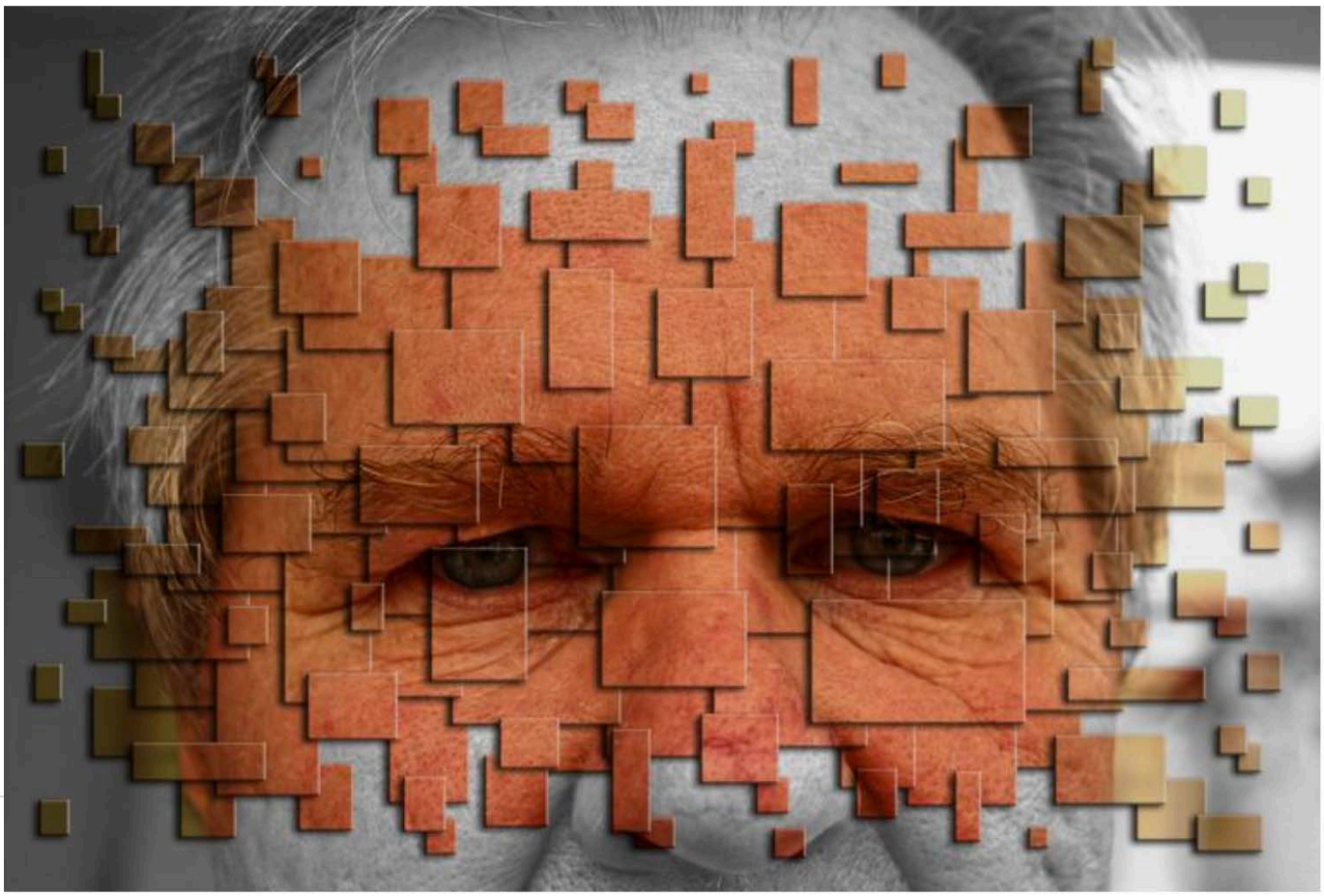
PSY 3315

Welcome to PSY 3315: Psychopathology

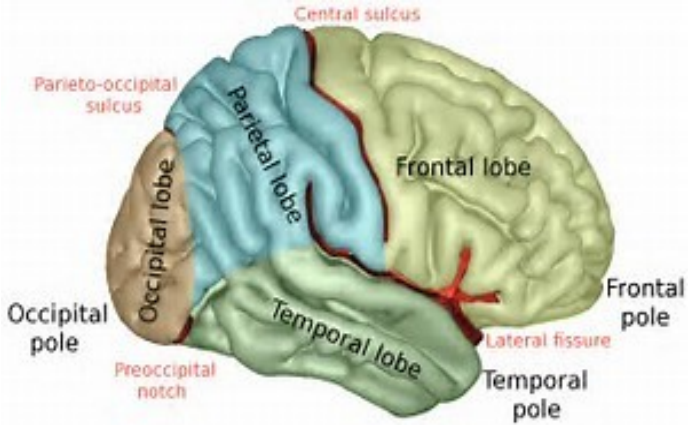


Get Started | Syllabus | Course Pacing Guide

New to the course?

- Be sure to familiarize yourself with the **Syllabus** and *review the information carefully*.
- To succeed in this course, please fill out your **Course Pacing Guide** and take no more than 7 **days** from when you enroll to turn it in.

Click **Get Started** to begin your course.



Returning to the course?

Click **Modules** to the left and resume where you left off.

Important reminders:

- This is a **6-month, online, correspondence self-paced course**.
- **All submissions, including exams, must be completed by the course expiration date.** When you registered for the course, you were sent an email to your Texas State account indicating registration and expiration dates.
- **You may not submit more than 2 modules per week.**
- You may not take an exam before previously submitted assignments have been graded and returned.

At the end of the course, you will be asked to complete a brief course evaluation. Your input will help improve the course.

Meet Your Instructor

Read

Dr. Ty Schepis

schepis@txstate.edu (mailto:ts36@txstate.edu)

Welcome to Psychopathology (PSY 3315)! My name is Ty Schepis, and I will be your Professor for this course. I am a Proessor in the Department of Psychology at Texas State University-San Marcos, where I joined the faculty in 2009. I received my B.S. in Neuroscience from Texas Christian University, and after working as a Research Assistant in a depression and anxiety research lab at the University of Texas Southwestern Medical Center (UTSW), I obtained my PhD. from UTSW in Clinical Psychology. After graduate school, I completed a three year Postdoctoral Fellowship at Yale School of Medicine in the Division of Substance Use that was funded by the National Institute on Drug Abuse. During this time, I also was an Adjunct Faculty member at Quinnipiac University, where I taught this class.

I have taught this course at both an undergraduate and graduate level since joining the faculty at Texas State, where I also teach undergraduate and graduate Psychopharmacology. My primary area of research is in substance use, with particular focus on prescription drug misuse (PDM, or misuse of prescription opioid, benzodiazepine, and stimulant medications) and how PDM differs across the lifespan, in different groups, and relates to other substance use and mental health. My research has been funded by the National Institute on Drug Abuse, US Food and Drug Administration, and the US Substance Abuse and Mental Health Services Administration. Finally, I have been a Board Member of the Society of Addiction Psychology and served as Director of the Department of Psychology's Masters of Arts Program in Psychological Research.

View

You can learn a bit more about me in this video:

Get Started

Correspondence Course Information

Correspondence studies student responsibilities

As a correspondence studies student, it is your responsibility to be familiar with correspondence-related policies and services. To this end, I encourage you to review the Correspondence Course Information webpage.

View

You can also view the Correspondence Online Orientation Video below to help you get started in the course. This video addresses many topics such as Bobcat Mail, navigating Canvas, test requests, and more.

Explore

Online Student Resources

This webpage contains multiple resources for online students at Texas State University. Note: Some resources are only available to students who pay a student service fee.

Click Next to proceed to Technical Requirements and Support.

