

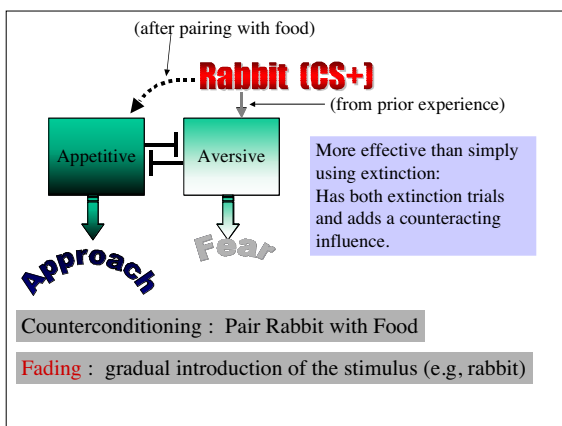
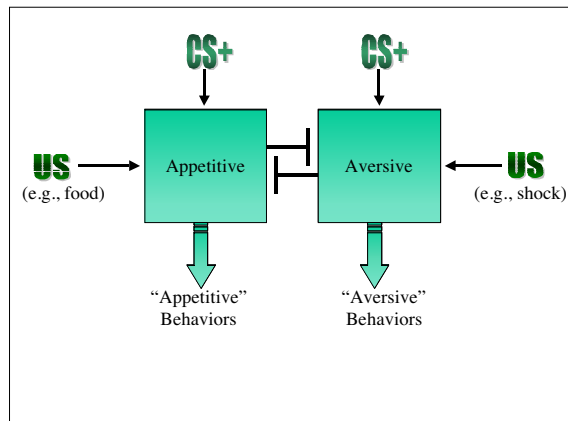
Working Hypothesis:
If created by conditioning, could be eliminated using principles of conditioning

Behavior Therapy: treatment based on environmental determinants of behavior, not mental states.

Counterconditioning:
Elimination of a response by conditioning an incompatible CR.

e.g., Cover-Jones,
Peter's fear of rabbits.

Note: In section titled "systematic desensitization"
But, technically, it is pure counterconditioning.



Systematic Desensitization

Steps:

1. Rank order fear
2. Relaxation Training
3. "counterconditioning"

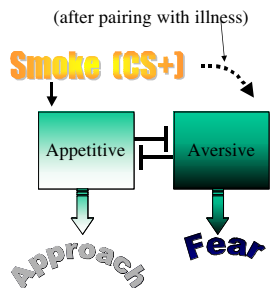
Imagine fear situation — relaxation
(CS) (US)

Relaxation (CR) is incompatible with Fear

4. Work up list to more fearful imaginings

Aversion Therapy

Essentially counterconditioning in other direction



Thorndike

Law of Effect

If a behavior in the presence of a stimulus is followed by satisfaction, the association between the stimulus and the response is strengthened.



R — S* Contingency

S — R Association

Thorndike

Negative Law of Effect

If a behavior in the presence of a stimulus is followed by **dissatisfaction**, the association between the stimulus and the response is **weakened**.

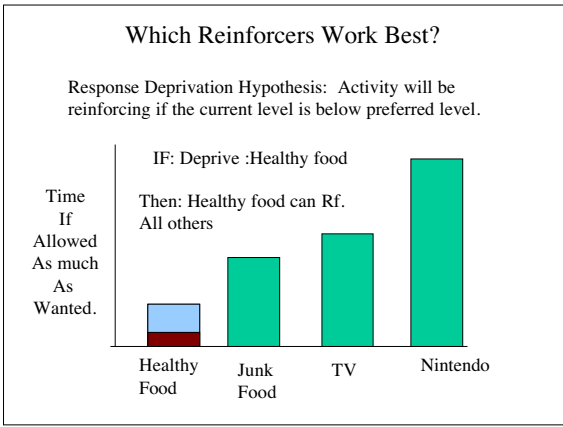
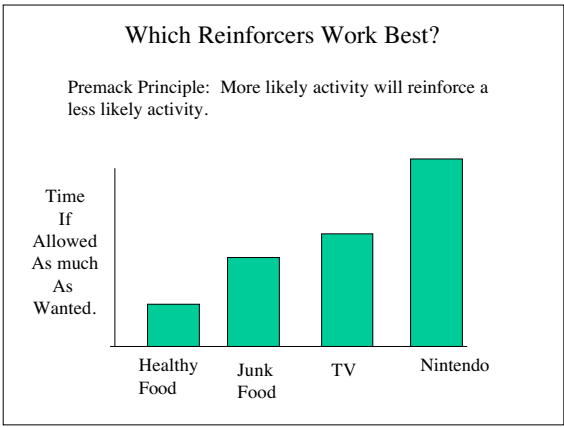
Law of Effect → increased Response (Reinforcement)

