

A SURVEY OF THE POTENTIAL MARKET  
OF THE KANSAS STATE COLLEGIAN

by

Harry Joe Parsons

B. S., Kansas State College  
of Agriculture and Applied Science, 1949

---

A THESIS

submitted in partial fulfillment of the  
requirements for the degree

MASTER OF SCIENCE

Department of Technical Journalism

KANSAS STATE COLLEGE  
OF AGRICULTURE AND APPLIED SCIENCE

1950

## TABLE OF CONTENTS

INTRODUCTION.....	1
THE METHOD OF RESEARCH.....	3
Framing the Questionnaire.....	8
Instructions for Interviewers.....	11
Interviewing Problems.....	14
TABULATION AND RECORDING.....	15
SUMMARY.....	32
ACKNOWLEDGMENT.....	34
REFERENCES.....	35

## INTRODUCTION

The survey presented herewith is an outgrowth of a serious need experienced as business manager of the Kansas State Collegian from June 1949 to June 1950.

This need was for a realistic measure of the actual value of the Collegian market that is made up of student readers. Day by day contact with advertisers who were undecided as to the amount of advertising space to use in the Collegian was stimulus enough to provoke a survey of the potential sales to be reached through the pages of Collegian advertising.

Since most advertisers plan to spend 2.5 to 3 per cent of their gross sales volume on advertising, it is necessary to have a basis for estimating the gross sales obtainable from reaching the Collegian market.

Not only is it desirable to have a measure of the potential total market buying reached by a newspaper, it is necessary to have a measure of the allocation of this figure in respective sums spent on items common to the average budget of the market population.

A measure of the effectiveness with which the medium reaches this market is another requisite. Points of assurance that the market sales can be commanded in a particular area by those advertisers doing business locally are vital in guiding the scheduling of advertising in the local media or local components of a medium. This study limits itself to the measurement of the effectiveness of the Collegian in reaching the student population and

consequently the sales potential within it.

The students of journalism who work on the advertising staff of the Collegian can serve as better advertising counselors with concrete information on the sales picture of the market. The measuring of student use of Collegian advertising will enable advertising advisers to improve their sales messages.

In addition to these aids, this effort will serve as a text to acquaint advertising students serving on the Collegian with the marketing function of advertising in aiding distribution and consumption of economic goods.

This material was gathered from the spring enrollment in 1950 of 6,404 students. This represents a near optimum size from the standpoint of longevity of reference for these findings of this research when future enrollment forecasts of the College are considered.

At the particular time of the survey a certain amount of transition, from the post-war ex-servicemen swelled enrollment, back to a normal population of typical college students, was underway. Allowance was made for the veteran receiving subsidization and interviewers extracted estimates of costs from individuals who might not be actually paying certain school costs. Married students were, as the questionnaire implied, to record only individual expenses.

The work was done to provide a useful guide for those needing advertising counseling. Since the Collegian has long stood as an integral part of campus life at Kansas State College, and it has an enviable business success, there was absolutely no

coercion in the study but a searching for the measurements needed to improve the efficiency of the advertising effort for both the medium and the accounts.

Beyond general information on conducting surveys this work is original. General references were used as guides for the study.

### THE METHOD OF RESEARCH

The information necessary for proper evaluation and measurement of the potential market of the Kansas State Collegian fell into the following basic questions:

1. What is the potential market sales figure?
2. How is it spent?
3. What is the Collegian influence?

Out of these basic problems grew the following study questions:

1. What is the prevailing opinion of the Collegian's worth?
2. How well read is the Collegian?
3. How well read is Collegian advertising?
4. How useful is Collegian advertising?
5. What percentage of the student expenditures are spent in Manhattan? Hometown? Other towns?
6. How is the money spent? For what items does it go? When do students shop?

The method selected to find these answers was a personal questionnaire designed for use in personal interview. This type of subject matter did not lend itself to other forms of survey work.<sup>1</sup>

---

<sup>1</sup> Albert B. Blankenship, Consumer and Opinion Research (New York: Harper and Brothers), 1943, p. 21.

There were four points of consideration in selecting the sample:

1. An adequate sample should be a true miniature of the universe of the total population which is to be sampled, and should give proportionate representation to all the characteristics found in that universe which may affect the problem.

2. An adequate sample must be large enough to provide subsamples of sufficient size to give accurate and measureable information for special study.

3. An adequate sample must not only yield the desired information but also provide a basis for the statistical measurement of its reliability.

4. An adequate sample should be so designed as to meet reliability requirements set up by the sponsor.<sup>2</sup>

Much consideration was devoted to point number one. Without benefit of census information or data of similar nature to provide economic, social, age, or religious classifications of the population, the method of sampling became a problem. To obtain an accurate sampling of the student population, all characteristics must be represented. But characteristics of the population were found to be generally undifferentiated. That is, student groups of one curriculum, class, school, or age at college manifested no significant differences from any other group. Individual differences numerous as the population were the pattern.

Chief division of the sample was to be the sex of the respondents. There were available no other controls of a group nature. But because personal interviewing lends itself to more rigid control an elaborate sampling device to insure randomness, the equal

---

<sup>2</sup> Myron S. Heidingsfield and Albert B. Blankenship, Market and Marketing Analysis (New York: Henry Holt and Company), 1947, p. 136.

chance of all parts of a population to be represented, was devised.<sup>3</sup>

With the aid of the college IBM office, an enrollment breakdown into men and women enrolled in any of the 90 college curriculums was obtained.

Dr. H. C. Fryer of the college mathematics department was instrumental in this plan. Five per cent of the enrollment of each curriculum was taken. This provided at least one person from each curriculum having 20 enrollees. Curriculums having less than twenty enrollees were a minority and left no significant portion of any school not sampled, (Table 1). Thus it was determined that 296 interviewees would make up the sample of the population to survey. This number included 238 men and 58 women. Five per cent of the total population of 6,404 students who were in school as of April 20, 1950, was 320 students. The sampling number of 296 was 4.6 per cent of the population.

