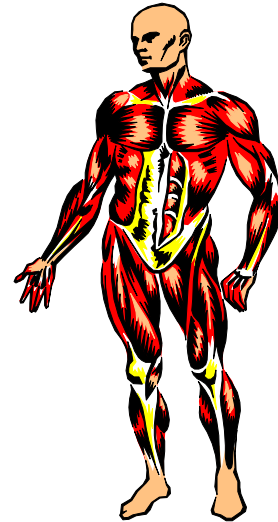




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## **Behavioral Relativity & Cognitive Economics**

- HUMAN NATURE
- REALITY ORIENTATION
- THERAPEUTIC INTERACTION
- THE PRINCIPLES OF LEARNING
- VALUES & VALUE JUDGMENTS
- RELATIONSHIPS
- ADDICTIONS
- SELF-INJURIOUS BEHAVIOR
- GENERATIVE STRESS
- BEHAVIOR PROBLEM PREVENTION & SOLVING
- RIGHTS & RESPONSIBILITIES
- SHAPING THE SELF





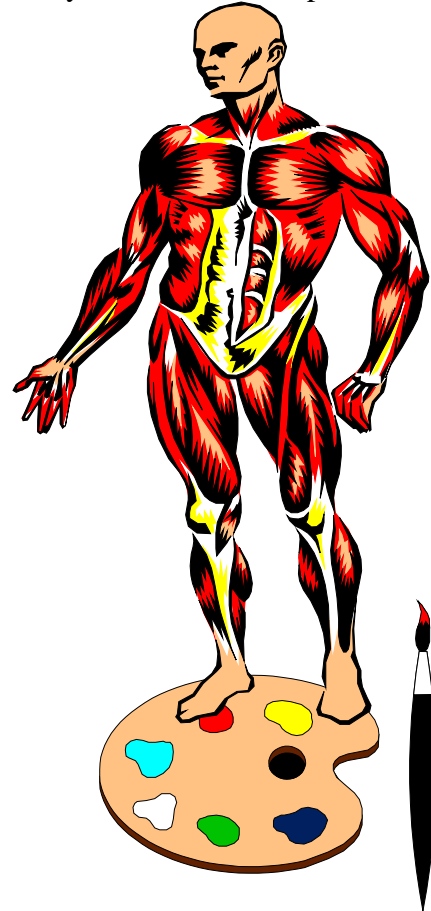
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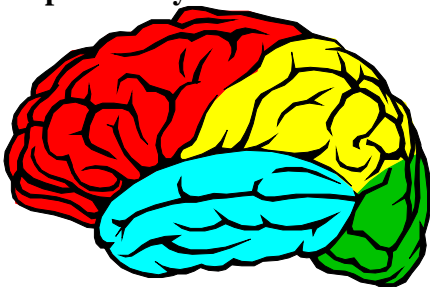
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**All things are *relative* and even chaos is well patterned.** In our day to day lives, relativity is revealed in the regularity and order of things, in our recognition of patterns, matters of similarities and differences, causes and effects, antecedents and consequences, associations and relationships. It is this relativity that gives order and stability to our felt and experienced reality. It is this relativity that allows us to shape our behavior, and thus the behavior of others, to meet our needs. It is this relativity that allows us to plan and prepare for the future and to reflect on the past. It is this relativity that gives meaning to the events of our lives and affords us the structure and security of familiarity. It is this relativity that makes practice and repetition possible, that keeps the flood of our experiences from overwhelming us. It is this relativity, the perceived regularity and stability, the cycles and patterns of our nature and the nature around us, the interrelationship of time and space that allows for our learning and development, our predictability and control, or at least our risk and opportunity management. Ultimately, it is this relativity that gives us *our sense of self*, the common thread that we weave across the fabric of time and circumstance, our hopes and fears, our values and beliefs, our behavioral strategies and tactics, the patterns we create by and of our selves, our actions and reactions - *our personalities*.



*Behavioral Relativity* is concerned with human nature and development, with patterns and pattern recognition, with individuals and systems made up of individuals, with critical thinking skills and behavior problem prevention and solving, with **personal responsibility and freedom**.

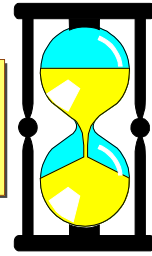


*Behavioral Relativity* is concerned with **discovering the patterns of chaos in our daily lives** in order to create order out of disorder, to clarify alternatives, to predict the course of events and to create choices where none existed.



**SPACE**

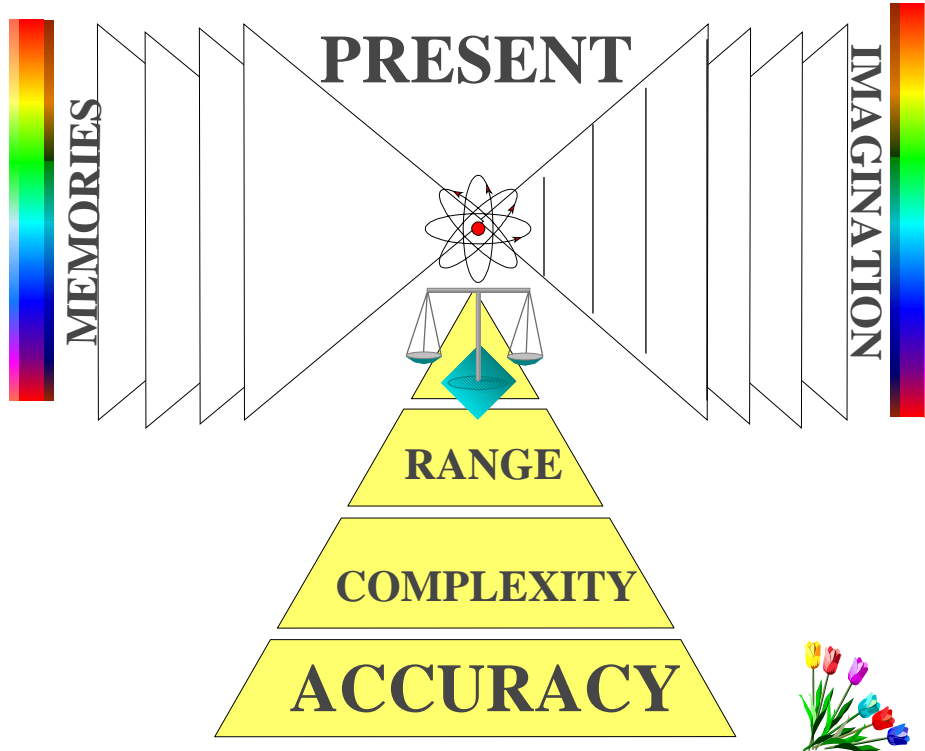
**TIME**



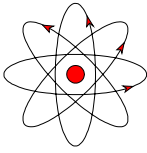
# HALF FULL OF WHAT?

**PAST**

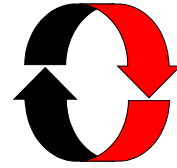
**FUTURE**



(BRACE™)



**BEHAVIORAL RELATIVITY  
&  
COGNITIVE ECONOMICS**



**(A COGNITIVE-BEHAVIORAL-EXISTENTIAL MODEL CURRENTLY APPLIED TO  
INTERPERSONAL ALTERNATIVES AND GUIDELINES FOR THERAPEUTIC  
INTERACTION)**

**INTRODUCTION:**

“*Behavioral Relativity and Cognitive Economics*” is a cognitive-behavioral model which employs the terminology of economics along with the basic principles of learning as an aide to understanding, preventing and solving complex behavior problems in an effective and therapeutic manner. People are generally more familiar and comfortable with economic terms than the terminology of modern learning theory and it is often easier for them to conceptualize and identify with economic interests and concepts such as “work,” “pay” and “cost” rather than "behavior," "reinforcement" and "punishment." Economic concepts such as “value,” “consumer,” “market,” “purchasing power,” “buying habits,” “supply and demand,” “risk management,” and even “depressed or inflated economy” are powerful metaphors directly applicable to human behavior. In fact, it is human behavior that economics attempts to describe, predict and manage. Cognitive economics is an instructional tool and a model for behavior problem prevention and solving.

In a scientific sense, all learned behavior is lawful and rational, even those behaviors that are apparently self-destructive or completely irrational. Understanding is the key to behavior problem solving, and the key to understanding such behavior is to first understand the “laws” which govern their development and maintenance (i.e. the basic principles of learning), then to discover how those laws are currently operating for the individual(s) in question. Cognitive Economics intentionally employs the terminology

and concepts of both economics and psychology, making “*cognitive economics*” a metaphor which emphasizes the relative and dynamic nature of motivation and performance. Economic systems obey the same basic laws as any other behavioral system and each person has their own personal economy. Each person is also a contributing member of various other economies: the economies of friends, family, associates, social groups, community, county, state, country, et cetera. Economies are, by their very nature, interpersonal - even the international ones. Similarly, most behavior problems are interpersonal in nature and require interpersonal solutions.





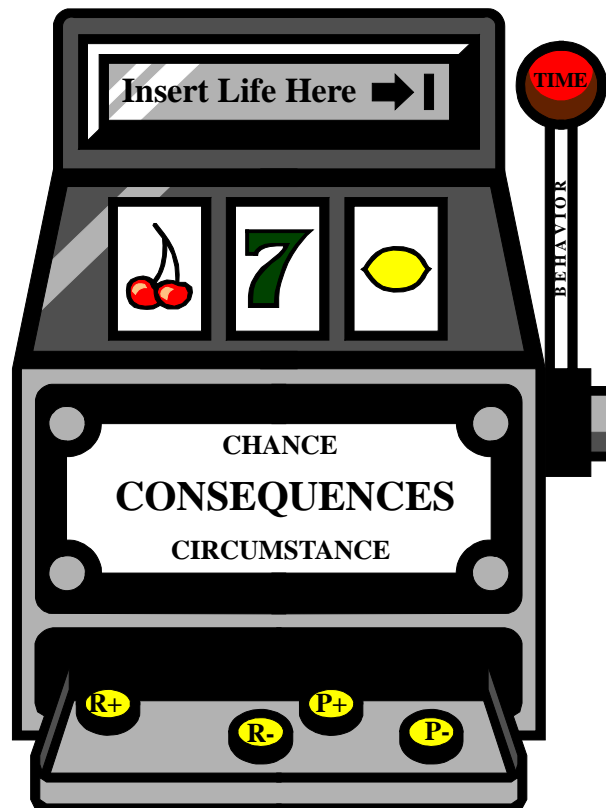


People “behave” or act the way they do because of their

- genetic makeup or heredity (capacity for differential sensory reaction to stimulation by the various forms of physical energy that are within the range of human experience; sensory/perceptual range...),
- learning history (past experiences- memory, associations, habits, self-discipline, behavioral hierarchies, emotions, response predispositions, beliefs, values...),
- current physical/cognitive state (arousal, awareness, efficiency...), and
- current life situation (attention, expectation, motivation...).

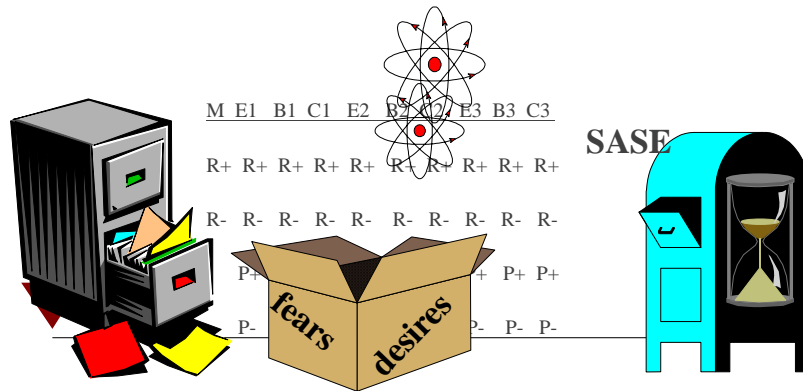
In brief, people behave the way they do because of what they:

- ✓ can experience/do,
- ✓ have experienced/done,
- ✓ are experiencing/doing, and
- ✓ expect/want to experience/do.