Negative Law of Effect → decreased Response (Punishment)

Types of Response-Outcome Contingencies

	Give	Take
Good	Positive Reinforcement	(negative) Punishment (Time out)
Bad	(positive) Punishment	Negative Reinforcement (escape/avoidance)

Reinforcement: Incr. Target behavior Positive = Give
Punishment: Decr. Target behavior Negative = Take

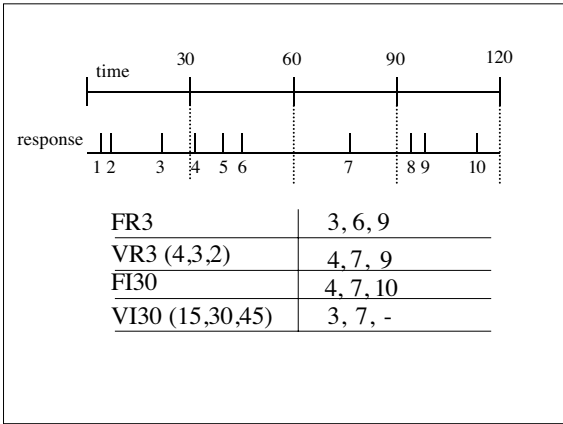


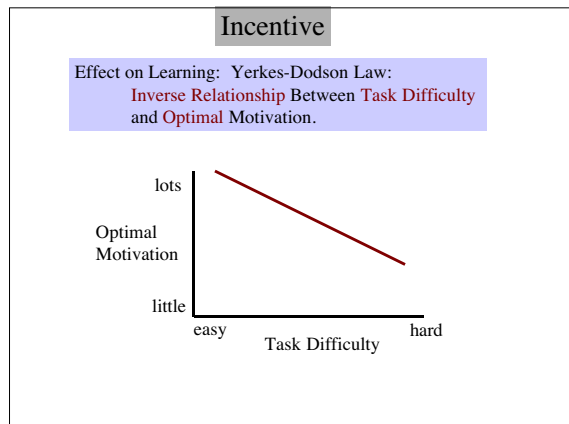
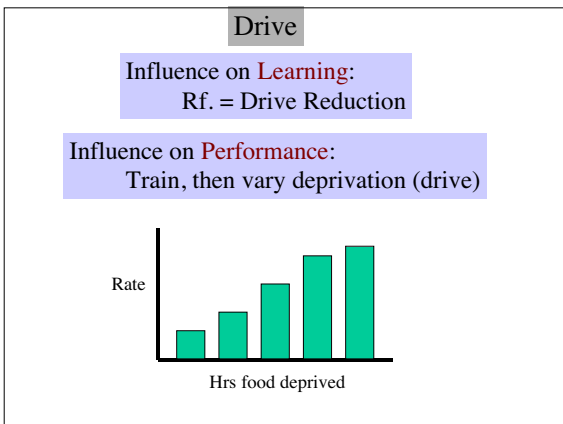
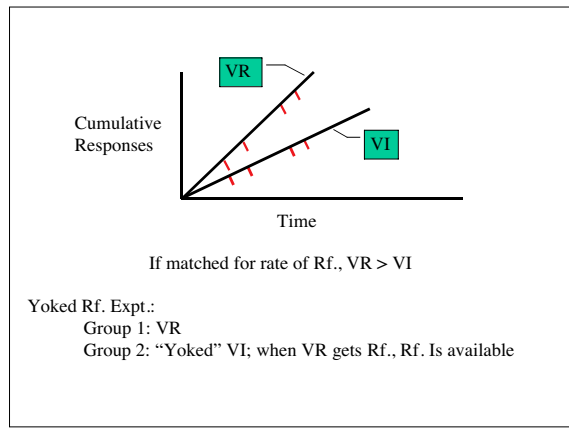
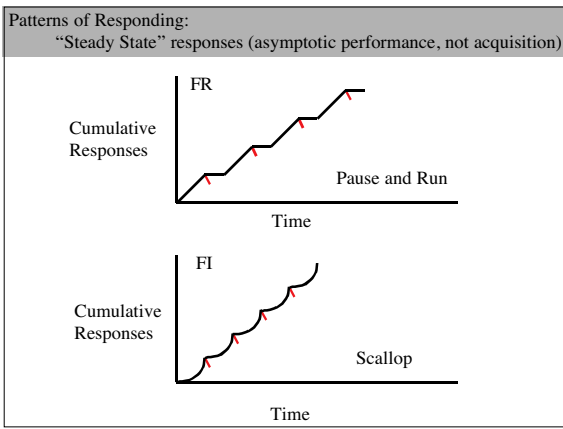
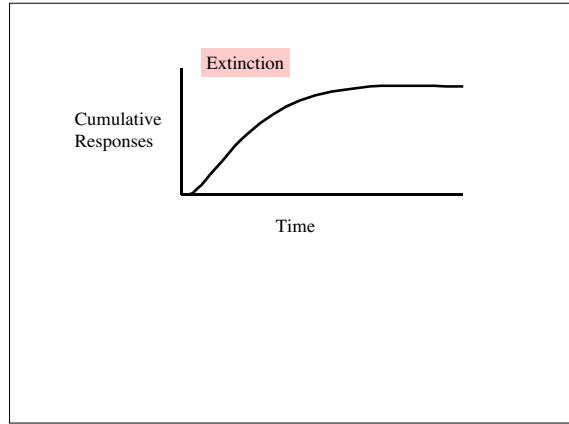
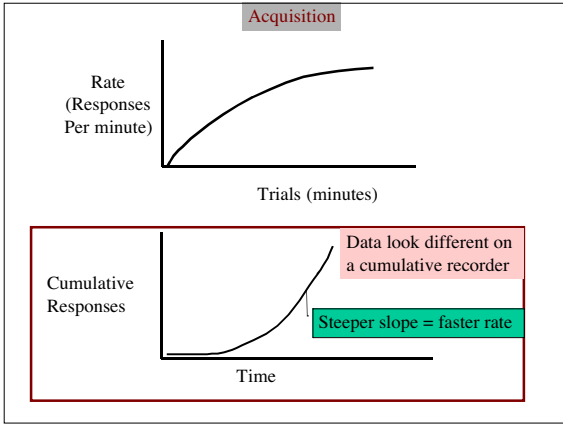
Schedules of Reinforcement

