INTRODUCTION TO PSYCHOLOGY

ROBERT W. FERGUSON PH.D.

COURSE OVERVIEW

- DEFINITION
- PSYCHOLOGY AND THE LAW
- LAW - HINKLEY
  - MURDER - KILLING WITH MALICE
- PSYCHOLOGY
  - INSANITY - PSYCHOSIS OR HEAT OF PASSION
  - SANITY - PARANOID, ANTISOCIAL, NARCISSISTIC
  - DIMINISHED CAPACITY

RESEARCH

- VALIDITY - FACTUAL
- RELIABILITY - CONSISTANCY
- INDEPENDENT VARIABLE - METHOD
- DEPENDENT VARIABLE - RESULTS
- HYPOTHESIS

TYPES

- OBSERVATION
- QUESTIONNAIRE

CORRELATION

- POPULATION - RANDOM
- HYPOTHESIS - THERE IS A CORRELATION BETWEEN EXPECTANCY AND A CHANGE IN SELF CONCEPT AMONG A GROUP OF HEROIN ADDICTS.
- CONTROL GROUP - PRETEST, NOTHING, CLASS, POSTTEST.
- EXPERIMENTAL GROUP - PRETEST, EXPECTANCY, CLASS, POSTTEST.

LABORATORY

- STEREOTAXIC MACHINE AND ATLAS
- TYPES
  - ABLATION - VMH (OFF SWITCH), LH (ON SWITCH)
  - STIMULATION
    - GATE CONTROL THEORY
    - CHEMICAL - DOPAMINE, SCHIZOPHRENIA
  - RECORDING - BIOFEEDBACK
BRAIN CELLS

• GLIAL - SUPPORT
  – REGULATE INTERNAL ENVIRONMENT
  – GROWTH AND NUTRITION
  – MYELIN SHEATH
• NEURONS - ELECTRICAL/CHEMICAL
  – ONE WAY FIRING
  – ALL OR NOTHING

ELECTRICAL

• DENDRITES
• AXON
• NODES OF RANVIER
• MYELIN SHEATH
• SYNAPTIC KNOB
• SYNAPSE

REGENERATIVE MEDICINE – STEM CELLS

• MATERIALS – 46 CHROMOSOMES – 200+ CELLS – 3000+ GENES PER CELL
• HISTORICAL – VIRGIN BREATH, TESTICULAR GRAFTS
• PLURIPOTENT – EMBRYO/PLACENTA INNER LAYER OF UNDIFFERENTIATED CELLS
• SPECIFIC GENE DIFFERENTIATES CELL, OTHER GENES TURN OFF
• 1998, ISOLATE AND GROW STEM CELLS-2000, TURN CELL INTO SPECIFIC TYPE (10)-2001, 110 CELL TYPES

MORE

• CLINICAL TRIALS – HUMAN EMBRYO, (MASS,BRIT,SOKOR)
  – PANCREATIC CELLS – DIABETES
  – NERVE CELLS – EPILEPSY, PARKINSON’S, ETC
  – SKIN CELLS – MELANOMA, WOUNDS, BURNS
  – HEART CELLS – DAMAGED CARDIAC TISSUE
  – LIVER CELLS – SCLEROSIS
  – SPINAL CORD CELLS – DAMAGED
  – TREATMENT – REPLACE DAMAGED CELLS WITH DIFFERENTIATED STEM CELLS

MORE

• IMMUNE CELLS
  – MULTIPLE SCLEROSIS – IMMUNE CELLS ATTACK MYELIN
  – ARTHRITIS – IMMUNE CELLS ATTACK CARTILAGE
  – LUPUS – IMMUNE CELLS ATTACK SKIN
  – TREATMENT – IMMUNE SYSTEM CELLS DESTROYED BY RADIATION AND REPLACED BY EMBRYONIC STEM CELLS

CHEMICAL (NEUROTRANSMITTERS)

• DOPAMINE
• NOREPINEPHRINE/GABA
• SEROTONIN
• ACETYLCHOLINE/ADRENALINE
• ENDORPHIN – ANANDAMIDE?
• PHENYLETHYLAMINE/LIMERANCE
• OXYTOCIN
• NITRIC OXIDE
LET THE BRAIN CHOOSE

