Jr. Tucker List Part 1

1. **Aaron Becks view of depression**- developed a cognitive theory of depression; identified patterns of thinking that correlated with symptoms of depression. In an effort to better understand depression and related illness, he developed the Beck Depression Inventory, Beck Anxiety Inventory and the Scale for Suicide Ideation. Beck believes that depression is maintained because depressed patients are unaware of the negative automatic thoughts that they habitually formulate.

2. **Absolute threshold**- The minimum amount of physical energy needed to produce a reliable sensory experience; operationally defined as the stimulus level at which a sensory signal is detected half the time.

3. **Achievement vs. aptitude tests**- Achievement: measures what has been acquired (terminal); selection purposes; designed for K-12; group or individually administered. Aptitude: predicts future performance or ability; decisions about future; designed for high school+; group or individually administered

4. **Action vs. resting potential**- Action: nerve impulse activated by in a neuron that travels down the axon and causes neurotransmitters to be released into a synapse. Resting: polarization of cellular fluid within a neuron, which provides the capability to produce an action potential.

5. **Acuity-vision-** Acuteness of vision or perception; keenness.

6. **Ainsworth Strange Situation (Paradigm)** - The Strange Situation procedure, developed by American psychologist Mary Ainsworth, is widely used in child development research. The goal of the Strange Situation procedure was to provide an environment that would arouse in the infant both the motivation to explore and the urge to seek security. An observer (often a researcher or therapist) takes a mother and her child (usually around the age of 12 months) to an unfamiliar room containing toys. A series of eight separations and reunions are staged involving mild, but cumulative, stress for the infant.  Separation in such an unfamiliar setting would also likely activate the child's attachment system and allow for a direct test of its functioning. Ainsworth categorized the responses into three major types:

            (A) Anxious/avoidant--the child may not be distressed at the mother's departure and may avoid or turn away from her on her return;

            (B) Securely attached--the child is distressed by the mother's departure and easily soothed by her on her return;

            (C) Anxious/resistant (ambiguous?)--the child may stay extremely close to the mother during the first few minutes and become highly distressed at her departure. When she returns, the child will simultaneously seek both comfort and distance from the mother. The child's behavior will be characterized by crying and reaching to be held and then attempting to leave once picked up.

7. **Albert Bandura: major view on learning and Bobo Doll experiment**- Bandura argued that individuals, especially children, learn aggressive responses from observing others, either personally or through the media or environment. He stated that many individuals believed that aggression will produce reinforcements. In the Bobo Doll experiment, he had children witness a video of a model aggressively attacking a plastic clown. After the video, the children were placed in a room with attractive toys, but they could not touch them. The process of retention had occurred. Therefore, the children became angry and frustrated. Then the children were led to another room where there were identical toys used in the Bobo video. The motivation phase was in occurrence. Bandura and many other researchers found that 88% of the children imitated the aggressive behavior. Eight months later, 40% of the same children reproduced the violent behavior observed in the Bobo doll experiment

8. **Albert Ellis**- Rational Emotive Therapy (RET) - The RET is a comprehensive system of personality change based on changing irrational beliefs that cause undesirable, highly charged emotional reactions such as severe anxiety.

9. **Albert Adler-** inferiority complex- This feeling of inferiority is derived from physical disability or from faulty relationships. The inferiority complex is a need to validate ones self by oneself; it is the need for individual accomplishment. It arises from the experience of denigration as a child.

10. **All-or-nothing law (all-or-none) of neural firing**- The rule that the size of the action potential is unaffected by increases in the intensity of stimulation beyond the threshold level.

11. **altruism**: prosocial behaviors a person carries out without considering his or her own safety or interests.

12. **American Psychological Association (APA):** an organization that includes psychologists

from all over the world. At the end of 1998, the organization was reported to have over 155,000 members worldwide.

13. **amnesia**: a failure of memory caused by physical injury, disease, drug use, or psychological trauma.

14. **apparent motion**: a movement illusion in which one or more stationary lights going on and off in succession are perceive as a single moving light; the simplest form or apparent motion is the phi phenomenon.

15. **arousal**: a motivational state of excitement and tension brought about by various stimuli. A result is emotions, which serve as a motivational function.

16. **Asch’s conformity study (line segments):** male college students were led to believe that they were in a study of simple visual perception. They were shown cards with three lines of differing lengths and asked to indicate which of the three lines was the same length as the standard line. Most of the participants, when faced with conflicting beliefs, who yielded to the majority’s opinion, were described as disoriented and doubt-ridden. Two-thirds of the time, however, participants gave the correct, nonconforming answer.

17. **attachment**: emotional relationship between a child and the regular caregiver.

18.**attribution theory**: a social-cognitive approach to describing the ways the social perceiver uses information to generate causal explanations.

19. **aversive conditioning**: when a stimuli one seeks to avoid is used to condition a subject. ???

20. **Babinsky response**- A reflex produced by stroking the sole of the foot that manifests in dorsal flexion of the big toe.

21. **Bell curve (normal distribution)-** used to assess intelligence on a bell shaped curve; most people's scores cluster in the middle and fewer are found toward the two extremes of genius and mental deficiency.

22. **Benjamin Whorf's theory of linguistic relativism (determinism)-** through cross-linguistic exploration, came to the conclusion that differences in language created differences in thought. Sapir-Whorf hypothesis: linguistic relativity- structural differences between languages will generally be paralleled by nonlinguistic cognitive differences in the native speakers of two languages. linguistic determinism- the structure of language strongly influences or fully determines the way that its native speakers perceive and reason about the world.

23. **Binocular disparity**- the displacement between the horizontal positions of corresponding images in the two eyes.