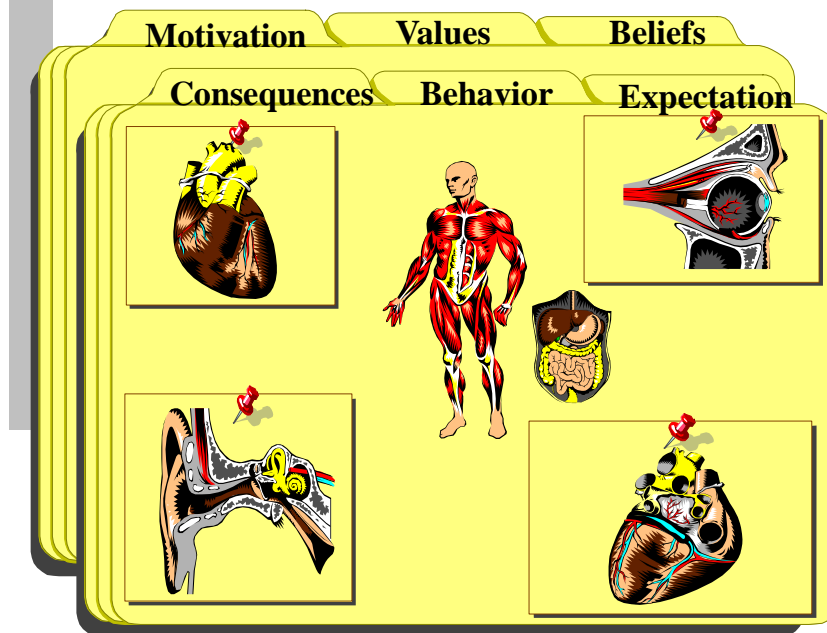


Behavior modification is concerned with changing what a person does (learns to do) by changing what a person experiences (modifying antecedent conditions and/or consequences in order to change the frequency, intensity and/or duration of the “target behavior”).

Learning and behavior change are going on all of the time. Behavior is always “changing”- getting stronger/weaker, more or less intense, more or less likely to occur again. The principles of learning are always “at work,” regardless of a person’s awareness of them. Behavior modification is simply an intentional, planned, systematic application of learning principles.



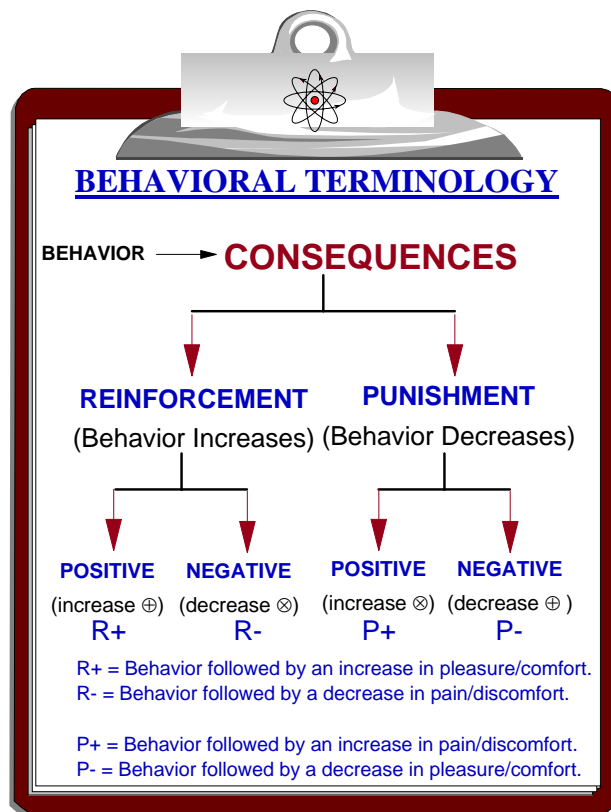
## me, my self and eye



## BEHAVIOR AND BEHAVIORAL TERMINOLOGY

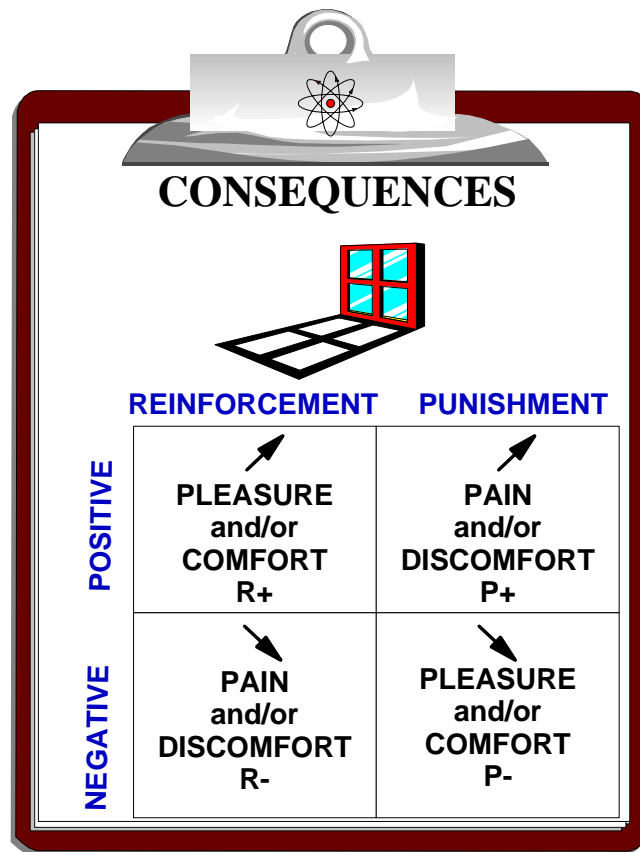
The “cause” of any learned behavior is the “effect of previous consequences” for that behavior. That is, **current behavior is caused by its past effects**. Behaviors that are “successful” are more likely to occur again. Behaviors that are followed by relatively improved conditions are learned, whereas behaviors that are followed by relatively worse conditions tend not to be repeated. In order to change future behavior, the consequences of current behavior must be changed or the behavior must be replaced with a behavior that is more effective or requires less effort.

As an objective approach to human behavior, behavior modification focuses on behaviors that can be observed and measured. Measurement requires that behaviors be defined in observable, measurable terms. A good behavioral definition is sufficiently descriptive to ensure that any two reasonable observers would agree about what the behavior is and whether or not it has occurred.

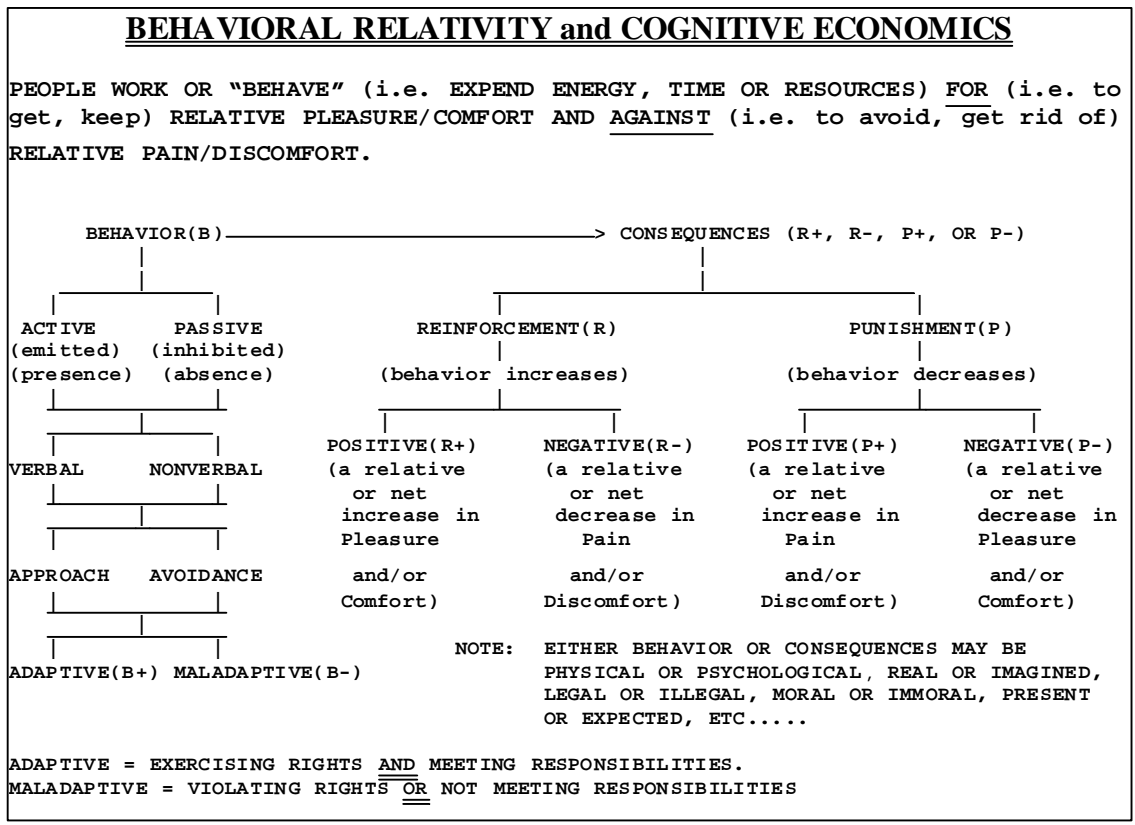


In general, when describing a behavior use action verbs and include the object of the action and descriptive modifiers whenever possible. Answer the basic question, “Exactly what did the person do?” “Paint” a clear picture with your words so that someone else can “see” (i.e. imagine) what happened: When (date/time)? Where (place)? What (actions)? What before (context)? What after (consequences)?

Consequences experienced as “desirable” tend to increase/strengthen a behavior ... the behavior is more likely to occur in the future under the same or similar circumstances. Similarly, “undesirable” consequences tend to decrease/weaken a behavior ... the behavior is less likely to occur in the future under the same or similar circumstances. In either case, **it is what happens after the behavior that counts** (i.e. the consequences), with behaviors that lead to “relative gains” in pleasure/comfort increasing or becoming stronger (“shaped in”) and behaviors that lead to “relative losses” in terms of pain/discomfort decreasing or becoming weaker (“shaped out”).



**BEHAVIORAL MODEL:**



It should be noted that the terms “positive” and “negative” have a special technical meaning when referring to a behavioral procedure - **“positive” means something is added** to the situation and **“negative” means something is subtracted or removed** from the situation.

**R+ = B → + ⊕.**

**[Positive Reinforcement = Behavior followed by the addition of a positive reinforcer.]**

⊕ = a positive reinforcer, often called a reward. People usually mean a positive reinforcer or positive reinforcement when they simply use the terms “reward,” “reinforcer” or “reinforcement,” but there are two types of reinforcers and two types of reinforcement procedures (i.e., positive and negative). A positive reinforcer is a stimulus event which increases the future probability of behaviors that it follows, and decreases

the future probability of behaviors that lead to its removal. A positive reinforcement procedure involves the presentation or occurrence of a positive reinforcer following a behavior.

$R- = B \rightarrow - \emptyset$ .

[**Negative Reinforcement = Behavior followed by the termination of a negative reinforcer**]

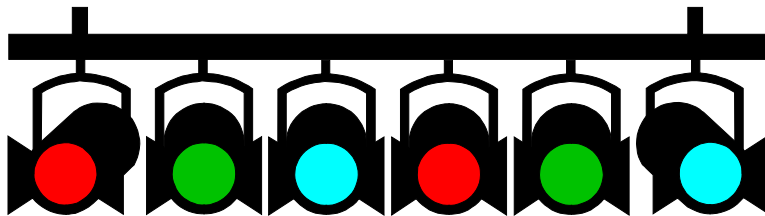
$\emptyset$  = a **negative reinforcer**, often called a punisher or an aversive stimulus. A negative reinforcer is a stimulus event which increases the future probability of behaviors that are followed by its removal, and decreases the future probability of behaviors that are followed by its occurrence. A negative reinforcement procedure involves the removal of a negative reinforcer following a behavior.

$P+ = B \rightarrow + \emptyset$ .

[**Positive Punishment = Behavior followed by the addition of a negative reinforcer**]

$P- = B \rightarrow - \oplus$ .

[**Negative Punishment = Behavior followed by the termination of a positive reinforcer**]

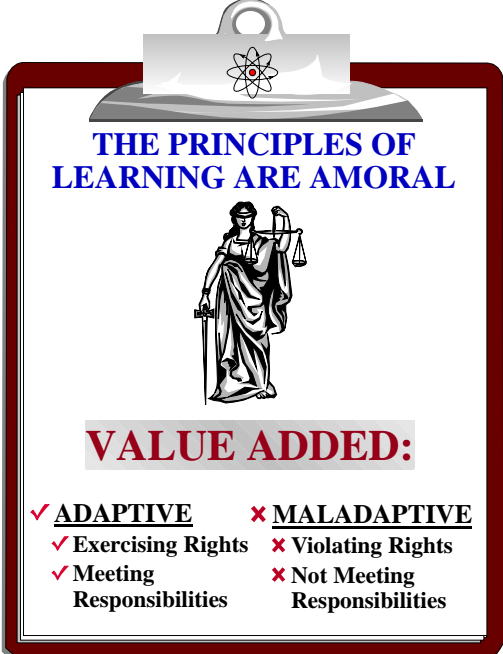


It is “reinforcing” to gain  $\oplus$  or to lose  $\emptyset$  and “punishing” to gain  $\emptyset$  or to lose  $\oplus$ .


**NAME GAMES, VALUES and the POLITICALLY CORRECT:**

Technically, any stimulus event involves both reinforcement and punishment. The reinforcement or punishment of any given behavior also involves the punishment or reinforcement of all other behaviors that could occur under the same or similar circumstances. For example, reinforcing “sitting in a chair” by definition results in punishing “getting out of chair.”

