



**Project CERCE**  
**Comprehensive Education**  
**and**  
**Rehabilitation**  
**in a**  
**Correctional Environment**

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**TRAINING MANUAL**

For Project Use Only

State Technical Institute at Memphis

Project C.E.R.C.E.  
Comprehensive Education and Rehabilitation  
in a Correctional Environment

Training Manual

Department of Corrections  
State of Tennessee  
Memphis Correctional Center

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## Inservice Training

October, 1976

Project CERCE

William R. Sewell  
Project Consultant

### Introduction

The attached outline for a training package includes sections on behavior principles, the role of recording, conditions necessary for effective usage, the role of motivation or producing the initial response and permanence of effects. Each section requires reading some simply presented material or attending a lecture on related material followed by a seminar-type discussion relating the principles to the therapeutic environment of the CERCE Project. In addition, supplementary reading is made available for particular sections. There is an emphasis on volunteering information during these seminars; therefore, approximately two hours is allotted per seminar. A pretest and posttest will be given to assess the effectiveness of the training.

The emphasis is on understanding the basic principles which produce psychological and behavioral change as these principles are interpreted within the therapeutic environment. Thus, the information is designed to make the manager more effective in treatment and implementation.

INSERVICE TRAINING OUTLINE

930<sup>T</sup>-1130 930<sup>W</sup>-1130

2

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<u>Section</u>	<u>Title</u>	<u>Assigned Reading</u>	<u>Practical Application</u>	<u>Supplementary Reading</u>
1	Managing Behavior Behavior Principles	Handout on Behavior Principles	Examples and Discussion	Elementary Principles of Behavior Chapters 2-4
2	Principles of Effec- tive use	Article by Jack Michael, Handout from Sewell	Examples and Discussion	---
3	Role of thoughts in behavior change	Lecture (Sewell)	Examples and Discussion	---
4	Producing change in thoughts-Indirectly	Lecture (Sewell) Discussion	CERCE: Warmup meetings	---
5	Producing change in thoughts-Directly	Lecture (Sewell) Stop-Think; Activity Scheduling; Assertion Training. Programming response alternatives	CERCE: Quondam meetings: (Group reinforcement for open expression and positive thoughts). Modeling appropriate response and providing group reinforcement.	---
6	Role of Motivation Producing behavior by instruction. Motivation by posi- tive reinforcement.	Lecture-Discussion Lecture-Discussion	CERCE: Verbal cue. Rehearsal of contin- gencies. CERCE: Point system, Phase system, Ad- vanced Unit, Study Release.	Elementary Principles Chap. 13, Pg. 247-251. Elementary Principles Chap. 15.
	Motivation by Nega- tive Consequences	Lecture-Discussion	CERCE: Negative Sanc- tions, Disciplinary Unit, Loss of Freedom, Reorientation Unit	Elementary Principles Chap. 18-20.

Programming Response  
Alternatives

Programming for  
Permanence

Self Control

Lecture-Discussion  
Chart, and Adoles-  
cent Group Home

Lecture

CERCE: Education,  
Levels of Achieve-  
ment, Work Call,  
Recreation, confronta-  
tion meetings, indivi-  
dual unit outings,  
film meetings.

CERCE: Confrontation  
meetings, verbal cues,  
fading of external  
control via the phase  
system.

Elementary Principles  
Chap. 14

Elementary Principles  
Chap. 19

## Training in Behavior Modification

Project CERCE

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Project Consultant

### Introduction

The attached outline for a training package includes sections on behavior principles, the role of recording, conditions necessary for effective usage, the role of motivation or producing the initial response and permanence of effects. Each section requires reading some simply presented material or attending a lecture on related material followed by a seminar-type discussion relating the principles to the therapeutic environment of the CERCE Project. There is an emphasis on volunteering information during these seminars and; therefore, small groups, six or less, are desirable.

The emphasis is on understanding the basic principles which produce psychological and behavioral change on these principles are interpreted within the therapeutic environment. Thus the information is designed to make the manager more effective in treatment and implementation.

## Training in Behavior Modification

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### Principles of Behavior Modification

Readings: Managing Behavior: Principles  
Seminar Discussion Application to CERCE Program  
2 hours per 6 person group

### Role of recording

Readings: Measuring and Charting Behavior  
William Sewell  
Seminar Discussion: Application to CERCE Program  
2 hours per 6 person group

### Principles for Effective Usage

Readings: Article by Jack Michael  
Description of the Principles  
William Sewell  
Seminar Discussion: Applications to CERCE Program  
2 hours per 6 person group

### Role of Thoughts in Behavior Change

Lecture and Discussion  
Seminar : 2 hours per 6 person group

### Producing Change in Thoughts: In-direct Intervention

Lecture and Discussion  
Seminar: 1 hour per 6 person group

### Producing Change in Thoughts: Direct Intervention

Description of Techniques  
William Sewell  
Seminar and Practice  
by example: 2 hour per 6 person group



## Role of Motivation-Producing Initial Behaviors

Producing Behavior by Instruction--Lecture Discussion  
 Producing Motivation by Positive Reinforcement--Lecture  
 Discussion  
 Producing Motivation by Negative Consequences for undesired  
 behavior--Lecture Discussion  
 Seminar Discussion Application to CERCE Project  
 2 hours per 6 person group

## Permanence of Effects

- 1 - Programming Response Alternatives in a Living Environment with chart. William Sewell  
 Lecture
- Programming for Permanence-Lecture William Sewell  
 Adolescent Group Home
- Seminar Discussion - Application to CERCE Project  
 2 hour per 6 person group
- 2 - Self Control Lecture William Sewell  
 Definition and Description  
 of Self-control with examples

Project CERCE  
IBM Card Set-Fifth Revision

William R. Sewell  
Project Consultant

Card #	Column	Description
1	1-4	Subject Identification
1	6	Card number
1	8-9	City and county, if Memphis-Shelby enter MS other enter OT
1	11	Race
1	13-14	Age
1	16	Dependents
1	18-21	Date of arrival - month and year
1	23	Previous convictions
1	25-28	First date of parole-month and year
1	30	Number of escapes
1	32-33	Special characteristics 2 digit code List A
1	35-36	Vocational experience or work experience 2 digit code List B
1	38-39	Last grade completed
1	41-43	Psychomet. CAT Math Compr-Grade equivalent
1	45-47	Psychomet. CAT Math Concep--Grade equivalent
1	49-51	Psychomet. " " Total " "
1	53-55	" " Read Vocab " "
1	57-59	" " Compr " "
1	61-63	" " Total " "
1	65-67	" " Lang Mech " "
1	69-71	" " Use " "
1	73-75	" " Total " "
1	77-79	" " Total Battery " "
2	1-4	Subject Identification
2	6	Card Number
2	8-10	Psychomet. Graham Kendall-Memory for designs
2	12-14	" Shipley Hartford IQ Vocab
2	16-18	" " " " Abstract
2	20-22	" " " " Total
2	24-25	" MMPI ? Pretest
2	27-28	" " L "
2	30-31	" " F "
2	33-34	" " K "
2	36-37	" " 1 Hs "
2	39-40	" " 2 D "
2	42-43	" " 3 Hy "
2	45-46	" " 4 Pd "
2	48-49	" " 5 Mf "
2	51-52	" " 6 Pa "
2	54-55	" " 7 Pt "
2	57-58	" " 8 Sc "
2	60-61	" " 9 Ma "
2	63-64	" " 10 Si "

