company, New York, 1929. p. 62

3/ Richardson, Jessie E., The Quality of Living in Montana Farm Homes, From Accounts Kept by Forty Families During the Year 1929-30. Montana Agricultural Experiment Station Bulletin No. 260, 1932. p. 19.

4/ Von Tungen, G. H., Thaden, J. E., Kirkpatrick, E. L., Cost of Living on Iowa Farms, Iowa Agricultural Experiment Station Bulletin No. 237, 1926.

Black, J.D., and Zimmerman, C.C., Family Living on Successful Minnesota Farms, Minnesota Agricultural Experiment Station Bulletin No. 240, 1927.

Fish, Marion, Buying for the Household as Practiced by 368 Farm Families in New York, 1928-29, Cornell University, Agricultural Experiment Station Bulletin 561, Ithaca, New York, 1933

These findings, therefore, indicate that the major part of the commodities used in farm family living is being purchased in the retail market. The rural standard of living, then, is closely connected with rural consumer buying. One important aspect of consumer buying is the problem of where to buy.

During the past four years several important college texts on consumer education have been published. Among these are Margaret G. Reid's Consumers and the Market, from Iowa State College, and Jessie V. Coles' The Consumer-Buyer and the Market, from the University of Missouri; other books which recently have appeared include, The Consumer and the Economic Order, by Warren C. Waite and Ralph Cassidy, Jr., of the Universities of Minnesota and California, and Consumption and Standards of Living, by Carl C. Zimmerman of Harvard University.

The two books, Consumers and the Market, and The Consumer-Buyer and the Market were found to be more useful in the present study than were the others. Each of these books contained a short section dealing with the consumer problem of where to buy. Dr. Reid emphasized the three major appeals of quality, service and price which retail stores use to attract customers. In addition, she emphasized the consumer's difficulty in determining the quality of commodities offered for sale.

Dr. Coles compared the types and quantities of commodities purchased in chain stores and in independently owned stores. She also analyzed the effects of store and trading center locations upon the types and quantities of commodities bought.

Another recent book in the field of consumer education is entitled,

Does Distribution Cost Too Much?, published by the Twentieth Century Fund.

This book included a review of the costs involved in present marketing methods. However, it contained little information that had a direct bearing upon the problem of where to buy. Other books, bulletins and consumer education materials furnished additional information of a general nature only. It is, therefore, apparent that more detailed information is necessary on the factors involved in rural consumer choices of where to buy.

The general objective of this study was to assist in finding such additional information.

Purpose of the Study

This study, undertaken in November 1941, is a specific attempt to obtain information concerning the buying characteristics of a group of farm families. ^{5/} This meant obtaining information on the place of purchase and the reasons why certain stores were selected by farm families. The factual data, therefore, were secured from the buyers. The reasons for patronizing certain stores were the opinions of the buyers. This study is, therefore, in the nature of a case description.

A second purpose of this study was to discover what relationship, if any, existed between certain farm and family factors, on the one hand, and farmer retail buying characteristics on the other. Such questions as the following were considered: Do high income farm families buy at

^{5/} The term "buying characteristics" as used in this study means only those habits or methods of buying which related to the decision of where to buy and to the reasons why certain stores were patronized.

many retail stores, and do farm families always seek price advantages? What are the general attitudes of farm families concerning the retail marketing system and suggestions for improvements? What other phases of farm family store patronage need detailed study?

Eighty-five farm families in the trade area of Livingston, Montana, cooperated in the survey. Forty-six commodities were included in the schedules used for interviewing these farm families.

Methodology

Commodities Included in the Farm Schedules. -- An attempt was made to obtain data on the normal or typical buying characteristics of farm people. 6/ For this reason, and in order to simplify the schedules used, no attempt was made to obtain data on articles or commodities outside of the 46 which were believed to include the major part of farm family commodity purchases. In addition, only the usual place of purchase for any single commodity was included in the data. If there was no usual place of purchase, information was obtained on the retail store most recently patronized.

