

PY 101 Exam 3 Notes

2 forms of Reasoning

Deductive Reasoning

- Reasoning from general to specific
 - Ex: birds have feathers-general
 - Robins have feathers so a robin must be a bird-specific

Inductive Reasoning

- Reasoning from specific to general
 - Ex: I love my intro to psych class therefore I will love all psych classes

Problem Solving Strategies

- Algorithms
 - Systematic way of thinking
 - Guarantee you'll find it
 - Takes longer
 - Ex: look at every shelf in library

Heuristic

- Mental shortcut
 - Rule of thumb
 - Ex: higher price=better quality

? What percentage of felony cases is a plea to insanity

- Less than 1%

Availability Heuristic

- Making a decision base on the answer that most easily comes to mind
 - Ex: flying vs. driving-people more afraid of flying

You can impose limitations on yourself when you problem solve

Schema

- Cognitive structures that help us perceive and process info.
 - Ex: classroom, car, store, part, professor at a bar

Script

- A schema that directs our behavior
 - Ex: out to eat, movies, class, first date
 - Helpful and influence our reasoning process

Choice

- Making decisions gives us a sense of control
 - Too many choices=bad
 - Depression
 - Ex: grocery store study 3 vs. 12
 - Jam selection

Satisficer and Maximizers

- Satisficer- good enough philosophy
- Maximizer-make best possible decision
 - Compare labels, reviews
- Mere exposure effect
 - Decisions can be influenced by what we have been exposed to
 - Ex: song choice, food, friends

Functional Fixedness

- Using an object for its typical function
- Cup to drink out of
 - But you can use a cup for other things

Framing

- How info is presented can affect the decisions we make

Marketing and Framing

- 83 cents per day for a gym membership sounds better than \$25 a month
- 80% lean meat

Children and Problems Solving

- Improve child's problem solving skills?
 - Let them figure it out alone
 - Give them more love

Background

- Intelligence- ability to use knowledge to reason
- Physical and personality differences
 - Individuals differ in terms of intelligence too

Psychometrics

- Measurement of intelligence

Achievement vs. Aptitude Test

- Achievement- knowledge and skills that have been learned
 - Class exams
- Aptitude- measures individual potential to perform well
 - SAT

Intelligence Quotient (IQ)

- Mental Age
 - Intellectual age compared to same age peers
- Chronological Age
 - Actual age of person
- Average IQ?
 - 100

- o < 70-intellectual disability
- Validity
 - o Does the test measure what it is suppose to measure
 - o Very important

IQ is a good predictor of life outcome

- Self control

Cultural Bias

- Main problem with test
 - o Penalize people in other cultures
 - o Ex: "da bomb"

General Intelligence (g)

- Charles Spearman
- A factor that underlies intelligence
- Predicts performance in school and work

Fluid and crystalized intelligence

- Fluid
 - o Ability to process info in novel or complex situations-ability to learn new things, how fast can you pick something up
 - o Decreases with age-why old people have trouble performing tasks
 - o Peaks at young adulthood
- Crystallized
 - o Knowledge we acquire through experience
 - o Street smarts
 - o More stable
 - o Increases with age-wisdom

Does birth order affect intelligence?

- Research says first borns tend to have higher IQ

Savants

- People who have some sort of intellectual exceptional ability
- We know very little about them-tend to be autistic
- Kim Peek-like rainman

Stereotype Threat

- Conforming to negative stereotypes related to ones own group
- Ex-women are bad at math
- Can affect performance on things