In this plan of considering all curriculums certain biases were avoided. For example, by taking a survey with a control by schools, that is, say a certain number of interviews within the school of Arts and Sciences, a possible bias might develop if the interviewers contacted a majority of students enrolled in the curriculum of Business Administration and ignored the Physical Science students. Using the curriculum as a control for randomness a true miniature of the population universe was obtained.

These control efforts set up operating limits for the inter-

---

<sup>3</sup> Heidingsfield and Blankenship, op. cit., p. 92.

Table 1. Pattern of sampling.

Curr. no.	Curriculums to be sampled	No. of question- naires assigned		No. of question- naires returned	
		Women	Men	Women	Men
School of Agriculture					
102	Agriculture		12		6
104	Agronomy		3		3
106	Animal Husbandry		7		7
108	Dairy Husbandry		2		2
114	Agriculture (2 years)		4		4
116	Agricultural Administration		10		4
118	Agricultural Education		9		3
124	Floriculture and Ornamental Horticulture		1		0
126	Landscape Design		2		2
128	Milling Administration		2		2
132	Milling Technology		2		0
134	Soil Conservation		5		1
School of Arts and Sciences					
202	Art Adaptation	2		2	
204	English	3		3	
212	Speech	2	2	0	1
214	Economics		2		1
216	History and Government	2	3	0	3
220	Psychology	2	2	2	0
224	Sociology	2		2	
226	Teaching Certificate (non-degree)	1		1	
238	Zoology		1		1
240	Biological Science, Med. Tech.	3		3	
242	Biological Science, Pre-Med.		3		1
244	Business Administration	4	25	4	19
246	Citizenship Education (Institute of Citizenship)		1		1
248	Geology, Applied		2		2
250	Industrial Chemistry		2		2
252	Industrial Journalism	3	4	3	4
254	Industrial Physics		1		1
260	Physical Education (Men)		7		6
262	Physical Education (Women)	2		2	
266	Geology		5		5
270	Mathematics		1		1
276	Pre-Veterinary Curriculum (2 yr.)		6		5
School of Engineering and Architecture					
302	Agricultural Engineering		6		3
304	Architectural Engineering		7		6
306	Architecture (5 years)		12		6
308	Chemical Engineering		5		4



Table 1. (Concl.)

Curr. No.	Curriculums to be sampled	No. of question- naires assigned		No. of question- naires returned	
		Women	Men	Women	Men
310	Civil Engineering		10		10
312	Communication or Electronics Option		9		8
314	Electronic Power and Commercial Option		8		8
316	Industrial Arts		6		3
318	Mechanical Engineering		6		6
324	Industrial Option		3		0
326	Petroleum Production Option		3		3
328	Technical Option		3		3
School of Home Economics					
402	Home Economics General		7		4
404	Teaching		7		7
408	Home Demonstration Agent		2		0
410	Art		4		3
412	Child Welfare		2		2
416	Home Economics in Business		2		2
422	Dietetics and Institutional Management		3		3
424	Home Economics and Journalism		2		2
426	Home Economics and Nursing		2		0
School of Veterinary Medicine					
502	Veterinary Medicine		12		6
Graduate School					
602	Graduate Study for the M.S. degree	4	15	0	8
604	Graduate Study for the Ph. D. degree		3		0
Special students			1		0

viewers and thus gave basis to the statistical analysis. The designation, in this way, solved only one problem. In addition to framing a workable questionnaire, which will be taken up later, the problem of obtaining interviewers was a difficult one.

It was impossible to employ trained interviewers. Fortunately, three classes in the Department of Journalism had become acquainted with market surveys in their class work. These students were briefed on the survey, instructed in personal interview techniques, and each was given three questionnaires so marked as to indicate the sex and curriculum for each respondent they were to obtain. Each interviewer thus knew he was to see either a man or woman student enrolled in a specific curriculum as noted on their questionnaires. This procedure proved effective. It worked quite well in producing careful completions of 202 of the total 296 questionnaires assigned.

### Framing the Questionnaire

The questionnaire is the vital part of this type of research. The work on it was, perhaps, the greatest single effort.

With the basic questions in mind, the problem became how to best uncover the answers. The questions had to be simple, direct, and yet complete. Finally the questionnaire was condensed to six questions plus an itemization of the individual's budget per full year. (Form 1) Identification questions of sex and class in college were included at the end of the questionnaire. The latter question was discarded for study when it became apparent during tabulation that no significant correlations could be established. That is,

**COLLEGIAN MARKET SURVEY**

Form 1. A sample of the individual questionnaire used in conducting the survey.

Do you consider the Collegian a worthy part of campus life?

- yes
- no

Do you read the Collegian?

- daily
- twice a week
- once a week
- never

Do you read Collegian advertising?

- daily
- twice a week
- once a week
- never

Do you feel Collegian advertising is a useful guide in your buying?

- yes
- no

What percentage of your income going for merchandise and services do you spend in

- Manhattan
- hometown
- other towns

When do you do your shopping in Manhattan?

- beginning of week
- middle of week
- weekend
- holiday time
- any day as need arises

How much do you spend each year on the following items?

