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## The Evaluation of an Incentive Program Used to Recruit Health Club Memberships through Friend Referrals

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**THE EVALUATION OF AN INCENTIVE PROGRAM USED  
TO RECRUIT HEALTH CLUB MEMBERSHIPS  
THROUGH FRIEND REFERRALS**

by

**Michael D. Bowles**

**A Thesis  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Master of Arts  
Department of Psychology**

**Western Michigan University  
Kalamazoo, Michigan  
April 1981**

THE EVALUATION OF AN INCENTIVE PROGRAM USED  
TO RECRUIT HEALTH CLUB MEMBERSHIPS  
THROUGH FRIEND REFERRALS

Michael D. Bowles, M.A.

Western Michigan University, 1981

This study evaluated an incentive program used to recruit memberships through friend referrals in a health club. A multiple-baseline design was used to compare the relative number of referrals made per person in the incentive conditions to the number made in the no-incentive conditions. In the first incentive condition for the two groups involved, the changes in the mean number of referrals per person dropped from .317 and .295 to .129 and .029 under the no-incentive conditions and back up to .291 and .297 under the second incentive condition. In looking at the cost and revenues attributable to this incentive program it was found to have a cost-benefit ratio of 12:1.

## ACKNOWLEDGEMENTS

I would like to thank my parents, Charles and Pat Bowles, for their continual support and encouragement throughout my education. I would also like to thank Bill Heintzleman whose time and effort made this all possible. I would also like to extend my gratitude to Dr. Dale Brethower and Dr. Norman Peterson for providing me with assistance and suggestions throughout the course of this research, and to Mark Dean for whose guidance I am very grateful. Ultimately my thanks goes to Dr. Richard Malott who receives my admiration for his guidance, constructiveness, and influence in my education and life.

Michael D. Bowles

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## INTRODUCTION

There are several approaches to increasing organizational performance with varying costs associated with each. One approach to maximizing performance output is the implementation of an incentive system. An incentive system is defined as "plans or schedules for delivering rewards or bonuses," (Miller, 1978, p. 385). The operation of these systems involves rewards being contingent on behaviors with the assumption that behaviors will occur more frequently when rewarded and less frequently when not rewarded (Nord, 1975).

Nord (1975) used money as an incentive for teachers to decrease their rate of absenteeism in schools. Sick leave payments were reduced 62 percent by offering a "lottery" program whereby teachers with perfect attendance for the preceeding month became eligible for a \$50.00 bonus in a lottery drawing. Conoco ("Incentive schemes," 1978) reported an increase in "working man hours". Worker related accidents decreased 39% when points were given to workers with safe working records. Workers could use these points to purchase goods at the company store. Vredenburg (1956) reported that when using trading stamps the sales increased 29.5% in 30 chain stores and 27.5% in 19 grocery stores.

Monetary systems are relatively expensive but effective methods of increasing behavior while the systems using alternative strategies tend to be less costly. This study was an attempt to evaluate the use of monetary payoffs where the value of the incentives increased as desired behavior increased. It was done with an existing incentive



system for membership recruitment at a local health club.

## METHOD

### Subjects

People signing membership contracts to join a local health club in Kalamazoo during the time of this study served as subjects; they included 179 males and 176 females. Their ages ranged from approximately 18 to 55. The members signing contracts were assigned to one of two experimental groups, depending on which of the two managers they enrolled through. The subjects did not know the study was taking place.

### Staff

The staff consisted of two groups including one male manager who supervised three salesmen, and one female manager who supervised three saleswomen. The two staff groups generally alternated the days that they worked.