3	1-4	Subject identification
3	6	Card Number
3	8-9	Psychomet. Locus of Control
3	11-12	" Eysenck Personality Inventory Lie (Pre)
3	14-15	" " " " Neuroticism
3	17-18	" " " " Extroversion
3	20-21	" " " " Psychoticism
3	23-24	" Draw a Person (Goodenough Harris) 3 digit MA) (Pre)
3	26-27	" Wais IQ (Comp., Siml, Digit Span, Pic Comp) (Pre)
3	29-30	" " Sim Subtest Score (Pre)
3	32-33	" " Comp " " "
3	35-36	" " Digit Span Subtest Score (Pre)
3	38-39	" " Pic. Comp. " " "
3	41-42	" Nelson Denny Reading Grade Equivalent (Pre)
3	44-46	" GATB G (General)
3	48-50	" " V (Verbal-Vocab)
3	52-54	" " N (Numerical):Arithmetic, Reason, Comp.)
3	56-58	" " S (Spatial)
3	60-62	" " P (Perception: Tool Match, Form Match)
3	64-66	" " Q (Clerical Perc.: Name Comparison)
3	68-70	" " V (Motor coordination: Marking, Place)
3	72-74	" " F (Finger Dexterity: Assemble, Disassemble)
3	76-78	" " M (Manual Dexterity: Place, Turn)

4	1-4	Subject Identification
4	6	Card #
4	8-11	Psychometrics TABE Reading (Test of Adult Basic Education)Pre
4	13-16	" " Grammar "
4	18-21	" " Math "
4	23-26	" " Composite "
4	28-29	" Handtest Agg (Aggression) "
4	31-32	" " Acq (Acquisition) "
4	34-35	" " E. Int. (Interpersonal) "
4	37-38	" " E. Env. (Environmental) "
4	40-41	" " E. Mal. (Maladjustment) "
4	43-44	" " E. With (Withdrawal) "
4	46-47	" " Path (Pathology) "
4	49-50	" " R (Responses) "
4	52-53	" " AOS (Acting out score) "
4	55-56	" " AIRT (An Initial Reaction Time) "
4	58-59	" " AOR (Acting out Ratio) "

5	1-4	Subject Identification
5	5	Card Number
5	6-7	BEHAVIORS Behav. Points Waking up on time
5	8-9	" Participate in morning meeting
5	10-11	" Maintain personal and assigned areas
5	12-13	" Personal appearance
5	14-15	" Being prompt
5	16-17	" Classroom behavior
5	18-19	" Participation on work call
5	20-21	" Participation in confrontation meetings
5	22-23	" Participation in static meetings
5	24-25	" Participation in other meetings and activities

5	26-27	"	Interaction with peers
5	28-29	"	Accepting pull-ups
5	30-31	"	Issuing pull-ups
5	32-33	"	Volunteering
5	34-35	"	Attitude
5	36-37	"	Accepting responsibility
5	38-39	"	Decision making
5	40-41	"	Honesty
5	42-43	"	Properly using the chain of command
5	44-45	"	No profanity
5	46-47	"	Obeying all institutional and unit rules

## ATTACHMENT LIST A

## Special Characteristics

## Two Digit Code

- 01 Body Part Missing
- 02 Scars
- 03 Sense impairment (vision, hearing, smell, taste)
- 04 Medical problem (migraine, emphysema, diabetes, heart trouble, high or low blood pressure, kidney dysfunctioning, ulcers, stomach or intestine missing, vocal function lost)
- 05 Crippled
- 06 Illiterate

## ATTACHMENT LIST B

## Vocational-Work Experience

## Two Digit Code

- 01 Industrial Maintenance
- 02 Surveying/Drafting
- 03 Welding
- 04 Building and Construction
- 05 Food Services
- 06 Data Entry
- 07 Warehousing

## ATTACHMENT LIST C

## Disciplinary Action

## Two Digit Code

01	Arson	17	Larceny
02	Attempted Escape	18	Mutilation
03	Assault	19	Participating in Riot
04	Burglary	20	Possession Free World Money
05	Destruction of Property	21	Possession Dealy Weapon
06	Disrespect	22	Refuse to work
07	Drinking Drugs	23	Refused direct order
08	Possession	24	Sexual malpractice
09	Selling	25	Strong armed robbery activity
10	Escape	26	Threatening an employee
11	Extortion	27	Threatening a resident
12	Fighting	28	Gambling
13	Forgery	29	Gaming
14	Inhalants Intoxicants	30	Out of place
15	Possession	31	Other _____
16	Selling		_____
			_____
			_____

## PRINCIPLES FOR BEHAVIOR CHANGE

AND

## CONDITIONS FOR EFFECTIVE USE

Steve H. Sanders and William R. Sewell

Behavioral change generally manifests itself by either an increase or a decrease in the frequency of a behavior's occurrence, and is dependent on a number of environmental conditions that will be discussed in this paper. It is important to emphasize the fact that the rate of change is usually not immediate, but a gradual process. The behavioral principles that you will read about and use are based on a great deal of scientific research and do work if applied appropriately. However, you must not expect instant changes in your behavior or that of your clients. Whether you realize it or not, the behaviors that both of you are now emitting did not appear overnight, and it is a foolish mistake to think that you can eliminate them instantly. This is not to say that it will take forever to change, for behavioral change will occur provided you use the principles correctly and persistently. We are only trying to point out the need for patience and encourage you not to give up before you have given yourself an adequate chance.

With this in mind, let us take a look at the various ways environmental conditions affect behavior.

Increasing the Frequency of Behavior

One way for behavioral increase to occur is for an environmental event which is positive for the individual to consistently follow a behavior. The rate of the behavior will finally reach an upper limit and no further increase will occur, but the behavior will be maintained



if the environmental event continues to follow the behavior.

For example, suppose a mother wanted to increase her teenage daughter's cleaning up her room. The first thing she must do is define what is meant by cleaning up the room. This can be broken down into a number of smaller behaviors, like making the bed, dusting, hanging up her clothes and putting her dirty clothes in a hamper. Once the mother decided what constituted cleaning the room, she could then begin following these individual behaviors with a positive event, such as verbal praise and/or paying her 50¢ each day she made her bed. A "shaping" procedure would be the best approach for increasing the frequency of room cleaning. This procedure is based on the scientific principle that it is much easier to learn a complex behavior if the behavior is broken down into small steps, with the learner mastering one step at a time. Thus, in this example, the mother would begin by increasing the frequency of bed-making and concentrate on that behavior until it was being performed at a high rate and being done properly. She could then begin increasing the frequency of hanging up clothes, and then of putting dirty clothes in a hamper. This way the daughter would gradually develop the behavior of "cleaning her room", receiving a reward for each intermediate step. If the mother did not use this "shaping" method and required that she clean the entire room before being rewarded, this might well be asking her to do too much too fast, resulting in a great deal of frustration. You will find that this concept of "shaping" behavior is extremely important in determining whether or not your efforts toward applying these behavioral principles are going to succeed.