“Reinforcement” simply means that a behavior increases and “punishment” means that a behavior decreases. It is unfortunate that the word “punishment” is generally associated with harmful or cruel procedures or actions, while “reinforcement” is associated with beneficial and kind procedures and actions. Life is full of natural punishments (both positive and negative) that are as beneficial as any reinforcement procedure. Similarly, life is full of reinforcements (both positive and negative) which are as destructive and detrimental as any punishment procedure. Reinforcement does not mean “good” and punishment does not mean “bad.”



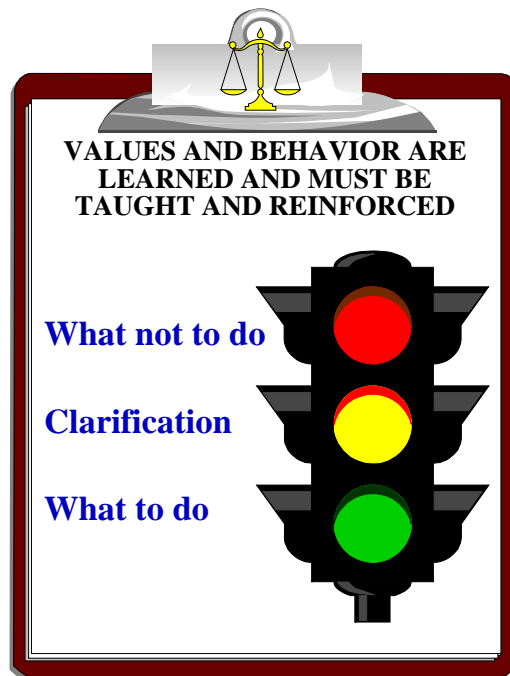
**THE PRINCIPLES OF  
LEARNING ARE AMORAL**



**VALUE ADDED:**

✓ <u>ADAPTIVE</u>	✗ <u>MALADAPTIVE</u>
✓ Exercising Rights	✗ Violating Rights
✓ Meeting Responsibilities	✗ Not Meeting Responsibilities

Unfortunately, some “standards of care and treatment” or local policies boldly state that they do not allow or use “punishment procedures.” If that were true they would be guilty of abuse and/or neglect, or even criminal conduct, since they would not be using any procedures to decrease maladaptive behaviors, including time-out from positive reinforcement (presumably meaning that they would continue to actively reinforce maladaptive behavior). In fact, they would be violating their “standard” or policy if they ever told a client “No” for any behavior or ever refused to do what the client wanted. Again, a punishment procedure is any procedure that results in a decrease in a behavior.




The principles of learning are amoral. Behavior modification has no value system and is not concerned with anyone’s rights or responsibilities. As far as behavior modification is “concerned,” any learned behavior (adaptive or maladaptive, moral or immoral, legal or illegal) can be modified and any behavior that can be learned can be taught through the application of learning principles. Similarly, any external consequence can be made contingent on any behavior (i.e., when the behavior occurs the consequence follows - the consequence may be the occurrence or nonoccurrence of any combination of reinforcers or punishers, which also may be adaptive/maladaptive, moral/immoral, legal/illegal). The



basic principles of learning do not make value judgments - people do.

While there are formal and informal guidelines (value judgments) for the use of behavior modification and other instructional techniques based on state and federal law, community standards, local policies, the ethical principles of the American Psychological Association, etc., none are inherent in the learning principles themselves.

In order for staff to develop meaningful, functionally integrated active treatment plans, there must be general agreement as to what kinds of behaviors are adaptive and maladaptive and what kinds of procedures are acceptable and unacceptable. Adaptive behavior is generally defined in terms of “normalization” and “independent functioning” and maladaptive behavior is generally defined as any behavior that interferes with rehabilitation or “habilitation.” A more “operational” and productive approach is to define adaptive behavior in terms of the ability to independently exercise individual rights and meet personal responsibilities. Similarly, maladaptive behavior is defined in terms of violating rights or not meeting responsibilities.



### VALUE JUDGMENTS

- ✓ WHY
  - LAW
  - POLICY
  - GOALS
- ✓ WHAT
  - OBJECTIVES
  - TYPES OF REINFORCERS TO USE AND NOT USE AND IN WHAT RANK ORDER.
  - BEHAVIORS TO REINFORCE AND PUNISH AND IN WHAT RANK ORDER.
  - REINFORCEMENT AND PUNISHMENT TECHNIQUES TO USE AND NOT TO USE AND IN WHAT RANK ORDER.
- ✓ HOW
  - PROCEDURES.
  - WHO TO DO WHAT.
  - WHEN TO DO WHAT.
  - WHERE TO DO WHAT.
  - DISTRIBUTION OF RESOURCES.



### WORK

✗ <u>AGAINST</u>	✓ <u>FOR</u>
✗ DESTRUCTIVE PAIN AND/OR DISCOMFORT	- CONSTRUCTIVE PAIN AND/OR DISCOMFORT
✗ DESTRUCTIVE PLEASURE AND/OR COMFORT	- CONSTRUCTIVE PLEASURE AND/OR COMFORT

(BUT FIRST LEARN THE DIFFERENCE)





## **Rights & Responsibilities**

- ✓ In a social environment each individual's rights and responsibilities are interrelated.**
- ✓ Each individual's rights and responsibilities are restricted and/or expanded depending on their various social roles and the context in which they are exercised.**
- ✓ Each client right establishes a directly related employee responsibility to teach and reinforce.**
- ✓ Each individual right is paired with a corresponding responsibility and vice versa.**
- ✓ Rights related to personal safety and well-being take priority over rights related to property and habilitation or rehabilitation.**

**NEGATIVE REINFORCEMENT IS NOT PUNISHMENT ... BUT TIME-OUT**  
**FROM POSITIVE REINFORCEMENT IS:**

*Reinforcement* means increase or strengthen and *punishment* means decrease or weaken. Any procedure that increases or strengthens a behavior is a reinforcement procedure. Any procedure that decreases or weakens a behavior is a punishment procedure. A positive reinforcer  $\oplus$  (sometimes called a *reward*) increases or strengthens behaviors that lead to or produce it. When a positive reinforcer  $\oplus$  is presented or occurs immediately after a behavior, the behavior is more likely to occur in the future under the same or similar circumstances.

A negative reinforcer  $\ominus$  (sometimes called a *punisher* or an aversive stimulus event) increases or strengthens behaviors that reduce, delay, avoid or terminate it. When a negative reinforcer  $\ominus$  is reduced, delayed, avoided or terminated immediately after a behavior (negative reinforcement), the behavior is more likely to occur in the future under the same or similar circumstances.

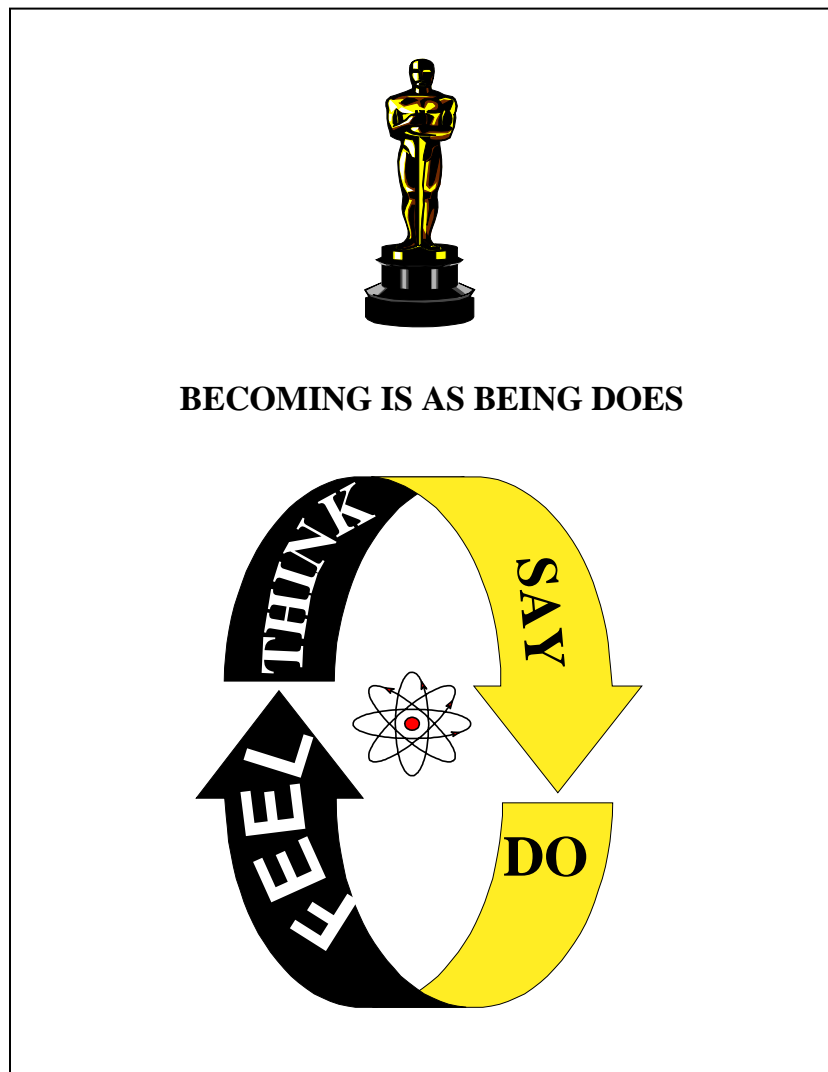
**NEGATIVE  
REINFORCEMENT (R-)**

✓ <b><u>Relief from</u></b>	→ Learned
<b><u>pain/discomfort</u></b>	→ Desired
— <b>Physical and/or</b>	→ Worked for
<b>Mental</b>	→ Deserved
— <b>Real and/or</b>	→ Interpersonal
<b>Imagined</b>	→ Valued
— <b>Adaptive and/or</b>	→ Contingent
<b>Maladaptive</b>	→ Aware of
— <b>Present and/or</b>	→ Intentional
<b>Expected</b>	→ De
— <b>Behavior and/or</b>	→ Pr
<b>Consequence</b>	→ Mu
	→ Pot
	→ Experi

OR NOT

Punishment (actually “positive” punishment) is the presentation of a negative reinforcer  $\ominus$  immediately after a behavior. **Punishment is not negative reinforcement.** Negative reinforcement is increasing or strengthening a behavior by the removal or reduction of a negative reinforcer  $\ominus$ , whereas punishment (specifically positive punishment) is decreasing or weakening a behavior by the presentation or increase in a negative reinforcer.

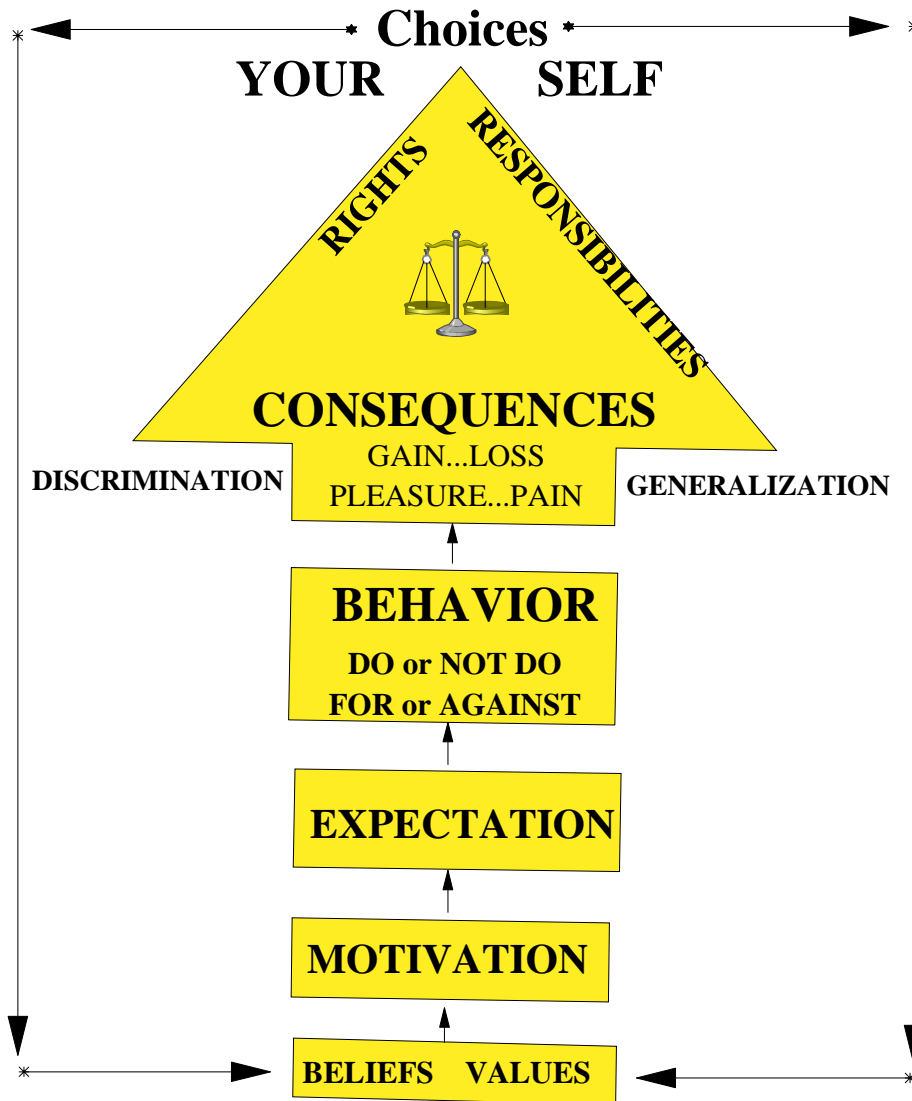
Time-out from positive reinforcement (actually negative punishment) is a punishment procedure in which a behavior is decreased or weakened by the removal, reduction or delay of a positive reinforcer  $\oplus$  as a consequence of the behavior.