### Membership Incentives

The health club relied primarily on four strategies to increase the number of club memberships: radio advertising, local newspaper advertising, club-member referrals to the club, and walk-in customers. The club also offered its new members an incentive program developed to increase club memberships through friend referrals. The components of this incentive program included the following: (a) Current club members who refer new members to the club receive a \$10.00 gift cert-

ificate. (b) New members who refer three additional new members to the club within the first 30 days of their membership receive a free lifetime membership to the club as well as a \$10.00 gift certificate for referring each of the additional members. (c) Members increase the value of their gift certificate \$10.00 for every four additional members that they refer. (d) Club members chosen as "members of the month" receive a \$10.00 gift certificate. The staff gives one award each month to one male and one female member. Each staff group makes their decision based on the candidates attendance, attitude, membership referrals, and work progress etc. It is possible for a club member to receive this award more than once during the course of the year. (e) A male and female member chosen as "members of the year" each receive an all-expense paid trip to Las Vegas and various other prizes. The staff base their decisions on the same criteria as they do for members of the month.

#### Data Collection

Club policy required the staff manager to ask each new member how they heard of the club. This information was then classified by the manager as either radio advertising, newspaper advertising, club member referrals, or walk-in customers. If the new member was referred by another member, then the name of the person making the referral would be listed on a guest pass so that they would be given credit for the referral (Appendix A). The club manager transcribed this information to a daily sheet (Appendix B). The number of referrals relative to the number of new members each week served as the dependent variable.

### Experimental Conditions and Procedures

This study used a reversal within a multiple-baseline design. The use of the incentive program as a means of soliciting potential new members served as the first condition. During this time new members receive the appropriate incentive for referring additional new members to join the club. The removal of the incentive program served as the next experimental condition. The staff members were asked to omit reference to the incentive program when soliciting potential members. The reinstatement of the incentive program as a means of soliciting potential members served as the third experimental phase. All incentives were available to members in the incentive conditions for the duration of their membership except for the incentive that required new members to refer three additional members with the first 30 days of their membership in order to obtain a free membership. No incentives were available to members in the no-incentive conditions. Consequently this study only examined referrals within the new members first 30 days.

### Reliability

An independent observer measured the reliability of the salesperson's sales presentation. If, during the proceedings of the sales presentation, the salesperson failed to mention all of the incentives available to members, the observer recorded this as an instance of disagreement during the incentive conditions. During the no-incentive conditions if the salesperson mentioned any of the incentives available to members this was recorded as an instance of disagreement.

The observer measured reliability on 16 to 21% of the sales presentations for each group under each condition. No reliability was taken on the manager contracting the memberships, as it was presumed that the people who were listed on the daily sheets as having signed a membership contract did, in fact, sign a membership to the club.

Reliability was calculated by using the following formula:

$$\frac{\text{Agreements}}{\text{Agreements} + \text{Disagreements}} \times 100 = \% \text{ reliability.}$$

Following the experiment, the health club staff reported that they were unaware that a second observer had been monitoring their sales presentations, yet reliability was 94% for Group I and 97% for Group II, ranging from 82% to 100%.

## RESULTS

For the two groups the changes in the mean number of friend referrals for new members dropped from .317 and .295 under the incentive conditions to .129 and .029 under the no-incentive conditions and rose back to .291 and .297 under the second incentive conditions (see Figure 1). Data points indicate the number of referrals per person relative to the total number of people signing membership contracts during a given week. A list of new members and referees was made each week. By checking the names of the people making referrals against the people signing membership contracts within the previous 30 day period, the number of referrals per person could be determined. Data were calculated by determining the number of members who signed membership contracts during a given week and dividing that number into the number of referrals accumulated during the next 30 days that were attributable to those members who had signed contracts that week.