A second way to increase behavior is to remove an environmental event which is negative or aversive to the individual each and every time the behavior occurs. Again, the rate of the behavior which removes or terminates the negative or aversive event will reach an upper limit which depends on the number of times or frequency that the aversive event occurs. The behavior will then be maintained if the environmental event continues to be removed each time the behavior occurs. An unfortunate example of this principle can be seen in the wife who constantly "nags" the husband about everything he does or does not do. Assuming that this "nagging" behavior is aversive to the husband, which is probably a safe assumption here, he might remove or escape this aversive environmental event by going to the office in the evenings to "get some work done". Thus, the behavior of leaving home and going to the office in the evenings would increase in frequency and be maintained if it eliminated the aversive environmental event of the wife's nagging. It is obvious, however, that an increase in the husband's "going to the office" behavior would be detrimental to the marriage in several respects. In the first place, it would greatly impair an important part of any marriage, being and doing things together. Secondly, this escape behavior might well provide more fuel for the wife's "nagging" behavior, with the wife complaining about him being away from home so much. An important point brought out in this example is that all of the behavioral principles discussed here can be used to increase not only appropriate, desirable behaviors, but also are just as potent in their affect on inappropriate, detrimental behaviors. The key to success is in understanding the principles and using them to reach your goals.

A third way to increase behaviors which occur very seldom or at a low rate, is to use what is called the "Premack Principle". This involves finding a behavior which an individual engages in very often, at a high rate, and arranging the environment such that the the low rate behavior is always, or consistently followed by the high rate behavior. It is usually necessary to insure that the individual can never engage in the high rate behavior unless he or she first engages in the low rate behavior. Take the case of the "peanut butter kid". A mother complains that her son will eat nothing but peanut butter and milk. Although he is probably well-nourished, she wants him to eat vegetables and meats. Eating peanut butter and milk is therefore high frequency behavior and eating other foods is low frequency behavior. To increase the rate of the low-frequency behaviors, she allows him to eat peanut butter and drink milk only after eating spinach or hamburger, for example. She may use the principle of "shaping" here, at first requiring the boy to eat only one bite of spinach before receiving a bite of peanut butter and then increasing the amount of spinach he is required to eat before getting the bite of peanut butter. "Shaping" would continue until the boy is eating less peanut butter and milk than other foods.

#### Decreasing the Frequency of Behavior

One way for behavioral decrease to occur is to consistently follow each behavior with the presentation of a stimulus which is negative or aversive to the individual. If the rate of behavior is high, it will decrease rapidly to a low level, and be maintained at this new low level as long as the aversive event continues to follow the behavior. For example, if each time a child disobeyed his mother, he was harshly

scolded or spanked by her, this "disobedient" behavior would decrease. Another example of this principle would be the husband who immediately after any extramarital sexual relationship wrote down all of the negative consequences of such an action, e.g., she might get pregnant and tell my wife, if my wife found out she would divorce me, and I would have to pay her a large alimony, etc. Thus, the aversive statements might well aid in decreasing the frequency of the husband's extramarital sexual behavior.

A second way to insure behavior decrease is to remove an environmental event which is positive to the individual. Again, the rate of the behavior which removes or terminates the positive event will decrease rapidly to a low level, and be maintained at this new low level if the positive event continues to be removed each time the behavior occurs. The husband wishing to decrease his wife's "smoking" behavior could leave the room every time she took out a cigarette - this is assuming that his presence and their being together was rewarding to the wife. This same approach could be used for the mother who wishes to decrease her child's "crying at night" behavior. Instead of going to his room and comforting him each time he cries, as she has done in the past, she should not attend to him until he quits crying.

A third way to decrease behaviors that occur at a high rate (again using the "Premack Principle") is to find a behavior which occurs at a low rate and insure that the individual can never engage in the high rate behavior unless it is immediately followed by the low rate behavior. An example of this principle can be seen in how Mary and Joe decreased his behavior of watching T.V. until 1:00 A.M.

Mary and Joe decided that every night he watched T.V. until 1:00 A.M. he must sleep on their small sofa. The principle is clear; the high frequency behavior of "watching T.V. until 1:00 A.M." was immediately followed by the low frequency behavior of "sleeping on the sofa". Needless to say, it was not too long before Joe was going to bed at 10:00 P.M.

### Principles for Behavior Change

From the previous treatment, we can conclude that there are several principles of behavior change:

#### Increasing Low Level Behavior

Principle 1 - If a person's behavior is at a low level, follow that behavior with the presentation of an event which has been identified as a positive event by the individual and the behavior will be increased. In addition, the behavior will be maintained with continued application of the positive event following the behavior's occurrence.

Principle 2 - If someone's behavior is at a low level and a negative event is affecting the individual, follow the behavior with the removal of this negative event and the behavior will be increased. Also, as indicated in "Principle 1", the behavior will be maintained with continued removal of the negative event.

Principle 3 - If behavior is at a low level, follow that behavior with a high level behavior, i.e., one that occurs frequently, insuring that the high level behavior can never occur without being preceded by the low level behavior. As a result, the low level behavior will be increased and maintained by continuing the contingent relationship between it and the high level behavior.

### Decreasing High Level Behavior

Principle 4 - If behavior is at a high level, follow the behavior with an event which has been identified by the individual as a negative or aversive event and the behavior will be decreased to a low level. This low level will be maintained by continued application of the negative event.

Principle 5 - If a behavior is at a high level and accompanied by a positive event, remove the positive events each time the behavior occurs and the behavior will decrease to a low level, which will be maintained with continued removal of the positive event.

Principle 6 - If a behavior is at a high level, follow the high level behavior with a low level behavior and the high level behavior will decrease to a low level. As in all the preceding principles, the behavior will be maintained at the low level as long as the contingent relation is maintained.

### Conditions for Effective Use

Application of the preceding principles must take into account a number of critical conditions. 1) Identifying Observable Behaviors and Observable Events. The behavior or behaviors in question must be clearly identified such that the labels clearly stand for observable behaviors and observable events. For example, our mother who increased her daughter's "cleaning the room" behavior used observable behaviors, e.g., dusting, making a bed, hanging up clothes, etc., to define the more general behavior of cleaning the room. 2) Baseline Recording. The behavior must be recorded for an adequate period of time, usually one week, prior to the onset of any program with a recording system which is easy to use. The recording procedure allows accurate determination of the level of behavior and provides a permanent record of

behaviors over time which is not subject to loss of memory and can be seen by a number of individuals as a "picture of behavior". This recording should continue throughout your program. 3) Immediacy. Immediacy of application or removal of environmental events is extremely critical. To increase a low level behavior the positive event must be immediately applied and the negative event must be immediately removed following the occurrence of the behavior. Immediate application or removal insures immediate improvement or increase and continued maintenance. When trying to decrease high level behavior the negative event must be immediately applied or the positive event immediately removed following the behavior. In the case where a low level behavior is arranged to follow a high level behavior the low level behavior must be arranged to immediately follow the high level behavior. Immediate application in this case insures immediate decrease and continued maintenance of the behavior at a low level. 4) Consistency. In each case the positive or negative environmental event must be applied consistently. Consistent application requires that the positive or negative event be applied each and every time the recorded behavior occurs, and that the same contingency be used each and every time the behavior occurs. Inconsistency would result from (a) a failure to apply the contingency on occasions when the behavior was observed, (b) the application of different contingencies each time the behavior was observed, or (c) some combination of the two in kind or degree. 5) Identifying "truly" Positive or "truly" Negative Events. Determination of the positive and negative events to be applied or removed may be made by a review of the literature and acceptance of one that has been universally effective, or by asking the individual whose behavior is to be changed, or by selecting a large number of possibilities

and allowing the individual to choose from among those available. Regardless, the application or removal will not be effective unless the event is truly positive or truly negative to the individual whose behavior is being changed. Extreme care must be taken to insure that the original selection is appropriate and that the event remains positive or negative over repeated applications. If an event loses its effectiveness, another should be substituted. 6) Shaping. As clearly brought out in the example of the "peanut butter kid", an individual learns a new behavior much faster and more efficiently if the behavior can be presented in small steps. Thus, the person masters one step at a time before moving to the next. Too many behavioral programs have failed because those involved ignored the significance of "shaping" behavior. Don't let yours be one of them.

