*BEHAVIORAL COMMUNITY PSYCHOLOGY: ENCOURAGING
LOW-INCOME PARENTS TO SEEK DENTAL
CARE FOR THEIR CHILDREN¹*

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The present study examined the effectiveness and cost efficiency of three different techniques to encourage low-income rural parents to seek dental care for their children. The families of 51 children who needed immediate dental care (determined by dental screening at a local school) were placed into three matched groups and randomly assigned to the treatment conditions: One Prompt (Note Only), Three Prompt (Note, Telephone Contact, Home Visit), and One Prompt plus \$5 Incentive. The Three Prompt and One Prompt plus \$5 Incentive were significantly more effective in initiating dental visits than the Note-Only procedure. Not only was the One Prompt plus \$5 Incentive technique effective in producing a slightly larger percentage of initial dental visits compared to the Three-Prompt technique, it also produced a significantly larger number of followup visits. Furthermore, the cost-effectiveness analysis showed the Incentive condition to be less costly than the Three-Prompt condition in encouraging initial dental visits.

DESCRIPTORS: dental care, community-based treatment, cost analysis, note prompt, telephone prompt, home-visit prompt, cash incentive, low-income families, parents, children

The application of behavioral technology to socially significant problems occurring in natural, and often unstructured settings in the community has been termed "behavioral community psychology" (Briscoe, Hoffman, and Bailey, 1975). Several studies present this direct approach to longstanding community problems in urban transportation (Everett, Hayward, and Meyers, 1974), environmental pollution (Burgess, Clark, and Hendee, 1971; Chapman and Risley, 1974; Clark, Burgess, and Hendee, 1972), attending self-help meetings (Miller and Miller, 1970), and community policy-board effectiveness (Briscoe, Hoffman, and Bailey, 1975).

Another area to which the application of behavioral principles has begun, is in the delivery of dental-health care (Corah, 1974; Weisenberg, 1972). The magnitude and persistence of the dental disease problem, both caries and periodontal disturbances, has been extensively documented in the public-health literature (U.S. Department of HEW, National Center for Health Statistics, 1965; Newman and Anderson, 1972; U.S. National Center for Health Statistics, 1972). Efforts to prevent and control dental disease usually take the form of dental-health education programs that saturate our private, public, and parochial school systems (Dollar and Sandell, 1968), mass-media campaigns (De Carlis, 1973), and patient education and management programs in private dental practices (Weisenberg, 1972). More often than not, improved dental-health practices (*e.g.*, dental visits, toothbrushing, dental flossing, and diet control) resulting from these programs are the exception rather than the rule (Cartwright, 1949; Cohen and Lucye, 1970; Haefner, 1974).

One factor contributing to the apparent ineffectiveness of these programs as pointed out by

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Cohen and Lucye (1970) may be the overemphasis on acquiring information, rather than behavior change (Cohen and Lucye, 1970). These authors (Cohen and Lucye, 1970, p. 362) advocate "the development of techniques which go beyond knowledge and facts and motivate for behavior". That is, the acquisition and habitual performance of actual dental-health behavior should be the focus of dental-health education programs if they are to be successful.

Both preventive and episodic delivery of dental care requires patient motivation to enter the care system, *i.e.*, to come into contact with a dentist (Weisenberg, 1972). Health beliefs (*e.g.*, vulnerability to dental disease) (Kegeles, 1969), sanctioning by a significant other, *i.e.*, parent (Zola, 1964), and demographic factors such as age, income, and educational level (O'Shea and Gray, 1968) have all been shown to be related to the likelihood of an individual's seeking dental care. Some researchers (Mechanic, 1964; Metz and Richard, 1967; Freeman and Lambert, 1965) have maintained that dental-health visits of children are significantly related to the dental-health practices of their mother. At least for dental visits of young children, it is the parent, and not the child, who is the prime determinant of the health behavior.