	MEN
<b>Clothing</b>	
Suits	_____
Topcoats, overcoats	_____
Hats, gloves	_____
Tuxes, tux shirts	_____
Slacks	_____
Jackets, sweaters	_____
Shoes, socks	_____
Shirts, ties	_____
Suspenders, belts, billfolds	_____
Underwear, pajamas	_____
<b>Food</b>	
Regular meals	_____
Extra meals, short orders	_____
Candy, ice cream, gum	_____
Drinks	_____
<b>Transportation</b>	
Bus, train fare	_____
Taxi, city bus	_____
Auto maintenance, operation	_____
<b>General</b>	
Cleaning, laundry	_____
Amusements	_____
Tobacco, cigarettes	_____
Musical supplies	_____
Toilet, shaving goods	_____
Barber shop service	_____
Books, school supplies	_____
Raincoats, rubbers, umbrellas	_____
Hardware, electric goods	_____
Jewelry	_____
Flowers	_____
Professional (Medical, optical, dental)	_____
Drugs (prescriptions, etc.)	_____
Telephone, telegrams	_____
Photography, cameras	_____
Sporting goods	_____
Gifts, not classified	_____
<b>Miscellaneous</b>	
Expenditures not itemized	_____
<b>TOTAL</b>	_____

	WOMEN
<b>Clothing</b>	
Dresses	_____
Fur, dress coats	_____
Hats, gloves	_____
Skirts, blouses	_____
Hosiery	_____
Jackets, sweaters	_____
Shoes	_____
Pajamas, robes, negligees	_____
Purses, bags	_____
Lingerie	_____
<b>Food</b>	
Regular meals	_____
Extra meals, short orders	_____
Candy, ice cream, gum	_____
Drinks	_____
<b>Transportation</b>	
Bus, train fare	_____
Taxi, city bus	_____
Auto maintenance, operation	_____
<b>General</b>	
Cleaning, laundry	_____
Amusements	_____
Tobacco, cigarettes	_____
Musical supplies	_____
Cosmetics, toilet accessories	_____
Beauty parlor services	_____
Books, school supplies	_____
Rain capes, galoshes, umbrellas	_____
Hardware, electric goods	_____
Jewelry	_____
Flowers	_____
Professional (Medical, dental, optical)	_____
Drugs (prescriptions, etc.)	_____
Telephone, telegrams	_____
Photography, cameras	_____
Sporting goods	_____
Gifts, not classified	_____
<b>Miscellaneous</b>	
Expenditures not itemized	_____
<b>TOTAL</b>	_____

I am:  Freshman  male  Sophomore  female  Junior  Senior

there were no evident differences that a senior woman spent more or less or bought different items than a freshman, sophomore, or junior woman. The amount spent in the three categories of locations did not vary between classes as groups.

A trial and error method was used in reducing the preliminary questions from twelve to six. With the aid of instructors in both major and minor fields, questions were established covering the desired information. Groups of 5 or 6 students were used to determine the most understandable of the questions. In one case it was found that three questions when pretested together were confusing by their overlapping nature. These questions were rewritten into one question.

Naturally the first of the six questions has little research value. It is of the "warming-up" nature intended to flatter the interviewee into a more lucid response with information necessary through the remainder of the questionnaire.<sup>4</sup> It must be remembered that general information of student buying habits, such as brand or style preference, was not stressed. Simply, measures of how much the students buy, when, and where they buy were considered important. This was the information to be useful in creating advertising efficiency.

The categories and classifications of the student budget were arrived at arbitrarily. A previous questionnaire was a guide and was found to be satisfactorily simple and comprehensive. In pre-testing, categories and classifications were proven generally

---

<sup>4</sup> Albert B. Blankenship, op. cit., p. 57.

easy to understand. A few exceptions were noted but adjusted in instructing interviewers.

### Instructions for Interviewers

Student interviewers were taken from class rosters of the cooperating journalism instructors, from the staff of the Kansas State Collegian, and a few volunteer journalism students. Groups were given instruction which greatly facilitated the survey. For the most part each interviewer was assigned three interviews with sex and curriculum designated for each respondent to be obtained. A record of assignments was kept so that a check could be made to determine if there were gaps in the sampled population sufficient to produce error. In all, persons in 54 curriculums were interviewed. Curriculums not sampled were either of insufficient enrollment for consideration or were handled by interviewers in an irresponsible manner. All the curriculums not sampled were well spread throughout the five schools of the college.

General instructions were given the interviewers concerning the techniques. They were not to coach any answers nor appear aggressive in their contacts. Each person was to explain the purpose of the survey and inform the intended interviewee that the information, once gathered, was confidential for no questionnaire was identified. Naturally, the interviewers were cautioned to convey a serious attitude in their questioning. They were to refrain from influencing any answers. Each questionnaire had to be filled out with a definite type of student. While no controls existed for selecting the individual from the group, each inter-

viewer was to select only one student at a time.

Interviewers were instructed to aid response to particular questions or items, without biasing answers, as follows:

"The first question, 'Do you consider the Collegian a worthy part of campus life?', is designed to establish rapport with the interviewee. We want to make the individual comfortable and willing to concentrate on answering the remainder of the questionnaire. It is often best done by complimenting his ego in asking his opinion. You may interpret the question, if the interviewee is puzzled, by paraphrasing it to, 'Do you feel that your college life is better because we have the Collegian?'

"In questions 2 and 3, the answers must be limited to one in each of the four choices in order to be tabulated. The interviewee must, in cases of doubt, check the answer he considers to be closest to his actual practice.

"Again in question 4, there can be only one answer. The term 'useful guide' may be interpreted to mean, does the interviewee think the Collegian advertising has at some time influenced or aided him in a decision to buy, or not buy, some merchandise during the year.

"On question five there is apt to be some hesitation because of the estimating nature of the phrasing. If so, it is suggested the interviewee return to its consideration after completing the budget itemization. The answer should be unbiased. Each respondent must estimate where he spends what percentage of his budget. Budget in this case being the amount of expenditure for merchandise and services in a year. The answers should be considered

approximations only. The respondent must estimate a division of 100% in the three categories given. Each estimate should be in multiples of 5 per cent.

"Question six, again, must be answered by checking one of the blanks provided. The respondent must check that one answer most nearly like his shopping habits.

"There are five general categories of the schematic budget in the questionnaire. In all, there are 36 blanks to be filled out. Each interviewee should be encouraged to fill out all the blanks possible. The values should be rounded off to even dollars.