24. **Blind spot**- a.k.a., the optic disc, which is the region in the retina where optic nerve leaves each eye; contains no receptor cells. You do not experience total blindness for two reasons: The blind spots of the two eyes are positioned so that receptors in each eye register what is missed in the other, and, The brain "fills in" this region with appropriate sensory information from the surrounding area.

25. **Blood brain barrier**- made up of specialized glial cells (astrocytes) that form a continuous envelope of fatty material around blood vessels in the brain. Protects the brain from poisons and harmful substances that are not fat-soluble.

26. **The brain has 4 lobes**: frontal, occipital, temporal and parietal.  What part of the brain do we share with animals?  Animals and we share the same basic hindbrain, at the base of our skull where the brain meets the spinal cord. These structures (medulla, cerebellum, reticular system, Pons, etc.) are important for basic vital functions such as heartbeat, balance, digesting and breathing. So humans and animals all have the same lower part to their brains. It’s only the higher parts (cerebral cortex) that distinguish us from the apes, dogs, lions, tigers and bears.

27. **Brainstorming**: A way to generate novel solutions to problems. Everyone in the room just sort of shouts out ideas about something and the ideas are written on the board, no one is allowed to criticize the ideas until everyone has said everything they want. By reducing criticism, there is a free flow of ideas from which you can go back later on and judge which ones are good or which ones are bad. But the initial idea is to get those ideas out and on the board. If you know you’ll be instantly criticized, they someone with a good idea might not speak up in the first place.

28. **Brocas Aphasia**: this is a kind of language disorder that is caused by damage to the left frontal lobe. Damage in this area could lead to an inability to "produce speech." A person has a hard time forming the words, moving his mouth, much like a stroke victim that cant actually make the correct sounds for the words he’s trying to say. Aphasia means language problem and Paul Broca was the French physician who discovered the specific area in the brain that contributes to it.

29. **Bystander Intervention:** This has to do with the factors or forces that influence whether or not you are likely to come to someone’s aid if you are an innocent bystander. What affects whether or not you stop to help someone in need? Surprisingly enough, there are number of factors: whether or not you are in a hurry, whether you feel competent, whether the person is like you, whether you are with a small group versus a large group, whether or not you are in a good mood.

30. **Cannon/Bard critique of James-Lange Theory of Emotions**: The first theory of emotions was developed by two researchers James & Lange. They argued that emotions result from reading our visceral (physiological) reactions and thereby concluding certain emotions. For example, we see a bear, we feel our heart beat, feel our sweat pour out, notice our hair stand on end and we conclude "Im afraid." This was too simplistic for Cannon/Bard. The argued that 1) sometimes we feel and emotion first and only after realize what it did to our body 2) different emotions may have similar physiological responses (for example both fear and joy might cause the heart to beat) so how can one certain physiological response lead to any specific emotion? They argued instead that emotions and our perception of them are simultaneous. The raised the question of whether or not ones bodily response (heart beating) occurs before, after or simultaneously with ones perceived emotional reaction (I am afraid).

31. **Carl Rogers Person Centered Therapy**: A gifted American psychologist, Rogers reformed traditional therapy. He called his patients "clients" and not "patients". He sat them up to face him, the therapist, rather than have them lie down and look away, and he believed that if he truly accepted the client, unconditionally, and surrounded the client with unconditional positive regard, then in this accepting and caring relationship he could best help the client grow in the way the client wanted to grow. He didnt see therapists as some aloof, intellectual, who was only there to figure out what was wrong with the patient. His techniques revolutionized therapy as we used to know it.

32. **Carol Gilligans Critique of Kohlberg**: Lawrence Kohlberg did a lot of studies on moral reasoning. His research had a distinct male bias as not many of his subjects that he surveyed and interview were female. He seems to suggest that males often reason through moral issues at higher levels than females. Gilligan pointed out the male bias in Kohlbergs research and argued that females have different ways of reasoning through moral issues, this does not make them inferior to male reasoning, but only points out the females value different things when trying to reason through moral issues.

33. **Chaining** this is a term from learning theory that refers to putting several learned behaviors together to make one complete whole routine. For example, suppose you were to break down all the small routines that might go into a marching band performance. There are lots of little routines going on that when they are all put together make for a grand show. Chaining is linking each smaller routine to the larger whole.

34. **Character Disorders**: another name for these is Personality Disorders. There are 10 of them in DSM-IV. They have to do with character "flaws" that interfere with a persons relationship to others, their performance on the job and even their image of themselves. They are not "crazy" in the sense that they have lost touch with reality, but they have inappropriate or disproportional personality traits that often put them at odds with other people. For example, the Antisocial Personality has an inability to feel guilt when he does something wrong and feels no shame or remorse (thus hes always in trouble with the law), the Paranoid Personality always feels hes being watched or others are out to get him, the Schizoid Personality is the extreme loner, to the point of being a recluse, etc. These disorders are a whole different category in DSM and separate from the other major categories.

35. **Chunking**: this is grouping items into smaller chunks so that they can be memorized easier. For example, your social security number is chunked into a 3-2-4 pattern. This is easier than trying to memorize 9 digits as one whole.

36. **Classicial Conditioning**: Pioneered by Pavlov, this is a kind of learning by association. The subject learns to associate a one stimulus with a certain response. This is also called Pavlovian conditioning. Its a very basic yet powerful kind of learning.