Cauffman, Peterson, and Emrich (1967) searched the health records of fourth-grade children from 48 Los Angeles city schools, identifying 495 children (70% with overall health problem; 30% with dental problems) whose parents had previously received at least one form of health-problem notification. Parental interview data were used to examine factors that correlated with referral outcome. They found that notification factors, *e.g.*, contact frequency and technique, were more significantly related to parents seeking care for overall health problems than attitudinal or socio-economic factors. Using this same data source, Cauffman, Warbuton, and Shultz (1969) examined the efficacy of these notification factors. Both home visits (66.6%) and telephone contact (72.9%) as single notification procedures

with "personal interaction" yielded significantly higher rates of participation than did written notices (27%). Thus, personal-contact techniques (either telephone call or home visit) and multiple notifications of varying technique were significantly related to parents seeking care for overall health problems. A single note by a dentist or physician (the most common referral procedure) yielded consistently low rates of care, in this case, 17% and 5%, respectively. The infrequent use of referral patterns found to be effective with overall health problems precluded an analysis of their effect on dental defects. Swerdhoff (1968) was able to obtain significant ($p < 0.05$) increases in dental-visit behavior of children exposed to one of four different referral procedures, as compared to children receiving no treatment. The increases, although statistically significant, were actually quite small, improving from 14.8% to 19.4%. While statistically significant, these changes do not appear to be socially significant.

The present study examined the effectiveness and cost efficiency of three different techniques to encourage low-income parents to seek dental care for their children. This research extends earlier correlational analysis of effective referral procedures for overall health problems in urban settings to dental problems within a rural community setting. In addition, these procedures were compared to an incentive technique. It has become increasingly important for purposes of developing practical procedures that researchers accurately determine the actual costs of treatment. Therefore, an analysis based on implementation of the procedure (including system-provided resources) was used to determine the cost-efficiency of the three treatments. Followup visit data were maintained for some four months after completion of the study to determine the effects of these treatments beyond the initial dental visit.

METHOD

The present experiment was conducted with parents and children from a small (180 chil-

dren) rural elementary school. All children in the school were screened for dental problems by a public-health dentist and hygienist. Pre-established dental treatment criteria were used to assess the child's oral condition, as outlined below:

Need for Dental Treatment Criteria

- Category 1: no visual evidence of caries; evidence of good oral hygiene behavior.
- Category 2: no visual evidence of caries; oral hygiene appears inadequate with evident accumulation of plaque and calculus.
- Category 3: visual evidence of a carious lesion; no reported pain or discomfort associated with the lesion.
- Category 4: visual evidence of a carious lesion; child reports sensitivity or pain upon stimulation.

Participants

Since the purpose of the study was to determine ways of encouraging parents to take their children for needed dental care, the families of 51 children were considered the participants in the study. Thus, there were 35 families involved, with incomes ranging from \$2000 to \$6400 (mean = \$5000). Median education level for mothers was 11 yr and for fathers 9 yr.

The families were placed into three groups, matched to be comparable as to number of families, number of students by grade level, parental educational level, income level, race, and dental ranking. Table 1 gives the key characteristics of each group.² Once these three matched groups were formed, a random assignment to treatment was made.

Experimental Treatments

Before initiating the study, teachers and school staff were given a brief description of the study,

but remained unaware of the assignment of children to experimental conditions. Notes for the three groups were sent home with children on the first day of the study.

One Prompt (note only). In this treatment, parents received a single notification of the outcome of the dental screening in the form of a note. Notes were typed on school letterhead stationery and sent home with children in sealed envelopes. To increase the probability that parents received the envelope, a coupon, redeemable for items in a school-operated exchange store, was attached to the outside of the envelope. Children were instructed to obtain parental signatures on the coupon as a necessary prerequisite for purchasing items in the store. The note described the screening procedure, the extent of the dental problem and its potential effect on the child's health and school performance, and specific recommendations for parental followup behavior.

Three Prompts (note, telephone call, home visit). Subjects in this treatment received three notifications in the following sequence: (a) note (identical to that with One-Prompt group sent home with child), (b) telephone contact by school staff, and (c) home visit by dental hygienist. These notifications were spaced three weeks apart, which was determined to be the necessary time period to obtain a dental appointment with a local dentist or the public-health dental clinic.

Telephone calls to parents to inform them of the dental-screening results were generally made by the child's classroom teacher. However, both the school psychologist and reading specialist were used to supplement the teaching staff because of the time involved in reaching parents. A telephone contact sheet was constructed to provide staff with a list of subjects to be contacted and instructions for the telephone call. The telephone callers worked from this telephone checklist, obtaining answers to listed questions in a specified order, as follows: Did the

²These data were based on self-report parent data available in school-maintained records (60 to 85% complete).

³Before initiating this research, all local dentists were sent a covering letter describing the essential features of the study and asking for relevant input and cooperation.