• BIOCHIP TESTING/SWABS
  – GENETIC DIFFERENCES/MEDS
• EEG, MRI, CAT SCAN ACTIVITY

BRAIN

• CENTRAL NERVOUS SYSTEM - BRAIN/SPINAL CORD
• PERIPHERAL NERVOUS SYSTEM - ORGANS, MUSCLES, ETC.
• CORTEX (CONVOLUTED)

LOBES

• FRONTAL - PLANNING, ABSTRACT, EXPRESSIVE SPEECH, AGRESSION, IMPULSE CONTROL, SMELL
• TEMPORAL - RECEPTIVE SPEECH AUDITORY
  – SURGERY - MAPPING
• PARIETAL - TASTE AND TOUCH
• OCCIPITAL - SIGHT
• CONTRA COUP

HEMISPHERES

• LEFT AND RIGHT
• ASYMMETRICAL, CONTRALATERAL
• CORPUS CALLOSUM

LEFT HEMISPHERE

• VERBAL
• MATH
• READING
• CONCENTRATES ON THE PARTS
• BLACK-WHITE
• DEALS IN THE PRESENT
• NON EMOTIONAL
• BORING

RIGHT HEMISPHERE

• PICTORIAL
• ABSTRACT
• BIG PICTURE - SPATIAL
• CREATIVE
• MUSICAL
• EMOTIONAL
• PAST-FUTURE
• GHOSTLY PRESENCE
## Split Brain Ramifications

- Epilepsy
- Thalamotomy
  - Destroys overactive cells
- Electrode Surgery
  - Overrides overactive cells
- Comissurotomy
  - Speech difficulties
  - Color accessorizing

## Brain Divisions

- Hind Brain
  - Medulla
  - Cerebellum
  - Pons
- Mid Brain
  - Limbic System (Gage)
- Fore Brain
  - Thalamus, except smell
  - Hypothalamus

## Sensation

- Body Part - Bring in stimuli
- Neurons - Carry to the Cortex

## The Eye

- Optical
  - Cornea (Translucent) - REM sleep
  - Aqueous humor (Glaucoma)
  - Iris
  - Pupil
  - Lens (Cataract)
  - Ciliary muscles (Near/Far Sighted)

## Neural

- Retina
- Rods
- Cones
- Purkinje Effect
- Optic Nerve

## The Ear

- Outer
  - Pinna
  - External Auditory Canal
- Middle
  - Tympanic Membrane (Eardrum)
  - Bones - Hammer, Anvil, StIRRUP
- Inner
  - Semi-Circular Canals - Vertigo
  - Cochlea
TASTE

- SWEET
- SALT
- BITTER
- SOUR
- SAVORY MEAT
- SUPER (35 BUDS), AVERAGE, OR NON TASTERS (10-15 BUDS)
  - (NONTASTERS) OVEREATING, ALCOHOLISM, ETC.

SMELL - 1000,S

- NOSE
- NEURONS
  - ONE HALF IN NOSE - ONE HALF IN BULB
- OLFACTORY BULB (PROCESSING)
- BRAIN
- MEMORIES
- PHEROMONES - VOMERAL NASAL ORGAN

TOUCH

- HOT
- COLD
- PRESSURE
- PAIN

PERCEPTION

- DEFINITION - P=B+S
  - DECODE INCOMING STIMULI, IDENTIFY CONSISTENCIES IN THE WORLD
- VISUAL CLIFF
- ILLUSIONS
  - NOVEL ARRANGEMENT OF CUES

STATES OF CONSCIOUSNESS

- SLEEP

STAGES

- SLOW WAVE - (norepinephrine)
  - STAGE 1
  - STAGE2
  - STAGE3
  - STAGE4
- REM (paradoxical) - (serotonin)
CYCLES
- 1,2,3,4
- 3,2,1,REM, AWAKE
- 90 MINUTE CYCLES
- REM - MINUTES
  - 8
  - 18
  - 24
  - 28
- ADOLESCENTS

DISORDERS
- CONSIDERATIONS
  - frequency, intensity, duration
- SLEEP WALKING
- SLEEP TALKING
- BINGE EATING
- SEXSOMNIA
- INSOMNIA
- HYPERSOMNIA
- NIGHT TERROR
- NIGHTMARE DISORDER

MORE
- NARCOLEPSY
  - CATAPLEXY
- APNEA (UVULA)
- REM SLEEP BEHAVIOR DISORDER
- SLEEP PARALYSIS
- CLONAZEPAM (ANTI-SEIZURE)

