PSYC 303: Introduction to Psychopathology — Reference Sheet Illinois Institute of Technology

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1 Forewarning

Many of the definitions in this document will come from Abnormal Psychology.

Diagnoses used here are drawn from Diagnostic and statistical manual of mental disorders: DSM-5.

2 Historical Context

We are concerned with both Psychological Disorders and Psychological Dysfunctions.

Defn 1 (Psychological Disorder). There are 3 criteria for a psychological disorder:

- 1. Psychological Dysfunction
- 2. Distress or Impairment. The Psychological Dysfunction must cause distress to the individual, or impair their ability to function "normally"
- 3. The response to the Psychological Dysfunction must be atypical or not culturally expected. Some people with disorders that do not affect their life terribly strongly might be considered "eccentric" or "talented". In addition, the more productive you are, the more abnormal you can be without society making a big fuss about it.
 - Note that "normal" does **not** refer to, for example, political dissidents.

Defn 2 (Psychological Dysfunction). *Psychological dysfunction* refers to a breakdown in cognitive, emotional, or behavioral functioning. For example, if you are out on a date, it should be fun. But if you experience severe fear all evening and just want to go home, even though there is nothing to be afraid of, and the severe fear happens on every date, your emotions are not functioning properly.

Remark 2.1 (Harmful Dysfunction). Harmful dysfunction is a narrowing of the idea of a Psychological Dysfunction. Namely, it is concerned with whether the behavior is out of the individual's control.

But it is never easy to decide what represents a Psychological Dysfunction, and we may never be able to satisfactorily define disease or Psychological Disorder. The best we may be able to do is to consider how the apparent disease or disorder matches our current understanding of its Prototype.

Defn 3 (Prototype). A prototype is a "typical" profile of a disorder.

A patient may present only some features or symptoms of the disorder (there exists a minimum number) and still meet criteria for the Psychological Disorder because their set of symptoms is close to the Prototype.

2.1 Psychopathology

Defn 4 (Psychopathology). *Psychopathology* is the scientific study of psychological disorders. This field contains many different branches, including:

- Clinical Psychologists
- Counseling Psychologists
- Psychiatrists
- Psychiatric Social Workers
- Psychiatric Nurses
- Marriage and Family Therapists
- Mental Health Counselors

They study patients that are Presenting a problem.

Defn 5 (Present). Present is a traditional shorthand way of indicating why the person came to the clinic.

The effects that the patient Presents are used to form a Clinical Description.

Defn 6 (Clinical Description). A *clinical description* represents the unique combination of behaviors, thoughts, and feelings that make up a specific disorder. The clinical portion of the phrase refers both to the types of problems or disorders that you would find in a clinic or hospital and to the activities connected with assessment and treatment.

Both the course of the Psychological Disorder and the onset are used to determine the Prognosis.

Defn 7 (Prognosis). The anticipated course of a disorder is called the *prognosis*.

2.1.1 Branches of Psychopathology

Defn 8 (Clinical Psychologist). Clinical psychologists receive the Ph.D., doctor of philosophy, degree (or sometimes an Ed.D., doctor of education, or Psy.D., doctor of psychology) and follow a course of graduate-level study lasting approximately 5 years, which prepares them to conduct research into the causes and treatment of psychological disorders and to diagnose, assess, and treat these disorders. Clinical psychologists usually concentrate on more severe Psychological Disorders.

Defn 9 (Counseling Psychologist). Counseling psychologists receive the Ph.D., doctor of philosophy, degree (or sometimes an Ed.D., doctor of education, or Psy.D., doctor of psychology) and follow a course of graduate-level study lasting approximately 5 years, which prepares them to conduct research into the causes and treatment of psychological disorders and to diagnose, assess, and treat these disorders. Counseling psychologists tend to study and treat adjustment and vocational issues encountered by relatively healthy individuals.

Defn 10 (Psychiatrist). Psychiatrists first earn an M.D. degree in medical school and then specialize in psychiatry during residency training that lasts 3 to 4 years. Psychiatrists also investigate the nature and causes of psychological disorders, often from a biological point of view; make diagnoses; and offer treatments. Many psychiatrists emphasize drugs or other biological treatments, although most use psychosocial treatments as well.