"Some items, such as suits, overcoats, ladies' coats, etc., may be best accounted for by dividing the original cost by the number of years in use. An overcoat that cost \$60, three years ago, would be itemized as \$20 per year. Two suits that cost a total of \$100, say, two year ago, would be allowed at \$100 a year. Each item should be expressed as whole dollars.

"Under auto maintenance and operation, if a new car was purchased this past year, include that cost. This will give a picture of such a car market as exists locally.

"Phonograph records should be included under musical supplies, but the player would be listed under hardware and electric goods.

"Gifts, not classified, includes all the assorted novelties purchased as gifts, which do not come under other classifications.

"Each of you as interviewers may have particular problems and when any arise please check with me in the Collegian business office."

The journalism instructors, in most cases, handled this work as a class assignment, giving extra credit to those satisfactorily

completing the work.

The interviewing took place between May 1 and May 20, 1950. This was considered an ideal time to review annual expenditures. Annual, in this case, meaning a full 12 months and not the school year only. This was done because many purchases of clothing and other items made during the summer are intended for the school year and so are rightfully a part of the potential Collegian market.

One further precaution for legibility of the questionnaire was the use of a smooth finished, 60 pound, offset printing paper suitable for both pen and pencil use. The questionnaire was printed by the offset process. This was necessary as the interviewers were instructed to have the respondents write out answers on the questionnaire. The results of this precaution were greatly appreciated during the tabulation.

#### Interviewing Problems

The interviewers problems did not follow a consistent pattern of difficulty. The complaints ranged from inability to locate enrollees of the assigned curriculum to how to avoid "flippant" answers in the questionnaire. Along with locating appropriate students, it was difficult to locate respondents of the proper sex. In all cases, interviewers were cautioned again to persist in finding respondents as designated. Some complaint was made of individuals inclined to breeze through the questionnaire, noting only items easily calculated such as meals and clothing items. In most of these instances, interviewers reported they successfully held



the person to a more careful handling of the items. Some ill-considered questionnaires were returned but provision for these in statistical analysis offset their extreme tendencies. The mean arrived at per item, subjected to standard error, represents in every case a plausible amount.

#### TABULATION AND RECORDING

As the questionnaires were returned they were checked off on the master copy of assignments. At the end of the survey period, those completed questionnaires on hand were cross checked to show coverage of the sample population, numbered to represent their respective segments for any possible later correlations, and separated into groups of men and women.

Table 1 depicts the curriculums from which assignments were made and the representation in the returns.

The tabulation was handled as two separate operations. The questionnaire was actually two separate investigations. The first six questions were designed to measure opinion and habit. The budget itemization was to estimate merchandise and services purchased. Some correlation of the two tabulations relevant to the basic problems are detailed subsequently in this section.

Tabulation of the first section of the questionnaire was accomplished by code-card punching on standard statistical McBee Keysort cards. (Form 2.)

In order to answer the question of size of the potential market it was necessary to establish a mean total of expenditures as the budget of the average man and woman student respectively.

Form 2. A McBee Key-sort card used in coding and tabulating the general information questions.

PRINTED IN U.S.A.

7 4 2 1   7 4 2 1   7 4 2 1   7 4 2 1

16 15 14 13   12 11 10 9   8 7 6 5   4 3 2 1

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

FORM K568  
+ XE1568

Each budget item on the questionnaire was subjected to a statistical operation to determine the amount of standard error inherent in the sampling process. Each respondent's answers also were totaled and the findings were subjected to the same statistical measure of standard error.

The procedure used involved a tabulating of the sums spent per item as reported individually. For example: all the women respondents reported a sum spent on dresses. Each of the forty-four returns were entered on a calculator and were squared as entered so that upon completion of entry the total figure reported was available plus the sums of the squares of each amount entered. To determine standard error the operation involved squaring the total sum and dividing it by the number of sums reported. The result was then subtracted from the sums of squares to give the square of the sums of error within the limits of the returns.

This figure then was placed in the formula  $\frac{x^2}{N(N-1)}$  = Standard error. N being the number of responses per item.

This operation was repeated for each entry in the questionnaire budget. A total of 36 calculations were necessary for the women and a like amount for the men. Thus 72 runs through the questionnaires were made.

Table 2 records the findings of this procedure for the women. The means and standard error are rounded off to the nearest cents. Table 3 is the same but records the findings for the men respondents.

The results of the survey are answers to the basic problems. This research established:

Table 2. Tabulation of women's questionnaire budget.

Classification	No.:	Total expenditure reported	Mean	Standard error
<u>Clothing</u>				
Dresses	44	\$3,312.00	\$75.27	\$7.41
Fur, dress coats	43	2,897.00	67.37	6.85
Hats, gloves	43	596.00	13.86	1.16
Skirts, blouses	42	1,526.00	36.33	3.39
Hosiery	42	448.00	10.67	1.12
Jackets, sweaters	44	1,079.00	24.52	2.46
Shoes	44	1,361.00	30.93	2.65
Pajamas, robes, negligees	42	617.00	14.69	1.51
Purses, bags	43	455.00	10.58	1.56
Lingerie	40	910.00	22.75	2.57
<u>Food</u>				
Regular meals	42	14,267.00	339.69	18.80
Extra meals, short orders	42	1,465.00	34.88	7.67
Candy, ice cream, gum	42	645.00	15.36	1.96
Drinks	42	1,015.00	24.17	8.96
<u>Transportation</u>				
Bus, train fare	35	1,597.00	45.63	7.81
Taxi, city bus	38	446.00	11.84	1.36
Auto maintenance, operation	4	835.00	208.75	114.79
<u>General</u>				
Cleaning, laundry	41	1,274.00	31.07	2.98
Amusements	42	1,495.00	35.59	6.52
Tobacco, cigarettes	18	709.00	39.39	6.65
Musical supplies	14	114.00	8.14	1.50
Cosmetics, toilet accessories	42	708.00	16.86	2.18
Beauty parlor services	23	234.00	10.17	2.31
Books, school supplies	44	1,952.00	44.36	2.57
Rain capes, galoshes, umbrellas	34	446.00	14.12	1.71
Hardware, electric goods	14	244.00	17.43	6.89
Jewelry	33	480.00	14.54	3.45
Flowers	13	147.00	11.31	2.62
Professional (Medical, dental, optical)	40	1,429.00	35.72	5.90
Drugs (prescriptions, etc.)	23	193.00	8.39	1.79
Telephone, telegrams	35	366.00	10.46	1.87
Photography, cameras	17	126.00	7.41	2.15
Sporting goods	19	286.00	15.05	4.28
Gifts, not classified	41	1,492.00	36.39	3.04
<u>Miscellaneous</u>				
Expenditures not itemized	36	4,862.00	135.05	23.58
Total	44	41,850.00	1178.41	70.05