Humans appear to be driven to diminish uncertainty and to seek control. *Behavioral Relativity* contends that this “drive” is directed and expressed through the equally powerful cognitive forces of generalization (similarities) and discrimination (differences) — the “I am ... not” of human experience. Combine the drive or need to diminish uncertainty and to seek control with the natural desire to increase pleasure/comfort and decrease pain/discomfort and you have the essence of *Behavioral Relativity and Cognitive Economics (BRACE™)*.

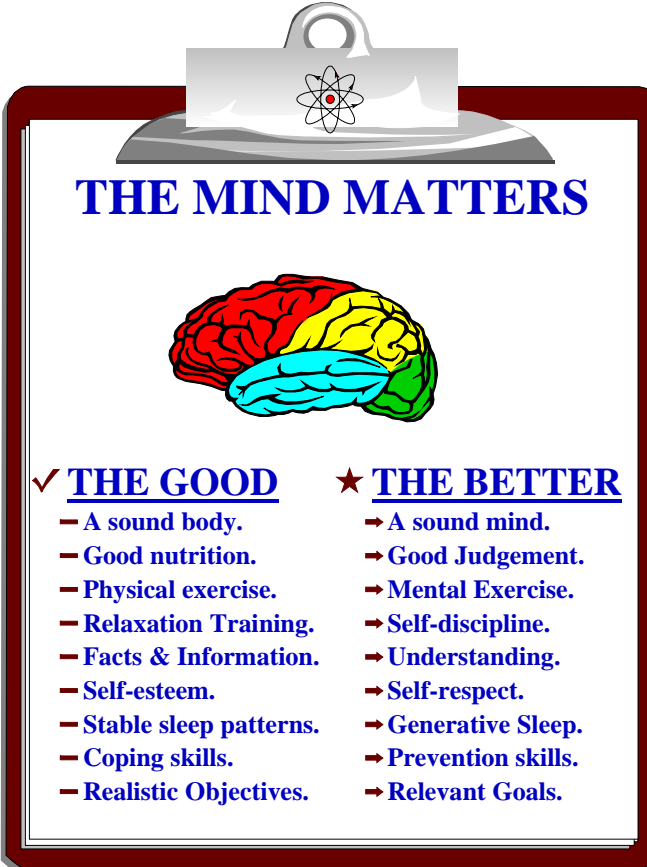


## RISK AND OPPORTUNITY MANAGEMENT

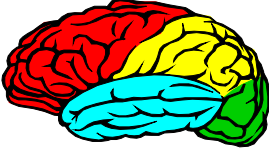


## THE MIND MATTERS:

*Behavioral Relativity* is a broader application of the basic principles of learning. Unlike other animals (some say beasts), humans are verbal creatures with active imaginations and it is useful to consider the implications of verbal capacity when applying basic learning principles to human behavior. Behavioral principles can be applied to any internal process that can be monitored and measured (e.g., biofeedback techniques). Although “thoughts” are units of behavior, they can not be directly observed and measured. However, there is no reason to assume that thoughts are not subject to the same learning principles as overt behavior. Thoughts certainly mediate much of human behavior and can function as stimuli for physiological responses (e.g. salivating at the thought of biting into a lemon) as well as more complex behaviors (e.g. running from an “imagined” danger), or function as responses to real or imagined events.



**THE MIND MATTERS**



✓ **THE GOOD**

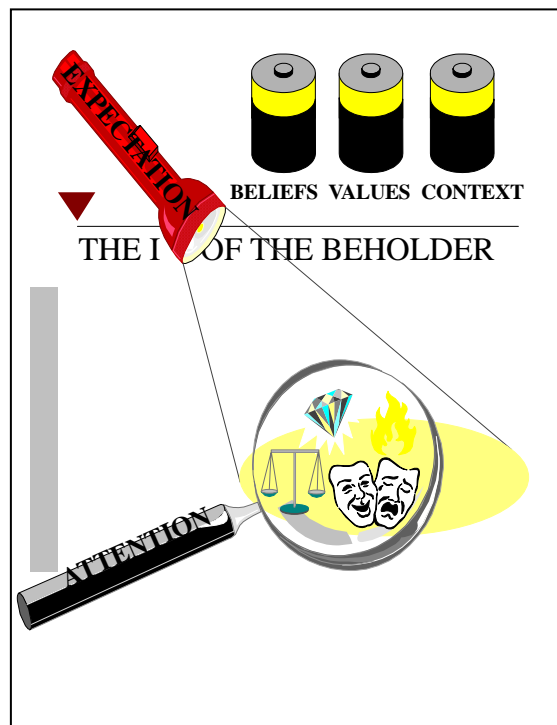
- A sound body.
- Good nutrition.
- Physical exercise.
- Relaxation Training.
- Facts & Information.
- Self-esteem.
- Stable sleep patterns.
- Coping skills.
- Realistic Objectives.

★ **THE BETTER**

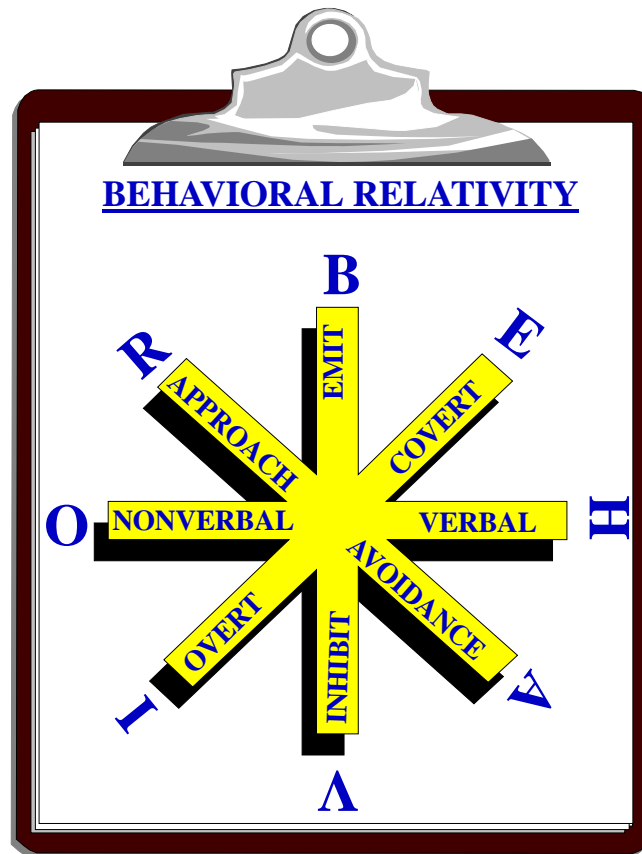
- A sound mind.
- Good Judgement.
- Mental Exercise.
- Self-discipline.
- Understanding.
- Self-respect.
- Generative Sleep.
- Prevention skills.
- Relevant Goals.

The principles of learning can be applied to imagination and expectation, to desires and emotions (e.g. covert desensitization or sensitization, cognitive restructuring and counterconditioning techniques, vicarious learning/modeling). However, the term “behavior modification” is generally reserved for procedures which involve changing the observable, measurable consequences of observable, measurable behavior in order to modify the behavior being measured.

*Behavioral Relativity* is a functional, descriptive model of human behavior based on the basic principles of operant and classical conditioning. It is also the systematic extension of these “behavioral” principles to subjective, invisible, internal processes such as thoughts, desires and emotions. *Behavioral Relativity* specifically allows for and encourages the development of prevention, intervention and treatment alternatives for a wide range of behavioral, emotional and psychological problems. Although a radical departure from the intended narrow focus of behaviorism, *Behavioral Relativity* specifically rejects the dogmatism and subjectivity of traditions such as psychoanalysis. *Behavioral Relativity* is primarily a functional model designed to facilitate a broader range of systematic behavior (“public” and “private”) problem solving. It is not anything new.



There are many ways to classify behaviors (e.g. in terms of excess or deficit, “good” or “bad,” adaptive or maladaptive, emitted or elicited, proactive or reactive, high probability or low probability, correct or incorrect) and such classifications can be useful to the degree that the categories are defined in behavioral terms and have some functional application.



One useful descriptive system for classifying behaviors is in terms of the occurrence (active or emitted) or nonoccurrence (passive or inhibited) of a behavior/response combined with whether the behavior functions to maintain/acquire/increase a consequence (an *approach* response) or functions to escape/avoid/decrease a consequence (an *escape/avoidance* response). Behavior can be passive as well as active and what a person does not do (i.e., the absence of a behavior) can be measured and may be as important as what a person does. For example, silence or “not responding” may be a very clear response, and "sitting" in a chair is a behavior.

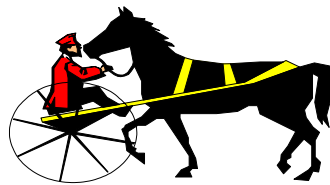


**ACTIVE APPROACH** behavior involves doing something (emitting behavior) to get, maintain or increase relatively reinforcing consequences.

**ACTIVE AVOIDANCE** behavior involves doing something to escape, avoid or decrease relatively punishing consequences.

**PASSIVE APPROACH** behavior involves not doing something (inhibiting behavior) to get, maintain or increase relatively reinforcing consequences.

**PASSIVE AVOIDANCE** behavior involves not doing something in order to escape, avoid or decrease a relatively punishing consequence.



## **FORM FOLLOWS FUNCTION AND BEHAVIOR HAS BOTH**

### **● FORM**

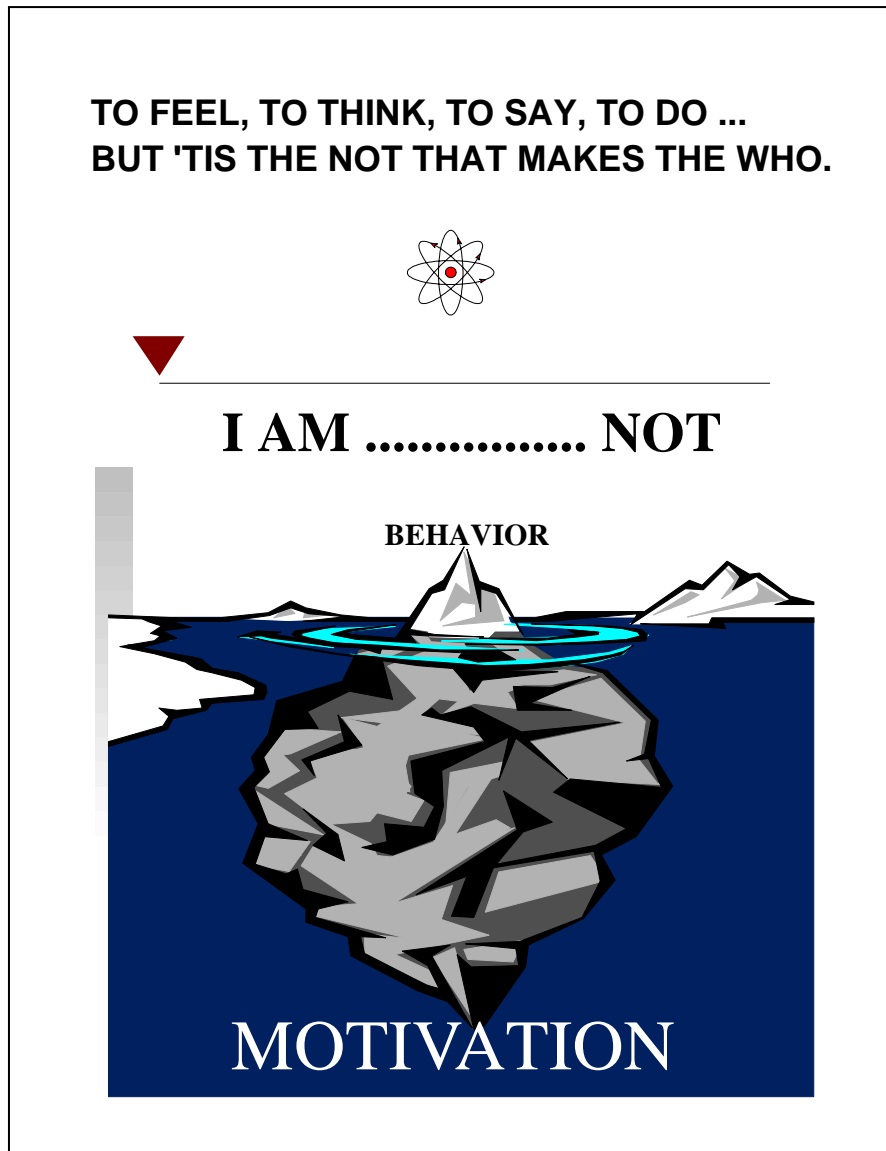
- THE SAME BEHAVIOR MAY SERVE MULTIPLE FUNCTIONS.
- ANY BEHAVIOR MAY BECOME A POSITIVE OR A NEGATIVE REINFORCER.
- BEHAVIOR MAY BE ACTIVE OR PASSIVE (EMITTED OR INHIBITED).
- OTHER THINGS BEING EQUAL, LOW ENERGY BEHAVIORS ARE SELECTED.