DREAMS
- DEMOGRAPHICS
- THEORIES
  - FREUD - PSYCHOANALYTIC
  - PERLS - GESTALT
  - VERTES - SURVIVAL (SIDS, ONDS)
  - WINSON - LEARNING
  - CRICK - CLEANSING
  - HOBBSON - PONS (NEURONS TO CORTEX)

LEARNING
- CONDITIONING
- S-R
  - STIMULUS - RESPONSE
  - IMPACT OF ENVIRONMENT ON ORGANISM
- R-S
  - RESPONSE - STIMULUS
  - IMPACT OF ORGANISM ON ENVIRONMENT

PAVLOV - CLASSICAL CONDITIONING
- CS - UCS - R
**CS UCS R**

- Neutral Innate Learning
- Bell Food Salivate
- Weekend Alcohol Intox
- 10 P.M. Food Relax
- Parents Approval Role
- Needle Heroin Rush

**SCHIZOKENESIS**

- CS UCS R
- Beard Rape Fear
- Truck Accident Fear
- Weather War Fear

**CC TERMS**

- Contiguity
- Extinction
- Generalization
- Discrimination

**SKINNER - OPERANT CONDITIONING**

- R-S
- Reinforcement - Positive or Negative
- Punishment
- Aversion Therapy

**KILLOLOGY – ACQUIRED VIOLENCE IMMUNE DEFICIENCY SYNDROME**

- Killing Unnatural – Mid Brain
- Civil War, 90% Dead Soldiers Guns Loaded; WWII 15% Fire at Exposed Enemy: Korea 55%; Vietnam 90%
- Conditioned Reflex and Reinforcement Desensitizes Mid Brain Resistance
- CC Teaches to Kill – OC Teaches to Like It

**CLASSICAL CONDITIONING**

- CS UCS R
- Boot Camp
- Di Dehuman Kill
- Police
- Target Form Shoot
- Children
- TV Violence Belief
- Teens
- Video Game Target Shoot
<table>
<thead>
<tr>
<th>OPERANT CONDITIONING</th>
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<tbody>
<tr>
<td>• R</td>
</tr>
<tr>
<td>• MILITARY</td>
</tr>
<tr>
<td>• KILL ENEMY</td>
</tr>
<tr>
<td>• JAPAN</td>
</tr>
<tr>
<td>• BAYONET PRISONERS</td>
</tr>
<tr>
<td>• POLICE</td>
</tr>
<tr>
<td>• KILL BAD GUY</td>
</tr>
<tr>
<td>• YOUNG PEOPLE</td>
</tr>
<tr>
<td>• WATCH VIOLENCE</td>
</tr>
<tr>
<td>• CANDY, DRINKS</td>
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<thead>
<tr>
<th>CONSIDERATIONS</th>
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<tbody>
<tr>
<td>• COLUMBIA U – 707 FAMILIES</td>
</tr>
<tr>
<td>– 1 HR TV/DAY – 5.7% VIOLENCE</td>
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<tr>
<td>– 1-3 HRS – 22.5%</td>
</tr>
<tr>
<td>– &gt; 3 HRS = 28.8</td>
</tr>
<tr>
<td>• ISSUES</td>
</tr>
<tr>
<td>– CONDUCT DISORDERED KIDS</td>
</tr>
<tr>
<td>– FAMILY ABUSE</td>
</tr>
<tr>
<td>– MORE TV BY AGGRESSIVE CHILDREN</td>
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<thead>
<tr>
<th>MEMORY</th>
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<tbody>
<tr>
<td>• CORRELATION</td>
</tr>
<tr>
<td>– RNA - PROTEIN</td>
</tr>
<tr>
<td>• TRANSFER</td>
</tr>
<tr>
<td>– CS - UCS - R</td>
</tr>
<tr>
<td>– LIGHT SHOCK JUMP</td>
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<tr>
<th>STAGES</th>
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<tbody>
<tr>
<td>• SENSORY</td>
</tr>
<tr>
<td>– TEMPORARY</td>
</tr>
<tr>
<td>– LASTS A FEW SECONDS</td>
</tr>
<tr>
<td>– NOT NOVEL</td>
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<tr>
<th>SHORT TERM</th>
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<tbody>
<tr>
<td>• ELECTRICAL</td>
</tr>
<tr>
<td>• 30 SECONDS</td>
</tr>
<tr>
<td>• LIMITED CAPACITY</td>
</tr>
<tr>
<td>• HOLDS 7 PLUS OR MINUS 2</td>
</tr>
<tr>
<td>• HIPPOCAMPUS</td>
</tr>
<tr>
<td>• EASY TO RETRIEVE</td>
</tr>
<tr>
<td>• AMPAKINE, NEOTROFIN, ETC</td>
</tr>
<tr>
<td>– IMPROVES GLUTAMATE RECEPTORS</td>
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<tr>
<th>LONG TERM</th>
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<tbody>
<tr>
<td>• CHEMICAL - (ACETYLCHOLINE)</td>
</tr>
<tr>
<td>• NO SPECIFIC LOCATION</td>
</tr>
<tr>
<td>– DIFFUSE</td>
</tr>
<tr>
<td>• MASSIVE CAPACITY</td>
</tr>
<tr>
<td>• LASTS FOREVER</td>
</tr>
<tr>
<td>• DIFFICULT TO RETRIEVE</td>
</tr>
<tr>
<td>• PTSD – ADRENALIN</td>
</tr>
<tr>
<td>– ANXIETY MEDS</td>
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HOW COULD THEY FORGET?
- 30 CHILDREN DIE EACH YEAR
- WORKING MEMORY – 7 ± 2
  - SURVIVAL OF SPECIES
  - RELATED THOUGHTS
  - DEVOTION TO ROUTINE
  - “IN THE ZONE”
  - BREAD VS. CHILDREN