⁴Duplicate copies of these forms are available by request from the senior author.

Table 1
Group Comparability Data

		<i>One Prompt</i>	<i>Three Prompts</i>	<i>One Prompt + \$5 Incentive</i>
<i>Number of students:</i>		18	16	17
<i>Number of families:</i>		13	10	12
Number of siblings per family	1 sibling	8	5	7
	2 siblings	5	4	5
	3 siblings	0	1	0
Number of students by grade level	K-2	7	6	7
	3-5	11	10	10
Sex	Male	9	9	9
	Female	9	7	8
Race	# Black families	11	8	10
	# White families	2	2	2
Median (mean) years education	Mother	10 (9.5)	11 (10.4)	12 (10.9)
	Father	9 (8.4)	9 (9.2)	7.5 (7.4)
Median (mean) income		\$3500 (\$4900)	\$5000 (\$4400)	\$4000 (\$4400)
Dental treatment criteria	Cat. 3 (Cariou Lesion)	9	8	9
	Cat. 4 (Cariou Lesion w/reported pain)	9	8	8

parents receive the school note?; Did the parents make contact with a private or public health dentist?; Have the parents set a dental appointment?; Has the child ever seen a dentist?; What was the approximate date of the child's last dental appointment?; Who is the child's dentist? In addition, telephone callers were instructed to "be as positive as possible while making clear the immediate nature of the problem" and "to encourage parents to take their child or children to a family dentist or the public-health dental clinic for an examination".

The public-health dental hygienist completed 11 of the 12 home visits (one visit was made by a local dental assistant). At each home visit, the dental hygienist asked if the parent recalled receiving the referral note, advised the parents of the results of the examination, and repeated the recommendations identified in the original school note. In addition, the dental hygienist pointed to "possible dental problems" as the

parent looked into the child's mouth. The dental hygienist maintained mileage, time, and other contact information on the home visit.

One Prompt plus \$5 Incentive. Parents in this treatment were notified of the results of the dental screening in the form of a note identical in form and content to the one used in the two previous groups with one addition: it included a "Dental Coupon" as shown in Figure 1. To receive the value of the coupon, \$5.00, parents were instructed to complete the following steps: make a dental appointment for their child, take the child for a complete dental examination, obtain the signature of the dentist on the coupon, and, finally, mail the coupon in the stamped, addressed envelope that was included.

Dependent Measures

Initial dental visits. Daily office records from the public-health dental clinic and local private dental offices provided dental-visit data on fami-

<h1 style="margin: 0;">DENTAL HEALTH COUPON</h1> <p style="margin: 0;">[This Coupon Worth \$5.00]</p> <p style="margin: 0;">[Expires 4/28/75]</p>	
Pay to the Order of (Child's Name/Address)	
FIVE DOLLARS $\frac{00}{100}$ _____ DOLLARS	
I certify that _____ (child's name) has made a dental visit to our office.	
Date of Visit _____	
Dentist's Sign. _____	
Yes No	
Treatment Unwarranted Treatment Initiated Additional Visits Required	_____ _____ _____
Approx. # _____	
<hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> To Receive \$5.00 Mail To: </div> <div style="text-align: center;"> School Psychological Services 925 Miccosukee Rd. Tall., Fla. Att: Maxin Reiss </div> </div>	

Fig. 1. Dental health coupon.

lies participating in the study. The public-health dental clinic maintained dental-visit records of participants in a data recording file system constructed for this study. At completion of the study, all parents of children who did not visit the public health dental clinic were contacted by phone. Parents were asked if they had taken their child to a private dentist for an examination, the name of the dentist, and the date of the visit. These dentists were then called to confirm parental reports of child dental-visit behavior.

Follow-up visits. Seventeen weeks after completion of the study, the dental office records of those families who had made an initial dental visit were checked to determine the frequency of followup dental visits.

Cost analysis. Since it is not only important to know if the treatments differed in effectiveness but also to what extent the treatment costs differed, total cost was calculated for each of the three treatments. This information would be of importance, for example, to an administrator having to decide between treatments, given a

limited budget. The amount of materials and personnel resources, *i.e.*, "quantity", necessary for implementing each treatment were recorded with costs calculated on the basis of local rates, March to June, 1975, in Tallahassee, Florida.