#### The Social Interaction

We have been discussing behavioral change when positive and negative environmental events are made contingent upon that behavior. We have seen that behavior will increase when positive events or high level behaviors follow or when negative events are removed by the behavior. We have also noted that behavior will decrease when negative events or low level behaviors follow, or when positive events are removed by the behavior. In these cases we were dealing with contingencies where one individual's behavior is placed in relation to a tangible environmental object, or to a preferred activity in which he or she alone can engage, or to another low rate or high rate behavior which is uniquely his or her own behavior. The same principles and conditions for effective usage apply to the cases where the behavior or behaviors of one individual are dependent upon another individual's behavior or behaviors.



People are not born in isolation, they do not grow to adulthood in isolation, and they do not live in and develop in isolation after they reach adulthood. Positive events and negative events, are presented and removed by people, and the opportunity to engage in high rate behavior is provided by people. In addition, the behavior of one person has either positive or negative effects on the other person. In other words, our behaviors are positive or negative events for other people and the application and removal of our behavior follows the same principles and conditions for effective usage that we have previously ascribed to environmental events.

I, B-4

## MODELING

Joe Kunsaker

Much of what we learn is learned through observing the behavior of others, who serve as models. Fortunately, since much scientific research has been conducted on this process, called modeling or observational learning, the process is quite well understood. We know, for example, that quite a large number of behaviors are influenced enormously by modeling experiences. These behaviors include emotional expression, delay of gratification, self-control, moral conduct, and most motor behaviors such as gestures, mannerisms, tone of voice, and phrasing of words.

One of the most satisfactory explanations of modeling states that there are two stages in the process:

- 1) Acquisition (learning how to perform a given behavior.)
- 2) Performance (concerned with whether or not one actually engages in the behaviors he has observed, hence learned.)

Research indicates that we learn from observing others very rapidly. We tend to learn the most from models of the same sex, models with high social status, models which are about our age, models which reward us, and models which have some control over our destiny.

In addition to the acquiring novel behaviors as a result of exposure to models, observing a model can either weaken or strengthen behaviors that we already know. For example, if one observes a person on TV, in the movies, or in person engaging in profanity, the probability that the observer will also engage in profanity is increased. The probability of such is increased the greater the amount of exposure that we have to the

model, and is also affected by such characteristics of the model which were mentioned earlier in this paper.

Since we observe literally thousands of models throughout our lives, it is obvious that simply observing a behavior in another does not necessarily mean that we will engage in the behavior ourselves. For example, most individuals can describe at least twenty different ways of committing murder, but fortunately very few of us actually commit murder. Movies, TV, books, newspapers, and other modeling experiences teach us how to murder, but why do so very few of us commit murder?

Whether or not we actually perform a behavior that we have learned through modeling depends on whether or not the behavior is rewarded or punished. For example, if either the model or observer is punished for engaging in a given modeled behavior, the probability that the behavior will reoccur is lessened. If the overwhelming number of our friends are teetotlers or drink moderately and refuse to attend social events characterized by heavy drinking, the probability that we will drink heavily or become alcoholics is reduced. Conversely, if the majority of our associates drink heavily and punish through social pressure abstinence or moderate drinking, the possibility that we will become heavy drinkers or alcoholics is increased enormously.

Quite simply then, whether we are aware of it or not, we affect the behavior of others enormously and they, in turn, have a great effect on our own behavior. It is indeed a truism of modeling research that what we do matters; what we say is of much lesser importance.

Let us now consider some examples of modeling principles. Suppose that Bobby sees his older brother, Tom, refusing to eat his dinner, upon which their mother, begs and pleads with Tom. Tom continues to refuse, and his mother finally goes back to the kitchen and cooks his favorite meal. Will this increase the probability that Bobby will begin to refuse some of the foods his mother prepares? Scientific research would certainly indicate this to be the case, especially since Tom's "refusing" behavior resulted in his favorite meal.

Unfortunately, as just seen, not all models provide us with observational experiences which stand us in good stead later in our lives. None of us are guaranteed that we have encountered the necessary learning experiences to be a good husband, wife, parent, teacher, etc. Prior related modeling experiences for most of us have been haphazard, inconsistent, and perhaps even destructive to our adult life satisfactions. For example, assume that throughout childhood Mrs. Smith's parents repeatedly "clammed up" following a difference of opinion. However, Mr. Smith's parents characteristically yelled, cursed, and fought each other following a disagreement. Although Mr. and Mrs. Smith would likely behave in line with the observational experiences mentioned, certainly their batting average at resolving marital differences would be very low. We might guess, for sake of illustration, that Mr. Smith would likely complain that his wife "doesn't listen" to his point of view, whereas Mrs. Smith might state that she is "afraid of Mr. Smith" when they have an argument.

However obnoxious or offensive the behavior of another seems to us, an adequate knowledge of behavioral principles seems to provide us with

scientific grounds for tolerance and understanding of others, since "people behave just the way they ought" in terms of their past history of learning. None of us had any control over these experiences and some of us were more or less fortunate than others in having experiences which more adequately equipped them for adult responsibilities.

Nevertheless, knowledge and awareness imply responsibilities. Given that the reader understands more fully how he or she affects, and, in turn, is affected by others in his or her environment, how might this knowledge be applied?

Self-improvement seems to make one a better model for others to observe; therefore, perhaps a self-contract is preferred. For example, Mrs. Jones noticed that her children were becoming more critical and "sassy"; then, reasoning that they were using her as a model, she contracted to decrease her own criticalness and sassiness. She wore a thick rubber band around her wrist and each time she was critical or sassy, she or any other member of her family would pull and release the rubber band, reminding her of her sassy or critical behavior. Her husband and children did likewise, and agreed to positive and negative consequences for sassing/not sassing and critical/non-critical behaviors.

Another use of modeling principles involves contracting to avoid contact with certain people having undesirable behaviors, and increasing contact with others who provide adequate models for a given behavior. For example, Mr. Doe complained of impulses to "step out" on his wife as did his poker friends "Hands" Fink, and "Letch" Flynn. Upon reading about modeling he contracted with his wife to dissociate himself with both "Hands"

and "Letch" in exchange for some very desirable consequences provided by his wife during the time formerly devoted to the Wednesday night poker game. The Does also joined a new group of couples.

Regardless of the procedure utilized, the familiar sequence of Pinpoint, Record, and Consequence should be utilized.

First, the models for a pinpointed behavior should be identified. Both positive and negative models should be clearly specified.

Secondly, the number and duration of contact with both categories of models should be recorded.

Thirdly, consequences of a negative nature should be imposed for contact with the negative model, and consequences of a positive nature should be made contingent upon contact with the desired model.

#### SUMMARY PRINCIPLES

1. We serve as models for others and they, in turn, serve as models for us. Thus, we affect the behavior of others, and they affect our behavior.
2. Learning through observation is very rapid. Consequently modeling procedures are very efficient in teaching new responses.
3. Whether or not we actually engage in a response or not depends on whether the response is rewarded or punished. Observing a model can either strengthen or weaken behaviors we already know.
4. If we observe the model being punished, we are less likely to engage in the model's behavior.
5. If we see the model rewarded, we are more likely to engage in the behavior.