37. **Clever Hans Experiment**: This is the tendency to think animals are smarter than they actually are. There was a horse trainer in Germany that told everyone his horse, Hans, was super intelligent. The horse could tap out the date with his hooves, nod his head at the saying of the correct Prime Minister of Germany, neigh when he recognized the correct month, etc., etc. Everyone was amazed at Hans. Then we found out the Hans was merely associating certain nonverbal body language cues that the trainer would give after he asked a certain question. The trainer would touch his ear and the horse would neigh, adjust his cap and the horse would tap three times, etc. The horse didnt understand anything, he was just trained to do certain things when he saw the trainer give certain subtle body language cues.

38. **Cognitive Dissonance**: refers to the state of uneasiness within a persons mind whenever they are "shaken up". Suppose you learned that your minister was secretly a serial killer. You would be taken aback, your mind would be in a state of disbelief. Youd have contradictory thoughts prompting you to reevaluate your attitude toward your minister and probably change your behavior toward him. We often create a state of cognitive dissonance in people to get them to think about something, sort of shake them up a little.

39. **Color Blindness**: Its caused because people lack certain photoreceptors (neurons tuned to respond to certain frequencies of light) on their retina. Most common form is distinguishing red/green colors. Mostly in males (attached to the X-chromosome).   Those that cant distinguish any color are very rare.

40. **Complementary colors**: Mostly black/white, red/green, blue/yellow. There are pairs of cones that are antagonistic (work opposite each other) on the retina and they are tuned to these colors.

41. **Four kinds of conflicts**: Generally, there are four kinds of conflicts that we often get caught in and that will result in stress. a. Approach/Avoidance: having to choose something that has some good qualities but it also has some bad qualities. You want to go to Princeton but its so expensive.  b. Approach/Approach having to choose between two things, both of which have something good to offer. You get into Princeton and Harvard and you like them equally.

c. Avoidance/Avoidance Choosing between two equally bad things. Caught between a rock and a hard place. You can eat your spinach (which you hate) or you can eat your asparagus (which you also hate).  d. Double Approach/Avoidance having to choose between two or more things all of which have something good and bad about them. You got into Princeton but its so expensive, you also got into Harvard, but its too far from home.

42. **control group**-  The group in an experiment in which all variables are kept constant.  It is necessary to figure out whether or not a certain variable affected an experiment and to what extent.

43. **correlation coefficients**-  A statistic that indicates the degree of relationship between two variables

44. **corteces** of the brain: major ones

cerebral cortex-  The outer surface of the brain.

motor cortex- The region of the cerebral cortex that controls the action of the bodys voluntary muscles.

auditory cortex- The area of the temporal lobes that receives and processes auditory information.

visual cortex-  The region of the occipital lobes in which visual information is processed.

association cortex-  The parts of the cerebral cortex in which many high-level brain processes occur.

45. **cross** **cultural studies**-  Studies in which researchers try to figure out whether a certain behavior, belief, practice, etc. transcends cultural boundaries or differs from culture to culture.

46. **cross sectional studies**-  A research method in which groups of participants of different  chronological ages are observed and compared at a given time.

47. **crystallized intelligence**- The facet of intelligence involving the knowledge a person has already acquired and the ability to access that knowledge; measures by vocabulary, arithmetic, and general information tests.

It generally increases with age, which is why older people know more than younger people. Unless it is affected by disease (e.g. Alzheimers), ones crystallized intelligence just keeps on growing.

48. **CS-CR-UCS-UCR**: These are acronyms for terms in classical conditioning. They stand for conditioned stimulus, conditioned response, unconditioned stimulus, unconditioned response.  Know each term well! (Ch. 8 = Learning)

49. **Daniel Golemans Emotional Intelligence**: He believes that we have something called "emotional intelligence" which is the knowledge and ability to manage our emotions, respond appropriately to situations and the ability to make sound emotional decisions. He argues that this kind of intelligence is more important in life than the traditional math/verbal kind of intelligence that schools seem to glorify to the detriment of developing kids with good emotional skills needed to make sound decisions.

50. **David McClelland** is an American psychologist who studied something called "achievement motivation." His research led him to believe that achievement motivation could be taught and acquired through proper learning. He even went to India once, selected people who fit the personality profile of an "entrepreneur" and then gave them the skills to develop a successful business, or in other words, "taught" them how to be high achievers. Guess what? The project worked. A ten year follow up showed most of his students were quite successful at building businesses. McClelland researched the conditions necessary to develop achievement motivation in people.

51. **A "defense mechanism**" is a little mental technique (cognitive strategy) for defending the fragile ego from hurt, shame, embarrassment or guilt. Its sort of a protective device to defend our self-image. Common defense mechanisms are: repression, regression, displacement, projection, sublimation, denial, avoidance, reaction-formation, rationalization, withdrawal, identification, intellectualization, etc.

52. "**Deindividuation**" is what happens when people lose a sense of personal identity and accountability (responsibility). We usually think of this happening when people get caught up in a mob and do things that they would never do if acting alone. Factors that contribute to deindividuation are anonymity (darkness, wearing a mask, being one person in a large group) or intense physical activity (dancing, running) which floods a persons senses with feedback and they sort of "lose themselves." Unfortunately, this might lead to all kinds of antisocial behavior: riots, stealing, murder, etc. for which people feel might feel sorry for later.

53. **Deinstitutionalization** refers to what happened across America in the 70s when mental hospitals had to open their doors and let all kinds of folks with mental disorders go. This came about because new drugs were developed that could treat symptoms of many disorders and the folks didnt need to be locked up anymore, and the legal proponents who said we cant lock up someone just because they have bizarre thoughts or actions. So, we let close to 80% of folks with disorders go and asked them to come back twice a week for their medications. Of course, they didnt come back, they usually ended up living as street people in the alleys of America.