MNEMONICS
- CONNECT WITH LTM
- MAKE INFO NOVEL

THEORIES OF FORGETTING
- TRACE – DECAY
- DISPLACEMENT
- INTERFERENCE
- FREUD

MOTIVATION
- HOMEOSTASIS - DEFINITION
- HYPOTHALAMUS -
  - OFF SWITCH, VENTRAL /MEDIAL
  - ON SWITCH, LATERAL

HUNGER (HYPERPHAGIA, APHAGIA)
- THEORIES
  - STOMACH CONTRACTION
  - ENVIRONMENTAL
  - LIPOSTATIC
    - LEPTIN – REGULATE APPETITE (Brain)
    - ZENICAL
    - AXOKINE
    - RIMONABANT
  - GLUCOSTATIC
  - CCK – CHOLECYSTOKININ (Gut)
  - PROTEIN GENE- MELANOCORTIN 4 (CONVERTS FOOD TO ENERGY NOT FAT)

THIRST - (HYPERDYPSIA, ADypsIA)
- VOLEMIC CELLS (EXTRACELLULAR)
- OSMOTIC (INTRACELLULAR)
EMOTION

- JAMES-LANG
  - STIMULUS, THALAMUS, HYPOTHALAMUS, PHYSICAL, CORTEX
- CANNON-BARD
  - STIMULUS, THALAMUS, HYPOTHALAMUS AND CORTEX, PHYSICAL

SELYE

- DEFINITION
- LCU
- STAGES
  - ALARM
  - RESISTANCE
  - EXHAUSTION

LANGUAGE

- PSYCHOLINGUISTICS
- SCIENTIFIC - ALL CHILDREN
- SPECIAL CHILDREN - AUTISTIC, MENTALLY CHALLENGED, HEARING IMPAIRED

STAGES - INSTINCT

- CRYING - BIRTH TO 3 WEEKS
- COOING - 3 WEEKS TO 4 MONTHS
- BABBLING - 4-6 MONTHS TO 1 YEAR
- MARCUS - U.OF WASH
- CASES - ANNA, (MARASMAS)
- ISABELLE
- GENIE, (CRITICAL PERIOD)

STAGES - ENVIRONMENT

- PSEUDOCRIES (6 MOS.) - ECHOLALIA (8 MOS.)
- FIRST WORD - 12 MONTHS
- FIRST 2-WORD SENTENCE - 18 MONTHS
- 50 WORDS - 24 MONTHS
- 1000 WORDS - 36 MONTHS
- STUTTERING

PERSONALITY DEVELOPMENT

- PRENATAL
- INFANCY
- CHILDHOOD
- ADOLESCENCE
- ADULTHOOD
FREUD - PSYCHOSEXUAL

- UNCONSCIOUS, REPRESSED CHILDHOOD EVENTS
- FIXATION - LIBIDO
- STAGES
  - ORAL, BIRTH TO ONE YEAR
  - ANAL, 1-3
  - PHALLIC, OEDIPAL 3-5
  - LATENCY, HOMOSOCIAL 5-12
  - GENITAL, 12-18