6. We are affected most by models which are similar to us in sex, age, intelligence and models which are rewarding to us, high in status and having some control over our destiny.

7. We can model behaviors directly from other people, or indirectly from TV, books, radio, newspapers, magazines, etc.

8. We are not always aware of the influence that models have on our behavior.

9. Self-contracts can be used to make us better models.

10. Exchange contracts can be used to help us avoid poor models and increase our contact with more positive models.

## In-Service Training

## Course Evaluation

1. Research has indicated that parents who punish their children for aggressive behavior have more aggressive children than parents who do not punish their children for aggressive behavior. Interpret this finding in terms of modeling principles.
2. Using either a self-contract or an exchange contract, write a contract dealing with at least one of the positive and negative behaviors.
3. What kinds of models do we learn the most from?
4. You should be able to give an everyday example for each principle, illustrating each condition for effective use within each example.
5. List and explain three basic steps to follow in making changes in behavior.
6. A teacher complains that Steve is a "bad boy" in school. What questions would you ask her before starting a program to change his behavior? What would you do next?
7. List three (3) methods for controlling thoughts.
8. What is self control and how does a person gain the ability to control his own behavior?
9. Describe how motivation is produced using negative consequences (as applied in the CERCE Project).



10. Sally was observed by her teacher over a nine-day period during which she tipped her chair over the following number of times: 3, 4, 3, 2, 5, 6, 7, 7, and 9. The teacher then began an experimental procedure. Over the next five days the chair tipping was recorded as 3, 2, 1, 0, and 0. The teacher then withdrew the experimental procedures and chair tipping was recorded as 3, 4, and 7. The teacher then reinstated the experimental procedures and chair tipping was 3, 1, 0, 0, and 0 during that five-day period. The teacher continued experimental procedures and recorded the results one day every two weeks for the next ten weeks. She found the rate to be 0, 0, 1, 0, and 0. The school psychologist observed simultaneously on several occasions. He recorded three chair tips on the third day, eight tips on the seventh day, and no tips on the twelfth day. He recorded six tips on the sixteenth day and none on the twentieth day.

1. Graph the data above, labeling your graph properly. Points will be given for the following:
  - a. Correctly labeling the horizontal axis.
  - b. Correctly labeling the vertical axis.
  - c. Using the correct scale on the vertical axis.
  - d. Using the correct scale on the horizontal axis.
  - e. Correctly graphing the data points.
  - f. Correctly labeling the experimental conditions.
  - g. Correctly indicating the reliability points.
  - h. Correctly keying the reliability point information.
  - i. Correctly separating the experimental conditions.
  - j. Correctly separating the post check data points.

11. The baseline record was a record of the \_\_\_\_\_ of Sally's chair tipping behavior.
12. What was the mean (to the nearest tenth) number of chair tips during the first experimental phase?
13. The percent of observer agreement gives us an idea of the \_\_\_\_\_ of measurement.

14. What kind of research design was used in this example?  
\_\_\_\_\_

15. What kind of baseline is demonstrated in this example?  
\_\_\_\_\_

16. The behavior modifier is interested in dealing only with behavior that is \_\_\_\_\_ and \_\_\_\_\_  
\_\_\_\_\_.

17. What information must a scientific definition provide?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Bruce's teacher was concerned because he often called out to her without raising his hand. She estimated that he asked her questions, made requests, or told her something without permission approximately ten times per day. When he called out she answered him and reminded him to raise his hand next time. She sometimes scolded him for disturbing the class.

18. Which of the two major classes of behavior is Bruce's calling out? \_\_\_\_\_

19. Would you expect extinction to occur rather rapidly? Why? \_\_\_\_\_  
\_\_\_\_\_

20. Suggest a positive reinforcement procedure the teacher might use in conjunction with extinction to reduce talk-outs. \_\_\_\_\_  
\_\_\_\_\_

Suppose the teacher decides to reinforce Bruce for not calling out. She decides to tell him she appreciates his improved behavior, and she decides she will do this at the end of each week in which she feels his calling-out has decreased. Suggest at least four things which might account for lack of success under this procedure.

21. \_\_\_\_\_

22. \_\_\_\_\_

23. \_\_\_\_\_

24. \_\_\_\_\_

Bill's teacher decides to reinforce him for improvement in accuracy in working math problems. She gives him ten problems a day. She keeps track and finds that on the average he gets only one problem correct.

25. What kind of reinforcement schedule would you shift to following acquisition?

\_\_\_\_\_

26. If you eventually put him on an FR-6 schedule, when would you reinforce him? \_\_\_\_\_

\_\_\_\_\_

- 27-28. John has learned to ask his father for the keys to the family car only when his father is relaxed and comfortable. John knows that when his father is concentrating on something else, or when he is busy or angry, that the condition is \_\_\_\_\_ for letting him have the car. When his father is relaxed and happy, that the condition is \_\_\_\_\_ . (Use correct symbols).

29. When an organism learns to emit a behavior in some situations and not in others we say a \_\_\_\_\_ has been learned.

30. List ten potential reinforcers available to teachers in most classrooms. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

31. List at least three things a school principal might do to change his role from that of a person who primarily dispenses punishment?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## In-Service Training

## Course Evaluation

1. List the five most influential models in your life and pinpoint associated positive and negative behaviors which you feel were acquired from these models.

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2. What is meant by the statement, "People behave just the way they ought?"
3. What three factors affect performance of the observed behaviors?
4. Why is it important to take a baseline recording?
5. Why might discipline (scolding, for example) fail to eliminate a child's inappropriate behavior at home?
6. Describe what must be done to ensure that treatment effects are permanent.
7. Describe how motivation is produced using positive consequences (As applied in the CERCE Project).

Sally was observed by her teacher over a nine-day period during which she tipped her chair over the following number of times: 3, 4, 3, 2, 5, 6, 7, 7, and 9. The teacher then began an experimental procedure. Over the next five days the chair tipping was recorded as 3, 2, 1, 0, and 0. The

teacher then withdrew the experimental procedures and chair tipping was recorded as 2, 4, and 7. The teacher then reinstated the experimental procedures and chair tipping was 3, 1, 0, 0, and 0 during that five-day period. The teacher continued experimental procedures and recorded the results one day every two weeks for the next ten weeks. She found the rate to be 0, 0, 1, 0, and 0. The school psychologist observed simultaneously on several occasions. He recorded three chair tips on the third day, eight tips on the seventh day, and no tips on the twelfth day. He recorded six tips on the sixteenth day and none of the twentieth day.

8. What kind of observational recording did the teacher use?  
\_\_\_\_\_
9. What was the median number of chair tips during baseline?  
\_\_\_\_\_
10. What was the mean percent of agreement of the observers during the baseline phase? \_\_\_\_\_
11. In this example, is it acceptable? \_\_\_\_\_
12. Does the eyeball test indicate that causality has been demonstrated?
13. Was it sound to begin experimental procedures at this point even though the baseline was unstable? \_\_\_\_\_  
Why? \_\_\_\_\_
14. Was a scientific definition of the behavior given regarding Sally's behavior? \_\_\_\_\_
15. For extra credit, answer the following:

Make a cumulative record of the following data: Pete's teacher recorded the following number of talk-outs. Baseline<sub>1</sub> = 2, 2, 1, and 2. Experimental Condition = 1, 0, 0, 0, and 0. Baseline<sub>2</sub> = 2, 2, 2, and 2.

