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Rewarding Good Attendance: A Comparative Study of Positive Ways to Reduce Absenteeism

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The Yoder-Heneman Personnel Research Award honors the reporting of innovative research in the personnel field. It is named for Dale Yoder, APD, PhD, and Herbert G. Heneman, Jr., APD, PhD, two of personnel management's most respected scholars.

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Numerous programs have been developed to control absenteeism, and a myriad of studies have been conducted on the subject (Steers and Rhodes, 1978). Nevertheless, absenteeism still represents a serious problem for many organizations. According to a survey conducted by the Bureau of National Affairs, Inc., 60 percent of all participating companies considered absenteeism to be their most serious discipline problem (BNA, 1985). Yet within every problem there lies opportunity. Absenteeism represented just such an opportunity for collaboration by two companies and a university research team.

Originally our research approach was to focus on examining the effect that absenteeism control practices had on employee attendance rather than trying to identify factors that cause absenteeism. The authors previously conducted a regional and national survey of absenteeism control practices (Scott and Markham, 1982; Markham and Scott, 1981) that was funded by the ASPA Foundation. Both surveys indicated that companies which recognized good attendance had lower absenteeism than companies that did not. These findings persuaded Kenneth H. Klein and Linda Neumann of the Balfour Co. to investigate the possibility of a new market for the company's recognition programs (Balfour has sold service recognition awards to industry for over 75 years). Neumann inquired about the possibility of conducting a more rigorous research program to evaluate the effects of personal recognition on absenteeism.

This was an opportunity to extend our past research on absenteeism by conducting a comparative field experiment that would pit several major attendance improvement programs against each other for a substantial period of time. We were most interested in positive attendance improvement programs because: (1) these programs do not involve sanctions or disciplines that are difficult to administer; (2) these programs specify desired employee behavior; and (3) these programs do not create other negative outcomes associated with punishment.

There has been a history of field experiments in absenteeism control (see Schmitz and Heneman, 1980). This research has most frequently focused upon positive approaches to absenteeism control such as job redesign, employee participation, attendance lotteries, employee

assistance programs and financial incentive programs (e.g., Pedalino and Gamboa, 1974; Wallin and Johnson, 1976; Orpen, 1978). Some of the shortcomings of these studies include the following: (1) usually only one type of attendance improvement program was implemented; (2) most programs did not last more than 16 weeks; (3) few designs used control groups for comparisons; and (4) the results of these experiments were compared with absence rates from months immediately prior to the experiment, thus allowing for an incorrect inference because of the lack of control for seasonal influences or national economic conditions (Markham, Dansereau and Alutto, 1983).

In order to design a study that would respond to these problems, an extensive year-long search was made to locate a company that would be willing to try a number of different attendance improvement programs over an extended period of time. The Maid Bess Corp. agreed to participate in the study because this research provided an opportunity to reduce their absenteeism rate, which averaged over six percent. Even though employees are not paid when absent, absenteeism cost the corporation over $700,000 annually in lost sales, overtime payments, added overhead and extra employees.

The basic purpose of this research was to conduct a field experiment in an organizational setting which would provide a simultaneous comparison of a variety of positive attendance improvement programs under similar conditions.

Research methods

The attendance improvement programs. Based on the literature and the feasibility of program implementation at the Maid Bess

Corp., the following attendance improvement programs were selected.

- *Financial incentive program:* A financial incentive program provided a $50 cash bonus at the end of the year for employees who had no absences. Employees who had one or two absences received a $25 cash bonus. During the course of the year no attempt was made to recognize individuals who were still eligible to receive the financial bonus.

- *Recognition program:* At a different plant, a personal recognition program was installed with the assistance of the Balfour Corp. Colleen O'Connell, marketing manager for Balfour, analyzed the work situation at Maid Bess and designed a unified, thematic program using posters, cards and awards. At the end of each quarter, employees with no more than one absence received a card signed by the manager notifying and congratulating them of this fact. Employees who had perfect attendance or who missed one or two days during the entire year qualified for a custom-designed piece of engraved jewelry.

