A FRAMEWORK AND ANALYSIS OF DECISION

VARIABLES FOR INTERMARKET PATRONAGE

By

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CHAPTER I

INTRODUCTION

As the number of shopping centers grow, the trade area which they cover is expanded. The consumer is therefore encouraged to leave his local retail market and shop at these large centers. Minimizing the flow of these shoppers by understanding their buying behavior is the key to the success of the small town merchants. The movement of shoppers has been studied extensively in marketing literature. Historically, this research has been primarily concerned with the identification of trade areas and the measurement of trade flows between cities. As the research evolved, it became concerned with developing demographic and behavioralistic portraits of the out-of-town shopper. As with those studies, this work is concerned with market identification and consumer flow. However, in contrast to previous research, this paper has a decidedly different approach in that out-of-town purchases are approached from the decision process of the consumer.

There should be theoretical implications in both the fields of site location and search behavior, and practical applications coming from the understanding of consumer behavior in the search process. By understanding the factors which motivate out-of-twon shopping, the marketing manager can manipulate those variables in a way so as to control the flow of consumers, either to or from the local areas.

The identification of the out-of-town shopper was the early concern of consumer behavior research, and because of this, the theoretical base

for studying this area was bypassed in the literature. The first two objectives of this paper will be to develop a framework to review the basic literature, and then to analyze the behavioral research within that framework. More specifically, the objectives of the research would include:

- The development of the consumer behavior framework (microanalytic) for intermarket patronage from the "gravitational laws" (macro-analytic).
- 2) The construction of a behavioral model from the independent variables developed in the behavioral approach.

A second set of objectives evolve from the testing of the decision model. This set consists of three primary objectives:

- Analysis of the contribution each of the independent variables make to intermarket patronage.
- 4) Analysis of the elements of the independent variables and their relationship to the dependent variable, intermarket patronage.
- 5) Analysis of the decision model as a predictor of intermarket patronage.

The paper is organized in a way so as to facilitate the research. The second chapter develops the research literature on both the behavioral framework and the model for describing behavior. The independent components of the gravitational theory are translated into behavioral terms. These terms are then imputed into a decision model. The first two objectives, therefore, are completed in the second chapter.

The research design used for accomplishing the empirical objectives is discussed in Chapter III. The application and limitations of the design are also covered in this chapter. Chapter IV presents the analysis of the data. This chapter organizes the data collected and statistically tests the proposed relationships. A discussion of the results and their implications with regard to the decision model and past research is included. The final chapter will dwell on the contributions to the field, both practical and theoretical that this research has made. Finally, the paper will address itself to possible directions for future research.

CHAPTER II

LITERATURE REVIEW

Analysis of a firm's or retail district's market is basic to the planning of a manager's marketing mix. The study of intermarket patronage between perceived marketing districts is important in at least two respects. First, it provides information which helps to better define the size of the trade areas. And second, it gives information helpful in adjusting market activities designed to lower the rate of out-of-area shopping and/or to increase the inflow of shopping trade from other areas.¹

There have been two approaches to the exploration of shoppers' movements between retail market areas. The examination of intermarket patronage has traditionally focused on the mathematical models of the gravitational theorists. [1, 7, 19, 22] This macro-analytic approach can be contrasted to the consumer motivation or micro-analytic work done in recent years. [13, 20, 24] The "gravitation laws" are based on mathematical formulas whose independent variables are the size of the retail areas (mass) and the distance between them. The microanalytic approach is based on the assumption that consumers have different predispositions to forego secondary costs, such as time, money, and effort in their selection of one trade area over another.²

INTERMARKET PATRONAGE

The literature regarding intermarket patronage is clearly divided between the macro- and micro-analytic approaches. This section discusses both of these views and then draws them together through the development of a behavioral model.

Macro-analytic

The size of the retail trade area and its drawing power from surrounding markets have been measured for some time using the "laws of gravitation" developed by W. J. Reilly³ and Paul Converse.⁴ Reilly's work was conducted over a period of more than three years and had as its objective the discovery of some method for the measuring the retail trade influence of a city. "Retail trade influence of a city" was defined by Reilly as the amount of retail trade a city draws from its surrounding area. Converse's work was basically a refining of the results of Reilly's studies.

Together they developed six formulas which form the "laws of retail gravitation". Each of these formulas is based on Reilly's first law, which states:

Two cities attract retail trade from any intermediate city or town in the vicinity of the breaking point approximately in direct proportion to the population of the two cities and in inverse proportion to the square of the distances from these two cities to the intermediate town.

This law is present in the formula:

^B a =	Pa																				
В _Ъ	P _b	D _a	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	(1)	

Where,

Reilly defines the breaking point as a point to which one city exercises the dominating retail trade influence, and beyond which the other town dominates. The breaking point can be calculated through a variation of the basic gravitation formula. The formula is shown below.

$$D_{b} = D_{a} + D_{b}$$

$$1 + \sqrt{\frac{P_{a}}{P_{b}}}$$

$$(2)$$

Converse used consumer surveys in combination with the derived formulas to determine whether the shopping goods merchants in the relevant trading centers were obtaining more or less of the trade from the surrounding area than could **n**ormally be expected. For example, if City A received 30 percent of the shopping goods trade from a town located on the "breaking point" of its trading area as determined by formula (2), he would recommend that the shopping goods merchants in City A needed to take promotional action in order to raise this figure to at least 50 percent.

Refinements of Reilly and Converse's "laws of retail gravitation" have varied only in terms of adjustments. [14] The basic assumptions as to mass and distance have changed only slightly and the use of these two independent variables seems accurate enough for defining of trade areas. However, a dependence on these has come under increasing fire. Barry Mason and David Thompson write,

Traditional gravity formulations are inadequate to explain the complexity of factors that determine the economic potential for an intra-city population to support a proposed retail establishment. For example, the gravity concept is based on a notion of 'citeris paribus'. This restriction allows a concentration only on the basic variables of distance and mass, and the factors which can be encompassed in these variables. This two-dimensional nature thus forces the consideration of the problem in an unrealistic frame.

Such laws must be regarded as little more than historical 'accidents' in absence of tracing out a theoretical conn**ection** between their empirically determined weights and exponents and the corresponding behavioral variables on which they rest. . . Using such models for forecasting or planning is potentially disastrous in the absence of knowledge of the true underlying variables.¹⁰

Both of these authors recommend that a focus on the internal structure is necessary for a more nearly complete portrait of retail markets. The macro-analytic approach is also lacking in its explanation as to who the intermarket shopper is or why he travels outside his local retail market to shop. The use of the "gravitational laws" may lead to recommendations as to market share and needed promotional cæmpaigns. However, there has been no market or motivation research on which to build such a campaign. The question now becomes how does one analyze the individual and his reasons for intermarket shopping. Thus, determining what factors influence his shopping behavior.

Micro-analytic

There have been several recommendations as to the need for a frame of study and empirical research in the micro-analytic field. [6, 12, 14] At this point there have been only three research articles written using a consumer oriented approach to intermarket patronage. The earliest of these is the research by Herrman and Beik. Their work deals with the demographic analysis of intermarket patronage. They hint that consumer perceptions of secondary cost may have an affect on shopping patterns, but the researchers fail to follow up on any particular hypothesis.