Bruce's teacher was concerned because he often called out to her without raising his hand. She estimated that he asked her questions, made requests, or told her something without permission approximately ten times per day. When he called out she answered him and reminded him to raise his hand next time. She sometimes scolded him for disturbing the class.

16. Suggest an extinction procedure the teacher might use to reduce Bruce's calling-out behavior. \_\_\_\_\_

\_\_\_\_\_

17. Suggest a positive reinforcement procedure the teacher might use in conjunction with extinction to reduce talk-outs by Bruce.

Bill's teacher decides to reinforce him for improvement in accuracy in working math problems. She gives him ten problems a day. She keeps track and finds that on the average he gets only one problem correct.

18. Suggest a shaping procedure to be used in getting Bill to get all ten problems correct. \_\_\_\_\_

\_\_\_\_\_

19. What kind of schedule would you shift to following acquisition?

\_\_\_\_\_

20. How could you tell whether the potential reinforcer you chose was effective? \_\_\_\_\_

\_\_\_\_\_

21. When one has learned to emit a behavior in some situations he is more likely to emit it in similar situations. This is called \_\_\_\_\_.

22. List five advantages of using token systems.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

e. \_\_\_\_\_

23. Being a good parent or spouse is at best difficult. Suggest how an adult having problems as a parent or spouse might most likely need to change his behavior if he is having problems in his home.

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## COGNITION AND BEHAVIOR:

## MEETING AND MEDIATING THE ENVIRONMENT

## Part I

Anybody who works at the business of guiding others is bound to act from a philosophy about behavior. You may never have sat down to write it out formally. You may never have thought long deep thoughts about the human situation. But your assumptions, your experiences, and your predictions together make a kind of philosophy. They tell you how to decide when you must choose between praising or withholding praise. They tell you what to condemn, what to ignore, and what to excuse with just a warning to try harder next time. Those guidelines that aid you to aid others are all I mean by a philosophy.

For just under 100 years, scientists have been trying to solve the mysteries of human behavior. Instead of speculations, guesses and metaphors, they have tried to learn in different ways, from careful observations and from controlled experiments. For a long time their efforts oozed slowly along. Psychology, for example, after about 70 years, had a working model of man not more complicated than its model of how a bright rodent could solve maze problems. For example, it was widely held that the only way to learn was by trial and error. The better attempts would earn reward and so would eventually be stamped in. The poorer attempts would lead to blind alleys, lengthy detours, wasted time and effort, or to punishment. Eventually, errors would be



forgotten or abandoned. Useful actions would persist and continue.

Science is just starting to adopt a new view of humanity. In this view, people are FUNCTIONALLY much closer to what the man on the street has believed all along. That is, what people do is seen in much the same descriptive terms as common sense: They love; they hate; they feel bored. They worry about and ponder enough and just leap into action. They think a lot, and plan a lot, and use their conclusions to make inferences about what to do. If they don't weigh or consider enough information, they make wrong decisions and get into trouble. However, if they lack useful patterns or skill for thinking, for planning, for guiding themselves, they can probably be taught much more and much faster than we once believed. If you know how and if the environmental conditions are set up to support change, you can teach pretty old dogs a lot of pretty new tricks much faster than experts once believed. All of that is functional, in terms of what happens in a general or a global way to reach certain human goals. STRUCTURALLY, things are much more complicated than anyone, Freud included, ever imagined. The mechanisms and specific processes that underlie functional changes are more elaborate and more intricate and, especially, more optional or flexible or loosely determined than early and middle behaviorists would ever have dreamt. We won't talk too much about the fancy microevents or the process micro structure that ties

into an organized whole the threads of the parts.

INPUT EVENTS: Perception

In order to handle a situation, we've got to perceive it. You can watch or listen to chess game, or a bridge game, or a corrections unit going on. But if you don't know what to focus on, what counts, and how to make sense of it, the events won't have very much meaning. You'll be confused. Or worse, you'll get a false picture that will lead you to draw false conclusions and that will suggest actions that will not work. Anyone who perceives a policewoman as a streetwalker is in for trouble.

1. Attention. The first step in perception is attending. Even small events are too complex for us to notice everything about them. Attention is a kind of filter. It should pick out and focus on what counts, the important parts of events. And it should screen out or neglect the trivia. Attention is an active process. It doesn't happen automatically and a lot of people don't know how to attend. They think about other things. They get hung up on minor acorns and miss major oaks. Since people can only handle a limited batch of information at a time, it's like a suitcase. If you pack it full of far-fetched or nonessential clothes, there's no room left for the important stuff.

A lot of people screw-up because they don't know how to filter out distractions and to attend

to main points. The man who takes everything personally, and stores up gripes, may need help in filtering more realistically. You may have to go back and show him that he's picking out little things, taking them out of context, in ways that most of us don't use. By the time he has attended to minor events and built them into a case in his mind, it's too late to argue. He thinks he has good reasons for anger. And he would have IF his case was built on realistic filtering instead of distorted attention. The same goes for people who seem to leave out big chunks of fact in making decisions. They may be able to learn and to plan pretty well. But if important factors get ignored all along, he can't include them later when the time comes to act.

2. Representation. Closely related to attention is the process of representing or mentally depicting the attended information, recognizing them for what they are. Most human conduct is guided and steered by mental representations of reality. One man's meat is another man's exlax. The only difference may rest on how cues have been represented. If somebody is smiling, that is a raw fact one can attend to. If you see or recognize

the smile as a greeting or as a sarcastic gesture, you have added meaning. You have interpreted or represented it with further significance that it may or may not really deserve. Then, in the next step you will encode or label it not just as a smile, but as a friendly or a shit-eating grin.

3. Encoding. Therefore, at the stage of labeling or encoding, you have started to build a mental reality that will determine what information you carry away for later guidance. You have moved from noting or attending to the pattern of someone's lips, along to the point of recognizing it as a smile. Then you have added a crucial step of meaning. You have labeled or encoded the smile as well-meant or badly-meant. It is very obvious that the same stimulus smile will have very, very different meaning if you perceive it in one way as opposed to the other. By this point of encoding you have painted an interpretation on the event and that is what will be learned, what you will carry away from the event. In other words, we can only learn in terms of what we perceive whether or not we perceive correctly.

## COGNITION AND BEHAVIOR:

MEETING AND MEDIATING THE ENVIRONMENT  
Part II

## III. Social Cues and Events: Observation and Judgement.

So far, we are still not close to putting together the skills of handling knowledge with the factors that control what kind of knowledge we acquire. That is, so far we've looked at processes inside the head. Now we need to turn to the environmental channels and social forces that determine what gets into the head, and after that what kinds of events or factors steer the actions we undertake.

Most of our conduct is shaped and aimed by social forces. To be a human being means to share language, customs, experiences with others. Solitary confinement is supposed to be about the worst kind of incarceration. You all may know much more than I do about what solitary does to people. I do know that loneliness is a very powerful human emotion. It will drive people to do or avoid things at least as surely as will hunger or thirst. The kid who breaks laws and gets into trouble may be a delinquent in the eyes of the law. But he may be a leader or a hero to the other kids, the audience that he values.