Defn 11 (Psychiatric Social Worker). *Psychiatric social workers* typically earn a master's degree in social work as they develop expertise in collecting information relevant to the social and family situation of the individual with a Psychological Disorder. Social workers also treat Psychological Disorders, often concentrating on family problems associated with them.

Defn 12 (Psychiatric Nurse). *Psychiatric nurses* have advanced degrees, such as a master's or even a Ph.D., and specialize in the care and treatment of patients with Psychological Disorders, usually in hospitals as part of a treatment team.

Defn 13 (Marriage and Family Therapist). *Marriage and family therapists* typically spend 1 to 2 years earning a master's degree and are employed to provide clinical services by hospitals or clinics, usually under the supervision of a doctoral-level clinician.

Defn 14 (Mental Health Counselor). *Mental health counselors* typically spend 1 to 2 years earning a master's degree and are employed to provide clinical services by hospitals or clinics, usually under the supervision of a doctoral-level clinician.

2.1.2 Some Concerns of Psychopathology

Psychopathology works with individuals to improve their particular issue. But, they also have some other concerns as well.

Defn 15 (Prevalence). *Prevalence* is how many people in the population as a whole have the disorder.

Defn 16 (Incidence). Incidence is the statistic on how many new cases occur during a given period.

Some other statistics include:

- The sex ratio, what percentage of males and females have the disorder.
- The typical age of onset, which often differs from one disorder to another.
- The course of the Psychological Disorder.

2.2 Courses of Psychological Disorders

Defn 17 (Chronic Course). A *chronic course*, means that the Psychological Disorder tends to last a long time, sometimes a lifetime.

Defn 18 (Episodic Course). An *episodic course*, means that the Psychological Disorder will have a sequence of episodes in which the individual recovers, only to suffer a recurrence of the disorder. This may occur throughout the individual's life.

Defn 19 (Time-Limited Course). *Time-limited course*, meaning the disorder will improve without treatment in a relatively short period with little or no risk of recurrence.

2.3 Onset of Psychological Disorders

The onset of particular Psychological Disorders can vary quite widely.

Defn 20 (Acute Onset). An acute onset Psychological Disorder is one where the disorder begins quite suddenly.

Defn 21 (Insidious Onset). An acute onset Psychological Disorder is one where the disorder begins quite suddenly.

2.4 Models of Abnormal Behavior

There are three main models that have been and continue to be used today:

- 1. The Supernatural Model
- 2. The Biological Model
- 3. The Psychological Model

2.4.1 The Supernatural Model

Deviant behavior has been considered a reflection of the battle between good and evil. When confronted with unexplainable, irrational behavior and by suffering and upheaval, people have perceived evil.

Defn 22 (Supernatural Model). The driving factors in the supernatural model are:

- Divinities
- Demons
- Spirits
- Other phenomena such as:
 - Magnetic fields
 - The moon
 - The stars

While this model is still alive today, it is limited to small religious sects and primitive cultures. Most members of organized religions today turn to psychology and medical science for help with Psychological Disorders.

2.4.2 The Biological Model

The Biological Model was initially developed by Hippocrates his associates left a body of work called the *Hippocratic Corpus*, written between 450 and 350 B.C.. In this work, they suggested that Psychological Disorders could be treated like any other disease. In addition, they did not limit their search for the causes of Psychopathology to the general area of "disease," because they believed that psychological disorders might also be caused by brain pathology or head trauma and could be influenced by heredity (genetics).

Defn 23 (Biological Model). The biological model states that abnormal behavior arises from the body influencing the mind.

This model has gone through phases of interest and disinterest. When it becomes the only explanation for mental health issues, it tends to lead to focusing solely on improving the life of the patient through rest, relaxation, proper diet, proper exercise, etc. However, when taken to the extreme, this leads to a complete neglect and disinterest in the potential mental and emotional explanations for various Psychological Disorders.

