

**Review of Applied Psychology**  
Applied psychology began in the early 1900's....  
....and it has continued to grow for over a century

Psychology Applications also spread to other areas:

- Schools – counseling & guidance
- Business – Organizational Behavior
- Clinical Social Work
- Marriage & Family Therapy
- Engineering, Architecture, and Design
- Many more areas

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Many schools of thought have an applied orientation...

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Psyc 405: History & Systems

Chap 9: Behaviorism: Antecedent Influences

OR

Ants, Rats, and Cats (Horses & Dogs too)

OR

Are you a "Dog" or "Cat" Person?

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Some key ideas serve as a foundation for Behaviorism.....

- Positivism
- Mechanism
- Pragmatism
- Parsimony

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II. E. L. Thorndike

Interested in the work of William James, could not study learning in children at Harvard

Earned PhD at Columbia (1898), advised by Cattell – Studied learning: Chicks in Mazes

Best known for his work examining cats trying to learn how to escape from the “puzzle box”

[http://books.google.com/books?id=JGAAAAYAAI&printsec=frontcover&dq=thorndike+animal+intelligence&hl=en&ei=vw0BTv2z0Tn9GuzAtrFDg&sa=X&oi=book\\_result&ct=result&resnum=2&sqi=2&ved=0CDMwQAFwAQhvwonepage&as=false](http://books.google.com/books?id=JGAAAAYAAI&printsec=frontcover&dq=thorndike+animal+intelligence&hl=en&ei=vw0BTv2z0Tn9GuzAtrFDg&sa=X&oi=book_result&ct=result&resnum=2&sqi=2&ved=0CDMwQAFwAQhvwonepage&as=false)  
(1898)

[http://books.google.com/books?id=LC7GeCzWdIQc&printsec=frontcover&dq=thorndike+animal+intelligence&hl=en&ei=vw0BTv2z0Tn9GuzAtrFDg&sa=X&oi=book\\_result&ct=result&resnum=1&sqi=2&ved=0C4C4QAFwAQhvwonepage&as=false](http://books.google.com/books?id=LC7GeCzWdIQc&printsec=frontcover&dq=thorndike+animal+intelligence&hl=en&ei=vw0BTv2z0Tn9GuzAtrFDg&sa=X&oi=book_result&ct=result&resnum=1&sqi=2&ved=0C4C4QAFwAQhvwonepage&as=false)  
(1911)

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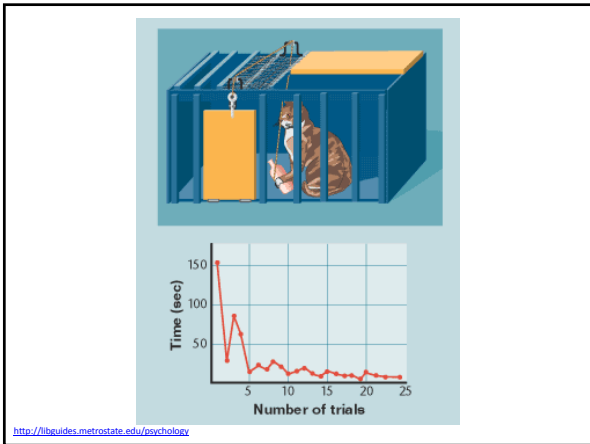
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Cats learned by trying different actions until they achieved success....

Learning by **trial-and-accidental-success**  
OR  
Now referred to as "Trial-and-Error Learning"

Behavior is impacted by positive and negative consequence (stamp in or stamp out actions)

Applied his work in schools, military, and.....

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Thorndike is known for:

- \*Connectionism (connection between situation and response)
- \*Law of Effect: An action followed by satisfaction is strengthened (dissatisfaction → weakened)
- \*Law of Exercise: More often an action is performed, the stronger the connection

These ideas are similar to.....???

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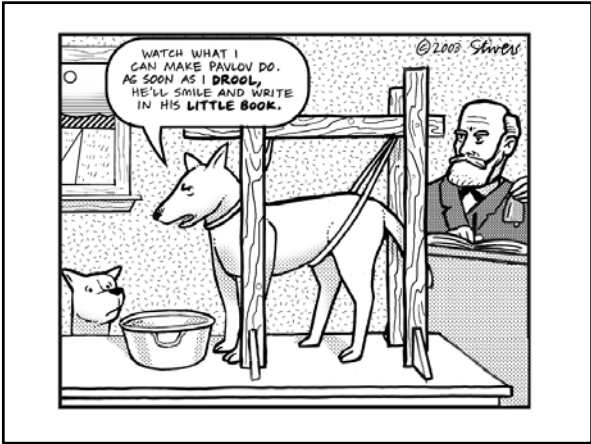
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III. Ivan Pavlov

Russian physiologist studying gastric functioning using dogs as subjects. His work led to a new understanding of how digestion works, earning a Nobel Prize (Physiology/Medicine)

His methods of studying digestion involved measuring salivary secretions, which brings us to psychology.....

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The "Tower of Silence"




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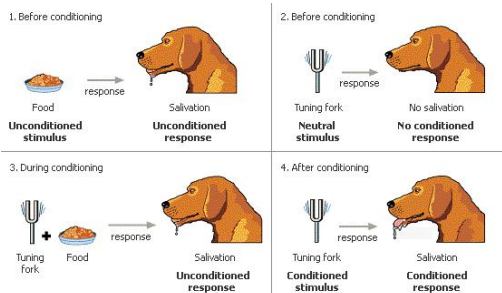
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The Conditioned Reflex: The response to one stimulus can be conditioned to or associated with another stimulus




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Pavlov initially called this a “Psychic Reflex” which implies a mental component.

However, such conditioning processes would be the foundation for an positivist school of Behaviorism that would reject mentalism

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IV. Vladimir Bekhterev

Another Russian Physiologist, he published “Objective Psychology” in 1907.

Research on human motor reflexes – He examined both conditioned reflexes and associated reflexes (2<sup>nd</sup> order conditioning)

The founders of Behaviorism would cite Pavlov, but Bekhterev’s work provided better support

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Ideas Set the Stage for Watson’s Behaviorism..

- Parsimony and positivism applied to the “animal mind” (and human mind too)
- Behaviors associated with UCS-UCR

(Also, Behaviors followed by/connected to rewards)

Sets the stage for Behaviorism (Chapters 10/11)

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