The earlier research of Herrman and Beik was expanded by John Thompson. He tested a series of hypotheses regarding shopping patterns, most of which were based on earlier research. One major difference was Thompson's attempt to measure consumers' attitudes toward their own local shopping conditions. The attitude measurement gives the marketing manager more insight into the consumers decision making process.

Thompson also recorded the purpose of the trips on which the last out-of-town purchase was made. This question was not followed up by any analysis other than summary tables. There is a strong possibility that the added purpose of the trip provides a diversification of secondary costs thereby making out-of-town purchases economically feasible. The lack of a framework for analysis seems to be Thompson's primary error. He was, therefore, not looking at a model of purchase behavior, but at a set of isolated hypothesis.

The latest article concerning intermarket patronage is by Reynolds and Darden. Their work is a psychographic study of consumers who shop out-of-town. Their primary concern is a portrait of the consumer in both demographic and psychographic terms. Reynolds and Darden developed a series of measures which are primarily targeted at the consumer's attitudes toward their local retail trade area, and various alternative trade areas. The purpose of the research was to describe a market

segment. The psychographic approach proved to be a good surrogate in studying the consumer. The primary failing of Reynolds and Darden is the lack of a framework and not the application of their research tool.

Parameters

Each of the micro-analytic articles concerning intermarket patronage have approached the subject with a disdain for the organization of the material. The remaining portion of this review will be an attempt to organize prior consumer research into a framework designed on the premise that intermarket patronage is a function of mass and distance.

Where,

P_i = intermarket patronage,

M = mass,

D = distance between cities.

These variables from Reilly and Converse's "gravitational laws of retailing" are the basis for the consumer research done in the microanalytic field. Modifications of these variables have been used in other studies, the differences being in how the researchers look at the variables and the methods used in defining the variables function with respect to intermarket patronage.

For consumer research the independent variables of mass and distance must be redefined; also, the concept of intermarket patronage must be bounded by a time constraint so as to give the researcher a workable definition as to who are the intermarket shoppers. With regard to micro-analytic terminology, mass would be the attitudes that the individual evokes toward his perceived shopping alternatives. The gravitationalist's assumption is the larger one's local marketing area the more likely that an individual will be satisfied with shopping there. Therefore, one could conclude that the size of the market is not the independent variable, but the consumer's view of that market as satisfying his needs. [7, 16, 17, 25]

The same could be said for the consumers other marketing alternatives. The consumer-orientated researcher would then presume that intermarket patronage is a function of various attitudes about the local and alternative markets or possibly shopping in general. [7, 9, 23]

Distance is perceived as a monetary constraint, a secondary cost to be included in the price of the product. In addition to the direct price of the item, secondary costs in time, money, and effort which are spent while shopping can be important determinants of shopper's behavior. [3, 6, 14] The individual's perception of these secondary costs should be an independent variable in his decision to travel to alternative shopping areas. It has been argued that in a multipurpose trip these secondary costs can be shared. [4] This cost sharing can be seen in the case of a woman visiting her parents who while doing so, makes some purchases from a nearby store. The trip's primary purpose may be hidden, but the fact remains that the social function of the trip served as a hedge to defray the expense of the shopping trip. Distance could then be termed in micro-analytic jargon as an attitude toward secondary cost and/or an ability to share costs or cost hedge through multipurpose trips.

By analyzing each of these independent variables which are derived from the original concepts of mass and distance, a basis for building a decision model for intermarket shopping can begin to form. Each of these variables has a theoretical background with respect to a dependent variable. That dependent variable is unique to micro-analytical literature. In classifying consumers for analytical purposes, the frequency of intermarket patronage over some time span has been used as a means to distinguish "out-shoppers" from "in-shoppers." Now, with the substitution of this dependent variable referred to as an out-shopper, a model for decision making can be formalized.

 S_o = outshopping, A_1 = consumers attitude toward the local market, A_o = attitude toward alternative market areas, A_s = attitude toward shopping, C_s = consumers perception of secondary costs, C_h = consumers use of multipurpose trips to hedge against secondary costs.

The earlier model of intermarket patronage has now been transformed into a form which is available for systematic analysis.

MODEL VARIABLES

This section will define each of these variables and describe the relationships which have been cited in the literature.

Outshopping

In each of three articles written concerning outshopping, the researcher used different definitions of what constitutes an outshopper as follows:

- Herrman and Beik--a consumer who has shopped outside a five mile radius of the downtown area one or more times during the previous year. 8
- Thompson--one who had made at least one out-of-town purchase in the last six months.⁹
- Reynolds and Darden--respondents reporting shopping out-of-town twelve or more times in the previous year were defined as frequent outshoppers. Infrequent outshoppers were those who reported fewer than twelve out-of-town shopping trips.¹⁰

Because of the varied definitions, only generalizations can be drawn in comparing the results of these articles. The degree of outshopping found by the researchers, based on their respective definitions, is given in Table I. Without taking into consideration these differences, the casual reader would be inclined to view the disparity in percentage of outshoppers to be a significant change.

TABLE I

	Total Sample	Outshoppers	% Outshoppers
HERRMAN & BEIK	301	215	71.4
THOMPSON	1,543	1,296	84.0
REYNOLDS & DARDEN	304	66	21.7

PERCENTAGE OF OUTSHOPPERS

It can be easily seen that Reynolds and Darden's criteria of twelve trips each year lowers their percentage of outshoppers, and may hamper the comparison of results. However, general tendencies should be consistent if the relationships that they describe are valid. The following is a discussion of these tendencies and the development of descriptive models.

Attitude: Local

Each of the research articles analyzes the opinion of consumers toward the local market. A general assumption of all the articles concerns attitude toward the local retail market. As dissatisfaction with the local market increases, the propensity of the consumer to outshop also increases. The individual attitudes which have been tested to measure the consumers opinion of the local market are summarized in Table II. Because of the diverse methodologies, the tendencies of the variables are referred to in broad terms of high and low.

The research that redvered the most diverse variables was Reynolds and Darden. Their work showed that the frequent outshopper had an "overall dissatisfaction with local shopping," and of the variables tested, selection played the lesser role in motivating the consumer to outshop.¹¹ This is contrary to what Thompson found in his study of several Georgia towns. Thompson writes, "In every twon, the major reason for shopping out-of-town was expressed as 'local stores carry too small of selection'."¹² Herrman and Beik's work was not ad detailed as were these later publications, but their findings were similar to Thompson.

The desire for access to larger and more varied selections... was the principle factor motivating out-of-town shopping. In contrast, concern over local prices did not appear to be an important factor motivating out-shopping.¹³

The role of other variables had little effect on outshopping according to Herrman and Beik. Only 5.0 percent of the respondents in their study had difficulty with shopping locally for any reason other than price or selection.

TABLE II

PERCENTAGE OF COMPLAINT ABOUT LOCAL ATTITUDE VARIABLES

	Herrman & Beik	Thompson	Reynolds & Darden
Price	low (14.0)	high (40.4)	high (40.8)
Selection	high (78.1)	high (58.4)	low (25.0)
Styles	N/A*	N/A	high (31.9)
Quality	N/A	low (24.0)	low (23.4)
Hours	N/A	none (15.0)	high (31.3)
Store Attractiveness	N/A	none (13.4)	low (23.7)
Personnel	none (5.0)	none (10.7)	high (39.5)

*Not available for the study.