- *Lottery program:* At another plant, a quarterly lottery program was instituted. The prize (a mantle clock or a portable television) was given at the end of each quarter. The value of each prize was approximately $200. If an employee had perfect attendance for the quarter, his or her name was entered twice in the lottery. If the employee had one absence, his or her name was entered just once for the drawing.

- *Information feedback program:* At one plant, an information feedback program was installed. In this program employees received absenteeism feedback once a month with their paychecks. This feedback indicated the employee's year-to-date absence record. No attempt was made to change the absence policy; no positive or negative connotation was attached to the information about absences.

A fifth plant (Control 1) was used because a survey had been administered to examine employee attitudes toward absenteeism and the attendance improvement programs. Although this questionnaire was not a program per se, it may have affected the absence rates (i.e., a "Hawthorne effect"). Therefore, to assess and control for the effects of the survey, only questionnaire data were collected at this fifth plant. The survey was administered at the same times as in the other plants.

A sixth plant (Control 2) was established from which only absence data were collected. The only time the plant was visited was to establish a procedure to collect the absenteeism data from employee records. These data were collected by the personnel assistant, who was informed that this information was being used for an experiment and was not an evaluation of management.

Research location. The Maid Bess Corp. has six "cut-and-sew" garment factories in southwestern Virginia and North Carolina. These plants are very similar in terms of work force, manufacturing technology and employment policies. Each plant operates independently; thus, there is little communication among employees of different plants. Plant sizes ranged from 149 to 400. There are approximately 1,800 employees in all of the plants, and about 94 percent of the employees are women. Turnover rates varied from 30 percent per year to 70 percent, compared to an industry average of about 65 percent. Employees are on a piece rate pay system.

Although they are guaranteed the minimum wage when hired and $3.75/hr. after one year, their average hourly wages are $5, with some workers earning up to $9 per hour.

There was an identical attendance control policy at each of these plants prior to the experiments. Employees were disciplined (and in some cases terminated) for excessive absenteeism. The absenteeism rate for each plant was calculated daily. It was computed by dividing the number of absentees (disregarding those on vacation, jury duty and layoff) by the total number on the payroll for that day. The six percent absenteeism rate at Maid Bess was moderate for this industry.

Administration of the study. The four attendance improvement programs were conducted at the same time: July 1983 through June 1984. The fact that the experiments lasted for a full year was very important for two reasons. First, from a methodological viewpoint this reduces the possibility that the results were attributable to seasonal variation, as noted by Cook and Campbell (1976: 277) or economic conditions (Markham, 1985). Second, it also provides a test of the endurance of the program, which is an important consideration from a practicing manager's perspective.

Results

Figure 1 shows the results of the treatments for the six plants during the experiment. For each program the average absenteeism rate for the prior two years is shown in Column 2, and the experimental period's rate is listed in Column 3. Column 4 contains the percentage change and the level of statistical significance for a one-way ANOVA

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with unequal cell sizes for the comparison of the experimental and matching previous rates.

Figure 2 shows employee responses to survey questions about absenteeism in general and the specific control programs. The responses to four questions are shown for each of the five plants where the questionnaire was administered. The questions are listed in Column 1. Column 2 indicates when employees responded to these questions. Wave I data were collected before the program was announced (July 1983); Wave II data were collected after the program had been in effect for six months (January 1984); and Wave III data were collected after the program had been in effect for a year (July 1984). Columns 3-7 indicate how the employees responded. Each question had six response categories ranging from "strongly disagree" to "strongly agree", and the tabled values are the percentages of those employees who agreed, strongly agreed, or somewhat agreed with the question. For example, in Column 4, Wave I, 53.7 percent of the employees agreed that "good attendance" was rewarded at the plant where the personal recognition program was implemented.

Personal recognition. At the plant where the personal recognition program was implemented, absenteeism decreased by 36.9 percent, which is the largest decrease of the four positive attendance improvement programs. This program cost approximately $10,000 to implement in a plant of 400 employees. Thirty employees (7.5 percent) received the award for perfect attendance, and 30 employees (7.5 percent) received the award for good attendance (one or two days absent). Absenteeism costs were reduced by over $58,000 in terms of direct labor costs.