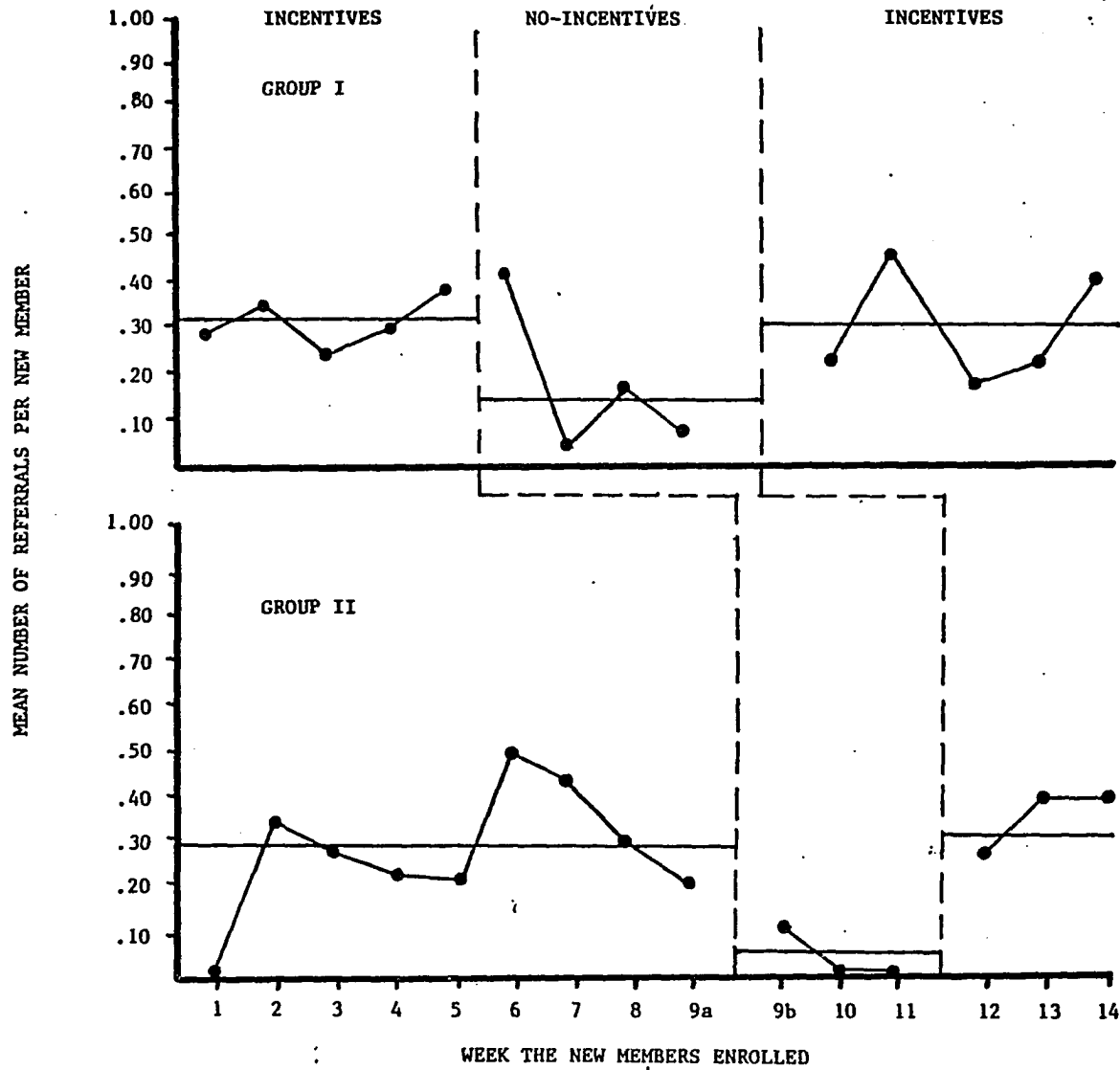
Figure 2 is a frequency distribution showing the number of days from the member's purchase of a membership contract to the time they referred their first new member. About fifty percent of the referrals were made within the first week of the new members contract.

A chi-square analysis examining the difference between the number of friend referrals signing contracts under the incentive and no-incentive conditions is significant at the .05 alpha level,  $\chi^2 = 5.033$ ,  $p < .05$ . The statistical analysis also indicates a significant difference in the number of friend referrals signing contracts under the incentive and no-incentive conditions for each of the two groups separately,  $\chi^2 = 7.16$ ,  $p < .05$  for Group I and  $\chi^2 = 10.89$ ,  $p < .05$  for Group II.

## FIGURE CAPTION

Figure 1. The number of friend referrals per person for each week of the experiment. Experimental conditions changed in the middle of week nine for Group II, therefore two data points were used. Horizontal lines indicate the mean for each condition.