There are two procedures for product costing: direct costing (also called variable or marginal costing), where fixed overhead costs (such as materials and teacher salaries) are not assigned to the product cost; and absorption costing, where fixed overhead costs are assigned to the product cost. The figures presented here were calculated using an absorption costing procedure, where a "total" cost was determined for each treatment. The cost estimates included all materials or personnel (*e.g.*, paper, nurses, secretaries) that were used for that treatment, even though some part or all of these might be provided at any one school site. The amount of resources used for each treatment and the rates involved in the cost calculations have been listed, by item, to permit adjustments necessary to estimate the implementation costs for a specific

school. School staff recorded the number of minutes spent on the phone reporting results and recommendations of the dental screening to parents. Total mileage, as recorded on a car odometer, and total number of minutes involved (including travel time) were recorded by the dental hygienist and assistant during the home-visit phase of the Three-Prompt treatment. Other staff times (*e.g.*, secretarial, teacher) were as reported by the personnel involved.

To determine the cost per family within each treatment, the cost for a given "item" was divided by the number of families affected by that aspect (described under "item") of the treatment. Since all the families "benefited" from those items listed under the "Costs for the 'One-Prompt' Treatment", the cost for each item in this category was divided by the total number of families ($N = 35$), with this average being listed under all treatments. Only 10 families were affected by the additional costs of the Three-Prompt treatment; therefore the costs listed are an average over only those families ($N = 10$). Likewise, the "Additional Costs for the 'One Prompt plus \$5 Incentive' Treatment" are averages over only those families affected by this treatment ($N = 12$).

The overall cost for each treatment (column totals) was divided by the number of families in that treatment to obtain the "Cost per family". The "Cost per *participating* family" is an average of the overall cost, by treatment, for only that number of families making at least one visit to the dentist, *i.e.*, three families in the One-Prompt treatment, six families in the Three-Prompts treatment, and eight families in the "One-Prompt plus \$5 Incentive" treatment.

RESULTS

Receipt of Dental Notices

The number of parent-signed coupons (redeemable for items in a school-operated exchange store) returned to school by children across all three treatments reflected parent receipt of the referral health note. The return rate

from both the One-Prompt and the Three-Prompt treatments were similar (80% and 85% respectively) and higher than the Prompt plus \$5 Incentive treatment return rate (58%) of referral receipts.

Initial Dental Visits

The per cent of families in each group that made at least one dental visit is shown in Figure 2 (top). As can be seen, the One-Prompt technique was least effective in this regard; only 23% (three of 13) of these families took their children to the dentist. The Three-Prompt package resulted in 60% (six of 10) of these families making dental appointments; the One-Prompt plus \$5 Incentive procedure was slightly more effective, resulting in a 67% (eight of 12) participation rate.

The data were analyzed using a binomial (nonparametric) test, with the results dichotomized (contact with the dentist considered a "success") by family. The estimate of success probability was derived from the data for the One-Prompt treatment; similar probabilities also being reported in a number of parallel studies (Cauffman *et al.*, 1969; Swerdhoff, 1972). The statistical procedures used are described in Hollander and Wolfe's *Nonparametric statistical methods* (pp. 15-25; 1973). Contrasts of the data found the differences between treatments to be significant at $\alpha = 0.0028$, for the Three-Prompt *versus* One-Prompt treatment comparison, and at $\alpha = 0.0002$, for the One-Prompt plus \$5 Incentive *versus* the One-Prompt treatment comparison.

Figure 2 (bottom) describes the cumulative number of visits to the dentist by families over time. The One-Prompt plus \$5 Incentive technique resulted in the most immediate response to the health message (75% of these visits occurred within the first three weeks of the study). Initial visits by families in the Three-Prompt group occurred exclusively during the latter part of the program (all of these visits occurred after the ninth week); dental visits by families in the One-Prompt (note only) group tended to occur

Fig. 2. Per cent of families making initial visit and cumulative number of families making initial visits across weeks, in each of the three treatment conditions.

at widely dispersed intervals (Weeks 1, 3, and 10) throughout the study.

Followup Visits

A chi square analysis of the follow-up data with correction for continuity revealed that the One-Prompt plus \$5 Incentive condition (18 visits, $p < 0.01$) and the One-Prompt condition

(six visits, $p < 0.01$) yielded significantly greater number of visits than did the Three-Prompt condition (one visit). Additional followup visits are most important, as they relate to completed dental treatment. More families in the One-Prompt plus \$5 Incentive group completed their course of dental treatment than families from either the One-Prompt or Three-Prompt groups. Five families in the Incentive group completed their dental treatment, compared to one completed case in each of the other treatment conditions.