High Impact of Social Information

To return to the framework of information-processing, social information is particularly potent. There are a number of reasons for this. First, social cues are important to us. We care a great deal about what others are doing, what they value or sneer at, and how they feel toward us. This means that information that gets transmitted through social sources has a kind of privileged status. We attend to it more carefully. We are more apt to encode and store it actively. We mentally rehearse it a lot. That is, we are more inclined to think about what we see and hear from valued friends and colleagues than we are to ponder over the same content if we read it in the paper or hear it in a commercial. It is not only that we trust information from social sources more than information from other sources, but also that we are more likely to be influenced by social information than by other information.

we are more likely to pick it up and try to relate it to our own points of view, our organizing frameworks for preserving knowledge. In the process of active thinking, we are more likely to recode or formulate knowledge from social sources into symbols that have private relevance and that hence endure better when the time for retrieval and action comes along. This is partly because we expect that input sampled from social models will have relevance for our own actions, immediately or eventually. For example, if we see that certain patterns of conduct bring some coworkers promotions and appreciation, but contrary conduct leads other colleagues into trouble, it is a short step of judgement for us to anticipate what either kind of behavior is likely to invite if we tried it ourselves. The same principle holds whether one is talking about handling one's career, choosing a neighborhood to buy a house, or entertaining plans to seduce some attractive potential partner. The strategies and styles that work well for peers are likely to work for us too, and vice versa. We can learn from other's mistakes as well as our own.

#### Predictive Value of Social Exposure as Standards for Conduct

In addition to the privileged salience of socially-conveyed information, and its value for predicting our own outcomes, observing the mores, inhibitions, and values of particular others has a sampling function. Quite naturally, we assume that social consensus as we encounter it is a good predictor of social opinion in situations we have never directly encountered. We all live in a tiny studio; our social experiences are a pinprick in the larger audience of the total society. People rely on the guidance of social consensus or majority opinion for deciding how to act appropriately in ambiguous conditions. And many episodes are ambiguous every day. Should I greet the person across the hall? I think I've met him before but I'm not sure. Should

I oblige the pan-handler or the hitch-hiker or keep on going? Should I spank my son for forgetting a chore, or for not getting home until 3 A.M., or should I let it pass? In many situations, we simply do not have firm guidelines or opinions of our own about how to act. Typically, in such case, we turn to our predictions or extrapolations about social consensus, group norms, as standards for judgement about how we should act ourselves. There is plentiful research evidence to show that social groups actively propagandize people who depart from shared norms; if group members persist in deviating, punishment or ostracism result. I think we are well aware of these kinds of social influences as guideposts and constraints upon our own behavior. What may be less obvious, is that most of us are rarely in a good position to directly assess or test the actual opinions that are held by our valued social partners. We rarely conduct an opinion poll of colleagues and friends before we act. Instead, we estimate group attitudes from very limited data.

#### Weighting of Standards

Our perception of social norms is largely a weighted prediction drawn from rather few instances in which we have observed social models dealing with decisions that are relevant to our own problems. One of the assets for clinicians who counsel others, is that very often the client has not shared his problems with anybody else or has confided in very few others. This means that the counselor's input as a model gets heavily weighted. The number 7 when averaged with the numbers 4 and 9 contributes much more to the resulting average than if the counselor's input, 7, must be added in with 25 other numbers or prior anchors. Helson's Adaptation Level Theory, and Social Judgement Theory (Sherif and Hovland, 1964) deal with these issues technically. What is important now is that social experiences serve as anchors

from which people extrapolate to many situations about which they have no first hand knowledge. Sometimes, this has tragic results. It is commonplace to law enforcement agencies that if the media play up a violent crime like mass murder or airline hijacking, very often a spate of related crimes occur, committed by other people in other places. Dramatic, deviant social modeling has privileged status as information, just as does more usual, more adaptive social modeling.

### Modeling as Guidance

The third facet of socially modeled information, is that it is a highly effective source of learning. We've touched on its priority for attention and storage, and also suggested that people are especially likely to use socially-derived guidelines to predict social response and interpersonal consequences in new situations. A very different aspect of modeled information is more technical. For a vast number of important human performances, information is more clearly and more effectively conveyed by demonstrations or example than by any other known techniques. The easiest way to illustrate this is to imagine trying to assemble some lawn furniture about which you know nothing. In case A, consider trying to follow the "simple" directions on the carton. Any novice who has done so will be well aware this can be a very time-consuming and frustrating endeavor. In case B, instead imagine asking a friend over coffee to instruct you in the mysteries of assembling picnic tables. While your friend's instructions may add further clues, on the one hand, it is hard to tie his words into the iconic, or visual, the spatial, and the motor demands of the boards; it is hard to link his words to the actual nuts, bolts, braces, washers and so forth. On the other hand, it is hard to organize and store the intended activities into a smoothly - flowing sequence. You must somehow represent the symbols generated



over coffee in a form that will later unroll in proper order when you again attack the furniture. In case C, instead imagine that the same friend volunteers to show you how to do it. You can watch how the deeds are organized and witness those important little steps that experts usually forget to include in directions they give out of the actual context. All these points should seem infinitely clear.

There is also considerable research evidence that shows, for many abstract, practical, and clinical purposes, that observation is more efficient than are trail-and-error practice or verbal directions about how to perform. Thus, social modeling of activities not only is more likely to encourage active learning efforts by observers, but it is also more likely to transmit guidance messages clearly and accurately, in a fashion more easy to acquire and to transfer to new conditions.

Now, I want to take a leap forward. There is a considerable body of research evidence which suggests this conclusion: Observing modeling is a highly efficient means to learn new behavior, behavior as varied as new routes or action sequences, new concepts, new styles of seeking-out and organizing information, and new forms of adaptive conduct (Rosenthal, 1976). That is, for purposes of guiding corrections inmates, and clinical clients, there are good reasons to conclude that social modeling is as important as, or is more important than, any other form of training. Indeed, evidence is growing to suggest that observational or social learning, from the examples modeled by other people, may well be the most typical means of learning under natural environmental conditions.

#### Implications of Modeling Effects

What does this imply? First, that if a person observes the actions of peers and their consequences, this is an important source of guidance for him. Second, that no matter what counselors preach or promise, it

will count very little unless the client observes situational events are in line with the words. Exhortations are much weaker than demonstrations as training devices. Promises and statements that something is true or necessary or important promptly get dismissed if people observe that realities do not square with the verbal assertions. Talk is cheap. If our goal is to instill new patterns and standards of action, then situational facts people witness must support situational norms or rules they get told. However, when an environment is working in a manner that is accurately mapped by counselor guidelines, both their verbal summaries of rules or principles AND the overt, action goals of the setting gain strength as internal regulating standards. This contains great dangers but also offers great opportunity for changing even stubborn, antisocial behavior patterns.

Let me tell you in some detail why these facts are so important. Since socially-transmitted information has high priority for attention, coding, and storage, AND since social exposures serve as guidelines or anchors for predicting the future, the ongoing events in a new setting have very great chance to reorganize a person's knowledge and expectations about the connections between behavioral cause and social effect. Further, since ongoing social practices, ways of acting and handling demands, are crucial training events in their own right, what people see as the ways a system work will dictate how they will try to behave within that system. If the system, the CERCE program, is a fair, accurate reflection of how things also work on the outside, the person who learns to make it here is also learning behavior that will work later on.