WEEKLY NUMBER OF FRIEND REFERRALS PER PERSON

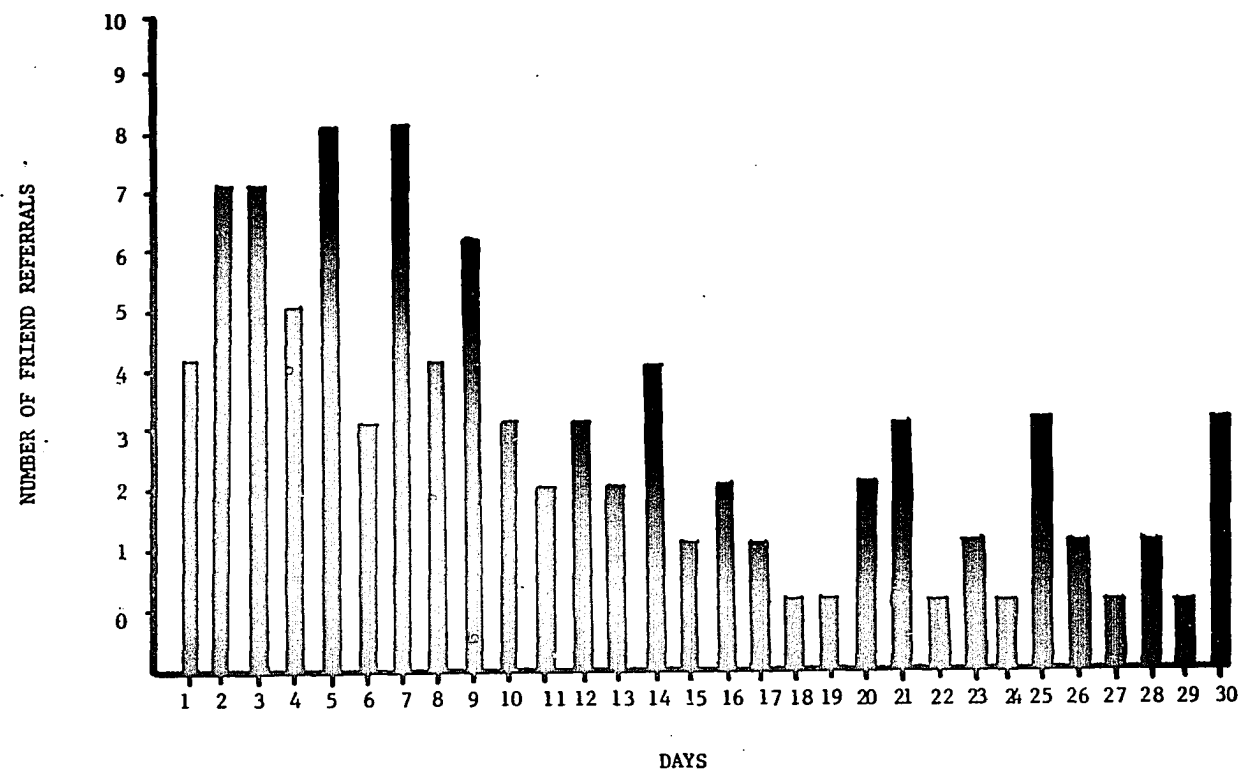




## FIGURE CAPTION

Figure 2. The number of days from the member's purchase of a contract to the time they referred a new member. These data include referrals made from both experimental conditions.

FREQUENCY DISTRIBUTION FROM  
CONTRACT PURCHASE TO REFERRAL



## DISCUSSION

The use of the incentive package significantly increased the number of referrals to the club. The largest payoff for club members occurred when they referred at least three additional members within the first 30 days of their membership. In doing so they would receive a free lifetime membership. However, the data indicate that only one person in an incentive condition achieved this, with most people only referring one additional member (Appendix C).

It should also be mentioned that this study concerned itself only with those referees who signed membership contracts. Consequently no data were taken on the number of referees who visited the club but who did not sign membership contracts.