Table 3. Tabulation of men's questionnaire budget.

Classification	No.:	Total expenditure reported	Mean	Standard error
<u>Clothing</u>				
Suits	156	\$8,607.00	\$56.17	\$2.48
Topcoats, overcoats	140	3,711.00	26.51	1.49
Hats, gloves	107	629.00	5.88	.57
Tuxes, Tux shirts	58	1,431.00	24.67	3.19
Slacks	153	5,109.00	33.39	1.98
Jackets, sweaters	150	3,215.00	21.43	1.29
Shoes, socks	156	3,755.00	24.07	.88
Shirts, ties	156	3,217.00	20.62	1.01
Suspenders, belts, billfolds	136	681.00	5.01	.03
Underwear, pajamas	149	1,566.00	10.51	.18
<u>Food</u>				
Regular meals	152	73,276.00	482.08	18.97
Extra meals, short orders	145	10,083.00	69.54	5.06
Candy, ice cream, gum	145	3,200.00	22.07	1.90
Drinks	142	8,344.00	59.76	4.95
<u>Transportation</u>				
Bus, train fare	85	3,486.00	41.01	6.09
Taxi, city bus	72	813.00	11.29	1.54
Auto maintenance, operation	98	27,960.00	285.31	32.20
<u>General</u>				
Cleaning, laundry	151	8,674.00	57.44	3.39
Amusements	155	14,174.00	91.44	8.79
Tobacco, cigarettes	110	7,301.00	66.37	20.10
Musical supplies	42	862.00	20.52	3.21
Toilet, shaving goods	154	2,578.00	16.74	1.08
Barber shop service	157	3,006.00	19.15	.67
Books, school supplies	130	7,758.00	59.68	3.14
Raincoats, rubbers, umbrellas	97	872.00	89.90	.06
Hardware, electric goods	90	2,190.00	24.33	4.92
Jewelry	101	2,670.00	26.43	3.14
Flowers	92	980.00	10.65	2.57
Professional (Medical, optical, dental)	129	4,391.00	34.04	3.36
Drugs (prescriptions, etc.)	85	850.00	10.00	1.23
Telephone, telegrams	137	2,633.00	19.22	1.64
Photography, cameras	79	1,084.00	13.72	1.68
Sporting goods	110	2,152.00	19.56	1.90
Gifts, not classified	131	5,551.00	42.37	3.24
<u>Miscellaneous</u>				
Expenditures not itemized	110	28,332.00	257.56	53.23
Total	158	255,472.00	1616.91	62.96

The potential market at Kansas State College in the year 1949-50 with 6,404 students enrolled was \$9,756,869.02. The 5,042 men accounted for \$8,152,111.52. The 1,362 women accounted for \$1,604,757.50.

These figures represent a projection of the average budget compiled from the return of 202 questionnaires, of which 158 were completed by men and 44 by women. This is 3.13 per cent of the male enrollment and 3.23 per cent of the female enrollment.

The average expenditure of \$1,616.91 per male respondent was projected to the potential total by multiplying that figure by the enrollment of 5,042, corrected to account for the fact that some items were not universally purchased. The average expenditure per female respondent was \$1,178.41 and was projected in the same manner for the 1,362 women enrolled.

Table 4 carries the projection in the same manner, for individual items for the women students. The sample taken proved an effective measurement of all items other than the auto maintenance category. In this case, it must be assumed the sample would have to be greatly expanded or that this segment of the market is so small as to be of little concern. The latter assumption seems valid when all other items adhere to a low percentage of error.

Table 5 carries the projections of annual averages for the men.

The tabulations for the men produced no wide variations in response. Certain items such as tux shirts and musical supplies ran proportionately low.

Table 4. Total expenditures by item with the grand total as market potential for female enrollment.

Classification	: Potential total : for the enrollment
<u>Clothing</u>	
Dresses	\$ 102,506.40
Fur, dress coats	89,662.15
Hats, gloves	18,446.20
Skirts, blouses	47,229.70
Hosiery	13,865.60
Jackets, sweaters	33,395.05
Shoes	42,122.95
Pajamas, robes, negligees	19,096.15
Purses, bags	14,082.25
Lingerie	28,164.50
<u>Food</u>	
Regular meals	441,563.65
Extra meals, short orders	45,341.75
Candy, ice cream, gum	19,962.75
Drinks	31,414.25
<u>Transportation</u>	
Bus, train fare	49,427.15
Taxi, city bus	13,803.70
Auto maintenance, operation	25,843.25
<u>General</u>	
Cleaning, laundry	39,430.30
Amusements	46,270.25
Tobacco, cigarettes	21,943.55
Musical supplies	3,528.30
Cosmetics, toilet accessories	21,912.60
Beauty parlor services	7,242.30
Books, school supplies	60,414.40
Rain capes, galoshes, umbrellas	13,803.70
Hardware, electric goods	7,551.80
Jewelry	14,856.00
Flowers	4,549.65
Professional (Medical, dental, optical)	44,227.55
Drugs (prescriptions, etc.)	5,973.35
Telephone, telegrams	11,327.70
Photography, cameras	3,899.70
Sporting goods	8,851.70
Gifts, not classified	46,177.40
<u>Miscellaneous</u>	
Expenditures not itemized	150,478.90
Grand total	\$ 1,604,757.50

Table 5. Total expenditures by item with the grand total as market potential for the male enrollment.