The conflicting data assimilated in Table I may be explained by the different methodologies of the studies. Therefore, the effect of consumer opinion toward the local market and what comprises that opinion is still undecided.

Attitude: Alternative Marketing Areas

The attitude of consumers toward alternative shopping areas is the second variable in the model. In Reynolds and Darden's research, the reasons that had previously been given for not shopping locally were the same ones given for shopping in other towns.

They also found that there was feeling of success generated by out-shopping. This success was in terms of satisfaction of finding what they had wanted at the desired price. Numerous researchers have built models which included the rationality of search success. [9] Each of these is based on the "economic man" and the rationalization of behavior. The need for successful search or rather the confidence in successful search would, therefore, seem to be the key to analyzing alternative markets. If the consumer knows he can find what he wants in another town, his inclination to outshop should be higher.

 A_a = attitude toward alternative shopping areas, Y_1 = confidence in successful search, Y_2 = fear of disappointment.

The attitude toward alternative shopping would then be described by a confidence in successful search and/or fear of disappointment.

Attitude: Shopping

Herrman and Beik suggested that the enjoyment of shopping expeditions may help offset the secondary costs of shopping at distant locations.¹⁴ The attitude toward shopping is a vague concept which can be just as easily offset by the frustration of shopping. Little research had been done in this area, but Reynolds and Darden did ask a series of psychographic questions which were designed to tap the general shopping attitude.¹⁵ The premise could then be put forth that the shopping attitude is a function of the variables they tested.

A_s = general shopping attitude,
K₁ = shopping is enjoyable and exciting,
K₂ = like to shop for bargains,
K₃ = money savings,
K₄ = like to buy new and different products,
K₅ = enjoy seeing products.

The enjoyment of shopping would seem to encourage outshopping. The research of Reynolds and Darden showed the outshopper to be an active individual with a desire to linger over shopping. However, they made no attempt to measure general satisfaction of shopping. The function described is a step in that direction.

Secondary Cost

The price of the commodity is a "prime" cost but not the sole cost. A number of "secondary" purchase-costs are necessary to achieve the purchase of the target commodity. Together, prime and secondary costs comprise total purchase-cost. Secondary items include costs in time, money, and effort.¹⁶ This relationship is readily available for the model definition.

 S_c = perception of secondary cost, C_1 = expense in time, C_2 = expense in money, C_3 = expense in effort.

The secondary costs which come to play in intermarket patronage are primarily those concerned with travel. Outshoppers seem willing to accept secondary costs, but only Reynolds and Darden have researched the consumers perception of these costs. They found that 70 percent of their frequent sutshoppers felt that outshopping was worth that "extra effort", while 40% of these same people felt that when you consider travel time, it costs too much to shop out-of-town. Therefore, between 30 and 40 percent of the frequent outshoppers cannot justify their trip solely for shopping. The resolution to this problem may be the concept of multipurpose shopping.

Multipurpose Trips: Cost Sharing

Herrman and Beik found that 17% of their sample said they were visiting the community in which purchases were made. Thompson analyzed the purpose of about 1,300 trips. He found that 30% of the trips were for reasons other than shopping. Primary among these were doctor's appointments, business and social trips. The secondary costs of travel

were then shared, or the opportunity arose so that the purchase was justified from a cost standpoint.

Again this relationship can be described as a function.

Where,

M_t = multipurpose trips,

 H_1 = social trips to other cities,

 H_2 = appointments,

 $H_3 = travel for other reasons.$

By summing the elements of the function, a measure of the consumer's perception of the use of multipurpose trips can be seen.

In Summary

The model has been shown to include the consumer's perceptions of the local market, alternative markets, secondary costs, multipurpose trips, and shopping in general. These variables have been defined so that they can be measured.

The research design for the testing of these variables can be found in the following chapter.

FOOTNOTES

¹_{Fred D. Reynolds and William R. Darden. "Intermarket Patronage: A Psychographic Study of Consumer Outshoppers," <u>Journal of Marketing</u>, October 1972, p. 50.}

²Ibid.

³William J. Reilly. <u>Methods for Study of Retail Relationships</u>. Austin: The University of Texas, Bureau of Business Research, Monograph, No. 4, 1929.

⁴P. D. Converse. <u>A Study of Retail Trade Areas In East Central</u> <u>Illinois</u>, Urbana: University of Illinois, Bureau of Economic and Business Studies, No. 2, 1943.

⁵George Schwartz. <u>Development of Marketing Technology</u>. Cincinnati, Ohio: South-Western Publishing Co., 1963, p. 11.

⁶_{Barry Mason.} "Retail Market Area Shape and Structure: Problems and Prospects." <u>Advances in Consumer Research</u>. Ed. Mary Jane Schilinger. Chicago: University of Illinois at Chicago Circle, 1975, p. 173.

[']Donald Thompson. "Future Directions of Retail Area Research." Economic Geography, Vol. 42 (1966), p. 6.

⁸Robert O. Herrman and Leland L. Beik. "Shopper's Movements Outside Their Local Retail Area." Journal of Marketing, Vol. 32 (October, 1968), p. 47.

⁹John Thompson. "Characteristics and Behavior of Out-Shopping Consumers." Journal of Retailing, Vol. 47 (Spring 1971), p. 74.

¹⁰Fred D. Reynolds and William R. Darden. "Intermarket Patronage: A Psychographic Study of Consumer Outshoppers." <u>Journal of Marketing</u>, Vol. 36 (October, 1972) p. 51.

¹¹Ibid., p. 52.

¹²John Thompson. "Characteristics and Behavior of Out-Shopping Consumers." Journal of Retailing, Vol. 47 (Spring 1971), p. 77.

¹³Robert O. Herrman and Leland L. Beik. "Shopper's Movements Outside Their Local Retail Area." <u>Journal of Marketing</u>, Vol. 32 (October, 1968), p. 51.

¹⁴Ibid., p. 52.

¹⁵Fred D. Reynolds and William R. Darden. "Intermarket Patronage: A Psychographic Study of Consumer Outshoppers." <u>Journal of Marketing</u>, Vol. 36 (October, 1972), p. 52. ¹⁶Wesley C. Bender. "Consumer Purchase-Costs: Do Retailers Recognize Them." Journal of Retailing, Vol. 40 (Spring 1964), p. 2.