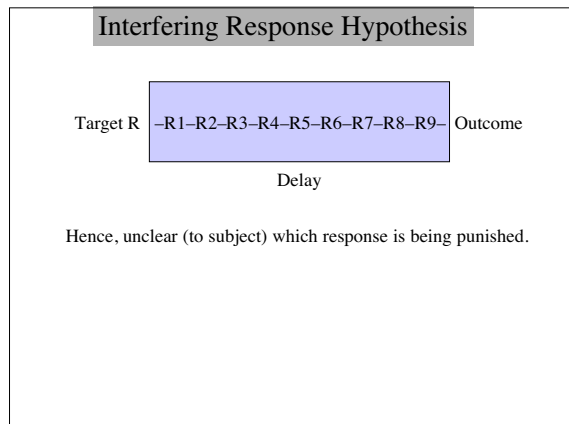
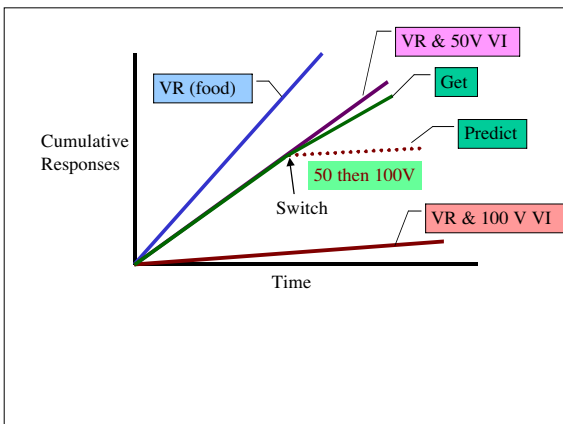
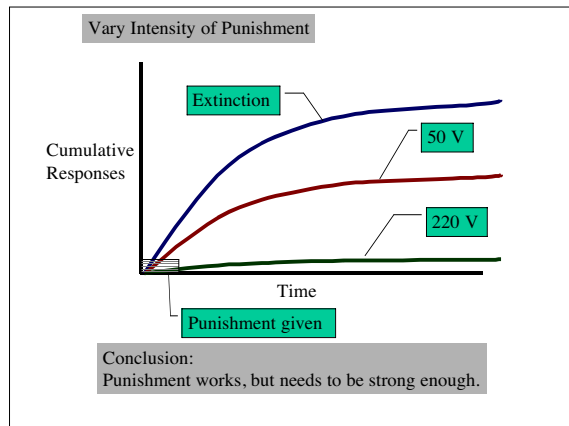
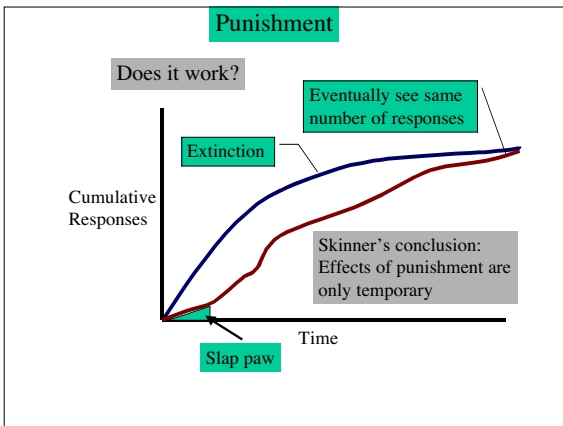
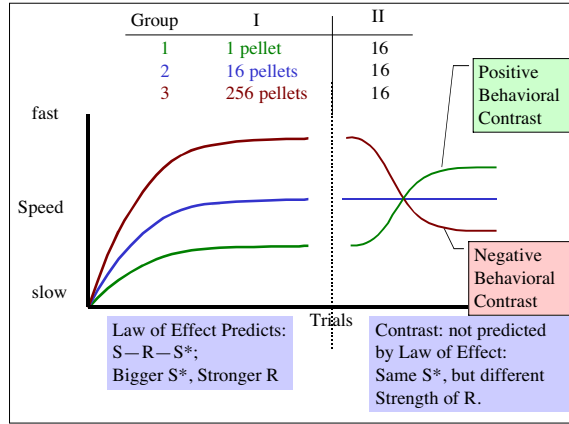
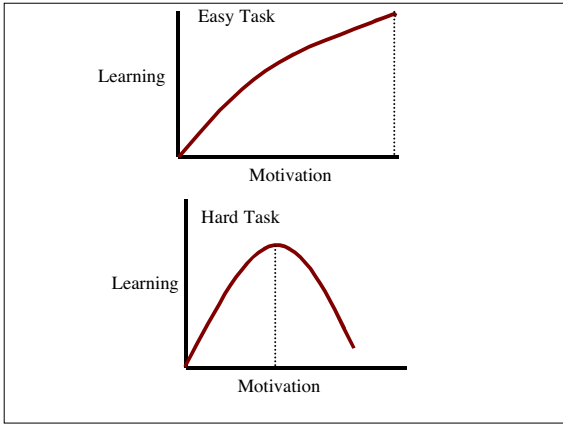
	Fixed	Variable
Ratio	FR	VR
Interval	FI	VI