Classification	: Potential total :for the enrollment
<u>Clothing</u>	
Suits	\$ 274,649.37
Topcoats, overcoats	118,418.01
Hats, gloves	20,071.39
Tuxes, Tux shirts	45,663.21
Slacks	163,028.19
Jackets, sweaters	102,590.65
Shoes, socks	119,822.05
Shirts, ties	102,654.47
Suspenders, belts, billfolds	21,730.71
Underwear, pajamas	49,971.06
<u>Food</u>	
Regular meals	2,338,237.16
Extra meals, short orders	321,748.53
Candy, ice cream, gum	102,143.91
Drinks	266,257.04
<u>Transportation</u>	
Bus, train fare	111,238.26
Taxi, city bus	25,942.83
Auto maintenance, operation	892,235.51
<u>General</u>	
Cleaning, laundry	276,787.34
Amusements	452,292.34
Tobacco, cigarettes	232,974.91
Musical supplies	27,506.42
Toilet, shaving goods	82,263.98
Barber shop service	95,921.46
Books, school supplies	247,557.78
Raincoats, rubbers, umbrellas	27,825.52
Hardware, electric goods	69,914.81
Jewelry	85,231.61
Flowers	31,303.71
Professional (Medical, optical, dental)	140,116.81
Drugs (prescriptions, etc.)	27,155.41
Telephone, Telegrams	84,019.03
Photography, cameras	34,590.44
Sporting goods	68,670.32
Gifts, not classified	177,132.41
<u>Miscellaneous</u>	
Expenditures not itemized	904,074.12
Grand total	\$ 8,152,111.52



The effectiveness of the Collegian as an advertising medium may be measured by the response shown to the leading questions on readership and influence. All 44 women respondents considered the Collegian a worthy part of campus life. Of the men, only one reported no to this question. Projected, then, it must be assumed that only .63 per cent of the male students do not consider the Collegian a worthy part of campus life or that 99.37 per cent consider it so. The female enrollment, by this study, is found 100 per cent in favor of the Collegian.

Table 6. Response to question "Do you consider the Collegian a worthy part of campus life?" for both men and women.

Question	Yes		No	
	Women	Men	Women	Men
Do you consider the Collegian a worthy part of campus life?	44	157	0	1

This indicated support of the Collegian is born out when actual readership of both editorial and advertising matter is measured. The survey showed that there were no women reading the Collegian less frequently than twice a week. Thirty-six reported they read it daily while 8 reported reading it twice a week. The categories of once a week and never were not used. The findings here than are that 81.9 per cent of the women students read the Collegian Daily. Thus 18.1 per cent read it at least twice a week.

Table 7. Response of the women on Collegian readership.

Do you read the Collegian?	Daily	Twice a week	Once a week	Never
		36	8	

According to the sample of the male enrollment 81.65 per cent of the male population read the Collegian daily. Also there would be 15.19 per cent reading the Collegian twice a week, 2.53 per cent reading the Collegian once a week and .63 per cent who never read the Collegian.

Table 8. Response of the men on Collegian readership.

	: :Daily	: : Twice a week	: : Once a week	: : Never
Do you read the Collegian?	129	24	4	1

Specifically, the women respondents indicated that 9 per cent of their enrollment never reads Collegian advertising but the remaining 90.9 per cent read it once a week or more often. The most frequent readership being twice a week with 40.9 per cent of the women indicating this habit. Daily female advertising readers were shown to be 20.5 per cent of the population. The remaining 29.5 per cent read the Collegian advertising once a week.

Table 9. Response of the women on Collegian advertising readership

	: :Daily	: : Twice a week	: : Once a week	: : Never
Do you read Collegian advertising?	9	18	13	4

The advertising readership of the men varied some from that of the women. The largest readership category for the men was twice a week just as with the women, but the second group in number of respondents was the daily readers. The 64 men respondents

who reported reading the Collegian twice a week indicates that 40.51 per cent of the college male population have this habit. In the sample 55 men indicated daily readership. This figure projected indicates that 34.81 per cent of the total male population read the Collegian advertising daily. The sampled group had 30 respondents who read the Collegian advertising once a week. This indicated that 18.99 per cent of the total population have this habit. The men population has only 5.69 per cent non-readers of advertising as opposed to 9.09 per cent of the women population. Over all, 94.3 per cent of the male students at Kansas State College are readers of Collegian advertising.

Table 10. Response of the men on Collegian advertising readership.

	∴ ∴Daily	∴ ∴ Twice a week	∴ ∴ Once a week	∴ ∴ Never
Do you read Collegian advertising?	55	64	30	9

An interesting variation noted in this study is the discrepancy between advertising readership indications and the indication of personal evaluation of the advertising. Only 22.73 per cent of the women felt that Collegian advertising was a useful guide in their buying even though 90.9 per cent read the advertising once a week or more often. The male respondents indicated that 60.76 per cent of the male population find the advertising a useful guide, while 39.24 per cent are of the negative opinion.

Table 11. Response to Collegian advertising used as a guide in buying by both men and women.

	: Yes :		: No :	
	: Women :	: Men :	: Women :	: Men :
Do you feel Collegian advertising is a useful guide in your buying?	10	96	34	62

For convenience, and because of its different treatment, answers to question 5 will be detailed following the discussion of question 6.

Question six, concerning shopping habits of the campus population, revealed that most of the students shop as needs arise.