A preliminary study of the farm records from several different types of Montana farms and ranches was made in order to determine which commodities were being purchased generally by farm families. 7/

6/ The term "normal or typical buying characteristics" as used in this study means those buying practices usually followed by the families studied in deciding where to buy certain commodities.

7/ The terms "farm families" and "farms" will hereafter be used to designate both farms and ranches in the study.

The completed list of commodities was divided into three classifications for convenience and comparison purposes. These classifications were as follows: (1) commodities for farm use; (2) commodities for household or home use, and, (3) commodities for individual or personal use. (See Appendix B).

The commodities purchased for farm use were: building materials, fencing materials, farm machinery, farm tools, automobiles, trucks, auto and truck supplies, auto fuels, truck and tractor fuels, feed grains, concentrates, hay, seeds, and miscellaneous farm equipment. 8/

Included in the classification of commodities purchased for household or home use were: furniture, kitchen equipment, fresh and canned vegetables, fresh, canned and dried fruits, breakfast foods, sugar, flour, meats, beverages, finished drygoods, tableware, kitchenware and silverware. 9/ Kitchen equipment included such items as stoves and refrigerators. Finished drygoods included curtains and bed sheets.

The commodities purchased for individuals or personal use were: smoking articles, clothing for men, women, and children, personal articles for men, women, children and the family, unfinished drygoods, personal display items, gifts and tonsorial services. Unfinished drygoods in-

8/ Farm income tax reports permit the listing of automobile cost partially or wholly as farm expense. Many farm families use their automobiles extensively for farm business. Consequently, automobiles were included in the above list of commodities.

9/ A variety of grocery items was listed in order to find out whether or not individual families tended to purchase all or most grocery items at one store.

cluded dress and pajama materials, and personal display items included watches and jewelry.

Reasons for Patronage. -- The first objective of the survey was to obtain information upon where farm family purchases usually were made, and the second was to determine the reasons for patronizing certain retail stores. Before any field work was done, a list was compiled of all the reasons why a farm operator or adult members of his family might purchase at one retail outlet in preference to another. (See Appendix A) In no case are these the reasons for purchasing the commodity, but are the reasons for purchasing the commodity at a certain retail store. Thus, a reason of lower price in the purchase of a hammer did not mean that the hammer was purchased at a lower price in preference to a shovel. It meant, instead, the hammer was purchased at a certain store because the buyer believed it to have been lower priced there than at competing stores.

This list of reasons for purchasing at one retail store rather than at another was unwieldy. Therefore, the reasons were classified under five major headings. These five were designated as price, convenience, social, personal and merchandising classifications. Definitions of each class heading were necessary. Store patronage on the basis of price was used to mean those store selections by farm buyers involving price advantages as the deciding factor. For example, if the price of the commodity purchased, or its price-quality relationship was considered by the purchaser to have been the chief factor in deciding where to buy, the store selection was assumed to have been determined on a price basis. Where the price may have been considered but was less important than

convenience of time or effort on the part of the buyer in choosing between stores, store selection was considered to have been made on a convenience basis.

Store patronage by the buyer was classified as determined by social factors where social considerations such as friendship for the proprietor were decisive in deciding where to buy. If personally recognized likes, dislikes and vagaries of the buyer decided which retail store was selected, choice of store was considered to have been determined on a personal basis. Where the buyer recognized that sales appeal, or merchandising inducements by the retailer were decisive in choosing the place of purchase, the merchandising basis was considered to have been the basis for store selection by the buyer.

Commodity price was the basis for the first nine reasons listed in Appendix A. The next ten reasons were based primarily upon convenience. Social relationships between the buyer and the store proprietors, clerks, or other buyers were the basis for the succeeding ten reasons.

