**mmPsychology 1A. Critical Thinking I. S 21. Milligan, PhD.**

**I. Jack and Jill** are 4 year old children in the same pre-school class. Imagine that Jill was overindulged during the Oral and Anal Stages, and Jack was somewhat deprived of gratification during the oral stage, and treated harshly during the anal stage.

**1.** What are their personality types? (Note that it is possible for a person to have a combination of personality types!) Jack: **aggressive and compulsive**; Jill: **dependent and expulsive**

Briefly describe how each child would behave toward other children, toward the preschool teacher and in a competitive game.

How would a follower of Karen Horney explain dependent/compliant

behavior and how would she explain aggressive behavior? Insecurity. **Jill: pleases everyone in order not to be attacked/rejected; Jack: attacks first in order not to be attacked.**

**2.**  Imagine that Jack and Jill are now young adults with the same personality

characteristics they had as 4 year olds. What professions might they choose for

which their personalities would be suited? What leisure time activities or hobbies

might suit them?

The father of Jack and Jill is very neat and orderly; their mother is rather messy.

How would a psychoanalyst explain this imitation of the parent of the same

gender by Jack and by Jill? **Phallic Stage resolution**

How would a social learning theorist explain the same

behaviors? **Imitation of behavior of both parents and selective reinforcement for gender appropriate behavior and punishment (especially in boys) of gender inappropriate behavior.**

**I, IV, V. Siggy,** who is twenty years old, seeks psychotherapy because he suffers from depression and a fear of heights so severe that he can no longer cross the Bay Bridge to get to work. During the course of therapy, he recalls, for the first time, that when he was 5 or 6, his older brother used to threaten to push him over a balcony railing unless he obeyed him: Siggy also recalls that his brother was generally abusive to him. When his brother is willingly interviewed by the therapist, his brother says this never happened.

1. If the recalled memories are true what defense mechanism was Siggy using? REPRESSION. And

his brother? DENIAL. How might you determine whether these events actually happened?

Suppose there is a strong correlation between abuse and depression, can Siggy’s

therapist conclude that his abuse caused his depression? NO. Why or why not? DRAWING CAUSE FROM CORRELATION.

Which neurotransmitter is associated with depression, and how (too much or too

little)? TOO LITTLE SEROTONIN

**II. Pavlovia** experiences pain, fear and startle when she is nipped by a growling puppy just as she is passing by a fragrant sage plant. Now whenever she smells and/or sees a sage plant, she experiences fear and startle.

**4.** Name the UCS: DOG BITE; UCR:FEAR AND STARTLE; CS: SAGE PLANT and CR: FEAR AND STARTLE. What principle of classical conditioning is involved in Pavlovia startling in the presence of any sage bush? GENERALIZATION

Pavlovia enters the restaurant, Good Eats, and, inside, at the cashier’s desk, there is a fragrant sage plant. Pavlovia experiences fear and startle and leaves the restaurant. When she passes Good Eats again, she experiences fear and startle when she sees the outside restaurant sign.

**5.** What principle of classical conditioning is involved in her fear of the sign, Good

Eats? HIGHER ORDER CONDITIONING

Suppose that Pavlovia avoids the “Good Eats” restaurant a number of times. How

would she then behave toward the restaurant if the paradox of avoidance

conditioning occurred? SHE WOULD STOP AVOIDING THE RESTAURANT

**II. Skinneria** is learning to play golf from her friend Fred, an expert golfer. At first, Fred says “Good!” whenever Skinneria swings the golf club, whether she hits the ball or not. By the third golf session, Fred is only saying “Good!” when Skinneria actually hits the ball; by the fifth session, Fred says “Good!” only when she hits the ball at least ten yards.

**6.** What principle of operant conditioning is Fred using to teach Skinneria golf? SHAPING

By their twentieth game of golf, Fred says “Good!” sometimes after one good swing from Skinneria, sometimes after three good swings, then perhaps one again, then maybe five good swings.

**7.** What schedule of reinforcement is Fred using here? VARIABLE RATIO

Suppose, instead of using the above method, Fred frowned and yelled “Bad!” every time Skinneria missed the ball, and never said “Good!” when she hit the ball. Imagine that Skinneria’s golf game improves.

**8.** What type of reinforcement accounts for Skinneria’s improvement? NEGATIVE REINFORCEMENT. What are the advantages and disadvantages of each method (one method involving the word,

“Good” and the other method involving the word, “Bad”), from an operant

conditioning point of view? NEGATIVE REINFORCEMENT: ADVANTAGES. FASTER LEARNING; DISADVANTAGES: ALL OF THE NEGATIVE SIDE EFFECTS OF PUNISHMENT AND THE PARADOX OF AVOIDANCE CONDITIONING. POSITIVE REINFORCEMENT: ADVANTAGES: CREATES A POSITIVE ATMOSPHERE; DISADVANTAGES: LEARNING MAY TAKE LONGER.

**I, II, III. Frederika** who is 17, has been detained at Youth Authority facilities for six months because of crimes having to do with gang activities; she is a known gang member and has been arrested several times for possession of drugs. Frederika comes from a very wealthy family; she has always had plenty of food and drink. She has her own suite of rooms in an enormous house in a gated community. Her parents are joint CEO’s of a very large company and are seldom home. She has been reared primarily by a steady stream of paid caregivers, among which there is a large turnover because her parents pay the caregivers very little.