### **⊕ FUNCTION**


- MULTIPLE BEHAVIORS MAY SERVE THE SAME FUNCTION.
- SHORT TERM GAINS MAY HAVE LONG TERM COSTS AND VICE VERSA.
- BEHAVIOR MAY FUNCTION TO APPROACH OR TO AVOID.
- OTHER THINGS BEING EQUAL, HIGH IMPACT BEHAVIORS ARE SELECTED.

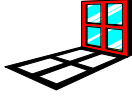
It should be noted that inhibiting a behavior does require control and energy. Consequently, a behavior may be classified as “passive” in the sense that the behavior is inhibited rather than emitted, but the process involved may be very active (i.e., active inhibition of a behavior).

Any given behavior may be actively inhibited in order to either acquire reinforcement or avoid punishment. The classification of a behavior as active or passive based on its occurrence or nonoccurrence should not be confused with the nature of the underlying processes or the level of motivation involved.




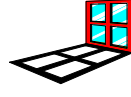
# BEHAVIOR AND MOTIVATION SUMMARY GRAPHICS

  
**BEHAVIOR & MOTIVATION**




<b>AVOIDANCE APPROACH</b>	<b>ACTIVE</b>	<b>PASSIVE</b>
	BEHAVIOR IS EMITTED TO GET/EXPERIENCE	BEHAVIOR IS INHIBITED TO GET/EXPERIENCE
	BEHAVIOR IS EMITTED FOR PLEASURE/COMFORT	BEHAVIOR IS INHIBITED FOR PLEASURE/COMFORT
	BEHAVIOR IS EMITTED FOR R+	BEHAVIOR IS INHIBITED FOR R+
	BEHAVIOR IS EMITTED TO AVOID/ESCAPE/DECREASE PAIN/DISCOMFORT. BEHAVIOR IS EMITTED FOR R- AND AGAINST P+ OR P-	BEHAVIOR IS INHIBITED TO AVOID/ESCAPE/DECREASE PAIN/DISCOMFORT. BEHAVIOR IS INHIBITED FOR R- AND AGAINST P+ OR P-

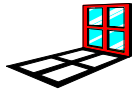
  
**HIGH IMPACT-LOW ENERGY BEHAVIOR IS PREDISPOSED TO SELECTION**



**ENERGY INVESTMENT**


<b>LOW IMPACT HIGH</b>	<b>HIGH</b>	<b>LOW</b>
	BEHAVIOR HAS HIGH IMPACT BUT ALSO REQUIRES HIGH ENERGY.	BEHAVIOR HAS HIGH IMPACT AND REQUIRES LOW ENERGY.
	WILL NOT BE FREQUENT.	BEHAVIOR IS VERY LIKELY TO OCCUR ... VERY LIKELY ... UNLESS THERE ARE ADDED COSTS OR DECREASED GAINS.
	MAY OCCUR WHEN NO ALTERNATIVE IS AVAILABLE OR KNOWN.	
	BEHAVIOR HAS LOW IMPACT BUT REQUIRES HIGH ENERGY.	BEHAVIOR HAS LOW IMPACT AND REQUIRES LOW ENERGY.
	NOT LIKELY. NOT WORTH THE EFFORT.	BEHAVIOR MAY OCCUR DURING PERIODS OF BOREDOM - JUST TO PASS THE TIME.

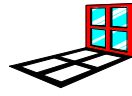
  
**LOW COST-HIGH IMPACT BEHAVIOR IS PREDISPOSED TO SELECTION**



**RESOURCE INVESTMENT**

<b>LOW IMPACT HIGH</b>	<b>HIGH</b>	<b>LOW</b>
	BEHAVIOR HAS HIGH IMPACT BUT ALSO HAS HIGH RESOURCE COSTS.	BEHAVIOR HAS HIGH IMPACT AND REQUIRES LITTLE RESOURCE INVESTMENT.
	WILL NOT BE FREQUENT.	BEHAVIOR IS VERY LIKELY TO OCCUR AGAIN ... UNLESS THERE ARE ADDED COSTS OR DECREASED GAINS.
	MAY OCCUR WHEN NO ALTERNATIVE IS AVAILABLE OR KNOWN.	
	BEHAVIOR HAS LOW IMPACT AND REQUIRES A HIGH INVESTMENT OF RESOURCES. ... NOT LIKELY. NOT WORTH THE COST.	BEHAVIOR HAS LOW IMPACT BUT REQUIRES A LOW RESOURCE INVESTMENT. MAY OCCUR DURING PERIODS OF BOREDOM - JUST TO KILL THE TIME.

  
**HIGH IMPACT-LOW DURATION BEHAVIOR IS PREDISPOSED TO SELECTION**



**TIME INVESTMENT**

<b>LOW IMPACT HIGH</b>	<b>HIGH</b>	<b>LOW</b>
	BEHAVIOR HAS HIGH IMPACT BUT ALSO REQUIRES MUCH TIME.	BEHAVIOR HAS HIGH IMPACT AND REQUIRES LITTLE TIME INVESTMENT.
	WILL NOT BE FREQUENT.	BEHAVIOR IS VERY LIKELY TO OCCUR AGAIN ... UNLESS THERE ARE ADDED COSTS OR DECREASED GAINS.
	MAY OCCUR WHEN NO ALTERNATIVE IS AVAILABLE OR KNOWN.	
	BEHAVIOR HAS LOW IMPACT AND REQUIRES A HIGH INVESTMENT OF TIME. ... NOT LIKELY. NOT WORTH THE TIME.	BEHAVIOR HAS LOW IMPACT BUT REQUIRES A LOW TIME INVESTMENT. MAY OCCUR DURING PERIODS OF BOREDOM - JUST TO FILL THE TIME.

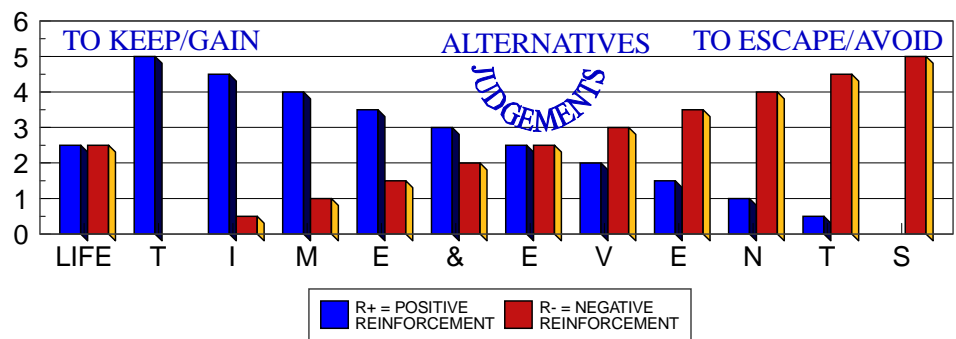


## REINFORCERS (A.K.A: THE "ENTICERS" AND "ENFORCERS")

- ▶ Positive reinforcers (rewards) and negative reinforcers (punishers) are unique for each person.
- ▶ The potency and function of a reinforcer changes across time, experience and circumstance.
- ▶ Any person, place, thing, or behavior can acquire rewarding or punishing properties.
- ▶ Pain/discomfort and pleasure/comfort come in many forms and have many names and we are all students and teachers of both.

**PEOPLE "BEHAVE"/"WORK" FOR REWARDS AND AGAINST PUNISHMENTS.**  
 THE LOSS OF A REWARD IS PUNISHING AND THE LOSS OF A PUNISHMENT IS REWARDING.  
 Short term gains have long term costs and vice versa.

### REINFORCER POTENCY/MOTIVATION (frequency, intensity, duration)



R+ = behavior followed by a "relative" increase in pleasure/comfort.  
 R- = behavior followed by a "relative" decrease in pain/discomfort.

WHAT YOU DO NOT DO IS AS IMPORTANT AS (AND DEFINES) WHAT YOU DO.

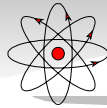
- + POSITIVE REINFORCER POTENCY SCALE**
- ★ 5 = EXTREMELY REWARDING (EXTREME PLEASURE, INTENSE FEELINGS OF WELL-BEING, ELATION OR EUPHORIC REACTION; IF NECESSARY, WILL PERSISTENTLY AND REPEATEDLY EXPEND HIGH ENERGY, SACRIFICE LESS POTENT POSITIVE REINFORCERS, AND ENGAGE IN HIGH RISK BEHAVIOR OR INHIBIT ALL OTHER BEHAVIORS TO GAIN, MAINTAIN, KEEP, PROTECT). IF NECESSARY, WILL RUN THE ENTIRE RANGE OF RESPONSE HIERARCHY.
  - ★ 4 = HIGHLY REWARDING (WILL 'BEHAVE' OR WORK FOR).
  - ★ 3 = MODERATELY REWARDING (WILL ACTIVELY SEEK).
  - ★ 2 = MILDLY REWARDING (REACHES FOR, MOVES TOWARD).
  - ★ 1 = VERY MILDLY REWARDING (WILL ASK FOR, WILL ACCEPT).

- NEGATIVE REINFORCER POTENCY SCALE**
- ★ 5 = EXTREMELY AVERSIVE (EXTREME PAIN, PANIC OR RAGE REACTION; WILL EXPEND HIGH ENERGY AND ENGAGE IN HIGH RISK BEHAVIOR OR INHIBIT ALL OTHER BEHAVIORS TO DELAY, AVOID, DECREASE OR TERMINATE. IF NECESSARY, WILL RUN ENTIRE RESPONSE HIERARCHY).
  - ★ 4 = VERY AVERSIVE (INTENSE PAIN, FEAR OR ANGER REACTION; WILL BEHAVE, WORK OR ACT-OUT AGAINST).
  - ★ 3 = MODERATELY AVERSIVE (WILL EMIT OR INHIBIT BEHAVIOR TO ESCAPE/AVOID).
  - ★ 2 = MILDLY AVERSIVE (WILL NOT ACCEPT, PUSHES AWAY, MOVES AWAY FROM).
  - ★ 1 = VERY MILDLY AVERSIVE (PASSIVE ESCAPE/AVOIDANCE, DISCARDS).

## PRINCIPLES, ASSERTIONS AND ASSUMPTIONS

1. Reinforcers are unique for each individual.
2. People work (behave) for relative (net) gain: to increase pleasure/comfort and/or to decrease pain/discomfort.
3. The same behavior may serve different functions and have multiple consequences.
4. The function and potency of reinforcers change across time and circumstance.
5. Reinforcement of any given behavior is punishment of alternatives and vice versa.
6. Short term gains have long term costs and vice versa.
7. Relatively low energy, high effect behavior is predisposed to selection.
8. Behavior is lawful and the principles of learning operate independent of our awareness of them.
9. Imagined behavior has real consequences.
10. The principles of learning are amoral but values and beliefs are learned.
11. One's behavior is another's consequence.
12. What a person does not do is as important as what a person does.





## DESTROYING THE DESTROYERS



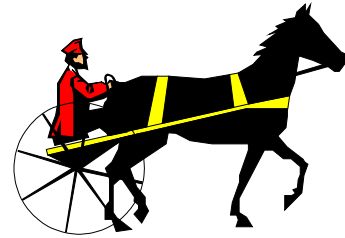
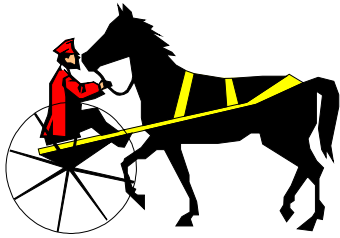
### ✓ MYTHS

- the principles of learning are different for different people and problems.
- reinforcement is good and punishment is bad.
- similar behaviors have similar causes.
- different behaviors have different causes.
- love can do no wrong.

### ✓ FACTS

- the basic principles of learning do not change any more than the basic laws of physics.
- you can't have one without the other and neither is better.
- behaviors can have multiple functions.
- different behaviors can have the same function.
- misguided love is as destructive as hate.

## BEFORE BEHAVIOR MODIFICATION



### **Ensure appropriate placement and activities**

- Services
- Schedule
- Functional Goals and Objectives
- Activity Level
- Socialization
- Personal Growth and Development

### **Provide for basic safety and comfort in the living environment through an active safety program based on prevention**

- Staff trained to react in a calm, orderly, effective manner in emergency situations.
- Maintain a hazard free living environment.
- Maintain a sanitary living environment.
- Provide supportive structure for physical limitations.
- Provide for protection from extreme conditions (e.g. temperature).
- Establish staff and client training in household safety and accident prevention.
- Ensure freedom from physical injury and exploitation.

