The effect of general and subject-specific prompts in eliciting a zero- or low-probability behavior in three Hispanic gang members, selected because of their artistic or writing abilities, was examined by monitoring their behavior in submitting any original work, written or pictorial, that could be published in a community newsletter. Dependent variable was the number of pages submitted. The general prompt consisted of one-page flyers announcing the reward contingency with no reward amount given. Subject-specific prompts involved face-to-face or telephone contact to inform the subjects of the reward amount. The reward amount or the reward contingency was altered to increase the frequency of the target response. Once materials were remitted, checks were disbursed at various intervals ranging from one to sixty days. Two subjects were also briefly interviewed to verify the effectiveness of the experimental manipulations and to assess the subjects' evaluation of the project. The general prompt was ineffective, but subject-specific prompts elicited a total of 38 pages of work. The importance of the findings is discussed in terms of the relationship of the target behavior to violent behavior, and the possible application of the technique to increase Hispanic utilization of public clinics. (NQA)
A Prompt/Reward Technique to Elicit Socially Acceptable Behavior with Chicano Gang Delinquents

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Abstract

This paper examines the effect of two types of prompts in eliciting a zero- or low-probability behavior in three Hispanic gang members. The target behavior consisted of a chain of responses terminating in the publication of writing and art work in a community newsletter. Baseline was at a stable zero level for all three subjects. A general prompt was ineffective, but subject-specific prompts elicited a total of 38 pages of work. The importance of these findings is discussed in terms of (a) the relationship of the target behavior to violent behavior, and (b) the possible application of the technique to increase the utilization of public clinics by Hispanics. The advantages and special problems of research in the natural environment are discussed with respect to this research, where uncontrolled variables, "setting events," were monitored and used to explain some unexpected findings.

Este artículo examina el efecto de dos tipos de impulsos para efectuar una conducta de probabilidad de cero o de nivel bajo, en tres miembros Hispanicos de pandillas. El punto de interés consistió de una cadena de respuestas terminando con la publicación de escritos y trabajos de arte en un periódico de la comunidad. La línea base fue estable a nivel de cero para todos los tres sujetos. Un impulso general no fue efectivo, pero impulsos específicos a los sujetos efectuaron un total de treintayochopáginas. La importancia de estos resultados se discute con respecto a (a) la relación de la conducta de interés hacia la conducta violenta y (b) la aplicación posible de este método para aumentar la utilización de clínicas públicas a Hispanicos. Los beneficios y los problemas especiales de investigación en
su ambiente natural se discuten con respecto a este investigacion,
donde variables que no se controlan, "sucesos del ambiente," se
examinaron y se usaron para explicar algunos resultados inesperados.
The growth over the past twenty years in the number of researchers and practitioners skilled in the use of behavior change techniques has been accompanied by a proliferation of published reports based upon such techniques. In work with juvenile delinquents, the effectiveness of behavior therapy has been demonstrated in a variety of settings, with various types of subjects, and in the modification of various target behaviors (Farrington, 1979; Morris, 1980).

There has been very little research on single-subject behavior therapy with either Hispanic delinquents or Hispanic gang members. This lack of research is disturbing in view of the serious Hispanic gang violence problem in some parts of the country. In Los Angeles County, for example, there were 276 gang-related deaths in 1979, and 250 more through August, 1980 (Barker, 1980). Seventy to 80% of the gangs in the county are Hispanic, but almost all of the gang-related deaths are attributable to Hispanics (Baker, 1979).

Stumphauzer and his associates have used a behavior analysis model to study the problem of Hispanic gang delinquency (Stumphauzer, Aiken, and Veloz, 1977) and non-delinquent Hispanic youths in a high-crime neighborhood (Aiken, Stumphauzer, and Veloz, 1979). Hunsaker (1981) has reported the use of behavior analysis to generate appropriate behavioral interventions with Hispanic gang delinquents. Non-behavioral approaches to the problem have also been tried (Klein, 1971; Torres, 1979).

The importance of studying Hispanics as a treatment group distinct from other ethnic groups arises from the hypothesis that Hispanics behave differently, in certain environments,
than do Anglo-Americans or members of other ethnic groups. There is some evidence to support this hypothesis.