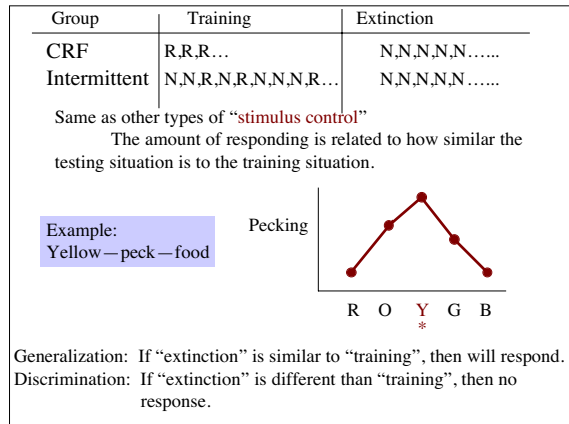
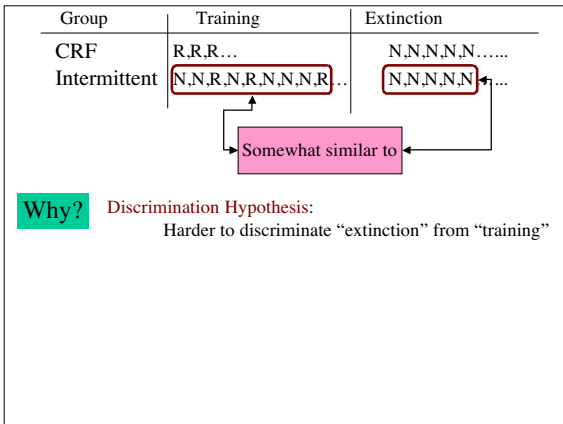
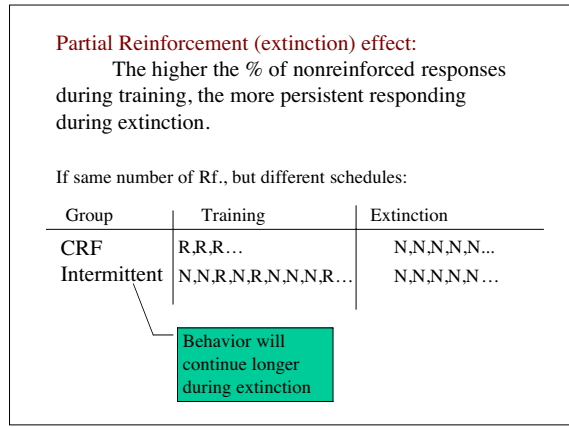
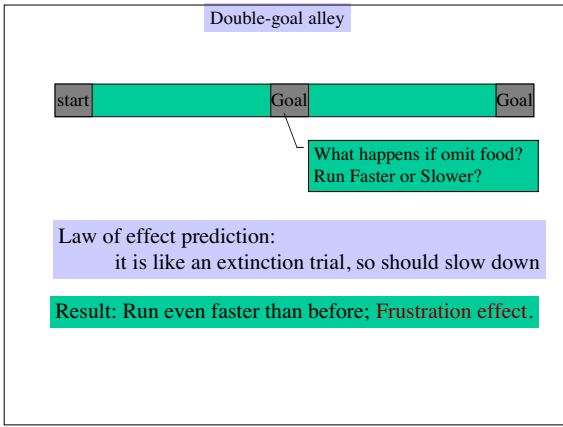
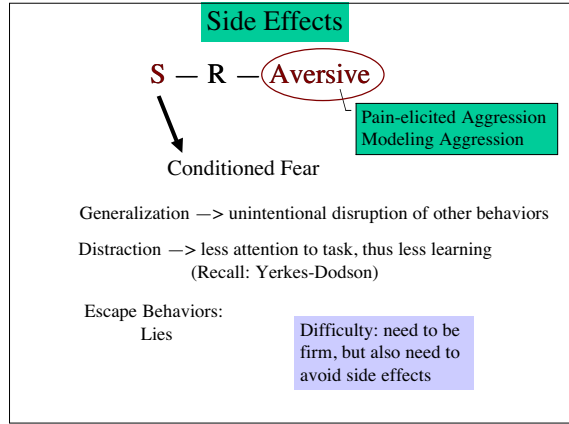
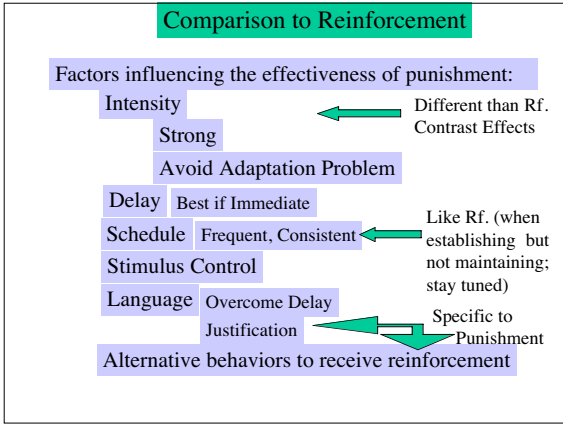
Ratio: # of Responses