The data in Figure 2 indicate that employee attitudes toward absenteeism also changed dramatically. Before the program started, only 53.7 percent of the employees believed that attendance was rewarded. After the program was implemented, 67.9 percent (Wave II) and 75.8 percent (Wave III) of the employees felt that attendance was rewarded. The survey indicates that a high percentage of the employees were aware of the attendance improvement program (88.5 percent and 92.2 percent), and that most employees liked the program (72.7 percent and 83.3 percent).

Financial incentives. The financial incentive treatment experienced

a non-significant decrease in absence from 6.35 percent to 6.04 percent. The total award cost of this program was $3,675 in a plant of approximately 400 employees. Fifty-seven employees (13.7 percent) received the award for perfect attendance that year, and 33 employees (8.0 percent) received the award for good attendance (one or two days).

The change in employee attitudes about absenteeism at this plant was different from the pattern at the recognition program's plant. Here employees believed that attendance was rewarded even before the program was implemented (72.1 percent). Employees knew about the program (78.8 percent and 83.7

Figure 1
FOUR ATTENDANCE IMPROVEMENT PROGRAMS AND FOUR CONTROLS

Program	Average of Previous Two Years' Rates	Experimental Rate	Percent Change
Personal Recognition	7.56	4.77	−36.9[a]
Financial Incentive	6.35	6.04	− 4.9 n.s.
Information Feedback	6.33	6.09	− 3.8 n.s.
Lottery	5.59	6.11	+ 9.3 n.s.
Control I: Survey Effect	4.22	4.24	+ 0.5 n.s.
Control II: No Treatment	5.23	4.54	−13.2[b]

[a] $p < .0001$
[b] $p < .01$
n.s. = Not significant.

Figure 2
PERCENTAGE OF POSITIVE RESPONSES BY PARTICIPANTS TOWARD ATTENDANCE CONTROL PROGRAMS

Questions	Survey Wave	Recognition	Financial Incentive	Information Feedback	Quarterly Lottery	Survey Control
Good attendance is rewarded here.	I	53.7%	72.1%	54.6%	42.0%	52.2%
	II	67.9	74.0	46.8	64.2	63.9
	III	75.8	81.7	40.6	59.3	59.9
I know about the new attendance program here.	I	—	—	—	—	—
	II	88.5	78.8	65.0	81.0	56.1
	III	92.2	83.7	61.8	81.0	59.2
I feel that the new attendance program has worked here.	I	—	—	—	—	—
	II	50.9	60.2	62.2	65.9	54.3
	III	74.6	66.7	56.2	66.6	53.4
I like the attendance program that was started in July.	I	—	—	—	—	—
	II	72.7	76.2	80.3	79.8	63.8
	III	83.3	75.6	77.0	86.3	65.8

Note: Positive responses were: Strongly agree, agree and somewhat agree. Each treatment (program) was at a separate facility and respondents answered the question in terms of program that was implemented at their plant.

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percent), and they indicated that they liked the program (76.2 percent and 75.6 percent). However, fewer employees indicated agreement that the program was working (60.2 percent and 66.7 percent) than employees who participated in the personal recognition program at the other plant.

Information feedback. The information feedback condition showed a non-significant reduction in absenteeism, from 6.33 percent to 6.09 percent. There was no cost for this program because it simply required giving employees periodic feedback about their absence rates. The plant had approximately 300 employees.

Figure 2 indicates that employee attitudes toward absenteeism changed markedly. However, this was in the opposite direction of the other attendance programs. Employee beliefs that attendance would be rewarded decreased during the course of the study (54.6 percent, 46.8 percent and 40.6 percent, respectively). Employees seemed to be less aware of this program than the attendance improvement programs at the other locations (65 percent and 61.8 percent).