Hispanic youths can be consistently differentiated from Anglo youths with respect to meanings assigned to culturally sensitive concepts (Martinez, 1977); social motives (Kagan, 1977); and field dependence-independence (Kagan and Buriel, 1977). Moore, Garcia, Garcia, Cerda, and Valenzuela (1978) found that Hispanic gang members differed in several respects from gang members of other ethnic groups. Of particular relevance to the present discussion, Hispanic gang members were considered to be "exceptionally violent by law-enforcement officers, black gang members, and prison officials" (Moore et al., 1978, p. 214).

Thus, it should not be assumed that prior behavioral research with juvenile delinquents of other ethnic backgrounds will necessarily generalize to Hispanic youths. A systematic replication (Hersen and Barlow, 1976) of the efficacy of behavioral techniques with this population is called for.

The present study examines the effectiveness of two types of prompts in eliciting a zero and low-probability behavior in three Hispanic gang members.

The prompt has been described as "the technique of introducing a particular stimulus in an environmental setting to increase the probability that a particular response will occur" (Geller, Farris, and Post, 1973, p. 367). Prompts have effectively elicited or altered target-responses in many community settings, including senior citizen attendance at
Prompts may be especially useful with Hispanic gang members in view of the several behavioral deficits exhibited by this population, including the failure to attend school and the failure to maintain legitimate employment. These behavioral deficits are hypothesized to relate inversely to delinquent behavior in this population (Stumphauzer, Aiken, and Veloz, 1974). The creative use of prompts by behavior therapists may be essential in eliciting the low- or zero-probability responses needed to rectify these behavioral deficits.

The target behavior for the present work was selected partly because it represents an important component in a chain of behaviors leading to legitimate employment; and partly because of a community need. A recently initiated community newsletter solicited articles and art work for publication. Although many Hispanic youths are talented writers, poets, or artists (Hunsaker, 1981; Moore et al., 1978), they rarely if ever submit their works to publications offering payment for accepted materials. The submission of creative materials is an important step toward gainful employment as a writer or as an artist, and such employment may in turn effectively prevent further delinquent behavior.

The strategy of counterconditioning delinquent behavior by reinforcing noncriminal competing behaviors was first reported by Schwitzgebel and Kolb (1964). These workers reduced arrests
and months of incarceration among twenty delinquent boys by rewarding attendance at a clinic and related behaviors.

**Method**

**Setting:** A private, non-profit community-based organization funded to prevent gang violence served as the setting for the present work. A contract with the local branch of the federal Community Services Administration provided funds for the publication of a community newsletter, and included monies to be paid for materials submitted to and published in the newsletter by neighborhood youths.

Because the setting for this research was the natural environment, the experimental control of certain relevant variables was limited. For this reason, special attention was given to "setting events," those environmental stimuli not immediately associated (temporally nor spatially) with the target behavior (Wahler and Fox, 1981). Post-hoc interpretations of subject behaviors in terms of setting events were employed to analyze response variability. This analysis suggested directions for reducing "hidden" variability, that variability not caused by the experimentally manipulated variable itself (Hersen and Barlow, 1976).

**Subjects:** The behavior of three subjects was monitored during the experiment. These subjects were selected for study because of their artistic or writing abilities.

**Subject 1:** S1 was a 22-year old Hispanic male who had been a gang member but was no longer actively involved at the time of this study. He had completed high school while confined to a juvenile detention facility, and had taken some college-level
courses there as well. He was not employed during this study, but earned small sums periodically by doing tattoos for friends. His mother, a welfare recipient, was his primary means of support. His father, a heroin addict, was incarcerated. Five younger siblings, three brothers and two sisters, also lived in the home, while an older brother lived outside the home. S1 had used drugs regularly since the age of 16, including inhalants, heroin, and phencyclidine. He had been arrested twice as a juvenile, and one of these arrests had resulted in his confinement to a juvenile detention facility for several months. S1 had previously submitted stories and poems to the publisher of a local, grass-roots newspaper, but the materials were never published, nor were they returned to him.