54. The major purpose of a **dendrite** is to receive incoming signals from other neurons.

55. **Two types of depression**: Dysthymic Disorder & Major Depressive Disorder.  The early drugs used to treat depression were known as "tricyclic" antidepressants. They worked but often had serious side effects and could be quite toxic if mixed with other substances. We dont use them much anymore, relying instead on SSRI drugs like Prozac which target very specific receptor sites in the brain and dont have the severe side effects.

56. **Descriptive statistics** merely describe data, inferential statistics try to infer causation between variables.

57. **Determinism** is the belief that human behavior can be boiled down to one or two major factors that "determine" everything about you. For example, biological determinism is the belief that biology is destiny. Everything you are can be explained by a few biological principles. Economic determinism would be the belief that everything about humans could be reduced to a few simple economic principles. Human beings are thought to be too complicated to be reduced to any simple principle.

58. **Developmental psychology** is concerned with changes that occur to humans as we grow throughout the life span. It encompasses changes from infancy, childhood, adolescence, adulthood, and old age.

59. **DSM-IV** is published by the American Psychiatric Association to help diagnose mental disorders. It merely gives symptoms and statistics about the disorders. It does not give causes nor treatments. It is updated about every 20 years.

60. **Difference Threshold** (aka just noticeable difference jnd) refers to how much more of a certain stimulation it takes for you to notice a difference in some sensory experience. For example, suppose I like 1 teaspoon of sugar in my coffee. The jnd would be how many more grains of sugar would it take to make the coffee sweeter? Or how much more light will it take before you say "Oh, now its brighter than before." Or how many decibels will it take before you say "The music is louder than it was before."

61. In learning theory, "**discrimination**" refers to being able to distinguish between similar stimuli. For example, I can get a dog to back at the sight of a square, but can I get him to distinguish the difference (discriminate) between a square and a rectangle. You experience this all the time when you discriminate between the sound that sends you to class versus the sound that tells you its a fire alarm and to go outside. Or, suppose you park your car at a crowded mall, and everyone has the same color car as you. Youre scanning the cars trying to discriminate your car from the others.

62. **Displacement** in Freudian defense mechanisms refers to taking out your emotion on an object other than the one you would like to take it out on. Suppose you are upset at your professor, really mad. You cant take your anger out on him/her (theyre the authority figure and might fail you), so you take it out (displace it) on your boy/girlfriend, you kick the cat, stomp upstairs and slam the door.

63. **Dissociative disorders** are disorders in which we lose some aspect of ourselves. There are three major dissociative disorders: Dissociative Identity Disorder (multiple personality), fugue states, and amnesia.

64. **Social facilitation** is the phenomenon in which the actual or implied presence of other people enhances an individuals performance of a task. For example, we tend to eat faster with other people around, we tend to walk faster when other people join us for a stroll, we tend to get more animated with other people around.

65. **Down syndrome** is a neurological and physical disorder that is genetic, caused by an extra chromosome on pair 21. It can lead to mental retardation and physical problems such as heart and respiratory problems.

66. **Dream analysis** was invented by Freud. Freudians love to believe that dreams can tell us a lot about our unconscious minds. Freud felt there were two levels to dreams. There is the manifest level the stuff of the dream, the surface level, and there is the latent level, the hidden symbolic meaning of dreams. But all dreams represent the unconscious wishes, desires and interest of the unconscious mind. They are a sort of "wish-fulfillment" mechanism of the mind. For Freud, dreaming represented the "Royal road to the unconscious mind."

67. **Human drives** are initiated by needs. The drive to eat is motivated by the need for food.

68. **Hermann Ebbinghaus** was an early pioneer (1885- Germany) of research on memory. He was a brilliant researcher and most of what we know about memory came from his early work. Among other stuff he developed something known as the "retention curve" or "forgetting curve". He discovered (and graphed) that material that isnt reinforced almost always disappears from our memory in a very short time. Most of the stuff you cram into your head just to pass a vocabulary quiz (if it isnt rehearsed) will leave your head in about two days.

69. **Echoic memory** is a kind of split second memory you have after initially hearing a sound. Its the lingering of a sound on your eardrum after the sound has occurred. If the sound isnt sent into long term memory, it will fade in a few seconds.

70. **Marijuana** affects short-term memory and motivation. Thats why we dont recommend it for students, it impairs they ability to get stuff to sink into their memories and, if used more than occasionally, usually makes them apathetic and intellectually lazy.

71. **An eidetic memory** is what used to be known as a photographic memory. Its the amazing ability to capture material that you "see."

72. **ECT therapy** is most effective in the treatment of chronic and debilitating depression. We think that the small doses of electricity delivered to the frontal lobes helps restore serotonin levels in the brain or helps boost the production of endorphins. Were not exactly sure why it works, but it does work wonders on depression. The only side effects are some short term memory loss for a few days after the procedure.

73. **Elizabeth Loftus** is an American psychologist who is one of the worlds leading authorities on memory especially "eyewitness memory" and "recovered memories." She has written a number of books on the reliability and unreliability of memory, especially when peoples eyewitness testimony is used in court. Her research shows that eyewitness memories are notoriously wrong and prone to be filled with mistakes that the person witness "inserts" into the recovered memory. Her work led lawyers to understand the use & misuse of eyewitness testimony and how gullible juries are when someone claims to have "eyewitness" testimony about an event.

74. The **endocrine system** is all the glands that secrete hormones. The pituitary is called the "master gland" because its chiefly in charge of making sure the other glands do their job. For a complete list of the different glands and the hormones each gland secretes, check your psychology book or any basic biology book. Realize however, that the hypothalamus oversees and supervises the pituitary gland.