### Cost-Benefit Analysis

In demonstrating the utility of this incentive program one should consider the income and costs. Membership contracts sold at three prices: \$200.00, \$250.00, and \$300.00, depending on the length and type of membership purchased. The estimated cost of operating the incentive program was approximately \$5000.00 per year. The health club sold approximately 1200 membership contracts per year. This number multiplied by the proportion of new members attributable to the incentive program<sup>1</sup> indicates that approximately 240 members per year sign membership contracts as a function of the incentive program. Multiplying 240 by the modal membership contract price of \$250.00 indicates that the revenue yielded attributable to the incentive program was \$60,000.00 per year.

Therefore, the cost-benefit ratio of this incentive program is  
 $\$60,000.00 \div \$5,000.00 = 12:1$ . (Appendix D).

#### Ethical Considerations

The managers expressed concern about the withholding of incentives for those members who signed contracts during the no-incentive conditions. Therefore they decided that, following the conclusion of this study, they would make the incentive program retroactive to those members.

#### Social Utility

At the time this study was implemented, management speculated that the rate of membership referrals would not decrease significantly if they were to discontinue use of the incentive program. However, with the help of this study, management has decided to continue using the incentive program.

In conclusion, the evaluation of this incentive program suggests that similar programs might be useful in organizations where the success of the program is partially contingent on the amount of revenues generated by new memberships such as clubs, magazine subscriptions etc.

## REFERENCES

- Incentive scheme overtakes worker accidents. International Management, 1978, 33, 19-20.
- Miller, L. M. Behavior management: The new science of managing people at work. New York: John Wiley & Sons, 1978, 385.
- Nord, W. Improving attendance through rewards. In K. N. Wexley, & G. A. Yukl (Eds.), Organizational behavior and industrial psychology, New York: Oxford University Press, 1975, 569-573.
- Vredenburg, H. L. Trading Stamps. Indiana University: Bureau of Business Research, 1956, 93.

## FOOTNOTES

<sup>1</sup>The following calculations were made to estimate the number of referrals attributable to the incentive program:

$$\text{referral rate} = \frac{\# \text{ referrals}}{\# \text{ new members}}$$

$$= \frac{11}{112} = .10, \text{ for the two no-incentive conditions.}$$

$$= \frac{73}{243} = .30, \text{ for the four incentive conditions.}$$

Referral rate in the incentive conditions =

referral rate not attributable to the incentives +  
referral rate attributable to the incentives.

If we assume that the rate not attributable to the incentives =  
rate during no incentive condition,

and if we rearrange the above equations, then:

Referral rate attributable to incentives =

$$\begin{aligned} & \text{referral rate during incentive condition} - \\ & \text{referral rate during the non-incentive condition} \\ & = .30 - .10 \\ & = .20. \end{aligned}$$

In order to calculate the total revenue generated per year by the incentive program, an average of the total number of membership contracts signed per year (1200) was used. Multiplying 1200 by the number of referrals attributable to the incentive program (.20) gives the total number of referrals per year attributable to the incentive program which is 240. This number is multiplied by the average cost of a contract (\$250.00) and

gives the total revenue brought into the health club as a function of the incentive program which is equal to \$60,000.00.

In order to calculate the cost-benefit ratio of the incentive program, the total revenue was divided by the cost of the incentive program (5,000.00). This indicates a 12:1 cost-benefit ratio for the use of the incentive program.

APPENDIX B

**LADIES...MEN...TRIM OFF EXCESS POUNDS  
AND INCHES THE QUICK, EASY WAY—  
REGARDLESS OF YOUR AGE**

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**VALID ONE VISIT PER GUEST, MUST BE  
OVER 18 YEARS OLD—AND ONLY UNDER  
THE COMPLETE SUPERVISION OF AN INSTRUCTOR**

**FULL PRIVILEGE GUEST PASS**

Fill In  
Name  
of Your  
Guest \_\_\_\_\_

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OR FITNESS ANALYSIS. Actually go through an entire  
program including use of Whirlpool, Sauna, Ultra-Violet  
Golden Tan Rooms plus use of more than \$200,000 worth  
of facilities and equipment FREE.**