Subject 2. S2 was a 16-year old Hispanic male who had been a member of a local gang for two years prior to this study, and was still involved during the study. He had dropped out of school after the tenth grade and was unemployed. He lived with his mother, an older sister, and two younger siblings. His father was incarcerated. S2 had been arrested three times, once for attempted murder, and had served about 2 months in a juvenile detention facility. His drug use was limited to alcohol, and one of his three arrests was alcohol-related. He had done art work, mostly pencil sketches, for several years, but had never submitted work for publication nor had he ever expected payment for his work.

Subject 3. S3 was an 18-year old Hispanic male, a current gang member involved with the gang for about one year. He had dropped out of school after the eleventh grade and was employed in a public works project for youth (CETA). S3 lived with both his
parents, an older sister, and three younger siblings. He had been arrested once, for an alcohol-related offense, and had used both alcohol and phencyclidine with regularity for four years. He had done pencil sketches for several years but had never submitted work for publication nor expected payment for his work.

Response definition: The target behavior was defined as a "material submission" response, where "material" included any original work, written or pictorial, that could be published in the community newsletter. The criterion for the target response required subjects to submit materials to the experimenter (E) in person. The number of pages of submitted material served as the dependent variable. Because of the relatively straightforward measurement procedure, no reliability check was used, but all submitted products were filed and maintained for future reference.

Experimental conditions: In order to verify the stability of the baseline rate of response, subjects were asked to estimate the number of pages they had previously submitted for publication (a) during the prior year and (b) in their entire lives.

Prompts were used to elicit initial responses. General and subject-specific or "personal" prompts were used.

Phase I (general prompt). During Phase I, mimeographed one-page flyers announcing the reward contingency were posted on the agency's front door and at several locations within a 2-mile radius of the office. The amount of the reward to be gained by submitting work was not stated in this announcement.
Phase II (subject-specific prompts). Prompts during this phase differed for each subject, but always involved face-to-face or telephone contact in which the subject was made aware of the reward to be earned by submitting work for the newsletter. In particular, the subject-specific prompts involved the following stimuli for each subject:

S1 - Specific prompts were telephone calls made to the subject at an average rate of two per week for two months.

S2 - Face-to-face, verbal prompts were given by S2's agency counselor. Prompts were presented during counseling sessions. For example, the counselor said, "Why don't you submit some of your drawings to the newsletter? If you work is published, you can earn some money."

S3 - Two specific prompts were given. S3 was first handed a flyer by E which did not indicate that money could be earned, but requested work to be submitted. There was no verbal interchange. Two weeks later—a second flyer, indicating the amount of payment for work submitted ($5.00 per page) was given to S3. Also, he was told, "We're paying five dollars per page."

Phase III (subject-specific contingency changes). As noted by Hersen and Barlow (1976), one of the significant advantages of the single subject design in clinical research is the capability of altering the design of the study in response to subject behavior. This capability was utilized in the present work. Either the reward contingency itself or the amount of the reward was altered in response to subject behavior for each of the three subjects. These changes were as follows:

S1 - The reward contingency was changed from $5.00 per page to $5.00 per topic, regardless of the number of pages.
This change took place after the submission of a total of 26 pages, 3.5 months after the project had begun. The reason for this change is discussed below.

S2 - The amount of the reward was raised from $3.00 per page to $4.00 per page after the submission of the first page.
S3 - The amount of the reward was raised from $5.00 per page to $10.00 per page after the submission of the first two pages.

The changes in the amount of the reward were made in an attempt to increase the frequency of the target response.

Other procedures. Once subjects had remitted materials, they were informed that payment would be forthcoming. Payment was made by check, and checks were disbursed to subjects at various intervals after the emission of the target response, ranging from one to sixty days. Most disbursements were made within five days of the target response. All checks were disbursed by E, and subjects signed receipts for each check. Brief interviews were conducted with two subjects to verify the effectiveness of the experimental manipulations and to assess the evaluation of the project by the subjects.