CHAPTER III

METHODOLOGY

Cause and effect relationships can seldom be viewed as a simple relationship. The real problem of motivational research is to analyze and identify the variety of interrelated factors which culminate in a particular action. A model which contains these factors has been defined for outshopping. The testing of the validity of these factors as part of the model now becomes the problem. The methodology explained in this chapter was designed to test the hypotheses which were developed by an expansion of the objectives stated in Chapter I. These hypotheses are:

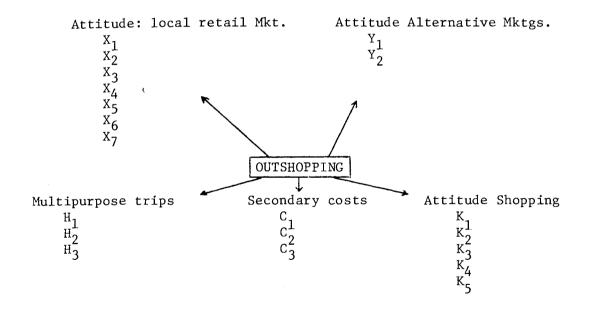
- (1) As the opinion toward Stillwater shopping improves, the number of outshop purchases decreases.
- (2) As the attitude toward shopping in general improves, the number of outshop purchases increases.
- (3) As the attitude toward alternative markets improves, the number of outshop purchases increases.
- (4) As the willingness to incur secondary cost increases, the number of outshop purchases increases.
- (5) As the willingness to expand the purpose of the trip increases, the number of outshop purchases increases.
- (6) The independent index variables will explain more of the outshopping behavior than the individual elements of the indices.
- (7) The model of outshopping behavior explains more of the outshopping behavior than it's independent index variables.

These hypotheses are linked into a model framework, which is designed to

explain out-of-town shopping.

Each of the independent variables consists of individual elements. The local attitude is comprised of individual concepts toward local selections, prices, services, etc. Secondary costs consists of concepts of the value of gasoline, time and frustration. It is these individual inputs which give the marketing manager insight into the decision process of the intermarket purchase. The framework for consumer's outshopping decision (Figure 1) is one of the primary objectives of this research, but identification of marketing variables which the manager can influence is also important.





SAMPLE

The survey was distributed to residents of Stillwater, Oklahoma. The city involved has a population of approximately 31,000 year round residents. It is the home of Oklahoma State University which has an

residents. It is the home of Oklahoma State University which has an enrollment of 17,000 students. Stillwater has a wide variety of retail stores, but is located within 80 miles of two major cities which are both over a quarter million in population.

The block statistics for Stillwater were summed and a random sample of 30 locations was selected from the city limits. These locations were the site of cluster sampling. Certain blocks were eliminated that were known to be of high student density. The instrument was then given to six households within each designated block. The households chosen were to be a cross-section of that block. If no one was home, or the time was inconvenient, the interviewer made a return call at some other time. After two calls, the field worker was allowed to select an alternative residence. Single students were excluded from the sample. An alternative home was selected if the respondent was ineligible.

The surveyer could either leave the questionnaire to be answered and picked up later or wait for the respondent to complete it in his presence. The surveyer was not allowed to explain the questions or probe for answers. In total, one hundred eighty questionnaires were returned. Of these questionnaires, nine were discarded because of incomplete responses.

The survey began on the fourth day of November, 1974. Interviewing was completed by the fifteenth of the same month.

QUESTIONNAIRE DESIGN

A direct structured technique was used in designing the questions. There was one dependent variable, twenty-two independent variables, and twelve demographic questions. These are explained below (see Appendix A for a complete questionnaire).

Dependent Variable

Although several dependent variables were tested, the dependent variable of prime concern was outshopping. The participant was asked to respond to this question:

How many times have you made purchases of \$5 or more outside of Stillwater since August 1?

It was necessary to place a minimum on the size of purchase, so as not to record insignificant data. There was no precedent note in the literature and five dollars appeared to be reasonable. The time boundary was set at August 1st, so as to give the consumer a full quarter (3 months) to draw on for his answers. It was felt that a longer time period was too long for the consumer to accurately recall. The respondent was asked to mark one of five categories which range from none to more than six out-shop purchases.

Independent Variables

Twenty-one independent variables were asked to gauge some opinion or belief that the consumer held about outshopping. One of these questions was a broad, general opinion question which was also used as a dependent variable to test the sub-model of local attitude. The respondents were asked to mark a six point multidimensional scale which ranged from highly disagree to highly agree. Because of the six point scale, the participant was allowed variation in response, but not indifference. Since the questions, which have been defined as elements of the independent variables that explain outshopping, are measured on a six point scale, the independent variables were considered to be the sum of these elements. For example, if a consumer responds to all three of the secondary cost questions with highly agree, scores of six, his total score would be eighteen, and his perception of cost would be greater than if he had a score of seventeen.

Demographic variables

There were twelve demographic variables. These were included in the questionnaire in order to provide a socio-economic profile of the sample. These included the respondents' sex and marital status, the head of the households, age, education, and employment, and family, residence, income and motor vehicles owned.

These questions were asked in a structured format. An exception was occupation which was an open-ended question.

STATISTICAL MODEL

After the data was collected, the questionnaires were coded and placed on computer cards. Various statistical tests were made using the Statistical Analysis System.¹⁷ Frequency tables were generated and correlation coefficients were calculated for all variables. This data was then categorized with respect to the model framework.

It is hypothesized that the motivation to outshop is based on the combined predispositions noted as independent variables. (Figure 1) These variables are in turn a function of their respective elements. Mean scores for the various levels of purchase behavior were calculated and correlation coefficients were used to test the first six hypotheses concerning outshopping and the individual variables. The model for outshopping behavior was tested by the use of regression analysis with Attitude-local, Attitude-shopping, Attitude-Alternatives, Secondary cost and Multipurpose trips being entered as independent variables. Outshopping purchases was the dependent variable.

FOOTNOTES

¹Barr, James Anthony and James Howard Goodnight. <u>Statistical</u> <u>Analysis System</u>. Raleigh, North Carolina: Department of Statistics, North Carolina State University, 1972.

CHAPTER IV

RESULTS

The first step in analyzing the research data was to develop frequency distributions and mean statistics. The purpose was to check for validity of the sample and see if there were any obvious discrepencies in the collected data. The next step was to test each of the independent variables, (Attitude-local, Attitude-shopping, Attitudealternatives, Secondary cost, and Multipurpose trips), for any general tendencies regarding out-of-town purchases. This analysis included a test for the individual contribution to outshopping for each of the independent variables' elements. Finally, the outshopping behavioral model was tested through the use of regression analysis.

OUTSHOPPING BEHAVIOR

The frequency of trips outside Stillwater and outshopping purchases are shown in Tables III and IV. Outshopping is the key research variable listed; however, the trips' measure was included in order to indicate the mobility of the population. As would be expected in a college town, the sample was rather mobile in that less than 10% had not left Stillwater in the previous three months, while over 60% had made more than five trips during that same time period. The data indicates that the residents of Stillwater are highly mobile both in shopping and general travel. Comment should be made here that there was no indication of failure to purchase on the trips or if the trips were

TABLE III

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Trips	Frequency	Percent
None	16	9.4
1-5	50	29.2
6-10	42	24.6
11-15	25	14.6
16-20	19	11.1
More than 20	19	<u>11.1</u>
	171	100.0

TRIPS OUTSIDE STILLWATER

TABLE IV

OUTSHOP PURCHASES

Purchases	Frequency	Percent
None	29	17.0
1-2	.52	30.4
3-4	35	20.5
5-6	6	3.5
More than 6	49	28.6
	171	100.0

used for multiple purposes, although both search success and cost-sharing through multipurpose trips are studied later.