### **Maximize security and eliminate sources of unnecessary stress**

- Establish a written code of conduct based on individual rights and responsibilities.
- Provide for and ensure personal privacy to the limits of context and adaptive functioning.

- **Reduce excessive, unnecessary noise.**
- **Provide for an uninterrupted, normalizing sleep cycle.**
- **Establish reasonably paced, predictable, normalizing schedule of daily activities.**
- **Establish positive active treatment through realistic, functional, developmental goals.**
- **Actively facilitate individuality and a positive self concept based on opportunities for success and accurate feedback.**

### **Review established medical status**

- **Sensory/Perceptual limitations.**
- **Specific neurological dysfunction**
- **Hormonal imbalance**
- **Metabolic and nutritional disorders**
- **Allergies**
- **Musculoskeletal and connective tissue disorders**
- **neurotransmitters and endorphins**

### **Consider sources of immediate physical distress (e.g., primary biological needs)**

- **air**
- **water**
- **food**
- **sleep**
- **rest and exercise**
- **sexual expression**
- **external sources of pain/discomfort**

### **Head Pain**

- **headache**
- **ear ache**
- **eye ache**
- **tooth ache**
- **facial nerve pain**
- **seizures**
- **sinus**



### **Itching, tingling, burning, stinging sensations**

- **Parasites/Fungus**
- **Nerve damage**
- **Allergies**
- **Bacterial infections**
- **Dry skin**
- **Hemorrhoids**
- **Insect bites**

### **Muscle/bone/joint aches & pains**

- **Activity beyond range of motion**
- **New or old injuries**
- **Viral illness**
- **Arthritis**
- **Back pain**
- **Strain & Sprain**

### **Other common sources of physical pain/discomfort**

- **Pain/discomfort with menses or prior to menses onset**
- **Elimination processes (constipation, urgency, incontinence)**
- **Drug effects (addictions, withdrawal, side effects)**
- **Sensory loss or hypersensitivity**
- **Nutritional/Biochemical excesses or deficits**
- **Blood sugar**
- **Balance**

### **Consider recent changes**

- **Staff relationships**
- **Peer relationships**
- **Family relationships**
- **Daily activities**
- **Spatial environment**
- **Object relationships**
- **Physical processes**

**In general, the lower the level of intellectual functioning (or the higher the level of anxiety or cognitive dysfunction):**

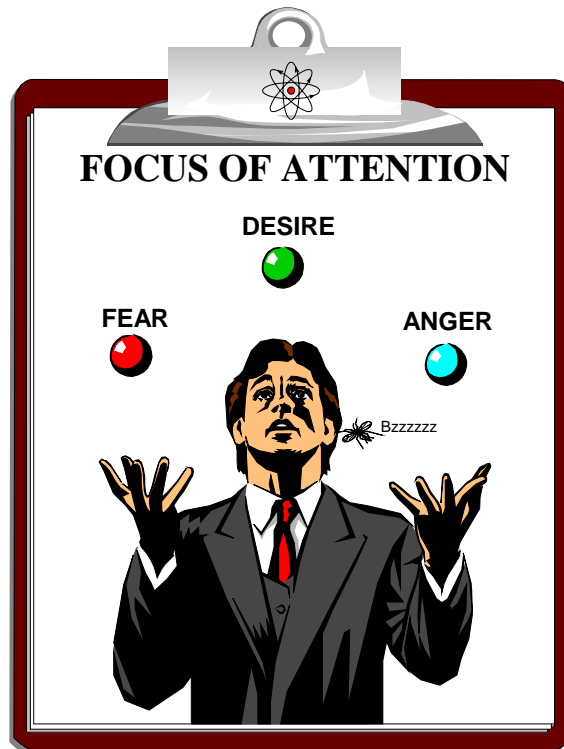
- ✓ **The more dependent the individual is on a stable, “predictable” physical environment.**
- ✓ **The more dependent the individual is on a stable, “predictable” sequence of daily activities.**
- ✓ **The more dependent the individual is on a stable, “predictable” schedule of daily activities.**
- ✓ **The greater the need for external sources of “information” and “support” to adjust behavior to changing environmental conditions.**
- ✓ **The greater the need for stable, “predictable” personal relationships to “immediate” complex or “overwhelming” environmental events and conditions.**
- ✓ **The greater the need for “ongoing” immediate and consistent “feedback” (information).**
- ✓ **The greater the need to introduce “change” in a gradual, planned, systematic manner.**



# BASIC REALITY ORIENTATION & THERAPEUTIC INTERACTION

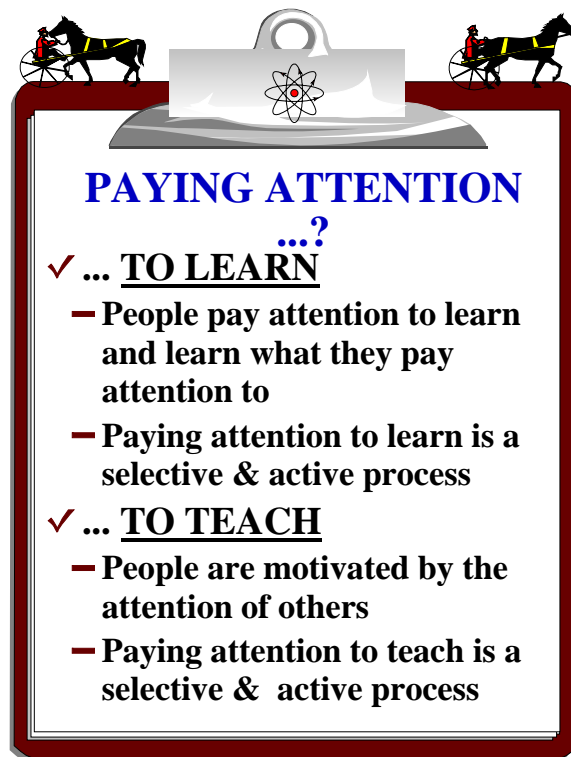
**Therapeutic Interaction** (i.e., “in vivo” therapy) is a **structured style of interpersonal interaction designed to teach progressively more adaptive behavior**. It consists of the systematic application of the basic principles of learning **during routine interactions** to selectively (i.e. differentially) reinforce relatively adaptive behavior and selectively stop all identified sources of positive and negative reinforcement for maladaptive behavior. Therapy is “acted out” in the “real world” --- or at least in real situations.

The more disoriented, disorganized, confused or limited a person is, regardless of the reason (anxiety, sensory-perceptual limitations, neurological dysfunction, developmental disability, drugs, hormonal imbalance, stress, etc.), the more critical it is to provide supportive structure and to focus on the here and now (present):



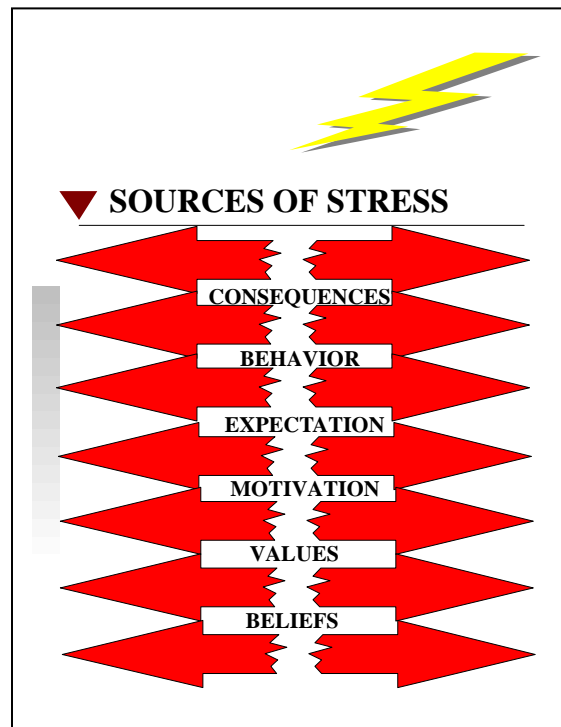
- **Mediate Sensory Losses & Provide Supportive Structure by the Nature of Your Instructions:** Know your clients' (you may substitute another term for "client" --- whatever is appropriate or politically correct for you and your situation) current sensory-perceptual limitations (hearing? vision?) and sensitivities (to sound? light? touch? odors?), and structure your interaction to increase information through other senses as indicated. Become a source of accurate information, stability, safety and security.
- **Focus on the Present With Respect to Both Time and Space:** Reality exists only in the present --- the past is a matter of memory and the future is a matter of pure imagination. Reduce the need for abstract reasoning and redirect attention to present events.
- **Describe the Current Situation:** Talk about current events and activities ... what you are doing, what the client is doing, or describe some other present condition or circumstance. Interact with the client verbally in a normal manner even if you think the client does not hear or understand your speech. But, be careful to avoid incessant, irrelevant verbiage.
- **If a Client is Becoming More Disoriented or Anxious, Emphasize Immediate Sensory Experiences:** Literally call attention to sensory experiences (e.g., sights, sounds, tastes, smells, feelings) that the client has just experienced, is experiencing or is about to experience (use 5 seconds as a general rule of thumb). Routine activities of daily living are primary occasions for basic reality orientation (e.g., eating involves all five senses; drinking water may help refocus; experiences related to movement, even simple exercises may help; effective grooming --- taking a shower and redressing --- requires increased body awareness, external feedback and consideration of social standards).
- **Limit Questions to Those That Have Immediate Consequences for the Client or the Answer is Immediately Evident:** Specifically avoid asking questions that are too complex or that you do not expect to be answered. Learn what kinds of information the client is capable of providing and what kinds of choices the client is capable of making. Questions may become increasingly overwhelming, whereas presenting direct, simple instructions may clarify the situation and reduce anxiety.
- **Use the Same Basic Words Each day for Instructions and Identifying Objects and Actions:** Do not say "soft drink" one day and "soda" the next or "sink" one day and "lavatory" the next, or "dinner" one day and "supper" the next.
- **Be Specific Rather Than General, Simple Rather Than Complex:** "Car" rather than "vehicle;" "shovel" rather than "tool;" "Help me lift this bag" rather than "Give me a hand here"...
- **Avoid Unnecessary Directing and Personal, Authoritarian Control by Commenting on Time or "Asking for Help":** "It is time to ... Help me ... Let's..."
- **Use Visual as Well as Auditory cues, Particularly for New Activities and Transitions in Activities or Locations:** Show the client the steps to do in new procedures. Provide a visual demonstration of exactly what you expect the client to do. Introduce change gradually.

- **Be Aware That Your Nonverbal Behaviors and Voice Tone are at Least as Important as What you say:** Facial expressions are particularly important and should be consistent with what you say and the message you want to communicate. Regardless of what you are saying, a loud voice or a frown may be interpreted as anger or disapproval, whereas a smile may be interpreted as approval or mocking. Make sure the message you are sending is the one you intend.
- **Whenever Possible and Not in Violation of Policy or Threatening, Ignore Irrational Statements or “Emotionally Loaded” Statements and Refocus Attention to Current Events:** Control your own emotions, ask for clarification if necessary, but do not argue with or repeatedly attempt to “counsel,” lecture or scold. Undue attention and your own emotional reactions may make matters worse.



- **Facilitate Personal Identity and Social Awareness:** Use the client’s name. Increase exposure to the familiar in unfamiliar circumstances and avoid unnecessary change. Place more emphasis on self-care (independence), increase opportunities for the client to help, to work, make choices, to be responsible, to be needed, and to provide rather than receive care and reinforcement.

- **Allow for Choices and Decision-Making Whenever Possible:** Provide clear opportunities rather than forced participation whenever possible. Specifically avoid requiring participation in nonessential activities that are not reinforcing or meaningful. Give each client the opportunity to learn responsible behavior by allowing natural consequences within reasonable limits of safety and the right to risk.
- **Add Positively Reinforcing Elements to Relatively Unpleasant Activities and Follow Less Reinforcing Activities With More Reinforcing Activities:** Recess type activities following more difficult activities ... special treat or special visitor during unpleasant activity.



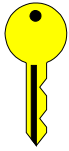
- **Be an Active Listener and Give Words More Meaning:** Respond to what the client says, asking for clarification if necessary. Let the client know that your behavior can be controlled by appropriate words. Slow down your own pace. Decrease complexity. Avoid constant talking, meaningless verbal reinforcement and constantly repeating instructions. Allow the client time to respond. Avoid rapid, loud speech. Avoid sentences that are too long and complex. Avoid frequent shifts in time and space or topics. In general, make verbal interaction more reinforcing and less aversive. Be clear and specific, and help the client do the same.
- **Focus on Adaptive Rather Than Maladaptive Behavior:** Keep comments about maladaptive behavior to an absolute minimum --- do not “counsel,” scold, fuss at, plead with, beg, promise, remind about, or repeatedly give instructions without follow through. Focus on current or expected adaptive behavior. Keep criticisms to a minimum and provide corrective feedback in terms of what actions you want rather than what actions you do not want.