There were 32 women who indicated this habit, while 11 preferred the weekend and one person chose the middle of the week category. The beginning of the week and holiday time were not reported. This established that 72.73 per cent of the women enrollment shop any day as their needs arise. Thus, there would be 25 per cent shopping on weekends and 2.27 per cent shopping in the middle of the week.

Table 12. Response of the women on the time of the week they prefer to shop.

	:Beginning: : of week :	Middle : :of week:	Weekend: : time :	Holiday: :need arises	Any day as :need arises
When do you do your shopping in Manhattan?	1	11			32

Comparably, the male respondents reported as favoring the answer categories, generally, as did the women. One hundred fifteen men reported shopping any day. There were 33 who shopped on

weekends, 7 who shopped during the middle of the week, and 2 who preferred the beginning of the week. One person shopped during holiday periods. Projected, the sampling provides that 72.78 per cent of the men shop any day as needs arise. The second largest group, those favoring weekend shopping, constitute 20.89 per cent of the total. The middle of the week shoppers comprise 4.43 per cent of the whole. The remaining categories are the beginning of the week shoppers and holiday shoppers which represent 1.27 per cent and .63 per cent, respectively of the population.

Table 13. Response of the men on the time of the week they prefer to shop.

	:Beginning: : of week	Middle : :of week	Weekend:	:Holiday: time	:Any day as :need arises
When do you do your shopping in Manhattan?	2	7	33	1	115

Question 5, dealing with where certain percentages of expenditures are spent, was handled as an indicator of average expenditures in Manhattan, hometown, or other towns. All women respondents reported some percentage of expenditures for merchandise and services in Manhattan. The indicated average per cent so spent by the women enrollment is 50.80 per cent. They average making 30.11 of these expenditures in their hometown. Other towns would receive an average expenditure of 19.09 per cent of the money going for merchandise and services. In addition, 26 women reported making 50 per cent, or over, of their expenditures in Manhattan. For hometown spending, 12 women reported that 50 per cent or more of

their income was used. Five women reported likewise for expenditures in other towns. The total spending in this manner is one short of the total sampled because not all respondents had percentages in all categories. Or one person had less than 50 per cent in each of the three categories, (Table 14).

For purposes of studying the possible effect of advertising readership on local buying some interesting correlations were worked out. Women with expenditures in Manhattan, who read Collegian advertising daily spend an average of 56.11 per cent of their budget in Manhattan. Daily readers with expenditures in hometowns average 32.22 per cent spent in such manner. Those with purchases in other towns and daily advertising reading habits, spend 21 per cent in this way.

Those women buying some items in Manhattan and reading Collegian advertising twice a week spend an average of 54.17 per cent there. Those who spend something at home average 28 per cent there. Twice a week readers who spend something in other towns indicated an average of 33.75 per cent so spent. Once-a-week advertising readers with expenditures in Manhattan, average 49.23 per cent here. The once a week readers who spend some at home average 38.50 per cent there. Once a week readers spending in other towns average 27.50 per cent there.

The group of women never reading Collegian advertising but with expenditures of their budget in Manhattan would average 28.75 per cent spent here. The group never reading advertising but spending some at home would average 57.50 per cent there. Students spending in other towns who never read Collegian advertising

Table 14. Per cent expenditures for female advertising readers.

Locality	Reading frequency	Division of expenditures reported as percents																No. of respondents	Per cent of readership	Ave. per cent by location			
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80				85	90	95
Manhattan	Daily			1			1		1	2					2	1		1			9	56.11	
	Twice a week			1	1	2	2	1		4				1	2		1	1		2	18	54.17	
	Once a week	1	1		1	1			2	3	1					1		1		1	13	49.23	50.80
	Never	1				1	1			1											4	28.75	
Total			2	3	1	4	5	1	3	10	1	1	4	2	1	3			3	44			
Hometown	Daily	1	2			2	1			2								1			9	32.22	
	Twice a week		4	2	2	1	1		2	2					1						15	28.00	
	Once a week		2		1		1		2	1	1			2							10	38.50	30.11
	Never									1	1	1			1						4	57.50	
Total		1	8	2	3	3	3		4	2	6	1	2	2		1				28			
Other Towns	Daily			1		2	1	1													5	21.00	
	Twice a week	2	2	1			1		1		1	3	1								12	33.75	
	Once a week		3		2	1			3			1									10	27.50	19.09
	Never	1	1						1												3	18.33	
Total		3	7	1	4	3	1	1	4	1	4	1								30			100.00

would average 18.38 per cent in such a manner.

In table 15 are recorded the tabulations of the sampling of the male population. The average male student would spend 67.34 per cent of his budget in Manhattan, 25.10 per cent in his hometown and 7.56 per cent in other towns.

With the men, as with the women, certain percentage relationships were established in correlating the division of expenditures with readership habits.

The group of men reporting expenditures in Manhattan and who daily read the Collegian, spend locally an average of 67 per cent of their budget. The group reading the Collegian twice-a-week and buying locally distribute 69.15 per cent of their budget here. Once-a-week readers, buying locally, have an average disbursement of 65.51 in this manner. The group never reading Collegian advertising but buying locally spend an average 62.22 per cent of their income here.

Male students making some purchases in their hometowns and who daily read Collegian advertising average spending there 32.05 per cent. The group spending something at home and reading the advertising twice a week average 30 per cent in this way. Then the group spending some at home and reading the Collegian advertising once a week, spend an average of 26.73 per cent there. Those not reading advertising and making purchases at home average spending 45 per cent there.

From the sample, the selected group reading Collegian advertising daily and spending some in other towns, average 15.83 per cent there. Another group, reading the Collegian advertising



Table 15. Per cent expenditures for men advertising readers.