Only 17% of the respondents had not shopped out-of-town in the three month period studied, and 62.6% had shopped three or more times during that same period. Both of these statistics are comparable with the earlier findings in the field. John Thompson found only 16% of his samples were non-outshoppers and Herrman and Beik had a slightly higher 29%. Reynolds and Darden's "frequent outshoppers" were 21% of their population, while 52% of this study's respondents averaged one outshopping purchase each month. There are discrepencies in time measurement, as has been pointed out, but his data tends toward the conclusion that outshopping in Stillwater is more prevalent than the other areas studied.

The number of purchases are distributed within the categories rather evenly; however, there was one exception, the category of 5-6 purchases. There is the possibility that at higher levels of purchasing that the memory could not distinguish between the number of purchases, and the respondent marked the higher frequency. Therefore, for the statistical analysis and the remaining summary tables, the last two categories were collapsed into one. The category would read "more than four purchases" and would have a frequency of fifty-four respondents which would be 32% of the sample population.

The demographic data is reported in Appendix C. Since the purpose of this report is not to give a demographic portrait of the outshopper, it should suffice to say that the sample was diverse in nature and representative of the local residents. This diverse sample provides a

broad scale of life styles and opinions. Therefore, the statistical inferences should be applicable on a broad scale.

As mentioned in the earlier chapters, the outshopping behavior model consists of five independent variables. It has been hypothesized that each of these variables, with the exception of Attitude-Local will vary directly with the frequency of outshopping. The local attitude is expected to be inversely related to out-of-town purchases.

Table V presents the mean scores of the independent index variables for the various levels of outshopping behavior. Of the five variables, only Attitude-Alternatives, Secondary Cost, and Multipurpose Trips show any general tendencies as hypothesized. With minor exceptions, the mean scores of the aforementioned variables increase with each higher level of outshop purchasing. That is, as one is willing to incur secondary costs, use multipurpose trips, or perceive successful search at alternative shopping areas, the number of purchases will increase. The index variables measuring local attitude and chopping in general had erratic mean scores and on the surface failed to explain outshopping behavior. Formal statistical analysis is needed to qualify all of the above.

ATTITUDE AND OUTSHOPPING VARIABLES

Mean statistics and correlation coefficients were calculated for the various independent index variables and their elements. The purpose was two-fold. First, the relative influence of each input element were of interest. By looking at each of them, the researcher can tell the contributing elements. Second, by breaking the index variables into their components, the validity of the index measurement can either be accepted or rejected. The index is a cumulative evaluation tool

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consisting of specifically defined elements which measures various components of the independent variable.

TABLE V

MEAN SCORES OF INDEX VARIABLES FOR VARIOUS OUTSHOP PURCHASE LEVELS

	Index Variables					
Purchases	Attitude	Alternatives	Shopping	Multipurpose	Cost	
None	28.58	6.37	18.34	8.72	9.86	
1-2	29.17	6.88	18.67	9.09	9.26	
3-4	27.71	8.42	26.48	11.11	10.28	
More than 4	27.58	8.87	19.20	13.85	12.25	
Grand Mean	28.26	7.75	18.33	10.97	10.53	

Attitude-Local

The consumer's attitude toward the local retail market was developed as an index variable which consisted of seven elements, (price, selection, styles, quality, personnel, store hours, and store attractiveness). The scores for these elements were summed, and this sum was the measure of that individual's attitude.

The research hypothesis proposed stated that if the individual's general attitude toward local shopping was good, he would not be inclined to shop elsewhere. The data does not support the hypothesis (Table VI).

The number of purchases and the mean attitude scores do not show any relationship. The correlation coefficient calculated for this variable is only .082, which is not significant at the .05 level. To explain this relationship, or rather lack of a relationship between the local attitude and outshopping, the mean scores and correlation coefficients for Attitude-Local index elements are given in Table VII. The elements were expected to have an inverse relationship with outshop purchases. Five of the seven elements correlated negatively with purchases. However, only three are significant and one of them has a positive correlation. The elements, in general, provide no support for out-of-town purchases.

TABLE VI

OUTSHOP PURCHASE VERSUS LOCAL ATTITUDE (Mean Scores)

Outshop Purchases	Local Attitude
None	28.58
1-2	29.17
3-4	27.71
More than 4	27.58
Grand Mean	28.26
Correlation Coefficient	082

TABLE VII

OUTSHOP PURCHASE VERSUS ELEMENTS OF INDEPENDENT INDEX VARIABLE, LOCAL ATTITUDE, THEIR MEAN SCORES

Outshop Purchase	Variable Elements						
	Price	Selection	Quality	Style	Personne1	Hours	Attractive Stores
None	3.37	4.00	4.25	3.82	3.72	4.55	5.00
1-2	4.00	4.07	4.57	4.73	3.65	4.36	3.84
3-4	3.02	3.97	3.54	4.97	3.57	4.40	4.22
More than 4	3.54	3.67	3.,85	4.05	4.36	4.58	3.50
Grand Mean	3.54	3.91	4.07	4.40	3.87	4.47	4.01
Correlation Coefficients	041	094	~ .171**	009	148**	022	287*

* significant at the .01 level ** significant at the .05

Previous research in this area had noted that selection was the key to whether an individual was an outshopper. However, in this case selection did not correlate with out-of-town purchases at any significant level. In fact, only quality of goods, training of personnel, and attractiveness of stores were significant at any appreciable level. There may be a trade off between the questions that depict retail goods. That is quality of goods, selection and styles may be interrelated, but the failure of styles and selection to have an impact on purchases behavior places doubt on the reoccurring complaint of shoppers about the lack of merchandise from which to choose.

Another interesting finding is that the correlation for attitude toward personnel is positively correlated. That is, the more the consumer outshops, the higher his opinion of the local retail personnel. This is contrary to expectation. One possible explanation for this finding is that the same personal attention is not given the consumer when he outshops that he receives when he shops in his local retail market. Therefore the consumer is encouraged to shop locally because of the personal attention he receives.

While these points are of interest, this analysis falls short of explaining the local variables and their contribution to a general attitude toward the local market. If the local attitude index does not explain outshopping, then does the general opinion toward the local market have an effect?

To help analyze the local attitude dimension, a measure of general opinion was asked in the form of the question, "How satisfied are you with local shopping?" Again, it was expected that the opinion of local shopping would be inversely related to outshopping behavior, the

reasoning being that if the consumer was staisfied, he would curtail his search.

Outshop purchases and general opinion had a negative correlation of 0.179 as expected and was significant at the .05 level. The relationship explains the behavior to some extent, but researchers may need to adjust their perceptions of image and shopping behavior.

The elements which were used for the formulation of the local attitude index were correlated with general opinion (Table VIII). Selection, attractiveness of stores, and the quality of goods had the highest correlation statistics. Each of these, along with the Attitudelocal index were significant at the .001 level. It would be assumed that these elements would correlate positively with the general opinion, which they did, but the relative low correlation of the element price is of some interest. Prices were a primary reason for outshopping for many of the respondents in earlier research. But, it's low correlation lead one to believe that complaints about prices are of the general variety, i.e., prices are bad everywhere.

The fact that general opinion plays such a minor role in determining shopping behavior leads one to believe there are other more significant factors. The remainder of this work is an analysis of some of those factors.