Results

As indicated in Table 1, baseline response rates were very low or at a stable zero level. Although the general prompt was not effective in eliciting the target response, subject-specific prompts were effective in doing so. The three subjects submitted no materials during baseline nor during the general prompt conditions, and a total of 38 pages during the specific prompt condition. Only S1 had previously
submitted materials for publication, about three years prior to this study. Since his material was never published nor returned to him on that occasion, his submission behavior had effectively extinguished.

Although specific prompts did reliably elicit the target response in these subjects, there was considerable variability among the three in response rates and response topography (refer to Figure 1). Some of the variability can be explained by the applicable contingencies of reinforcement or by setting events in the lives of the subjects.

S1 submitted his work in three batches of 7, 4, and 15 pages over a period of three and one-half months, but stopped submitting work after the fourth month even though specific prompting continued for another month. This decrease in rate to zero level occurred after the change in the reward contingency and was probably occasioned by it. In this respect, the altered contingency served as an aversive stimulus which effectively depressed responding to the baseline level.

The change in the reward contingency for S1 (from payment per page to payment per product, regardless of the number of pages), was necessitated when S1 admitted that most of his third batch of work had been plagiarized. He was therefore not paid for the 15 pages included in that batch.

The return to baseline response rate (zero) during the second month coincided with a two-month delay in the receipt of the reward. A week after he finally received payment for his first batch of submitted materials, S1 submitted a second batch. S1 demonstrated that the long delay between the emission of the target behavior and the administration of the reward had
been mediated by a bridging stimulus (Favell, 1977), a written list of the titles of the works he had submitted.

The interview with S1 indicated that the setting event, "Christmas," influenced his behavior at this time, since he needed money to purchase gifts for the upcoming holiday.

After prompting, S2 generally submitted pages singly, and produced at a low but consistent rate over the period of the project. A small increase in the amount of the reward did not increase the rate of response by S2, but may have helped to maintain it.

S3 responded after specific prompting, by submitting two pages during the fifth month. He then submitted nothing at all during the sixth month. In month 7, S3 submitted six pages, but then submitted nothing more for the duration of the project. An important setting event in this case was S3's employment status. He was employed through month 6, became unemployed during month 7, and was again employed during months 8 through 12. Thus, S3 was most productive when unemployed, but rarely emitted the target response when employed.

Conditioning of E to the associated reward may have occurred in this study, as it did in the study by Schwitzgebel and Kolb (1964). Such conditioning would explain why two subjects requested loans from E for the first time in their relationships of three years (S1) and nine months (S3). Visits to E's office and telephone calls to E by subjects increased during the project as well, but these measures were not systematically monitored.

Subject interviews:
S1 and S2 were interviewed. When asked why they had originally submitted work for publication in the newsletter,
both subjects indicated that the specific, personal prompts were important determinants.

S1 said: "You (E) called me and asked me if I wanted to submit poetry, stories, pictures on gangs for the newsletter. You called me again and asked me to do a picture for the cover on gangs."

S2 said: "I had nothing else to do... I like drawing... it kills time. Melanie (newsletter editor) told me to do it. Ernie (counselor) got me started."

These interviews also resulted in the finding that the monetary reward was possibly a secondary factor in the original decision to submit work for publication in the newsletter. S1 stated that practice of his writing and artistic skills, and the public exposure of his work, were more important than the money, but admitted that "the money will help me to get the stuff I need." S2 claimed that he was not aware that he would receive payment for his work, until after he had submitted the first picture.

**Discussion**

Subject-specific verbal prompts, both in person and by telephone, were clearly effective in eliciting the low- or zero-probability target response. A general written prompt, in the form of a flyer posted through the community, was ineffective in eliciting the response (there was one drawing submitted in response to the general prompt).

The importance of this finding can be assessed with respect to at least two related problems. The first is the disinclination of Hispanic gang members to visit community or public agencies, even when such agencies offer services useful
to them (Klein, 1971). The second is the underutilization of mental health clinics, and possibly of many types of public agencies, by Hispanics generally (Keefe, 1979). In the present study, because the reward was contingent upon a chain of behaviors which included office contact with E, subjects consistently appeared in person at the agency. Such a prompt-reinforcement technique may prove effective in increasing agency attendance by Hispanic gang members, and may effectively increase mental health utilization by Hispanics generally.