## SUMMARY OF DEVELOPMENTAL “GOLDS”



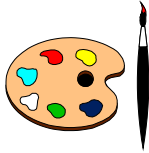
### I. RELATE TO ... NOT AT:

- A. Learn to Listen and Listen to Learn.
- B. Know Skills, Limitations, Interests, Precautions, Likes and Dislikes, the Function and Meaning of Behaviors, and Current Status.
- C. Give Words Meaning.



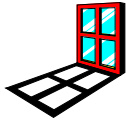
### II. HONESTY IS STILL THE BEST POLICY:

- A. Accurate Feedback.
- B. Consistency.
- C. Predictability.



### III. CONTROL YOUR OWN SELF FIRST:

- A. Emotions.
- B. Needs.
- C. Conflicts.



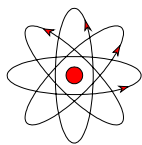
### IV. AVOID ASSUMPTIONS:

- A. Motives.
- B. Expectations.
- C. Myths.



### V. PROVIDE SUPPORTIVE STRUCTURE:

- A. Protect.
- B. Mediate.
- C. Describe.



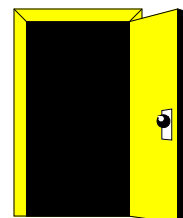
### VI. LEARN TO TEACH:

- A. Basic Terminology.
- B. Basic Principles of Learning.
- C. Cognitive Economics.



### VII. TEACH VALUE BASED BEHAVIOR:

- A. Rights and Responsibilities.
- B. Adaptive Limits.
- C. Instructional Consequences.





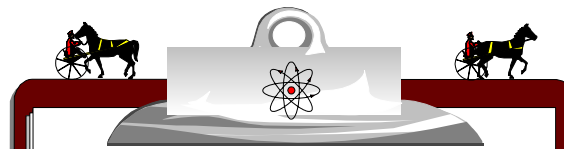
## "EXTINCTION BURST"

- ✓ EXPECT THINGS TO GET WORSE BEFORE THEY GET BETTER
- ✓ WEATHER THE STORM
- ✓ DO NOT ADD RESISTANCE TO EXTINCTION
- ✓ EXPECT A BEHAVIORAL HIERARCHY

**BEHAVIORAL CONTRAST**  
BEHAVIOR (FREQUENCY, INTENSITY, AND/OR DURATION)



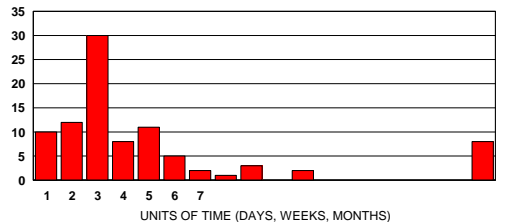
Unit of Time	Behavior Level
1	10
2	12
3	30
4	8
5	11
6	5
7	2



## "SPONTANEOUS RECOVERY"

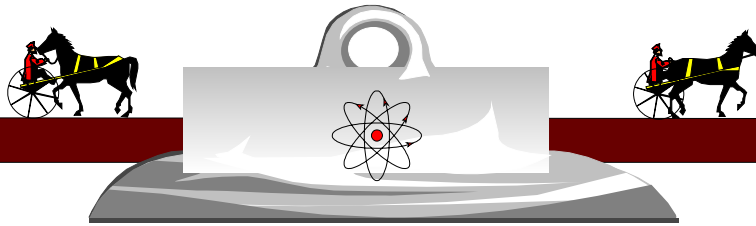
- ✓ EXPECT PERIODIC "TESTING OF THE WATERS" ... (JUST CHECKING!!!)
- ✓ KEEP EFFECTIVE CONSEQUENCES IN PLACE
- ✓ KEEP LOOKING FOR ADAPTIVE ALTERNATIVES TO REINFORCE (B+ OR ABSENCE OF B-)
- ✓ IF POSSIBLE, PROVIDE THE DESIRED REINFORCEMENT ... ON ADAPTIVE TERMS !!!

**DON'T FEED IT AND IT WILL GO AWAY**  
BEHAVIOR (FREQUENCY, INTENSITY, AND/OR DURATION)



Unit of Time	Behavior Level
1	10
2	12
3	30
4	8
5	11
6	5
7	2





## **Interdisciplinary Guidelines For Behavior Problems**

### **✓ FIRST**

- Define the "target behavior" in observable & measurable terms.**
- Measure it (baseline) by recording when, where, antecedent conditions (before), & consequences (what happened after).**
- Establish one or more measurable objectives with target dates.**

### **✓ THEN**

- Stop both positive and negative reinforcement of the maladaptive behavior.**
- Start positive and negative reinforcement of adaptive alternatives.**
- Provide accurate feedback with no more reinforcement than warranted or necessary, keeping the focus on adaptive behaviors.**



## COGNITIVE ECONOMICS

✓ **FIRST!!!** ✓ **THEN...**

### STOP

- ▶ REINFORCEMENT OF MALADAPTIVE BEHAVIOR
- ▶ PUNISHMENT OF ADAPTIVE BEHAVIOR
- ▶ USING MALADAPTIVE REINFORCERS
- ▶ USING MALADAPTIVE PUNISHERS









### START

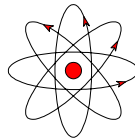
- REINFORCEMENT OF ADAPTIVE BEHAVIOR
- USING ADAPTIVE REINFORCERS
- USING ADAPTIVE PUNISHERS
- PUNISHMENT OF MALADAPTIVE BEHAVIOR



## COUNTERPRODUCTIVITY

R+ = Positive Reinforcement      B+ = Adaptive  
 R- = Negative Reinforcement      B- = Maladaptive  
 P+ = Positive Punishment  
 P- = Negative Punishment

 R+ of B-	 R+ of absence of B+
 R- of B-	 R- of absence of B+
 P+ of B+	 P+ of absence of B-
 P- of B+	 P- of absence of B-



## FUNCTIONAL ALTERNATIVES

### ✗ STOP

- ✗ R+ of B-
- ✗ R- of B-
- ✗ P+ of B+
- ✗ P- of B+
- ✗ R+ of absence of B+
- ✗ R- of absence of B+
- ✗ P+ of absence of B-
- ✗ P- of absence of B-

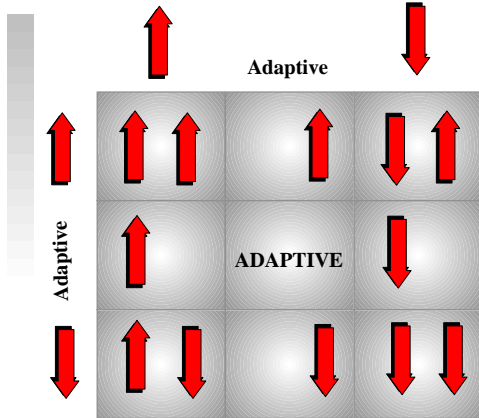
### ✓ START

- ✓ R+ of B+
- ✓ R- of B+
- ✓ P+ of B-
- ✓ P- of B-
- ✓ R+ of absence of B-
- ✓ R- of absence of B+
- ✓ P+ of absence of B+
- ✓ P- of absence of B+

R+ = Positive Reinforcement      B+ = Adaptive  
 R- = Negative Reinforcement      B- = Maladaptive  
 P+ = Positive Punishment  
 P- = Negative Punishment

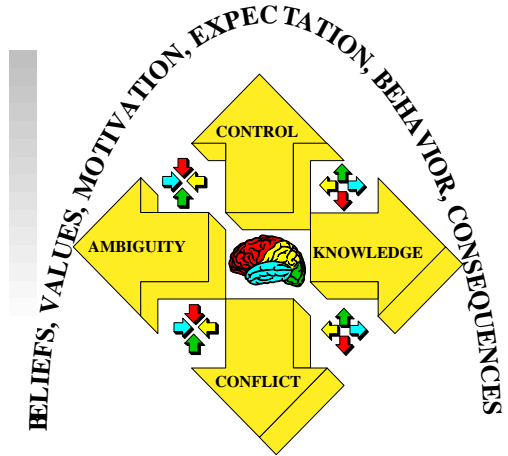
TOO MUCH ... TOO LITTLE  
 TOO SOON ... TOO LATE  
 TWO HALVES  
 ONE WHOLE  
 TWO PEOPLE

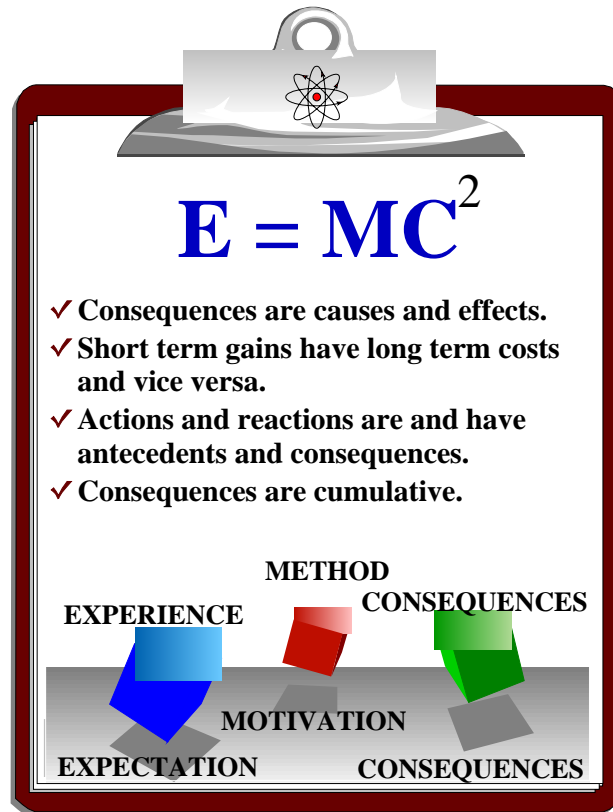
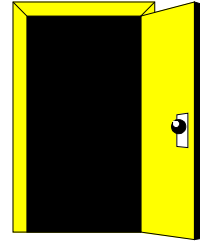
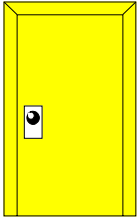
**EXCESSES & DEFICITS:  
 ALTERNATIVES & PATTERNS**



**OPPORTUNITY CREATES CHOICES**

**KNOWLEDGE CREATES OPPORTUNITIES**





### REALITY ORIENTATION AND BEHAVIORAL RELATIVITY

1. Reality contact is always a relative matter and mental health is a matter of management.
2. The past and the future are figments of imagination but imagination is a virtual reality.
3. Thoughts function as units of behavior and exercise comes in many forms.
4. Spoken words and unspoken thoughts have the power to produce physiological effects.
5. What a person wants is subject to the same learning principles as what a person does.
6. Many fears and few joys combine to make one susceptible to many things.
7. Pleasure can become pain and pain can become pleasure and all things are relative.
8. Enough is enough when enough is known but enough is never known till it's done.
9. Experience is a teacher after the fact but self-restraint reveals many alternatives.
10. Expectations have consequences and consequences shape behavior but desire speaks to both.
11. Tempers are given away rather than lost and poor impulse control is oft practiced.
12. Values give way before beliefs and then comes confusion and dark delusions.

## *BRACE™ for Fantasy*

**Definition:** *Fantasy is an active cognitive process in which memories, which are ultimately rooted in sensory systems, are reconstructed and cultivated in order to covertly act-out positively and/or negatively reinforcing experiences in the domain of the imagination.*

**Beliefs:** Fantasies reflect beliefs about related aspects of life and living, ranging from values and motivations to expectations and overt behaviors. Beliefs are the primordial foundation and life source of fantasies.

**Values:** Values make up the raw material of fantasies. Values is another term for reinforcers. People “work” for and against things according to the value they attribute to them --- i.e., positively reinforcing value (work for) or negatively reinforcing value (work against). Values are operational and functional in both the covert and overt domains of the individual, but one’s values may be more or less apparent to others, and that may be more or less by intent. Values are learned. Values also change according to experience and circumstance. All cultivated thoughts and all volitional behaviors involve value judgments. Value judgments is another term for decision-making, which is a cost-benefit analysis of related values, from the perspective of the individual in question, weighing this against that, to do against not to do, or perhaps, to be against not to be.

**Motivation or Function:** All fantasy activity is motivated for reinforcement, positive and/or negative. That is, “fantasy has function”: 1) to acquire and/or maintain positively reinforcing experiences (i.e., pleasure/comfort) and/or 2) to escape, decrease, delay or avoid the onset of pain/discomfort.

**Content:** There are no time, space, or reality constraints and limitations in the domain of the imagination, except for the capacity of the individual to efficiently abstract and perceive complexity. And, legal and moral constraints are optional, but the principles of learning have their full and usual effects in the domain of the imagination. Fantasies, cultivated and acted-out covertly and/or overtly, involve real learning processes, which strengthen and weaken related thoughts and emotions, as well as the objects of desire and related behaviors.