Guest of \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_ Authorized by \_\_\_\_\_

**VOID IF NOT USED WITHIN 30 DAYS OF DATE ISSUED**



**APPENDIX B**

**DAY SHEET**

NEW MEMBER	DOWN PAYMENT	AMOUNT OF CONTRACT	DATE EXPIRES	AGE	SOURCE	GUEST PASS	SALE MEN
1.							
2.							
3.							
4.							
5.							
6.							
MEMBERS TODAY		GUESTS TODAY					

MEN				WOMEN			
BENEFICIAL-NAME	DATE JOINED	CHECK NUMBER	AMOUNT	BENEFICIAL-NAME	DATE JOINED	CHECK NUMBER	AMOUNT
TOTAL				TOTAL			

20TH CENTURY-NAME	CHECK NUMBER	AMOUNT	20TH CENTURY-NAME	CHECK NUMBER	AMOUNT
TOTAL			TOTAL		

DOWN PAYMENTS TODAY					
NAME	DATE JOINED	AMOUNT	NAME	DATE JOINED	AMOUNT
TOTAL			TOTAL		

DATE \_\_\_\_\_ DAILY REPORT AT \_\_\_\_\_ BY \_\_\_\_\_

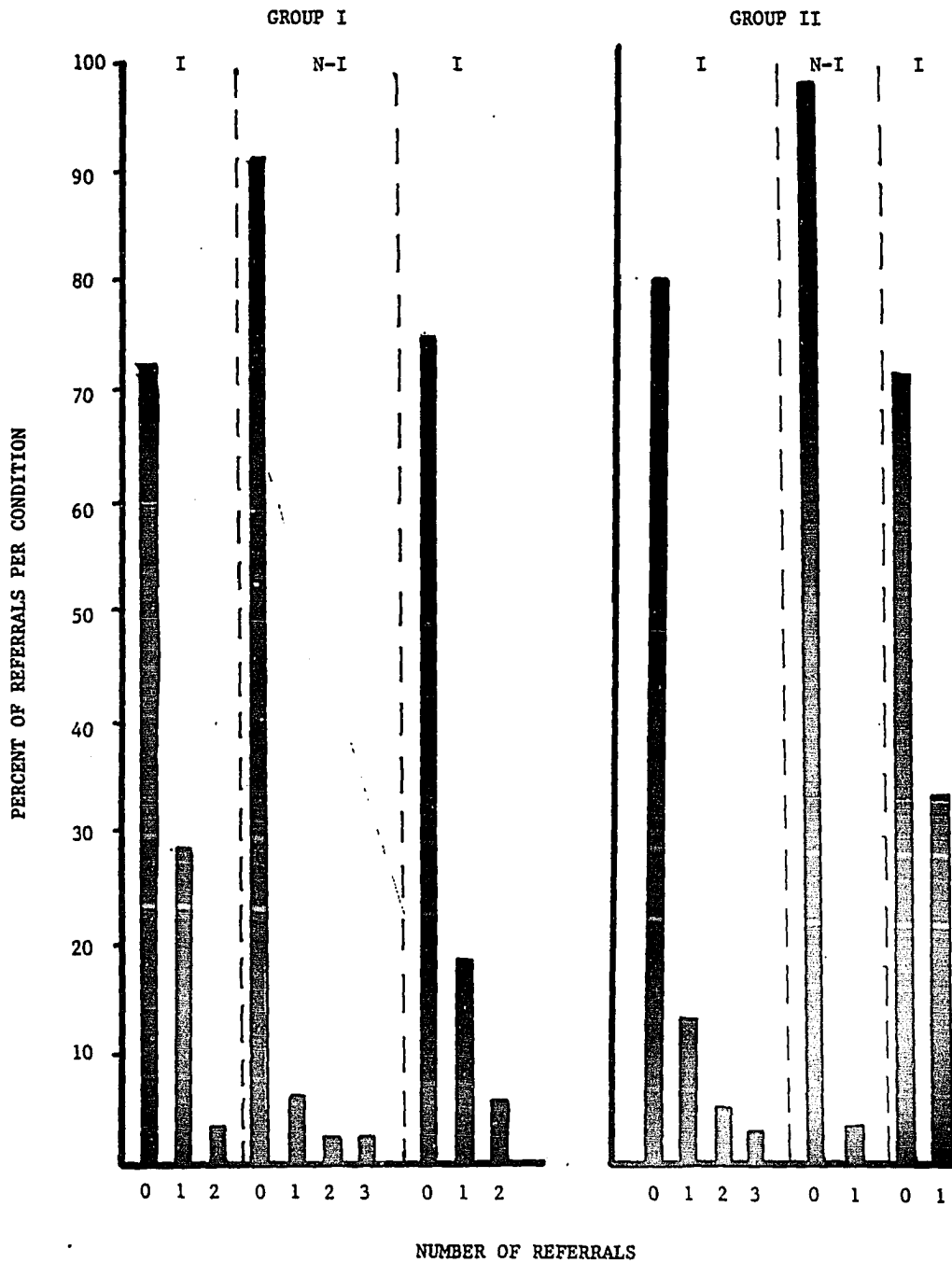
WOMEN CASH TODAY \_\_\_\_\_ MEN CASH TODAY \_\_\_\_\_