Attitude-Alternative Marketing Areas

The index measuring the consumer's perception of alternative markets consists of two elements. There is the ability to find what they want and their attitude toward disappointment. These elements are concerned with the ability of the consumer to find what he wants and his fear of

being disappointed. Outshopping is expected to vary directly with the former and inversely with the latter. If there is a high concern for the risk involved, the consumer will avoid taking that risk. This approach is bourne out by the research findings.

TABLE VIII

CORRELATION COEFFICIENTS GENERAL OPINION AND ATTITUDE INDEX ELEMENTS

Attitude Index Element	Correlation with Opinion
Attitude Index	.531*
Price	.216**
Personnel	.143
Selection	.561*
Attractive Stores	. 454 *
Styles	.176**
Quality	.460*
Hours Open	.254*

* .0001 level of significance

** .01 level of significance

Table IX shows the mean values for the index variable, Alternatives and each of its elements. As was hypothesized, the elements were related to the purchase behavior. The index variable had a higher correlation statistic than either of the elements, and in this case proved to be the better measure of outshopping behavior.

TABLE IX

OUT-OF-TOWN PURCHASES VERSUS INDEPENDENT INDEX VARIABLE SHOPPING ALTERNATIVES AND ITS ELEMENTS, MEAN SCORES AND CORRELATION COEFFICIENTS

Out-of-town Purchases	Index Variable	Variable Elements		
	Alternatives	Find	Disappointed#	
None	6.37	3.41	2.96	
1-2	6.88	3.32	2.96	
3-4	8.42	3.97	4.45	
More than 4	8.87	4.40	4.47	
All Purchases	7.75	3.81	3.93	
Correlation Coefficients	. 393*	.255**	.334*	

* significant at the .001 level

** significant at the .05 level

scores were reversed so that the sum of the elements would show
 an index for alternative market areas

The positive correlation indicates that as the consumer sees a chance for successful search, he is more likely to buy outside the local retail market. The implication of this has its strongest impact in the areas of search behavior and advertising. The knowledge of a bargain or of a needed good is basic to the individual's motivation to extend himself and incur the extra cost of outshopping.

Attitude-shopping

The enjoyment of shopping is measured by the summing of five elements to form the index variable, Shopping. The elements which were summed were designed to measure a range of shopping attitudes (enjoyment, savings seeing products, buying, social).

The independent variable was developed so as to explain those persons who were willing to search regardless of their success or the cost they incurred. It would be expected that the more **o**ne enjoys shopping, the more out-of-town purchases he would make because of more diverse stores.

Of the five elements and the index variable, only one was significant at the .1 level. (Table X) The lack of significance should not be discouraging. This variable has little empirical background, and the possibility of testing a superior model within this frame is entirely feasible. The possibility that the topic could be expanded to incorporate other variables is significant in itself.

Secondary Cost

The independent variable, secondary cost, was designed to measure the consumer's predisposition to incur the added expense of time, money and effort when making the out-of-town purchase.

It was hypothesized that as these costs, both individually and as a sum increased, the number of out-of-town purchases would decline. This is basic to any economic literature. The increase in the cost of a good will lead to a lessening of demand for that good. What is measured in this research is not actual cost of travel, but more significantly the consumer's perception of these costs.

TABLE X

OUT-OF-TOWN PURCHASES VERSUS INDEPENDENT VARIABLE INDEX SHOPPING ATTITUDE AND ITS ELEMENTS, MEAN SCORES AND CORRELATION COEFFICIENTS

Out-of-town Purchases	Index Variable		Varia	ble Elemer	nts	
	Shopping	Enjoy	Bargins	Things	See	New
None	18.34	3.06	4.34	3.20	3.75	3.96
1-2	18.67	3.07	4.03	3.42	4.42	3.71
3-4	16.48	3.14	3.80	2.62	3.68	3.22
More than 4	19.20	2.90	3.72	3.61	4.63	4.30
All Purchases	18.33	3.03	3.94	3.28	4.22	3.84
Correlation Coefficients	.036	040	144*	.047	.120	.084

*significant at the .1 level

The mean statistics and correlation coefficients for these variables when compared with frequency of out-of-town purchasing are shown in Table XI. The reluctance on the part of the non-**eu**tshopper to accept additional cost can be readily seen. Each of the variables show some level of significance at the .05 level or above with the composite index possessing the highest correlation.

TABLE XI

OUT-OF-TOWN PURCHASES VERSUS INDEPENDENT INDEX VARIABLE SECONDARY COST AND ITS ELEMENTS, MEAN SCORES AND CORRELATION COEFFICIENTS

Out-of-town Purchases	Index Variable		Variable Elements	5
	Cost	Time	Gas	Effort
None	9.86	3.06	4.06	2.72
1-2	9.26	2.92	4.32	2.01
3-4	10.28	3.14	3.91	3.22
More than 4	12.25	4.03	4.74	3.47
All Purchases	10.53	3.35	4.33	2.85
Correlation Coefficients	.351*	.259**	.143	.284**

* significant at the .0001 level

** significant at the .001 level

The R statistic for the index variable is in sharp contrast to that of gas. In fact, the relative lack of influence of gas when compared with any of the other variables seems surprising when one considers the significant increases in the price of gasoline. Time and "other" secondary cost variables correlate well with out-of-town purchases and explain more than gasoline. Therefore, the cost of gas is important, but the consumer is more concerned with the time he wastes and the frustration he may incur when considering shopping out-of-town.

Multipurpose Trips

The independent variable, multipurpose trips, was designed to analyze the possibility of sharing the secondary costs with other tasks during the trip. The elements of this variable are cost-sharing by the use of social events, doctors or business appointments, or a basic inclination to travel.

The use of multipurpose trips could reduce the travel cost and their allocation toward a shopping trip and have a subsequent influence on buying behavior. Therefore, it was hypothesized that as one was inclined to combine trip purposes the number of purchases would vary accordingly.

Table XII clearly points out that the use of multipurpose trips is a principal determinant in a person making out-of-town purchases. Each of the elements and the index variable are significant at the .0001 level, and the index has the highest level of correlation. It seems clear that the consumer tries to combine out-of-town purchases

with other trip functions, and in this way he minimizes the secondary costs of time and gas.

TABLE XII

OUT-OF-TOWN PURCHASES VERSUS INDEPENDENT INDEX VARIABLE MULTIPURPOSE TRIPS AND ITS ELEMENTS MEAN SCORES AND CORRELATION COEFFICIENTS

Out-of-town Purchases	Index Variable	v	ariable Elements	
	Multipurpose	Social	Appointment	Travel
None	8.72	2.25	3.00	3.55
1-2	9.09	2.61	3.42	3.05
3-4	11.11	3.62	3.57	3.91
More than 4	13.85	4.09	4.74	5.01
All Purchases	10.97	3.24	3.80	3.87
Correlation Coefficients	.518*	.443*	.339*	.402*

*significant at the .0001 level

ANALYSIS OF OUTSHOPPING MODEL

The behavior model which was constructed in the literature review and reiterated at the beginning of Chapter III was placed in a regression model. The independent variables of Attitude---local, Attitude---shopping, Attitude---alternatives, Secondary cost, and Multipurpose trips were entered against the dependent variable, out-of-town purchases, in the stepwise regression.