75. **Endorphins** are the brains natural morphine like substances which act as pain killers. When the body is injured or under stress, the brain is flooded with endorphins which help to counteract "substance p" a known pain causing substance in the synapse.

76. The **engram** and the quest to find the missing engram. An "engram" is sort of like a tiny bit of memory stored in a specific place. Psychologist have long sought to find the area of the brain that contained all the engrams in human memory. Karl Lashley spent his entire career trying to find it and ended up saying it couldnt be found. Well, he was partly right and partly wrong. Most memories cant be located in specific areas of the brain but some can be. Its safe, however, to say that most memories are formed by association links to multiple areas of the brain and are not easily located in any one specific area.

77. **Episodic memories** (a.k.a flashbulb) are sharp memories of clearly definable event in our lives: our wedding day, graduation day, first battle in war, first kiss, etc. They tend to be vivid snapshots of the event that we can easily recall with great detail.

78. **The equity theory of relationships** says that basically we like other people because of what they can do for us and vice-versa. We put a lot into a relationship because we expect to get the same in return. The relationship has to do with mutual gain and equitable returns on our personal investment. I like you because you like me. Its 50/50.

79. **Erikson has Eight Stages of Human Development**. Check your text, they are easy to find. Erikson further said that at each stage of development there are certain psychosocial tasks (developmental markers) that must be resolved successfully so that we can move easily into the next stage. He stressed the "social" and cultural aspects of psychological development versus the "sexual" aspects (Freud), so he called his stages the 8 Stages of PSYCHOSOCIAL development. He also felt that psychological development was a lifelong process (Freud felt it stopped at around age 6), and he felt that one could make up for a missed stage later on in life.

80. **The APA** has certain ethical guidelines researchers must follow prior to doing studies on humans. Some key guidelines are: confidentiality, no lasting harm, debriefing after the study, informed consent.

81. **Can you explain the major factors in an experiment**? Such as: control vs. experimental group, dependent vs. independent variable, operationalizing a definition, measurement of dependent variable, confounding variables, different kinds of biases, placebos, etc.

82. **The false consensus effect** is basically thinking that more people agree with you than really do.

83. **Hubel and Wiesel** won the Nobel Prize for discovering "feature detector cells" in the visual cortex. These are the specific neurons that help decode specific features of what you see. For example, some detector cells only pick up curves, some pick up end points of a line, some pick up horizontal or vertical lines, some pick up spaces, some pick up angles, some pick up movement, etc. And the brain then integrates all the bits and pieces of what you see and comes up with a complete image.

84. **Feature analysis** is what the brain does when its scanning objects to help you recognize things. For example, when youre looking for your friends face in a crowd of people your brain is instantly comparing each face for very specific features and rejecting faces that dont match that of your friends face. Or when youre trying to find your car in a big parking lot, your brain scans all the different features of the cars on the lot comparing and contrasting what it sees with the features it remembers your car to have.

85. **Feral children** are kids who have grown up in the wild and been raised by animals. There have been about 8 documented cases of such children. The most famous was the case of a 12 year-old boy named Victor found running with a pack of wolves in the south of France in 1799. He was captured and a young doctor, Jean-Marc Itard tried to "civilize" him. Itard was not successful. If youre interested go to <http://www.ling.lancs.ac.uk/monkey/ihe/linguistics/LECTURE4/4feral.htm> .

86. **Fetal alcohol syndrome** is caused by a mother drinking alcohol while she is pregnant. Defects in newborn babies include mental retardation, low birth weight, premature birth, brain malformations and a whole host of learning disabilities when the child matures.

87. **The figure-ground phenomenon** has to do with an area of psychology that deals with perception. Basically it has to do with being able to discriminate between an object and its background. For example, if you see a white shooting star against a deep black sky, the star would be the figure and the black would be the ground. Or, imagine how difficult it is to detect a camouflaged hunter (who isnt wearing orange) in a grove of bushes and trees. Its almost impossible because the lines between the figure and the ground are ambiguous and blurred.

88. **The foot-in-the-door phenomenon** is a technique that any salesman knows. If you can get someone to make a small commitment then you can ask them later for a larger commitment. If you give someone a penny to save the whales, they will have better success next time they come knocking asking for a dime, then a quarter, then a dollar. Or, wear a free lapel pin that says "Vote for Bill" and I bet Bill can get you to carry a sign for him later. Give into a guys request just to hold hands, and I bet youll give into a first kiss, then before you know it, youre married with 3.2 kids!

89. Famous child psychologist **Jean Piaget developed his Four Stages of Cognitive** Development in children. His fourth stage is called "formal operations." It occur during early adolescence (12-15) when youngsters are now capable of performing at the highest levels of cognitive activity and engage in kinds of thinking such as forming hypotheses, abstract reasoning and symbolic thinking. These more complicated mental "operations" can only be achieved with a developed cerebral cortex which is found during adolescence.

90. **The fovea** is the part of the eye that is the center of the retina. Here on the center of the retina are most of the cones. Cones are photoreceptor sensory neurons that help us detect colors and fine details. Cones generally are not found outside the fovea, unlike rods, which are found everywhere on the retina. Rods help us detect light.

91. **Francis Galton** was an amazing early English scientist. His contributions include such things as helping develop the first personality tests, developing the science of eugenics (better humans through breeding), using statistics in research, arguing that nature is more important in personality than nurture. He is most well known for his belief in eugenics.

92. **Free association** is a technique developed by Freud in psychoanalysis in which a person simply talks about anything that comes to mind. It is a kind of free flow of consciousness. Freud felt that by allowing his patients to verbally wander where they will, repressed items will be more easily released into consciousness thereby helping the therapist to get to the hidden cause of the patients problem.