WOMEN TOTAL BANKED \_\_\_\_\_ MEN TOTAL BANKED \_\_\_\_\_

WOMEN WRITTEN \_\_\_\_\_ MEN WRITTEN \_\_\_\_\_

FIGURE CAPTION

Appendix C. The relative frequency of number of referrals made by members under each experimental condition. I--Incentives; N-I--No-Incentives. Numbers on the X-axis indicate the relative number of referrals per condition.



## APPENDIX D

There are advantages associated with the incentive program which cannot be calculated in monetary terms. First, by encouraging members to bring new people into the club through the use of the incentive program, the health club receives free and effective advertising (word-of-mouth advertising). This can be contrasted to typical, yet costly, sources of advertising such as newspaper and radio advertising. Second, word of mouth advertising increases the probability that the staff can make a sale. Referred customers are required to set up an appointment with the manager upon their initial visit. By scheduling appointments, the club manager can better schedule their time in order to accomodate the potential member. This decreases costs associated with staff management. A final source of cost effectiveness has to do with "free time". This is time given to the male and female member choosen as runners-up for the member of the year award. This incentive is a time allotment which the member can use when their contract expires, or it is time which they can give away to a non-member. Since most members who receive this free time have a long term contract with the club, they will usually give this time away. During the time that the person uses this free time at the club, staff members have the opportunity to sell the advantages and values of belonging to the health club. This makes the person who receives the free time a "high potential" customer while costing rhe club very little in expenditures.

## BIBLIOGRAPHY

- Chromy, J. R. and Horvitz, D. C. Use of monetary incentives in National Assessment household surveys. American Statistical Association Journal, 1978, 73, 473-478.
- Incentive scheme overtakes worker accidents. International Management, 1978, 33, 19-20.
- Jauch, L. R. Tailoring incentives for researchers. Research Management, 1976, 19, 23-27.
- Latham, G. P., and Dossett, D. L. Designing incentive plans for unionized employees: A comparison of continuous and variable reinforcement schedules. Personnel Psychology, 1978, 31, 47-61.
- Miller, L. M. Behavior management: The new science of managing people at work. New York: John Wiley & Sons, 1978, 385.
- Nord, W. Improving attendance through rewards. In K. N. Wexley, & G. A. Yukl (Eds.), Organizational behavior and industrial psychology, New York: Oxford University Press, 1975, 569-573
- Plowman, E. G. Incentive plans can be productive. Hand & Shipp Management, 1979, 20, 10.
- Robertson, D. H., and Bellenger, D. N. New method of increasing mail survey response: Contributions to charity. Journal of Marketing Research, 1978, 632-633.
- Vredenburg, H. L. Trading Stamps. Indiana University: Bureau of Business Research, 1956, 93.
- Wallace, E. C. How incentive plans can cut costs. Banking, 1978, 70, 26.