The nine reasons following these classified on a social basis were classified on a personal basis since they involved personal likes, dislikes and vagaries. Reason No. 34 included those buyers who felt they had been cheated at one store, and made subsequent purchases at another or other stores. Reason No. 35 involved price, but was primarily a problem of personal desires. It included those buyers who felt an intense desire to secure bargaining "victories" over the seller. Reason No. 38 included such situations as the following: (1) red apples

were accepted while yellow apples were rejected, and, (2) white-shelled eggs were preferred to brown-shelled eggs.

Reasons numbered 39 through 46 were included in the merchandising classification because they dealt primarily with efforts of the store owner or clerks to sell their commodities. It might be argued that the most clever and efficient merchandising was not recognized as such by consumer buyers. This study, however, is not designed to measure whether or not the reasons given by rural retail buyers were the motives that the merchants intended to develop or convey to their patrons by way of store selection. We are here concerned with only those reasons which the rural buyers felt were their chief motives in choosing retail stores.

Certain internal checks upon the data, and certain comparisons with the results of other studies similar to this were possible, and these comparisons are discussed later. Reason No. 47 was the only reason classified under habit, and was, in reality, a duplicate reason, though an important one. In each case of "habit", the chief reason for the original purchase at that store was secured and included in the data under another classification.

The enumerated reasons, even though classified under five headings, still were awkward to use in the survey. Consequently, a code was attached to the list, each class heading corresponding to a letter of the alphabet. Each reason under a class heading corresponded to a number. This code was used in recording data on the farm schedules.

Additional Information. -- It was recognized that various farm and family factors might have an influence upon the place of purchase and

upon the reasons for purchasing at certain retail stores. This necessitated obtaining information on the estimated gross income, the size of family, the distance from the nearest trading center, the type of farming enterprise, the tenure status of the farm operator, and the size of farm, for each farm family interviewed. The gross cash income was derived by totalling the cash amounts received from the sales of various farm products. 10/

Description of the Survey

Area Surveyed. -- The trade area of Livingston, Montana, was chosen as the survey locale because: (1) it presented several different types of farms and ranches; (2) the total number of farm families in the rural trade area was sufficiently small that a limited sample could be used; (3) there were two small towns in the area and comparisons with Livingston, the county seat, were possible.

Livingston, Montana, a small city of about 6,600 population, is located at the eastern foot of the Rocky Mountains. It is a maintenance center for the Northern Pacific Railroad and the chief source of urban employment is in the railroad shops. Located on U. S. Highway 10 at its nearest point to the Yellowstone National Park, tourist trade is an important factor in summer retail business. Livingston merchants, however, are not dependent primarily upon this source of trade. Their chief trade comes from the railroad workers and farmers.

10/ The gross cash income was used chiefly because total purchases were made from the gross income rather than the net income available. In addition, the total cash income from farm marketings was believed to be a more accurate figure than an estimate of the net income.

The rural trade area of Livingston is well defined by the boundaries of Park County, which covers an area of 2,627 square miles and borders on the north side of the Yellowstone Park. The trade area extends about 35 miles east, 50 miles south, 10 miles west, and almost 40 miles north of the city. (See figure 1).

The Absaroka and Gallatin National Forests cover about 60 percent of the county. This leaves approximately 1, 116 square miles of agricultural land. The chief agricultural areas are located in the Yellowstone River Valley, south and east of Livingston, and the Shield's River Valley north of the county seat. The rural trade area tends to be limited on the east, the south and the west by mountain ranges. Consequently, the largest number of families in the sample were found north of Livingston, where the density of the total rural farm population of Park County also was greatest.

In the river valleys are large and small irrigated farms, and the range lands back from the rivers are utilized by large scale livestock ranching. Dryland wheat farming is the principal type of agriculture in the northern part of Park County.

Two small towns, Clyde Park and Wilsall, located 20 and 28 miles, respectively, north of Livingston, were included in the survey as primary trading centers. Each had a population of about 300 people. Their farm trade was largely local since it was derived from farm families located a lesser distance from them than from Livingston. The chief services which these towns performed for rural retail buyers included the furnishing of staple commodities. Many of these commodities were