Relative Costs

An important consideration in the selection of procedures for promoting good dental hygiene is the relative cost of each procedure in relation to its effectiveness. Cost may be calculated in two ways: cost per family in each group, or, cost per *participating* family (*i.e.*, those families whose children actually were taken to the dentist).

As shown in Table 2, when all costs related to each procedure are calculated relative to the number of students involved, the One-Prompt procedure is least expensive at \$0.20 per student or \$0.88 per participating student. Including the time and travel expenses in the Three-Prompt procedure, the cost per family was \$11.85. Considering only those families who made a dental visit from this Three-Prompt group, the cost for implementation of this technique rises to \$19.75. More expensive than the One-Prompt technique, but considerably less than the Three-Prompt procedure, the cost of the One-Prompt plus \$5 Incentive procedure was \$4.14 per family or \$6.21 per participating family. The \$5 Incentive appears to be the treatment of choice if one wishes to maximize effect and minimize cost.

DISCUSSION

This study demonstrated the superiority of two procedures to encourage low-income parents to take their children to a dental clinic for

Table 2
Breakdown of costs for each of three treatment conditions

	Item	Quantity	Average Dollar Cost per Family* (dollar cost per treatment)		
			One Prompt	Three Prompts	One Prompt plus Incentive
<i>Costs for "One Prompt" treatment</i>	Paper	approx. 100 pgs. @ \$1.75/rm.	0.01 (.13)	0.01 (0.10)	0.01 (0.12)
	Duplication materials	2 ditto masters @ \$.14	0.01 (.10)	0.01 (0.08)	0.01 (0.10)
	Production	1 hr. (secretary) @ \$4./hr.	0.11 (1.49)	0.11 (1.14)	0.11 (1.37)
	Assembling materials	¼ hr. (secretary) @ \$4./hr.	0.03 (.37)	0.03 (0.29)	0.03 (0.34)
	Distribution	¼ hr. (teacher) @ \$6./hr.	0.04 (.56)	0.04 (0.43)	0.04 (0.51)
<i>Additional costs for "Three Prompts" treatment</i>	Telephoning	2¼ hr. @ \$6./hr.	N.A.	1.35 (13.50)	N.A.
	Travel time	8.8 hrs. @ \$6./hr.	N.A.	5.28 (52.80)	N.A.
	Travel mileage	101 mi. @ \$.14/mi.	N.A.	1.41 (14.14)	N.A.
	Visit time	6 hr. @ \$6./hr.	N.A.	3.60 (36.00)	N.A.
<i>Additional costs for "One Prompt plus \$5 Incentive" treatment</i>	Paper	approx. 50 pgs. @ \$1.75/rm.	N.A.	N.A.	0.01 (0.18)
	Duplication materials	1 ditto master @ \$.14	N.A.	N.A.	0.01 (0.14)
	Production	½ hr. (secretary) @ \$4./hr.	N.A.	N.A.	0.17 (2.00)
	Pre-addressed envelopes & stamps	12 10-cent stamps & 12 envelopes (@ \$.04)	N.A.	N.A.	0.14 (1.68)
	Incentives	8 \$5.00 coupons redeemed	N.A.	N.A.	3.33 (40.00)
	Incentive envelopes & stamps	8 10-cent stamps & 10 envelopes (@ \$.04)	N.A.	N.A.	0.10 (1.20)
	Mailing of rebate	½ hr. (secretary) @ \$4./hr.	N.A.	N.A.	0.17 (2.00)
		Cost per family	0.20	11.85	4.14
		Cost per participating family	0.88	19.75	6.21

* Rounded off to nearest whole cent.

needed treatment. One note sent home to parents, although by far the most common method of encouraging parental involvement, was very ineffective in producing the desired outcome. These data replicate previous research (Swerdhoff, 1968). In addition, the data showing that three successively more intensive prompts can be effective, replicates the work of Cauffman,

Warbuton, and Shultz (1969), who obtained similar results with other health problems; but is the first such extension to dental hygiene. While the use of incentives has become part of the fabric of American business practice (S&H green stamps, rebates on the purchase of cars, etc.) the extension of this procedure to health-related problems appears unique. In the present

study, not only was the One-Prompt plus \$5 Incentive treatment effective in producing a slightly larger percentage of initial visits compared to the Three-Prompt treatment, but it produced a much larger number of followup visits as well. Furthermore, the cost-effectiveness analysis showed the Incentive condition to be less costly than the Three-Prompt condition in encouraging initial dental visits. This relatively lower cost for the Incentive treatment is actually a conservative measure, since the large number of followup visits in the Incentive treatment was not taken into account.