In the univariate analysis of prior sections, multipurpose trips had the highest coefficient of determination for the independent variables. The R^2 was .268. It was expected that there would be a composite effect among variables such that the regression model would have a higher coefficient of determination than any of the independent variables.

The composite or additive effects might take many forms. For example, individuals who had a high regard for the local market might also have found the alternative to be rewarding. Another possibility is that the frequent traveler may outshop, but yet regard the cost for out-shopping to be too high. There are several senerios possible for trade-off situations. It was, therefore, reasoned that the variables were additive and there would be greater explanation by use of the model.

The results for the regression are shown in Table XIII. The variables are listed in the order they entered the model. Multipurpose trips entered the model first. This was as expected, in that multipurpose trips had the highest R statistic in the correlation calculations. There may be some inter-correlations between the variables. That would explain Secondary costs late entry into the regression model.

The coefficient of determination, R^2 , increases only slightly after the entry of the first variable. The final R^2 was .325. While the R^2 is not large, it does offer more explanation than any individual variable by itself. The assumption of linearity possibly had an adverse effect, but the model approach is a definite improvement over previous

behavioral attempts at describing outshopping behavior. The low explanation points out the need for added work in the field.

TABLE XIII

ANALYSIS OF INDEX VARIABLES AND OUT-OF-TOWN PURCHASES STEPWISE REGRESSION

999				
Index Variables#	Beta Value	Statistics	Cumulative R^2	F Value
Multipurpose Trips	0.110	.0001	0.268	
Alternatives	0.094	.0087	0.284	19.99*
Attitude	0.031	.0093	0.312	
Secondary cost	0.047	.0706	0.325	

listed in the order of entry

* significant at the .0001 level

CHAPTER V

SUMMARY AND CONCLUSIONS

This paper has addressed the literature of intermarket patronage and from the literature, developed a framework for the study of consumer behavior. In conjunction with this, an attempt was made to bridge the gaps between the micro- and macro-analytic literature by the development of a behavior model from the macro-literature. Finally, the model was tested to determine how well it could explain outshopping behavior.

The literature review and its organization produced the desired framework so that theoretical gaps could be covered. The conversion of the basic gravitational variables into behavioral terms allowed the researcher to draw upon the literature of the macro field to give credance to the behavioral hypothesis. The framework that the review develops and the hypothesis from that frame permitted the researcher to audit the motivational structure of the outshopping market.

For this research, that andit is in the form of the behavioral model and its independent variables. Each successive step of the model explained more of the consumer's behavior than the previous step. The various indexes, on the whole, were better predictors of outshopping behavior than the elements, and the behavioral predictors of outshopping behavior than the elements, and the behavioral model proved to explain more than any of the independent indexes. Therefore, each of the objectives of the research were accomplished.

Implications

The results of the research have both theoretical and practical implications. The development of the framework and the bridging of the theoretical gaps will permit researchers to combine the two fields of intermarket patronage. The hope would be that various researchers would continue to build on the framework and begin to expand the research in the areas of image and search behavior. The model and its variables have revealed valuable implications in these areas.

The local attitude was bound to have less effect on the consumers decision to outshop than hypothesized. The individual elements also failed to explain purchase behavior. The lack of explanation of selection and price leads to the conclusion that local image has been an influence on a person's outshopping decision than other factors. Thus, it would seem that the flow of consumers to alternative retail markets can not be altered by these image variables.

With regard to the image that the local store projects, the store should continue to maintain the image of an attractive efficient facility and they should maintain personnel who are concerned with the consumer. It was found that the shopper, who shops locally and is there because he wants to be, is concerned with receiving service with his purchase.

The attitude of the consumer toward shopping in general failed to correlate with out-of-town shopping. This lack of correlation would be contributed to the ability of the consumer who enjoys shopping to be pleased wherever he shops. The variable did not tap any significant relationship. The psychological rewards that the consumer gains when he travels were either insignificant or were not measured adequately. Therefore, this variable must either be revised or incorporated into another variable.

The consumer's attitude toward alternative markets was measured by his perception of successful search at those markets. The measure showed the consumer was definitely inclined to out shop when they held a positive regard for alternative markets. That is when they perceived that their search at these other markets would be successful. The implications are that the outshopper is accessible through advertising and that as he is rewarded by his search patterns, he will continue to search. Therefore, the manager would need to reinforce that search pattern.

Secondary costs were found to be significant in the consumer's decision to outshop. The consumer's primary concern was found to be in travel time and other secondary costs such as parking and frustration. The cost of gasoline for these trips was of significant concern, but not as highly correlated as the other elements. The consumer is, therefore, conscious of these added costs and would take note of suggestions that would reduce these costs. Consumer's reduce cost in various ways.

The reduction of costs can be seen with the high correlation of multipurpose trips and outshopping. The use of multipurpose trips to chare cost reinforces the highly used concepts in site location that flow of traffic and accessibility are of considerable influence on buying behavior. This work would suggest that stores or shopping centers should be located in close proximity and with easy accessiblity to other large attractions such as hospitals. The store's facilities

should be coordinated with the activity periods of such facilities. That is, shopping centers located near stadiums should be open on game days.

Future Research

There is a great deal of work which can be done in the field of intermarket patronage. The work done in this paper has just scratched the surface on the field of consumer motivation for intermarket patronage. Some possible areas of research are:

- 1) An expansion of the behavioral model,
- 2) Refinement of the measurement of local image and its individual elements,
- 3) Evaluation of the general shopping attitude and the consumers perception of rewards for shopping,
- 4) The inclusion of a particular type of good in the model of search,
- 5) Segmentation of various markets and the consumers perception of each satisfying his shopping needs.

There are many other areas which can be researched within the frame developed. The behavioral frame lends itself to the logical evaluation of behavior and with this approach a systematic evaluation can be achieved.

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APPENDIX A

Questions Classified By

Variables Tested

Attitude toward the local market

Prices in Stillwater are out-of-line. Stillwater salesclerks are poorly trained. Stillwater merchants offer good selections. Stillwater stores are attractive places to shop. Stillwater merchants do not offer the later styles. Stillwater stores offer good quality for the price. Stillwater stores are rarely open when I want to shop.

Attitude toward shopping

Shopping in enjoyable and exciting. A person can save a lot of money by shopping around for bargains. I have better things to do than shop. I like to see a lot of different styles and models before I buy. I like to buy new and different products.

Attitude toward alternative marketing areas

In shopping I know what I want, and I know I can find it in the bigger cities. I often shop out-of-town only to be disappointed and not purchase anything.

Secondary costs

Out-of-town shopping always saves me money, even after the cost of traveling. When you consider travel time, it takes too long to shop out-of-town. The cost of gasoline makes any shopping trip too expensive to be worthwhile.

Multipurpose trips

Whenever I have an appointment in a bigger city, I go shopping. When in a big city for a social **ar** business trip, I generally make some planned purchases. We seldom travel outside of Stillwater.