**9.** According to the Hierarchy of Needs, which needs were fulfilled by gang

membership? UP TO YOU. I ACCEPT A VARIETY OF ANSWERS. I THINK LOVE AND BELONGING AND ESTEEM NEEDS ARE FULFILLED BY THE GANG

Suppose that while Frederika was at Youth Authority, she had a very supportive counselor and she was trained to be a teen drug counselor; as well, she was really interested in the high school English classes she attended. When she left Youth Authority, Frederika did not rejoin a gang, and, instead, became a very creative drug counselor and took classes at SRJC with a goal of becoming a psychotherapist. She is also an English tutor at her local middle school.

**10.** What needs would she be fulfilling? SHE SEEMS TO BE ON THE PATH TO SELF ACTUALIZATION

**11.**  From a Behaviorist point of view, why did Frederika become a gang member? THE GANG PROVIDED HER WITH POSITIVE REINFORCEMENT. Psychoanalytic point of view? DEPRIVATION AT THE ORAL STAGE LED TO FIXATION AND AN AGGRESSIVE PERSONALITY WHICH IS SATISFIED BY BEING IN A GANG. I DO ACCEPT OTHER ANSWERS.

How might “mental set” lead Frederika back into gang

membership? IF SHE FACES PROBLEMS SIMILAR TO THOSE OCCURRING WHEN SHE JOINED THE GANG SHE MAY RETURN TO GANG MEMBERSHIP AS A WAY OF SOLVING THOSE PROBLEMS AGAIN.

**V. Brandy** went to a party where she spent the evening drinking. As the evening progressed, Brandy’s behavior began to change. Her speech became slurred, her balance began to go, and her thinking became narrowly focused. Her social inhibitions seemed to drop away – Brandy said and did things she would never do when sober.

1. Which lobes of the cerebral cortex are associated with each of Brandy’s drinking behaviors: Her slurred speech? TEMPORAL LOBE, FRONTAL LOBE (BROCA’S AREA) Her loss of balance? FRONTAL LOBE – MOTOR AREA Her narrow thinking? FRONTAL LOBE And her loss of inhibitions? FRONTAL LOBE

**13**.Which of the central core areas is associated with loss of balance? CEREBELLUM With loss of

inhibitions? HYPOTHALAMUS

**V. Surfer Dudette** is about to compete in the world’s top surfing competition.

**14.W**hat physical reactions is she experiencing? INCREASED HEART RATE, BLOOD PRESSURE, PUPIL DILATION, INCREASED PERSPIRATION, RESPIRATION. What parts of the nervous system

are responsible for these reactions? SYMPATHETIC BRANCH OF THE AUTONOMIC NERVOUS SYSTEM. HYPOTHALAMUS

**IV and VI. Emma and Earl** are the parents of two young children. They read in a research report that children who are read to before bed are high achievers in school. Emma and Earl conclude that reading to children before bedtime **causes** them to be high achievers in school.

Is this a valid conclusion? Why or why not? NO. DRAWING CAUSE FROM CORRELATION

1. Is this a valid conclusion? Why or why not? NO. DRAWING CAUSE FROM CORRELATION
2. Earl calls ten of his friends and asks them how they discipline their children. What research method is this? SURVEY METHOD. What are the advantages and disadvantages of this general method? ADVANTAGES: MUCH DATA IN SHORT TIME. DISADVANTAGES: SOCIAL DESIRABILITY RESPONSE SET AND MEMORY FALLIBILITY. Any problem in Earl’s particular research? YES.If so, what? SMALL AND BIASED SAMPLE

**VI. Doctor Norvegicus,** a psychology researcher is interested in testing the effects of caffeine on exam scores. He starts with 100 coffee drinkers and randomly divides them into two groups. One group drinks a cup of coffee before the exam (the caffeine group); the other group drinks a cup of liquid that looks, tastes and smells like coffee, but it has almost no caffeine in it. Then all of the students take the exam. The average score of the caffeine group is considerable higher than the average score of the decaffeinated group. Dr. Emeritus concludes that caffeine causes high exam scores.

1. What is the independent variable in this study? AMOUNT OF CAFFEINE. What is the dependent variable? EXAM SCORE.
2. What is the confounding variable which makes the doctor’s conclusion invalid? ALL PARTICIPANTS WERE COFFEE DRINKERS. Do you think this is an ethical experiment? Why or why not?

**II and IV. Rosa** is studying for Dr. M.’s Psychology 1A midterm. She is using flash cards which are arranged in the order in which we covered the material in class (Unit 1 first, etcetera). Let’s say, for the moment, she is only studying the material for Unit I; the flash cards are arranged such that the stages are first, then the structure of the psyche and finally the defense mechanisms.

1. Rosa finds, after going through the flash cards several times, that she does not know the structure of the psyche as well as the stages and the defense mechanisms. What memory principle is involved here? PRIMACY AND RECENCY
2. Rosa shuffles the flash cards and also changes her study place from the kitchen to the living room, turning on the TV as well. Rosa learns all of the flash cards equally well and gets an A on the midterm. Now, whenever she studies, she shuffles her flash cards, studies in the living room and turns on the TV. Most probably, shuffling the flash cards is what improved her performance. What logical fallacy is involved in her studying in the living room and turning on the TV. FALSE CAUSE. What principle of operant conditioning is at work here? SUPERSTITIOUS CONDITIONING