93. **A frequency polygon** is simply a graph in which one "connects the dots." The picture you get is something like a mountain range.

94. Freud felt there were two levels of **dream interpretation**. There is the "manifest" level which is simply the surface level of the dream what the dream is about- and, there is the "latent" level which is the hidden, symbolic level of the dream, what it really means. Freud felt most dreams were hidden forms of wish fulfillment. We dream about things in a disguised form that we dare not think about consciously.

95. Check any psychology book for an explanation of Freuds Stages of **Psychosexual Development**. Basically they are: Oral Stage, Anal Stage, Phallic Stage, Latency Stage, Genital Stage. Be familiar with the psychological struggles at each stage.

96. **The frustration-aggression hypothesis** tries to explain anger and violence as stemming from pent up frustration that sort of explodes when it is triggered. People get aggressive not because they are necessarily evil, but because their pent up frustrations reach a threshold and they explode.

97. **Functional fixedness** is an inability to use an object in any other way than the way in which it was intended. For example, if you cant think of any other use for a paper clip other than holding together papers, they youre suffering from functional fixedness.

98. **The fundamental attribution error** is overlooking the influence of the power of a particular situation and thereby jumping to conclusions and crediting or blaming the "person" for what happened. Johnny continually comes late to school and we tend to immediately regard him as a slacker when in reality he has to catch three busses to school and often the traffic makes him late. But we overlook his "situation" and immediately blame his lack of character for not getting here on time.

99. The **galvanic skin response (GSR**) is a physiological measure of the skin's ability to conduct electricity. The more you sweat, the more you conduct electric current. The GSR is often one of the measures in a polygraph (along with respiration, heartbeat, pulse, etc.). The theory is that the more aroused you are (because you are anxious about lying) the more you are likely to sweat and this will increase your GSR rate.

100. **Ganglia** are bundles of neurons found outside the brain and spinal cord along the course of peripheral nerves. (e.g. - a cell in the visual system that integrates impulses from many bipolar cells in a single firing rate.  The cones in the central fovea send their impulses to the ganglion cells, while farther out on the periphery of the retina, rods and cones coverage on the same bipolar & ganglion cells.)

101. **The Gansfeld Procedure** is an experimental design which supposedly enables people who claim to have mental telepathy to read the minds of others. The person covers their eyes, has white noise (subtle hissing or humming) played low into their ears, softens the lights and this kind of sensory deprivation supposedly enables them to block out distractions so they can concentrate on reading someone's mind in another room.

102. **The Gate Control Theory of Pain** attempts to explain why and how a person can control the amount of pain running up the spinal cord to the brain. Pain is mediated by different neural pathways, some fast and some slow. Also, pain pathways must compete with other bodily sensations like temperature control, pressure and vibrations. At the spinal cord there are little gates that open one pathway and close another. For example, if you stub your toe (sending pain messages to your brain) but you put ice on the toe (sending cold messages to the brain) the cold messages will win out over the pain messages and thus the gate for pain closes. This is why rubbing a stubbed toe helps make the pain lessen. Also, your mind can "shut the pain gate" by focusing on something else or using a little mind over body attitude control to block out the pain.

103. **generalizability of a study**- It's nice when a study can be generalized to a larger population. For example, if we do a study with rats and its findings can be generalized to dogs, then to monkeys, then to humans we say the study is "generalizable". Not all studies lend themselves to this.

104- **genotype**- the genetic structure an organism inherits from its parents, it determines development & behavior

phenotype- the observable characteristics of an organism resulting from the interaction between the organisms genotype & its environment

105-**group therapy**- advantages (1) it is a less threatening situation for people who have problems dealing on their own with authority (2) allows group processes to be used to influence individual maladaptive behavior (3) provides people with opportunities to observe & practice interpersonal skills within the therapy session (4) provides analogue of the primary family group which enables corrective emotional experience to take place

106. **Glial cells** are neural helper cells. They outnumber neurons 4 to 1. They provide many maintenance functions like moving neurons, feeding them, carrying away debris, and coating the neurons with spiderlike webs to kind of keep neural networks together.

107. **Group therapy** has a number of advantages over individual therapy. First of all, its cheaper to counsel 10 people at a time than each one individually, groups provide support to individual members, they keep members honest because you might be able to fool your therapist, but one alcoholic can't fool other alcoholics, and it's often nice to open up your problems not only to your therapist but to other people who have the same problem as you do.

108. **Groupthink** is an interesting social phenomenon whereby individuals in a group are uncomfortable in dissenting with what they perceive to be the attitude of the leader or the majority's viewpoint. They don't want to "rock the boat" so they go along with what they perceive the group wants to do. Unfortunately, individuals might stifle valid dissent because of a desire to promote harmony. This could lead to awful decisions, such as the Bay of Pigs.

109. **Our gustatory sense** is our sense of taste (which often works with our sense of olfaction-smell). Some argue that we detect four basic tastes: sweet, sour, salty, bitter.

110. **Habituation** is the simplest kind of learning. It's when you decrease your responsiveness to a repeated stimulus thus leading to boredom.

111. **Hans Seyle's General Adaptation Response** charts our general reaction to stress. He found that our reaction to stress generally follows the following steps: Alarm (sympathetic system initiates the "fight or flight" response), Resistance (body tries to fight the stress), Exhaustion (prolonged resistence leads to exhaustion.

112. **Harlow** did lots of studies with primates. Chief among them was his famous study with surrogate (substitute) monkeys, some cloth and some wire. Baby monkeys preferred the contact comfort of cloth mothers even though the wire mothers could nurse. Emotional needs like touch are more important than even physiological needs like food.