Lottery. For the year, the plant with the quarterly lottery treatment showed a statistically significant *increase* in absenteeism, going from 5.59 percent to 6.11 percent. The program seemed to have no influence on absenteeism, except during the second quarter when the plant had a statistically significant decrease in absenteeism (14 percent). During this quarter, employees had the opportunity to select the prize. The plant had approximately 140 employees, and one employee won the award each quarter. Employees eligible for the drawing each quarter were: 54 for the first quarter (39 percent), 76 for the second quarter (54 percent), 60 for the third quarter (43 percent), and 62 for the fourth quarter (44 percent). Absenteeism costs were reduced by $650 during the second quarter, when the absenteeism rates were reduced. The total cost of this program was $800 for prizes for the year.

Figure 2 indicates that employee attitudes toward absenteeism changed. Only 42 percent of the employees believed that attendance was rewarded before the program was implemented. After the program was implemented, 64.2 percent (Wave II) and 59.3 percent (Wave III) of the employees felt that attendance was rewarded. Figure 2 also indicates that a high percentage of the employees were aware of the program (81 percent and 81 percent), and most employees liked the program (79.8 percent and 86.3 percent).

Control I (Survey). A non-significant change in absenteeism occurred at the plant where only questionnaire data were collected. It should be noted that absenteeism did decrease significantly during the first quarter (17 percent). This Hawthorne effect was in reaction to the administration of the survey and did not reappear during the subsequent quarters.

Control II (No intervention). At this plant, no survey or treatment program was implemented. However, unlike Control I, there was a significant decrease in absenteeism. We suspect that this reduction was due to production cutbacks, which resulted in layoffs.

Discussion

The data suggest that the recognition program had the most dramatic impact of all the programs in terms of reducing absenteeism, changing

employee attitudes and saving money. Although we rewarded only those employees with two days or less absenteeism in the recognition plant, attendance improved across the entire spectrum of employees. Many employees who previously had six to eight percent had four to five percent rates during the experiment. This improvement in attendance did not occur at the plant locations where the other programs were implemented.

A unique feature of this research is the simultaneous comparison of each attendance improvement program. Because the results indicate differences in the pattern of absenteeism and employee attitudes for the different attendance improvement programs, one has certain insights into why the programs may have had the effects that they did.

For example, one possible explanation for the positive results of the recognition program is that employees were responding to the perceived economic value of the award. If this were the case, it would seem that the results at the financial incentive plant would have been stronger. An alternative explanation for the success of the recognition program might be that it established a clear, specific attendance goal. However, both the financial incentive and the lottery program established goals; because these programs showed no effect, this alternative also seems unlikely. Another alternative is that the recognition program merely alerted employees to the importance that management placed on good attendance. This effect was isolated in the information feedback program, with no positive result, so this also seems unlikely.

Certain unique features of the recognition program may have contributed to its success. First, employees who had perfect or good attendance were publicly recognized each quarter by having their names placed on bulletin boards. In addition, a card was sent to the home of those with good attendance records. Second, this was a professionally designed program by the Balfour Co., and was customized for this plant. The employees truly seemed to be enthusiastic about the program because of the personalization of the jewelry award.

In Control Plant II, the significant decrease in absenteeism during the experiment was not anticipated. Regardless of the alternative explanations for this effect, it is possible that national unemployment

levels, inflation or other environmental conditions were such that absenteeism should have decreased at all plant locations. However, it also is possible that this control group had been contaminated by the plant manager's knowledge of what was happening at the other plants. Another possible explanation is that due to a reduction in work orders, employees at this plant recognized that they might lose their jobs and came to work to preserve their job security. Poor performers were laid off first.

Summary

In conclusion, the two strong points of this research are the comparison of multiple attendance improvement programs and the year-long trial of these programs. However, limitations should be noted. First, because the participants were women, the generalization of results may be limited. Further experimentation will be required to know how these treatments might affect men. Second, it would be unfair to discount the attendance improvement programs that did not reduce absenteeism. These programs may not have had an effect because of the way they were designed. For instance, the quarterly lottery may have had a much greater impact if a drawing occurred each month or if numerous, smaller prizes were used instead of one large prize. Finally, each attendance improvement program was only implemented at one plant location in one industry. The success or lack of success of these programs may have been influenced by some specific characteristic of the plant, the Maid Bess Co. or the garment industry.

In summary, the results indicate that the recognition program was associated with the largest decrease in absenteeism and the most dramatic changes in employee attitudes. □

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