2.4.3 The Psychological Model

Plato was one of the first to explain that mental health issues were caused by poor environments and learning centers. For example, Plato thought that the two causes of maladaptive behavior were the social and cultural influences in one's life and the learning that took place in that environment. If something was wrong in the environment, such as abusive parents, one's impulses and emotions would overcome reason. In his mind, the best treatment was to reeducate the individual through rational discussion so that the power of reason would predominate.

This formed the precursor to modern psychosocial treatment.

Defn 24 (Psychological Model). The *psychological model* states that abnormal behavior arises from the mind influencing the body.

In history, there were two movements in this model:

- 1. Psychoanalytic, which involved analyzing the mind and the patient's history to determine their treatment.
- 2. Behavioral, which involved identifying the issue and changing the patient's behavior to the issue through slow changes to the situation intended to show there is not inherent discomfort.

Freud stated that the mind has three components:

- 1. The Id.
- 2. The Ego.
- 3. The Superego.

Defn 25 (Id). The *id* is the source of our strong sexual and aggressive feelings or energies. It is, basically, the animal within us; if totally unchecked, it would make us all rapists or killers.

The id processes information according to the *primary process*, which is emotional, irrational, illogical, fantastical, and preoccupied with sex, aggression, selfishness, and envy.

Defn 26 (Ego). The *ego* is the part of our mind that ensures that we act realistically. It operates according to the according to the reality principle instead of the pleasure principle of the Id.

The cognitive operations or thinking styles of the ego are characterized by logic and reason and are referred to as the secondary process.

The ego is responsible for ensuring the Superego and Id are in balance.

Defn 27 (Superego). The *superego*, represents the moral principles instilled in us by our parents and our culture. It is the voice within us that nags at us when we know we're doing something wrong.

It is fundamentally at odds with the Id.

2.5 Scientific Method and Integrative Approach

This is the modern approach to psychopathology. It is founded on the principle that any time a person does something, both the brain and the body are working toegether. In addition, the person's thoughts are influencing their actions, and together they form our response.

3 Integrative Approach to Psychopathology

We prefer to use a multidimensional integrative approach to Psychopathology. These dimensions include:

Biological Causal factors from genetics and neuroscience.

Psychological Causal factors from behavioral and cognitive processes, including learned helplessness, social learning, prepared learning, and unconscious processes.

Emotional These contribute in a variety of ways. Emotions play a substantial role in the development of many disorders. **Developmental** These factors are always present.

Each of the above dimensions are **never** in isolation, each one is strongly influenced by the others.

3.1 Genetic Contributions to Psychopathology

Genetics influence our physical characteristics such as hair color and eye color. However, genetics only provide boundaries for our body to work with. The environment influences our physical appearance too. To some extent, our weight and even our height are affected by nutritional, social, and cultural factors.

Much of our development and, interestingly, most of our behavior, our personality, and even our intelligence are probably Polygenic.

Defn 28 (Polygenic). For something to be *polygenic*, the end result must be reached when multiple genes are being expressed.

For psychological disorders, the evidence indicates that genetic factors make some contribution to all disorders but account for less than half of the explanation.

3.1.1 The Diathesis-Stress Model

Defn 29 (Diathesis-Stress Model). The *diathesis-stress model* states that individuals inherit tendencies to express certain traits or behaviors, which may then be activated under conditions of stress.

This model of gene—environment interactions has been popular, although, in view of the relationship of the environment to the structure and function of the brain, it is greatly oversimplified.

3.1.2 The Gene-Environment Correlation Model

Defn 30 (Gene-Environment Correlation Model). The *gene-environment correlation model* states that a person may have a tendency towards a particular psychological issue, but also have genes that help incite that disorder. To that end, the genetic predisposition helps cause stresses that add to the person's predisposition to the Psychological Disorder, eventually causing issues.

Although the environment cannot change our DNA, it can change the gene expression. Genes are turned on or off by cellular material that is located just outside of the genome ("epi," as in the word epigenetics, means on or around) and that stress, nutrition, or other factors can affect this epigenome, which is then immediately passed down to the next generation and maybe for several generations.