113. **The Hawthorne Effect** refers to the theory that one effective way to increase worker productivity is simply to pay more attention to them. People who think they are being watched (and evaluated) show increased rates of productivity.

114. **Heuristics** are quick and easy mental "rules of thumb" (strategies) that we employ to make quick and speedy decisions or judgements. Know the following: availability, hindsight bias, representativeness, confirmation bias, fixation and overconfidence.

115. **Abraham Maslow**, one of the founders of Humanistic psychology, pioneered his "Hierarchy of Needs". Find the pyramid-like chart in your book and see what needs he ranks at the bottom and those at the top.

116. **High self-monitors** are real conscious about how they come across to other people, they're very aware of making a right impression and catering to other's expectations and needs (such as a good politician working a crowd). Low self-monitors could care less about how they come across to others, thus, their dress, manners and behavior is less responsive to the expectations of others.

117. **Hindsight bias** is a heuristic whereby one says after the fact "see, I knew it would turn out that way."

118. **Histogram** - a kind of frequency distribution commonly known as a "bar graph."

119. **homeostasis**: constancy or equilibrium of the internal conditions of the body

120. Howard Gardner's view of **multiple intelligence**: there is more than one type of intelligence and some societies value certain types over others.

Logical: numeric patterns, ability to handle long chains of reasoning

Linguistic: sounds, rhythms and functions of languages

Naturalist: ability to interact subtly with living creatures, love of nature

Musical: produce and appreciate rhythm, pitch and timbre

Spatial: perform transformations on one's initial perceptions (sculptor)

Bodily Kinesthetic: ability to control body movements and handle objects skillfully

Interpersonal: discern and respond appropriately to the moods, desires and motivations of other people (as a therapist would)

Intrapersonal: access to one's own feelings and knowledge of one's own strengths and desires

121. **hue**: the dimension of color space that captures the qualitative experience of the color of light

122. **hybrid**: an offspring of two dissimilar animals of different races, breeds and varieties; something made up of mixed origin

123 **hypnosis** (major theories of): people enter a deeply relaxed sleeplike state. There is some evidence of genetic determinants of hypnotizability and is not effected by personality traits like gullibility.  Pain control is accomplished through hypnosis, sometimes more effective than any other method. Hypnosis doesnt reside in a special ability or skill in the hypnotist, but the hypnotizability of the person

124 **Hypothalamus** this structure in the brain is responsible for regulating most of the autonomic processes in the body as well as other systems like temperature, hunger, sex and other basic drives.

125. **Id**: the primitive, unconscious part of personality that operates irrationally and acts on impulse to pursue pleasure.

Ego: the aspect of personality involved in self-preservation activities and in directing instinctual drives and urges into appropriate channels

Superego: the aspect of personality that represents the internalization of society's values, standards, and morals

126 **IDEAL** is an acronym for a problem solving strategy. The "I" stands for identifying the problem, "D" stands for defining the problem in a clear and operational manner, "E" stands for evaluating the poss-ible strategies, "A" stands for act on a solution, "L" stands for look back and see if your solution worked.

127 **Identical twin research** simply refers to the fact that psychologists love to study identical twins, especially those reared apart from each other, because they serve as such useful subjects in controlling for the effects of nature and nurture.

128 **Identification vs. internalization** (Freudian terms) Identification refers to what happens when a young boy or girl copies the traits and habits of their same sex parent. Freud felt that a young boy identifies (imitates) with his father and thus emulates his temperament, style, personality and behavior. Thats how he "grows up" to become a man. Same for young girls. But this identifying doesnt imply that the child doesnt develop his/her own personality, its just that they used their parent as their number one model. Internalization, however, is much more serious. Internalization is when a young boy/girl not only identifies with the same sex parent, but actually becomes very much like that parent. The morals, habits, traits of the adult actually become those of the child.

129 **Illusory correlation** refers to the tendency to see correlations where none really exist. A majority of adult Republicans wear glasses. There is no pattern here between ones political belief and their eyesight. It is pure coincidence. There is no correlation between the two. Just because two things go together, doesnt mean anything significant.

130 **Imaging (scanning) techniques**: PET, CAT, MRI, FMRI. PET Scans reveal whether or not neurons are alive or dead reflected by the amount of glucose they are consuming; CAT Scans are 360 degree colorized x-rays; MRIs give us great pictures of soft tissue; and FMRI show us the brain at work by measuring oxygen blood flow. We can see the brain at work as it solves a math problem or as its thinking about a particular subject.

131 **Imprinting** refers to a kind of immediate bonding that animals exhibit the moment they are born. Baby ducks, for example, will imprint on the first moving object. Usually its their mother, but it could be another animal or the animal handler.

132 **Incentives** are internal or external motivations that drive behavior.  An incentive is something you KNOW you will receive after a particular behavior.  We are usually motivated by intrinsic or extrinsic reasons to do something.

133 **The independent variable** is that factor in an experiment that is manipulated by the experimenter and is given to the experimental group. Its the one thing that is different between the experimental group and the control group. The dependent variable is the behavior you are measuring, the behavior you think will be affected by applying the independent variable.

134 **Induced motion** is the feeling of motion that a stationary person feels if the environment around you moves. Say you are sitting in a theater seat that is fixed to the floor, and all four walls and the ceiling start to move in a clockwise manner around you. Soon, even though you are stationary, youll get the sensation you are spinning with the walls. Movies have this effect on us, especially IMAX movies.

135 **Inductive reasoning** is used when you are thinking from specific cases and trying to build up to a general conclusion (sort of like bottom-up processing). Deductive reasoning is when you start from a general theory and work your way down to particular instances (top-down processing).