Because of the small, homogeneous sample (considered as three single-subject replications), conclusions regarding the extent of the prompting effect are tentative. The effect may be restricted to the Hispanic gang member, as in the present work; to Hispanics generally; or it may apply to subjects generally without respect to ethnic background.

The Hispanic cultural phenomenon of personalismo may be related to the effectiveness of personal prompts found in the present work. Saavedra (1976) notes that, "personalismo implies that interpersonal relationships of significance are formed on the basis of personal attributes" (p. 160). Thus, prompts were not effective until they were personalized, suggesting a possible relationship between subject behavior and this cultural factor.

It is noteworthy that this study took place in the natural environment, since most previous studies on behavior change with delinquents have taken place in institutional or clinical settings. As Stumphauzer (1981) notes, "The natural environment of delinquent behavior - the home, the school, the park, the
street corner, the store — this is where behavior therapy with delinquents can flourish" (p. 14).

The advantages of studying behavior in the natural environment were counterbalanced in this study by the disadvantage of uncontrolled variables. For example, because there was limited direct control over project funds within the agency, it was difficult to control the length of delay between the target behavior and the positive consequence. The delay period therefore varied unsystematically.

Another source of uncontrolled variation occurred in setting events, "environment interactions that potentially influence behavior," but are more complex and more temporally distant than the immediate antecedents and consequences of behaviors (Wahler and Fox, 1981, p. 326). A close examination of the response patterns of the three subjects, and interviews with two subjects, indicated that the present need for money influenced target responsiveness. The money-deprived subject was more likely to submit material than the subject not so deprived. With S1, the setting event, "Christmas," created a special need for money. Similarly, with S3, unemployment created a need for money; upon re-employment, S3 ceased to emit the target response. Thus, as Wahler and Fox (1981) have suggested, a descriptive analysis of setting events helps to explain behavior changes which otherwise appear to be in conflict with learning principles.

The behavior of S1 in submitting plagiarized material was similar to other deviant behaviors in the natural environment, especially to "cheating" in a classroom situation. In the
classroom students obtain rewards by presenting a behavioral product, but the full repertoire of behavior leading to the product is not often monitored nor observed. The product itself serves as the criterion for the positive consequence.

In the present study, "cheating" resulted from similar environmental stimuli. Cheating may have been inadvertently reinforced, but the plagiarism was immediately discovered. In the school setting, cheating is often rewarded because rewards are based on behavioral products alone (e.g., homework assignments, take-home tests), while behavioral processes are not closely monitored. Where behavioral processes cannot be conveniently observed, behavioral products must be closely examined in order to prevent the reinforcement of cheating. The framework of the present study can serve future researchers studying cheating behavior.

To limit cheating in the present study, the reward contingency for S1 was altered such that payment was made for separate themes rather than for separate pages. This alteration served as an aversive stimulus for S1, and was presented immediately after a target response. Thereafter, even with further prompting, S1 emitted no target responses. The analogy to the public school setting is again instructive. Mid-program contingency alterations to prevent cheating or in order to change other student behaviors may extinguish a desirable target response if careful attention is not paid to the nature of the alteration.

Although this study was performed in the natural environment where some sources of variation were uncontrolled, the effect of subject-specific prompts on the elicitation of the target
response was clear and stable for all three subjects. Additional research is needed with subjects of other ethnic backgrounds to determine whether or not the effect is culture-specific. Further research is needed also to clarify the relationship between setting events and contingency changes, on the one hand, and the prompting-reinforcement technique, on the other.
References


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Table 1
Number of Pages Submitted for Publication
During Baseline and Two Prompt Conditions

<table>
<thead>
<tr>
<th>Subject</th>
<th>Baseline 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Baseline 2&lt;sup&gt;b&lt;/sup&gt;</th>
<th>General Prompt</th>
<th>Specific Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

<sup>a</sup>Lifetime up to one year prior to this study.

<sup>b</sup>Year prior to this study.
Figure 1. Cumulative Pages for Three Subjects