At least three criteria should be considered in comparing and selecting interventions: (a) impact, or the technique's ability to produce changes in each application (Rossi, 1966); (b) coverage, the technique's applicability to a large number of cases (Rossi, 1966); and (c) overall costs relative to impact. The cost-analysis data represent an attempt to provide decision makers (in this case, school and public-health administrators) with information on dollar value to guide choice of intervention. In terms of absolute cost, the single written notice was considerably less expensive than either the Three-Prompt or the Incentive technique. However, a more significant figure, the cost per family actually making a dental visit after a single written notice (\$0.87), Three-Prompt (\$19.93), and Incentive (\$6.21), reflects the cost/efficiency of each of the three interventions.

A single written notice makes minimal demands on scarce resources, such as money, personnel, and time; this, coupled with the ease of administration makes the notice technique applicable to a large number of cases. Indeed, Rossi (1966) suggests that interventions that have low impact and high coverage should not be rejected out of hand as "they may, in the long run, have an extremely significant cumulative effect".

The Three-Prompt technique is highly effective, makes substantial resource demands, and has limited potential for extensive coverage. That it produced significantly fewer followup visits than the One-Prompt condition suggests that

either the parents in this group made their *initial* visits only to avoid a possible "fourth and more intense" prompt, or that the intensive prompting of the behavior resulted in their relative insensitivity to the normal procedures for reappointment by the public-health agency. On the other hand, since previous research on multiple prompts has not collected followup visit data, there are no grounds for determining whether this finding was merely the result of some artifact of the procedure. Previous research findings (Cauffman *et al.*, 1969) suggest that limiting the number of contacts to two notifications would reduce cost and resource demands without significantly affecting impact; however, all of the actual dental visits in this group were made within one week *after* the home visit. Due to possible ordering effects of the conditions, it is not possible to say with certainty that the home visit was responsible for all of the visits in the Three-Prompt Incentive. It is possible, for example, that had the telephone call been the third treatment, the same effect would have been seen. Further research, in which the design counterbalances for the sequence of treatments in a multiple-prompt condition is required before a definite conclusion can be drawn.

The Incentive technique appears to be effective, makes moderate resource demands, and has the potential for extensive coverage. Whereas the opportunity for personal contact was considered to be the essential element of effective referral procedures in previous research (Cauffman *et al.*, 1969), the efficacy of the Incentive procedure employed in this study suggests a broader consideration of other factors that may influence the outcome of referral.

There appear to be two primary concerns regarding the use of incentives to encourage health-care behavior. The first is a possible negative effect on the recipient's future behavior; that is, that the person would come to "expect" to receive incentives and would not engage in other desired behaviors unless they were offered. The followup data from the present study are relevant in this regard; these data indicated a

far greater follow-up response from those families in the Incentive treatment than either of the other two treatments. Thus, the concern over possible adverse effects of such incentives may be unwarranted, although further research to determine effects in other areas of family health care should be carried out.

The second concern has to do with the practicality of instituting an incentive model on a community-wide basis. "Where would the money come from?" is one frequently asked question. The answer may lie in a re-analysis of current dental hygiene "education" programs for children and low-income citizens. Funds set aside by school administrations and public-health departments to encourage better dental hygiene through information-based programs might be better spent on a program of incentives that actually improves dental-care behaviors.

Implicit in the technique and outcome of this study is the notion that our society does not adequately support health-related behavior. Although the individually oriented motivational techniques employed in this study are effective in producing high rates of dental-visit behavior, the behavioral effects of more "impersonal" (LeLaurin and Risley, 1972) aspects of the health-care system, such as organization, structure and geographical location of health facilities must not be neglected. The existing physical, social, and economic arrangement of the health-care delivery system may show evidence of having significant and reliable effects on the external realities that move people to operate contrary to their own best interests. To the extent that behavioral community psychology offers a simple, effective set of procedures to analyze social problems, it may eventually contribute to the development of environments that support the acquisition and maintenance of adaptive behavior.

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