136 **Industrial/organizational psychology** (I/O psychology) is all about applying psychology to the world of work and business. It studies such things as worker motivation, reward systems, job placement, and organizational structure. Businesses, the military, and large corporations all want happy employees that work hard to produce better products. And the rules and processes that make this work are the stuff of I/O psychology.

137 **Ingroup and outgroup** **bias** refers to the bias one might feel if you are a member of a group or if you are an outsider looking into a group. When you are a member, you tend to see greater diversity among your group members than an outsider might see. An outsider, for example, might see all cheerleaders as identical but to an insider, one of the cheerleaders there is a lot more diversity among the group that someone outside the group might not see. Such biases tend to force us to divide the world into a "us" and "them" mentality. Its not always a good thing.

138 **The vestibular sense** (balance) is governed, in great part, by the working of three little semi-circular canals in the inner ear. These little canals have tiny cilia that are activated by the moving of something like a tiny ball bearing that spins around and around whenever we move one of three ways: forward/backward; up/down; left/right.

139 **An instinct** is an unlearned, usually complicated, behavior. Spiders instinctively spin webs, nobody teaches them this behavior. Salmon return upstream to spawn, birds fly south, etc., etc.

140 **Instrumental conditioning** and operant conditioning are very similar. The former was pioneered by Thorndike (early 1900s) when he coined his famous "law of effect" which said that learning is basically a trial and error process in which the effect of an action (the consequence) is instrumental in whether or not you will repeat the behavior. Pleasant consequences tend to strengthen a behavior and cause it to be repeated and unpleasant consequences tend to diminish a behavior. B.F. Skinner (40s-70s) picked up on Thorndikes work and developed his theory of learning which he called "operant conditioning". Its basically the same except greatly refined. Behavior that is reinforced gets repeated, behavior that is punished gets extinguished. Both theories are heavily influenced by behaviorism, the belief that behavior is controlled by external consequences (rewards/punishments).

141 **The Intelligence Quotient** (I.Q) is simply the score you get on an intelligence test. It got its name because the old time intelligence tests were calculated by dividing your mental age (as determined by a test) by your chronological age and multiplying it by 100. Hence the formula: MA X CA/100. Today, your I.Q. isnt calculated that way anymore, instead, we use an averaged score (normed) from a representative sample group. The old formula is flawed because as your age would increase (the denominator) your intelligence would necessarily decrease.

142 There are lots of different kinds of **IQ tests** around. The old standby is the Stanford-Binet, and there are the very popular Wechsler intelligence tests that fit just about any age or any skill you are trying to measure. Wechslers tests: WAIS (Wechsler Adult Intelligence Scale), WISC (Wechsler Intelligence Scale for Children) tend to be the most popular.

143 **Proactive and retroactive interference** refer to problems encountered when one is trying to learn (encode) new information into your memory. Proactive interference is when old material gets in the way with learning new information (your old phone number keeps confusing you as you try to learn your new phone number). Retroactive interference is when the new information now gets in the way with remembering old stuff. Gosh, now that I can remember my new phone number, I cant recall my old number!

144 **Internal consistency reliability** refers to whether or not a test is said to be reliable. A test is reliable if it measures something consistently. That is, if you take the SAT test again and again, you ought to (within reason) keep getting near the same score. Well, one way to measure this is to make sure all the parts of the test measure what they are supposed to measure consistently. Thus, we might take the SAT and simply divide the test in two, odd and even numbers, and see if each section consistently yields the same score.

145 **Internalization** is when a young boy/girl not only identifies with the same sex parent, but actually becomes very much like that parent. The morals, habits, traits of the adult actually become those of the child.

146 **Intrinsic motivation** comes from within a person, such as the "drive" to do something one enjoys (drawing for personal satisfaction, not for a grade; or pursuing a challenge, just for the sake of trying it); extrinsic motivation comes from outside a person and may "push" someone to do a behavior (working to earn money, studying for a good grade, going to an event because you many friends you want to see will be there, etc.)

148 **The James-Lange theory of emotions** was the first theory presented that tried to explain how emotions occur. Simply put, it states that emotions (fear) comes from our physiological reactions. When I feel my heartbeat, my muscles tense, my adrenaline flow, I feel fear. So, emotions follow our perception of physiological arousal. The problem with this theory is: 1) sometimes we experience an emotion prior to being conscious what our body is doing; and 2) different emotions (fear and happiness) might be accompanied by identical physiological responses. Both make the heart beat faster, both make us tense and both make adrenaline flow.

149. **John Garcia**, famous American psychologist, pointed out the limits of behaviorist conditioning princip-les by demonstrating that humans and animals are biologically predisposed to learn some things and not others. For example, if you get sick off food in the cafeteria, you immediately develop a taste aversion to the food; you dont develop an aversion to the tray you used, the line you stood in, nor the time of day you ate it, nor the lunch lady that served you. You zero in on only one thing, the food. Thus, Garcia reasoned, we dont come into the world a tabula rasa being capable of being conditioned by anything. We are hardwired, predisposed to be conditioned (learn) some things over others. There are limits to conditioning.

150 **The just-world-phenomenon** is the belief that, in the end, all things considered, people get what they deserve and deserve what they get. The world is basically fair and youll reap what you sow. If you believe strongly in this idea, then it's a short leap to also assuming that those who flourish must be good and those sho suffer must deserve their fate. Gotta be careful here, this kind of mentality might lead to what is known as "blaming the victim" thinking. Sorry she got raped, but what did she do to encourage it? Want to see a great movie illustrating this phenomenon, see Jodie Foster in The Accused.