Interval: Time (since last Rf.)
Still need to respond!









Group	Training	Extinction
CRF	R,R,R	N,N,N.....
Intermittent	N,N,R,N,R,N,N,R	N,N,N.....

Why? **Discrimination Hypothesis:**
Harder to discriminate "extinction" from "training"

What "stimulus conditions" are different between these groups?

The memory of nonreinforcement (S^N) is one of the stimuli controlling the behavior

Recall: $S-R-S^*$

For intermittent group: S^N-R-S^*

Consequently, during extinction, S^N is present and should $\rightarrow R$

Sequential Model (Capaldi)

N-R Transitions

Group	Daily Session	Extinction
1	<u>NNR</u>	<u>NNN</u>
2	<u>RNN</u>	<u>NNN</u>

More persistent responding (slower extinction)

S^N Present during Rf. Trial

Sequential Model (Capaldi)

N-Length

Group	Daily Session	Extinction
1	<u>NNR</u>	<u>NNN</u>
2	<u>NRN</u>	<u>NNN</u>

Both have 1 N-R transition

More persistent responding (slower extinction)

Schedules and PRE:

Intermittent Schedules:

FR VR
FI VI

Which would give more persistent responding during extinction?

FR5 vs. VR5 ?

VR
Some longer N-lengths

VR vs. VI (matched for number of Rf.)
(i.e., same number of N-R transitions)

VR
Some longer N-lengths