Fantasies may be fleeting or prolonged, approach or avoidant, active or passive, mild or

intense, adaptive or maladaptive, rationale or irrational, engrossing or tangential, desirable or undesirable, etc., Fantasies may be more or less reality based, more or less legal or moral, more or less constructive or destructive, more or less physical or psychological, etc.,

**Focus:** Fantasies may be past, present, or future oriented. Past oriented fantasies range from efforts to imagine (construct or reconstruct) a childhood experience to conceptualizing alternatives to what one did or did not do --- i.e., what one should or could have done or not done instead. Present oriented fantasies are related to perceived immediate opportunities or possibilities based on current context and present situational stimuli. Future oriented fantasies are based on anticipated situations or events, or constructed situations into which one projects one's self.

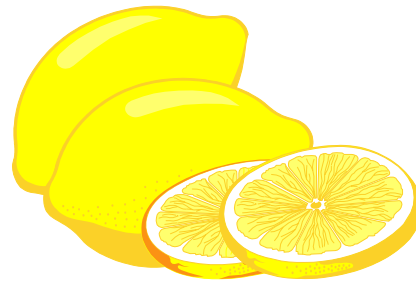
**Behavior:** Covert fantasies and overt behavior obey the same laws of the universe. Thoughts function as units of behavior and there are always overt indexes of cultivated covert fantasies --- i.e., rehearsed covert behavior and related cultivated experiences. Such "overt indicators" may be more or less subtle, more or less idiosyncratic, and more or less adaptive, but always present. On the surface, behavior is measurable and observable. Related beliefs, values, motivation and expectation are not. Behavior (as well as thoughts) has form and function.

**Consequences:**

Each time a fantasy is "cultivated," it changes, differentially reinforcing the perceptions, emotions and behavioral predispositions of which it consists. Fantasies are dynamic, never static.

Thought and behavior consistent with a fantasy reinforces the fantasy dynamics. When people put themselves in situations in which the elements of a fantasy are perceived as existing, they are creating opportunities for the fantasy to reach fruition. Such thought and behavior strengthen all related component parts of the fantasy, some sensitization and some desensitization, some thresholds raised, some lowered. Fantasy activity always consists of things that are strengthened and things that are weakened, reinforced or punished, and you can not have one without the other. All things in a cognitive, behavioral, or motivational class are interrelated and mutually reinforcing. There is a summation of effects, and consequences are cumulative. Bottom line is, fantasies are cultivated, and what is cultivated reflects who one is and determines who one is

becoming. The domain of the imagination is the stage for self-creation.



## Just A Thought ...

### ● IMAGINE ... BITING INTO A LEMON

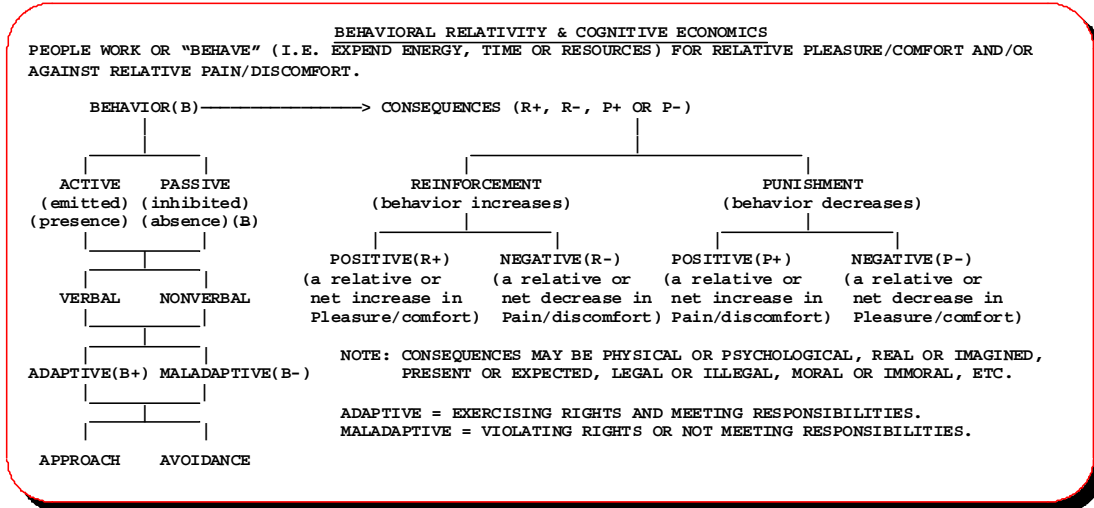
- If you did ..., you salivated, demonstrating the power of your thoughts to produce physiological effects.
- In fact, my thoughts (in the form of words) traveled through the air by way of sound and/or light, merged with your thoughts, and produced an observable, measurable, physiological effect in you.
- Thoughts and words can and do produce physiological effects, some of which you are aware.

### ✓ YOU ARE THE SELF YOU CREATED

- ✓ Both Classical and Operant conditioning occur in the virtual reality of your imagination.
- ✓ Thoughts function as units of behavior and stimulus events (antecedents and consequences).
- ✓ You are the ruler of the domain of your imagination.
- ✓ Your focus of attention and thoughts can and do shape your desires, emotions, and behavior.
- ✓ The mind matters and mental exercise "works".
- ✓ What you imagine makes a difference.



# BRACE™ MODEL SUMMARY CHARTS AND GRAPHICS

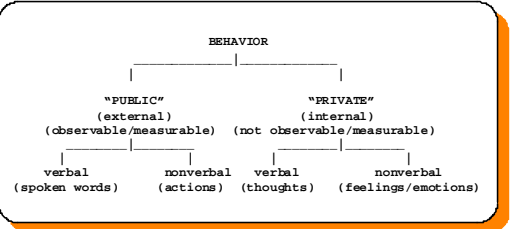


**ADAPTIVE = EXERCISING RIGHTS AND MEETING RESPONSIBILITIES.**  
**MALADAPTIVE = VIOLATING RIGHTS OR NOT MEETING RESPONSIBILITIES.**

- FUNCTIONAL ALTERNATIVES**
- |  |  |
|--|--|
| 1. R <sup>+</sup> of B <sup>+</sup>    | 1. R <sup>+</sup> of B <sup>-</sup>    |
| 2. R <sup>-</sup> of B <sup>+</sup>    | 2. R <sup>-</sup> of B <sup>-</sup>    |
| 3. P <sup>+</sup> of B <sup>+</sup>    | 3. P <sup>+</sup> of B <sup>+</sup>    |
| 4. P <sup>-</sup> of B <sup>-</sup>    | 4. P <sup>-</sup> of B <sup>+</sup>    |
| 5. R <sup>+</sup> of no B <sup>-</sup> | 5. R <sup>+</sup> of no B <sup>+</sup> |
| 6. R <sup>-</sup> of no B <sup>-</sup> | 6. R <sup>-</sup> of no B <sup>+</sup> |
| 7. P <sup>+</sup> of no B <sup>+</sup> | 7. P <sup>+</sup> of no B <sup>-</sup> |
| 8. P <sup>-</sup> of no B <sup>-</sup> | 8. P <sup>-</sup> of no B <sup>-</sup> |

**Terminating An Existing Contingency or "time-out":**

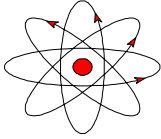
-R<sup>+</sup> = P<sup>-</sup>  
 -R<sup>-</sup> = P<sup>+</sup>  
 -P<sup>+</sup> = R<sup>-</sup>  
 -P<sup>-</sup> = R<sup>+</sup>



- REINFORCER POTENCY SUBSCRIPT**
- +5 = extremely rewarding (extreme pleasure, intense feelings of well-being, elation or euphoric reaction; if necessary will persistently and repeatedly expend high energy, sacrifice less potent positive reinforcers, tolerate highly aversive negative reinforcers, and engage in high risk behavior to gain, maintain, keep, protect). If necessary, will run the entire range of response hierarchy.
  - +4 = highly rewarding (will "behave", "work" or "act-out" for).
  - +3 = moderately rewarding (will actively seek).
  - +2 = mildly rewarding (reaches for, moves towards, participates).
  - +1 = very mildly rewarding (will ask for; will accept).
  - 0 = no noticeable effect other than novelty or initial orienting response.
  - 1 = very mildly aversive (passive escape/avoidance, discards).
  - 2 = mildly aversive (will not accept, pushes away, moves away from).
  - 3 = moderately aversive (active escape/avoidance).
  - 4 = very aversive (intense pain, fear or anger reaction; will behave, work or act-out against).
  - 5 = extremely aversive (extreme pain, panic or rage reaction; will expend high energy and engage in high risk behavior to delay, avoid, decrease or terminate. If necessary, will

**NOTE: Positive reinforcers motivate approach behavior and negative reinforcers motivate avoidance behavior, but negative reinforcement is not the same punishment. Reinforcement strengthens or increases a behavior and punishment weakens or decreases a behavior.**

- PRINCIPLES, ASSERTIONS AND ASSUMPTIONS**
1. Reinforcers are unique for each individual.
  2. People work (behave) for relative (net) gain: to increase pleasure/comfort and/or to decrease pain/discomfort.
  3. The same behavior may serve different functions and have multiple consequences.
  4. The function and potency of reinforcers change across time and circumstance.
  5. Reinforcement of any given behavior is punishment of alternatives and vice versa.
  6. Short term gains have long term costs and vice versa.
  7. Relatively low energy, high effect behavior is predisposed to selection.
  8. Behavior is lawful and the principles of learning operate independent of awareness.
  9. Imagined behavior has real consequences.
  10. The principles of learning are amoral but values and beliefs are learned.
  11. One's behavior is another's consequence.
  12. What a person does not do is as important as what a person does.



# Behavioral Relativity and Cognitive Economics



Consequences

Behavior

Expectation

Motivation

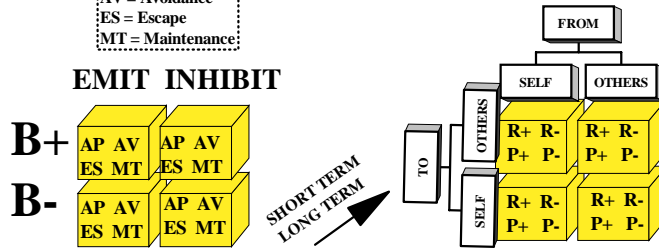
Values

Beliefs

B+ = ADAPTIVE  
B- = MALADAPTIVE

R+ = POSITIVE REINFORCEMENT  
R- = NEGATIVE REINFORCEMENT  
P+ = POSITIVE PUNISHMENT  
P- = NEGATIVE PUNISHMENT

AP = Approach  
AV = Avoidance  
ES = Escape  
MT = Maintenance



**ADAPTIVE**  
EXERCISING  
RIGHTS AND  
MEETING  
RESPONSIBILITIES

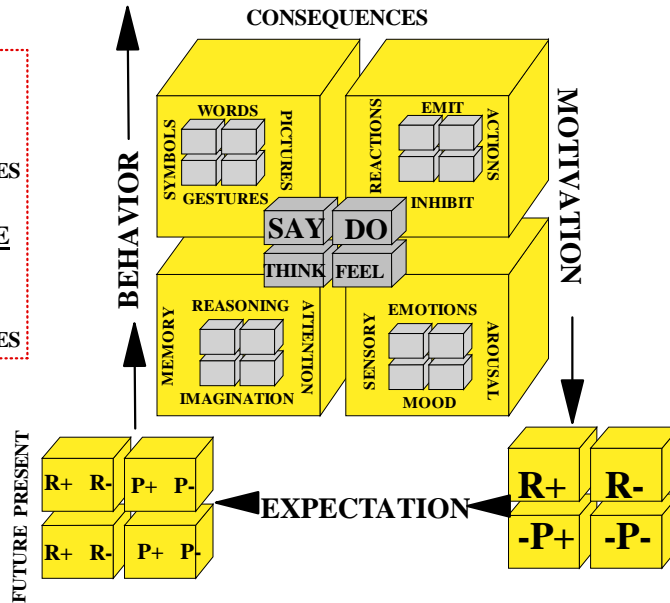
**MALADAPTIVE**  
VIOLATING  
RIGHTS OR NOT  
MEETING  
RESPONSIBILITIES

**BEHAVIORAL ECONOMICS:**

**FIRST STOP:**

1. R+ of B- and of the absence of B+.
2. R- of B- and of the absence of B+.
3. P+ of B+ and of the absence of B-.
4. P- of B+ and of the absence of B-.

**THEN START: R+ AND R- OF B+ AND THE ABSENCE OF B-.**



# TO BE OR NOT

- ✓ **ADAPTIVE (B+)**
- R+ of B+
  - R- of B+
  - P+ of B-
  - P- of B-
  - R+ of not B-
  - R- of not B-
  - P+ of not B+
  - P- of not B+



- ✗ **MALADAPTIVE (B-)**
- R+ of B-
  - R- of B-
  - P+ of B+
  - P- of B+
  - R+ of not B+
  - R- of not B+
  - P+ of not B-
  - P- of not B-