APPENDIX B

QUESTIONNAIRE

November 12, 1974

Dear Consumer:

I would like your cooperation in filling out this questionnaire. This is a study in consumer behavior. The survey is short and simple. Each questionnaire will be strictly confidential. Your responses will be used only in combination with other people's answers.

When you have finished, please place the questionnaire in the envelope supplied and seal it. The researcher will stop by shortly and pick up the sealed envelope. Please keep in mind that the households participating in this study have been carefully selected. The sample is small and every response is important. Your answers are needed to insure the accuracy of the study.

Thank you,

Hayd Duesler

Floyd Duesler

Section I

Directions: For each statement, please check the appropriate box. Your answers will be used only in combination with other people's answers.

1. How many times have you made purchases of \$5 or more outside Stillwater since August 1?

None	()
1 - 2	()
3 - 4	()
5 - 6	()
More than 6	()

.

2. How many trips of any kind have you made outside of Stillwater since August 1?

None	()
1 - 5 trips	()
6 - 10 trips	()
11 - 15 trips	()
16 - 20 trips	()
More than 20 trips	()

Section II

Directions: Please circle the appropriate number with regard to your opinion to the following question. The higher the number circled the more satisfied.

I find shopping in Stillwater to be . . .

Very <u>Unsatisfa</u>					Very Satisfactory	
1	2	3	4	5	6	

Section III

Directions: For each statement, please circle the number that best describes your feelings about that statement. The <u>higher</u> the number, the more you tend to <u>agree</u> with the statement. The <u>lower</u> the number, the more you tend to <u>disagree</u> with the statement. You may think many statements are similar. Actually, no two are exactly alike, so be sure to circle one number for each statement.

Exam	nle	۰.
Trychin	P + c	

	Highly Disagree	Highly Agree
I agree with this statement.	1 2 3	4 🝊 6

Statement	Highly Disagree		Highly Agree			
Prices in Stillwater are out-of-line.	1	2	3	4	5	6
Shopping is enjoyable and exciting.	1	2	3	4	5	6
In shopping I know what I want, and I know I can find it in the bigger citi es .	1	2	3	4	5	6
Stillwater salesclerks are poorly trained.	1	2	3	4	5	6
Out-of-town shopping always saves me money, even after the cost of traveling.	1	2	3	4	5	6
A person can save a lot of money by shopping around for bargains.	1	2	3	4	5	6
Stillwater merchants offer good selections.	1	2	3	4	5	6
Whenever I have an appointment in a bigger city, I go shopping.	1	2	3	4	5	6
I have better things to do than shop.	1	2	3	4	5	6
I often shop out-of-town only to be disappointed and not purchase anything.	1	2	3	4	5	6
Stillwater stores are attractive places to shop.	1	2	3	4	5	6
I like to see a lot of different styles and models before I buy.	1	2	3	4	5	6
When in a big city for a social or business trip, I generally make some planned purchases.	1	2	3	4	5	6
Stillwater merchants do not offer the latest styles.	1	2	3	4	5	6

	Hig Disa	-				Highly Agree
When you consider travel time, it takes too long to shop out-of-town.	1	2	3	4	5	6
Stillwater stores offer good quality for the price.	1	2	3	4	5	6
We seldom travel outside of Stillwater.	1	2	3	4	5	6
I like to buy new and different products.	1	2	3	4	5	6
Stillwater stores are rarely open when I want to shop.	1	2	3	. 4	5	6
The cost of gasoline makes any shopping trip too expensive to be worthwhile.	1	2	3	4	5	6

Section IV

Directions: For each question, please check the appropriate box or write in the correct answers. Your answers will be used only in combination with other people's answers.

2. Marital Status is
 Married ()
 Single ()
 Other ()

If married, please check both boxes, otherwise check the appropriate box.

3. What are the ages of the

	Male Head	Female Head
18 - 24 years	()	()
25-34 years	()	()
35-49 years	()	()
50-64 years	()	()
65 or over	()	()

4. What is the employment status of the

	Male Head	Female Head
Employed Full Time	()	()
Employed Part Time	()	()
Unemployed	()	()
Student	()	()
Retired	()	()
Housewife	()	()

5. If employed full time what is the occupation(s) of Male Head (please specify) Female Head 6. What is the level of education of Male Head Female Head Grade School or less () () Some High School () () High School () () Some College () () College Graduate () () Post Graduate () () 7. Household Members Number of children under 6 Number of children 6-18 Number of adults 8. What is your family's annual income before taxes? Less than \$ 4,000 () \$12,000 - \$15,999 () \$4,000 - \$ 7,999 \$16,000 - \$20,000 () () \$8,000 - \$11,999 () Over \$20,000 () 9. Type of Residence Single family dwelling unit () Duplex () Apartment () 10. Do you rent or own the place where you live? () Rent () Own 11. How long have you lived in Stillwater? Less than 2 years () 5-7 years () 2-4 years () More than 8 years 12. How many motor vehicles does your family have? None () 3 () 4 1 ()) 2 ()5 or more (

APPENDIX C

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DEMOGRAPHIC DATA

DEMOGRAPHIC PORTRAIT

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Marital Status	Percent
Married	05 1
Single	85.1 4.2
Other	
other	$\frac{10.7}{100.0}$
	100.0
Children	
None	40.4
One	18.1
Two	28.0
Three	11.1
Four or more	2.3
	99.9*
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Income	
Less than \$4,000	8.0
\$4,000 - \$7,999	22.0
\$8,000 - \$11,999	22.7
\$12,000 - \$15,999	22.0
\$16,000 - \$19,999	15.5
\$20,000 and over	10.0
, - , ,	$\frac{100.0}{100.0}$
	20010
Type of Residence	
Single Family dwelling unit	81.7
Duplex	3.0
Apartment	15.4
	$\frac{100.1}{100.1}$ *
Financing of Residence	
Rent	72.2
Own	27.8
	100.0
Length of Residence in Community	
Less than two years	10.7
Two to four years	19.6
Five to seven years	22.6
Eight years or more	47.0
	99.9*
Motor Vehicles	
None	3.5
One	37.3
Тwo	50.3
Three or more	8.9
	100.0

*Error due to rounding.

	Percent
AgeMale Head 18-24 years	9.3
25-34 years	20.5
35-49 years	44.4
50-64 years	15.2
65 or over	10.6
	100.0
AgeFemale Head	
18–24 years	13.4
25-34 years	32.5
35-49 years	37.6
50-64 years	7.6
65 years or over	8.9
	100.0
EducationMale Head	
Grade School or less	3.4
Some high school	4.8
High School	19.7
Some College	27.2
College graduate	17.2
Post graduate	27.2
	100.0
EducationFemale Head	
Grade school or less	2.0
Some high school	3.3
High school	34.7
Some college	37.3
College graduate	18.7
Post graduate	$\frac{4.0}{100.0}$
	100.0
EmploymentMale Head	
Employed full-time	79.3
Employed part-time	2.0
Unemployed	
Student	8.0
Retired	$\frac{10.7}{100.0}$
	100.0
EmploymentFemale Head	
Employed full-time	29.0
Employed part-time	7.2
Unemployed	0.6
Student	9.0
Housewife	49.7
Retired	$\frac{4.5}{100.0}$
	T00.0