3.2 Neuroscience and its Contributions to Psychopathology

The brain is made up of nerve cells called Neuron.

- **Defn 31** (Neuron). Neurons are the nerve cells in the brain. They are composed of a branch called a Dendrite and an Axon.
- **Defn 32** (Dendrite). *Dendrites* receive messages from other neurons.
- **Defn 33** (Axon). Axon is responsible for **sending** messages to other neurons.
- **Defn 34** (Synapse). The Dendrite-Axon connections between neurons are *synapses*.

The brain creates neurotransmitters to communicate between Neurons. When communicating with the rest of the body, the brain and endocrine system work together to communicate with hormones. Many of these hormones can be related (the extent is unknown) to many Psychological Disorders that we have identified. However, our current understanding is that a lack of a particular neurotransmitter will alter the way we process information and the way we exhibit certain kinds of behavior.

3.2.1 Neurotransmitter Changes

- **Defn 35** (Agonist). Agonists effectively increase the activity of a neurotransmitter by mimicking its effects.
- **Defn 36** (Antagonist). Antagonists that decrease, or block, a neurotransmitter.
- **Defn 37** (Inverse Agonist). *Inverse agonists* that produce effects opposite to those produced by the neurotransmitter.

3.2.2 Psychosocial Influences on Brain Structure and Function

The initiating factors (reason why a problem develops) are not necessarily the same as the maintaining factors (reason why a problem persists). In order to treat the problem effectively, it is typically more important to know and target the maintaining factors than the initiating factors.

3.3 Behavioral and Cognitive Science

Defn 38 (Cognitive Science). Cognitive science is concerned with how we acquire and process information and how we store and ultimately retrieve it.

Complex cognitive processing of information, as well as emotional processing, is involved when conditioning occurs.

Defn 39 (Learned Helplessness). Learned helplessness occurs when rats or other animals encounter conditions over which they have no control. The animal gives up attempting to cope and seem to develop the animal equivalent of depression.

Organisms do not have to experience certain events in their environment to learn effectively. Rather, they can learn just as much by observing what happens to someone else in a given situation. This fairly obvious discovery came to be known as modeling or observational learning.

3.4 Emotions

The alarm reaction that activates during potentially life-threatening emergencies is called the *flight or fight response*.

To define "emotion" is difficult, but most theorists agree that it is linked to an action tendency (a tendency to behave in a certain way), elicited by an external event (a threat) and a feeling state (terror) and accompanied by a (possibly) characteristic physiological response. Emotions are usually short-lived, temporary states lasting from several minutes to several hours, occurring in response to an external event. Mood is a more persistent period of affect or emotionality.

Emotion scientists now agree that emotion is composed of three related components-behavior, physiology, and cognitionbut most emotion scientists tend to concentrate on one component or another.

3.5 Cultural, Social, Interpersonal Factors

In many cultures around the world, individuals may suffer from fright disorders, which are characterized by exaggerated startle responses, and other observable fear and anxiety reactions.

Fear and phobias are universal, occurring across all cultures. But what we fear is strongly influenced by our social environment.

Our gender doesn't cause psychopathology. We think these substantial differences have to do with, at least in part, cultural expectations of men and women, or our gender roles. But because gender role is a social and cultural factor that influences the form and content of a disorder.

Many studies have demonstrated that the greater the number and frequency of social relationships and contacts, the longer you are likely to live. Interestingly, it is not just the absolute number of social contacts that is important. It is the actual perception of loneliness.

Psychological disorders continue to carry a substantial stigma in our society. To be anxious or depressed is to be weak and cowardly. To be schizophrenic is to be unpredictable and crazy.

3.6 Life-Span Development

We tend to look at psychological disorders from a snapshot perspective: we focus on a particular point in a person's life and assume it represents the whole person.

For example, in depressive (mood) disorders, children and adolescents do not receive the same benefit from antidepressant drugs as do adults, and for many of them these drugs pose risks that are not present in adults.

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