#### IV. Social System Impact on Motivation And Conduct

All of that may seem self evident. What is not self evident is this: Once a social system gets going, it develops a kind of life of its own. If people can be made to follow new rules, and find they work in a system, they will not only adhere to the rules, but they become models for new recruits. Not only will they demonstrate by their own conduct how rookies should act to succeed in the system, they will also become socializing agents acting on behalf of the system. Concretely, they will give acceptance and status to a large extent depending how newcomers meet or fail to meet the norms of the environment. They will steer newcomers toward the accepted rules, reward their progress, and punish deviations. You may not care for football very much. But if circumstances place you in a football game, and if your own goals and satisfactions depend on your playing well, you are apt to accept another guy who performs well. But you will tease, sneer at, or ignore the person who screws up. When in Rome, do like the Romans. Human beings rarely can dismiss the importance or correctness of the rules they must adhere to if the rules bring them meaningful gains and satisfactions and if they have no opportunity to play by other rules.

#### Reinforcement, Expectation, and Response to Social Systems

One classic reason for the failure of many social programs is that the new system has holes in it. Holes that permit the first generation, the starting recruits, to find other ways to milk the system of rewards through short cuts. They bypass or go around the steps the system wants to make habitual. Another typical reason for social system failure, is that the rewards for playing the game are insufficient to really count. They don't expect the system will

really pay off enough in the future. In other words, the newcomer is more concerned with learning how to keep his nose clean and avoid punishment than with trying to earn the wages or rewards or promotions possible within the system. A third source of system failure occurs when a system is implemented in a manner so brutal or cruel or unfair or arbitrary that anger and resentment swamp the importance of any goodies the system offers. Under such conditions, people can show amazing stubbornness at resisting a system; they will endure pain and deprivation in order to have a sense of fighting back. It is a kind of "One Flew Over the Cuckoo's Nest" situation. I am not too worried about any of these problems arising here at CERCE.

#### Transfer From Training System to Naturalistic Conditions

A last, and somewhat different problem has handicapped numbers of change programs historically. The system is effective internally, but the system's rules are too different from the rules the learner encounters once he gets out. People learn to succeed inside the system, but after discharge they find that the outside world does not follow the rules they have worked to master inside. Expectations are too different. Rewards are not provided in a manner approximately fair or expected from the vantage point of how the system operated. This is always a problem with corrections and rehabilitation programs because a free society is variable, inconsistent, sometimes arbitrary and often unfair. In the long run, we like to think that things even out. But people do not, by and large, live in the long run. They live in terms of their current experiences and use those as anchors or frames of reference for predicting or estimating the future. However, if a newcomer enters a system, sees it working, sees other inmates following the rules, and even organizing events as good or bad in terms of matching or deviating from the rules, that is a starting point. The

newcomer will try, ordinarily, to fit into the system. He will certainly want social acceptance by his peers, if only to keep them off his back. If he acts in accord with the modeled subculture, and earns meaningful rewards in exchange, half the battle is won. If the modeling of senior inmates brings them real rewards after discharge, and if the newcomer can expect that he can hack the system, and also that by following the system he can use the same reasoning later, follow the same principles, standards, and action patterns, you are well along to having him hooked on making positive, prosocial changes.

#### First Members as Models For Later Arrivals

All of this leads to a simple and important conclusion. The first one or two generations count vastly more than all others. What happens to the first recruits determines what they will be modeling for the next recruits, and so on. Given the power of social modeling, as has been covered, it is not likely that a system will work if its members are modeling deviant, crooked, or back door solutions successfully. On the other hand, if the new arrival sees a system in which conduct, expectations, and rewards occur in line with the program goals, much of your work is done. You can largely be spared efforts to resist or deny the system. Instead, you can concentrate on helping people learn the rules and skills they need to make it. Of course, some individuals will fail, or will refuse to try to play by the CERCE rules. But as long as they can be kept to a small minority, relative to a majority who are following (and therefore modeling for each other) behavior supporting program goals, a variety of informational and social pressures will act to keep the majority in line most of the time. And new recruits will, rather easily, adopt the standards, expectations, and performance guidelines you want to train.

### Reward Mediated By Expectations

Way near the beginning, I pointed out that reward depends on people's beliefs and expectations. Remember the experiment showing that the actual schedule of reward was less important than the schedule people believed they were getting, or expected to get. Like a lot of the other examples we have looked at, reward also depends on, is mediated, cognitively. Pleasures and pains do not automatically stamp in or knock out a behavior. Instead, incentives serve a variety of functions that fit together with the other psychological processes we have covered. Let me just list some major roles played by incentives in directing and supporting action:

1. Reward cues attract attention or repel it. If we expect information will have later value as a means to earn important rewards, we will attend to it more carefully, and therefore process it better.
2. Reward turns knowledge into performance. Most of us have available a vast amount of knowledge stored that we act on very rarely. If, for example, I thought that doing this (pound foot) would bring down manna from heaven, or excuse me from needing to pay income tax, I would do one hell of a lot of foot pounding. The decisions about whether or not to toe the line, whether to follow rules once we have learned them, will often depend on our judgement that the action will earn important reward, or will not lead to anything in particular. In that fashion, reinforcement is a very crucial determinant of the strength, or probability, of behavior.
3. Expectations about reward guide personal planning. If a person has the capacity and skill to perform a response, offer him a tempting reward and he will usually perform. Most of us will enact responses that promptly lead to valued reinforcers. If society dispensed rewards for desirable behavior promptly, and spankings or scoldings for misbehavior equally promptly, a lot of human problems would be

prevented. But that is not the way the world usually works. Many important activities are very demanding, time consuming, and effortful. Reward for such behavior may be long delayed. The student trying to memorize French verbs as a freshman is looking ahead years later to graduation from college and getting a good job. In the shorter run, he is looking ahead to good feeling and praise, or maybe a new car, from his parents, if his grades are high enough. His studying activities fit into a set of plans that tie the action to expected short term and long range rewards. If someone wants to become a physician, the person may need to start planning concrete steps, and their execution, ten years before he expects to earn this rewarding career. Still, for most of us, expected rewards that we really value create plans of action that are bridges to cross in order to reach the goal. If we do not control our present acts by their future consequences, we often get into trouble. Equally, if our plans are faulty, no amount of effort headed in the wrong direction will bring us to the rewards we are trying to reach. Just as important, when a social system makes general plans for us, in the form of rules, we will create individual plans of our own that may support or go against the program. If we feel the rewards are not worth the effort, we will probably plan how to do as little as possible safely. If we feel the rewards are fine, but the action required will only work inside that specific system, and will not apply to ordinary or future living, we will create private plans very different from what the system had in mind. Like planning how to graduate and, then, how to set up a bank robbery or a con game. But if the pattern of rewards demanded matches the kind of planning needed in everyday life, then the reward structure of a retraining system has a good chance to lead people to revise their ways of dealing with the larger world. In such case, people may still need a lot of guidance at planning their conduct,

and a lot of feedback to help them improve their conduct. Still, if the retraining system is a fair map of the skills needed and rewards available in the larger world, learning how to plan within the system is also invaluable practice for the time after discharge. This is another way of looking at how social systems can alter the self-regulation patterns of convicts. By teaching how to earn meaningful rewards inside the system, and demanding useful behavior to earn those rewards, the system serves another function. It teaches the convict to correct faulty or incomplete planning patterns by requiring him to learn new techniques. The same new techniques, once learned and mastered, can continue to steer appropriate and successful internal planning in the world outside. What all of this says, then, is that just as symbolic events steer our expectations and beliefs about reinforcement, the reverse is also true. Powerful and valued rewards, only given for progressively better quality behavior, serve as points of mental reference. They are the goals around which we organize our behavior. They are also the pay-off that encourages the time and effort we devote to making realistic plans.



**END**