PERSONALITY SEGMENTS

- ID
- EGO
- SUPEREGO

DEFENSE MECHANISMS

- DENIAL
- REPRESSION
- REGRESSION
- REACTION FORMATION
- DISPLACEMENT
- RATIONALIZATION

ERIKSON - PSYCHOSOCIAL

- TRUST V. MISTRUST-BIRTH TO 1
- AUTONOMY VS. DOUBT 1-3
- INITIATIVE V. GUILT 3-5
- INDUSTRY V. INFERIORITY 5-10
- IDENTITY V. IDENTITY CONFUSION 10-18
- INTIMACY V. ISOLATION, EARLY
- GENERATIVITY V. STAGNATION, MID
- INTEGRITY V. DISPAIR, LATE

PIAGET - COGNITIVE

- ASSIMILATION AND ACCOMMODATION
- STAGES
  - SENSORIMOTOR, BIRTH TO 2 YEARS
    - OBJECT RECOGNITION, CONTROL, PERMANENCY
  - PREOPERATIONAL, 2-7 YEARS
    - SYMBOLIC, ANIMISM, EGOCENTRISM, CONSERVATION

PIAGET

- CONCRETE, 7-12 YEARS
- FORMAL, ADOLESCENCE - 12 AND UP
  - ABSTRACT THINKING
KOHLBERG - MORAL
- PUNISHMENT
- REWARD
- GOOD/BAD GIRL - GOOD/BAD BOY
- AUTHORITY ORIENTATION
- INDIVIDUAL PRINCIPLES
- UNIVERSAL PRINCIPLES

MASLOW - HUMANISTIC
- INDIVIDUAL, MAXIMUM POTENTIAL
- HIERARCHY OF NEEDS
  - PHYSICAL, SAFETY, LOVE, SELF ESTEEM, SELF ACTUALIZATION

GOULD - TRANSFORMATIONS
- DIALECTICAL PULL
- 15-18 - ESCAPE PARENT CONTROL
- 18-22 - INDEPENDENCE
- 22-28 - MARRIAGE - OCCUPATION
- 28-36 - GIVE UP UNHEALTHY ROLES
- 36-45 - URGENCY TO ATTAIN GOALS
- 45-55 - ACCEPT ONE'S LIFE
- 55-? - MELLOWING

SHEEY - NEW PASSAGES
- TRYOUT 20'S
- TURBULANT 30'S
  - JUGGLE HOME, CAREER, CHILDREN
- FLORISHING 40'S
  - MEANING CRISIS, QUESTIONING DECISIONS
- PASSIONATE 50'S
  - CHASING ONES VALUES
- FUN 60’ AND 70’S

PRE-NATAL STAGE
- INTERNAL STRUCTURES
- GENETIC ABNORMALITIES
- ENVIRONMENTAL INFLUENCES
- TESTS

ROSS - DEATH AND DYING
- DENIAL
- ANGER
- BARGAIN
- MOURNING
- ACCEPTANCE
- RELATIONSHIP/PTSD
SOCIAL PSYCHOLOGY

- DEFINITION
- KITTY CASE
- ATTRIBUTION THEORY
  - SELF, EXTERNAL AND SITUATIONAL
  - OTHERS, INTERNAL AND DISPOSITIONAL

ABNORMAL

- DSM IV
- NEUROSES(FUNCTIONAL)
- PERSONALITY DISORDERS (10)
- PSYCHOSES

FUNCTIONAL DISORDERS

- EGODYSTONIC
- ANXIETY - DEPRESSION -ANGER
- STATES
- ANXIETY DISORDERS
  - OCD
  - PANIC DISORDER
  - PHOBIAS (AGORA, SOCIAL, SIMPLE)
  - GENERALIZED ANXIETY
  - PTSD

MORE

- SOMATAFORM
  - HYPOCHONDRIASIS
  - BODY DISMORPHIC
- DISSOCIATIVE
  - AMNESIA
  - MPD (DID)

PERSONALITY DISORDERS

- EGOSYNTONIC
- TRAITS
- PARANOID
- ANTISOCIAL
- HISTRIONIC
- NARCISSISTIC
- BORDERLINE

PSYCHOSIS

- SCHIZOPHRENIA
  - DELUSIONS, HALLUCINATIONS
- BRIEF PSYCHOTIC REACTION