Locality	: Reading frequency	: Division of expenditures reported as percents																		: No. of respondents	: Per cent of readership	: Ave. per cent by location		
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90				95	100
Manhattan	Daily		1		2	3		2	3	1	6		3	1	4	8	4	4	5	2	6	55	67.00	
	Twice a week	1	1	4	1	2	1	2		4	1	6		4	8	7	2	11	5	5		65	69.15	
	Once a week	1	2		2		1			1		1	1	3	3	7			5	3		29	65.51	67.34
	Never				1	1					3					1			1		2	9	62.22	
Total		3	3	7	7	2	4	5	1	14	1	10	4	11	24	11	6	22	10	13	158			
Hometown	Daily	4	7	2	4	10	2		3		4		3		2	2			1			44	32.05	
	Twice a week	7	7	2	9	7	3	2	3		6		1	1	2		1	1	1			53	30.00	
	Once a week	4	3	2	3	3	5		1		2		2		1							26	26.73	25.10
	Never					2	1			1			1		1							6	45.00	
Total		15	17	6	16	22	11	2	7		13		6	2	3	3	3	1	2		129			
Other Towns	Daily	10	6		3	2				2		1										24	15.83	
	Twice a week	13	10	3	1	1	2			2												32	12.97	
	Once a week	8	3	2	2	2		2							1							20	16.50	7.56
	Never	1	2		1	1																5	14.00	
Total		32	21	5	7	6	2	2		4		1		1							81			100.00

twice-a-week, and spending some in other towns, averages 12.97 per cent by the practice. Once-a-week readers who shop in other towns average spending 16.50 per cent in such a manner. The group which never reads Collegian advertising and buys something in other towns, averages spending 14 per cent there.

These percentages are not proof-positive of correlations between Collegian advertising readership and local buying habits but a more favorable comparison is to be noted here than in other correlations. It might be called an indication of potential improvement.

#### SUMMARY

This thesis had three basic problems to be solved. First, it was desired to determine the potential market to be reached through Collegian advertising. Secondly, the influence of the Collegian on this market had to be determined. Thirdly, a measure of how the market budget is divided as to local, hometown, or other town expenditures, was needed.

The market potential was found to be \$9,756,869.02. Of this, the men accounted for \$8,152,111.52 and the women \$1,604,757.50.

The Collegian was considered by 100 per cent of the women as a worthy part of their campus life. Of the men, 99.37 per cent reported it a worthy part of their campus life, while .63 per cent reported negatively on this question.

As for readership, 100 per cent of the women reported reading the Collegian in the frequencies of twice-a-week and daily. The categories of once-a-week and never were not used. The men

students indicated 99.37 per cent readership with .63 per cent non-readership. Specifically, a better measure of influence in this case, the advertising readership among the women was 90.9 per cent with only 9.1 per cent not reading it. The men reported 94.3 per cent reading advertising in one of the three time categories and 5.7 were non-readers.

As to personal usefulness of Collegian advertising only 22.73 per cent of the women felt it helped them with their buying. However, the men reported that 60.76 per cent found the advertising a useful guide in their buying and 39.24 per cent did not.

The average man at the college was found to spend 67.34 per cent of his income for merchandise and services in Manhattan, 25.10 per cent in his hometown, and 7.56 per cent in other towns. The average woman at the college spends 50.80 per cent of her income for merchandise and services in Manhattan, 30.11 per cent in the home town, and 19.09 per cent in other towns.

Shopping habits of women ranged from 72.73 per cent shopping any day as needs arise to just 2.27 per cent shopping in the middle of the week. Twenty-five per cent reported they shop on weekends. The holidays and beginning of the week were not reported. The men indicated 72.78 per cent shop any day as needs arise with 20.89 per cent favoring the weekends. Also there were 4.43 per cent shopping especially during the middle of the week, 1.27 per cent shop during the beginning of the week, and .63 per cent shopping at holiday time.

Thus, is known the potential market, the measure of influence of the Collegian's effectiveness and the distribution, geographically, of the student dollar.

## ACKNOWLEDGMENT

This thesis could never have become a reality without the aid of many persons. The writer is indebted to Prof. C. J. Medlin, his major instructor, for his clarity in outlining the basic problems and his many valuable suggestions for procedure. Much credit is due Dr. H. C. Fryer, of the Department of Mathematics, for his excellent sampling and statistical procedures guidance. Also credit is due Prof. Ira Gorden for his advice on construction of the questionnaire and many helpful suggestions on tabulation. The writer appreciates the cooperation of Byron Ellis, Merrill Samuelson, and Gerard Leibman, of the Department of Technical Journalism for the use of their classes as interviewers. Also his appreciation goes to those students acting as interviewers. Prof. R. R. Lashbrook, Head of the Department of Technical Journalism, provided many helpful editing suggestions.

## REFERENCES

- (1) American Marketing Society, The Technique of Marketing Research, New York: McGraw-Hill Book Company, 1937.
- (2) Barnhart, T. F., Newspaper Sales Promotion, Minneapolis: Burgess Publishing Co., 1939.
- (3) Blankenship, A. B., Consumer and Opinion Research, the Questionnaire Technique, New York: Harper and Brothers, 1943.
- (4) Coles, J. V., The Consumer-buyer and the Market, New York: J. Wiley and Sons, 1938.
- (5) Dept. of Commerce, An Outline for Making Surveys, Economic Series No. 34, U. S. Government Printing Office, Washington, D. C.
- (6) Edwards, C. M., Retail Advertising and Sales Promotion, New York: Prentice-Hall, 1945 (revised).
- (7) Heidingsfield, Myron S., and Albert B. Blankenship, Market and Marketing Analysis, New York: Henry Holt, 1947.
- (8) Kleppner, Otto, Advertising Procedure, 3rd Ed., New York: Prentice-Hall, 1941.
- (9) Starch, Daniel, Advertising Principles, Chicago: A. W. Shaw, 1927.
- (10) Strong, Edward K., Psychological Aspects of Business, New York: McGraw-Hill, 1938.