◂ Previous

Next ▸

Technical Requirements and Support

This online course requires technical skills and access to certain technology and software that face-to-face courses may not require.

- Learn about **skills and technology** you need to be successful in this course.
  Also review these **tips** and **interaction guidelines** to be a successful online learner.

Many users encounter fewer problems when they use **Chrome** to access Canvas courses.

Here's how to get help with Canvas:

• 24/7 **Live chat**
• 24/7 Phone support: 245.ITAC (4822)
• **Tool-specific help**
• Click Help in the left navigation of any Canvas course

Click Next to proceed to Free Tutoring Resources.

Free tutoring is available through Tutor.com for this course. Just click on the Tutor.com link in the left menu. Currently-enrolled, degree-seeking students able to visit the Texas State campus are eligible for free in-person tutoring from the Student Learning Assistance Center (SLAC) on the fourth floor of Alkek Library.

Click Next to proceed to Academic Integrity.

◂ Previous Next ▸

Academic Integrity

Texas State Academic Honor Code

The **Texas State Academic Honor Code** applies to all Texas State students, including correspondence students.
The **Honor Code** serves as an affirmation that the University demands the highest standard of integrity in all actions related to the academic community. As stated in the **Texas State Student Handbook**, **Violation of the Honor Code** includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials.

Definitions

> *As stated per **Texas State Honor Code, UPPS No. 07.10.01, Issue no. 8***
>
> *Please note that not all activities that constitute academic misconduct are listed in specific detail in **UPPS No. 07.10.10, Honor Code**. It is expected that students will honor the *spirit* of academic integrity and will not place themselves in the position of being charged with academic misconduct.
>
> Please cite all unoriginal material through the use of **standard bibliographical practice** explained through the **Alkek library site**.
>
> Incidents of **academic dishonesty as outlined by the University**
> will be reported to the administration for disciplinary action. In addition, students will receive a 0 for the assignment or assignments without the opportunity to redo the work.

Academic work signifies outcomes and products such as essays, theses, reports, exams, tests, quizzes, problems, assignments, or other projects submitted for purposes of achieving learning outcomes.

Cheating in general means, but is not limited to, engaging or attempting to engage in any of the following activities:

- Copying from another student's test paper, laboratory report, other report, computer files, data listing, programs, or from any electronic device or equipment;

- Using, during a test, materials not authorized by the person giving the test;
- Collaborating, without authorization, with another person during an examination or in preparing academic work;
- Knowingly, and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the content of an unadministered test;
- Substituting for another student—or permitting another person to substitute for oneself—in taking an exam or preparing academic work;
- Bribing another person to obtain an unadministered test or information about an unadministered test;
- Purchasing, or otherwise acquiring and submitting as one's own work, any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of the rough or final versions of an assignment by a professional typist;
- Submitting the same essay, thesis, report, or another project, without substantial revision or expansion of the work, in an attempt to obtain credit for work submitted in a previous course;
- Falsifying data.

Plagiarism in general means, but is not limited to, the appropriation of another's work and the inadequately or inappropriately acknowledged incorporation of that work in one's own written, oral, visual or the performance of an original act or routine that is offered for credit.

Collusion in general means, but is not limited to, the unauthorized collaboration with another person in preparing any work offered for credit.

Abuse of resource materials in general means, but is not limited to, the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course content.

Please cite all unoriginal material through the use of **standard bibliographical practice** as explained on the **Alkek Library site**.

Incidents of academic dishonesty as outlined by the University will be reported to the administration for disciplinary action. In addition, students will receive a 0 for the assignment or assignments without the opportunity to redo the work.

Honor Code TX State Policy

: "Violation of the Honor Code – includes, cheating, collaboration/collusion, plagiarism, fabrication, and facilitation of academic dishonesty." Honor Code Policy.

Psychology Policy

The study of psychology is done best in an atmosphere of mutual trust and respect. Academic dishonesty, in any form, destroys this atmosphere. Academic dishonesty consists of any of a number

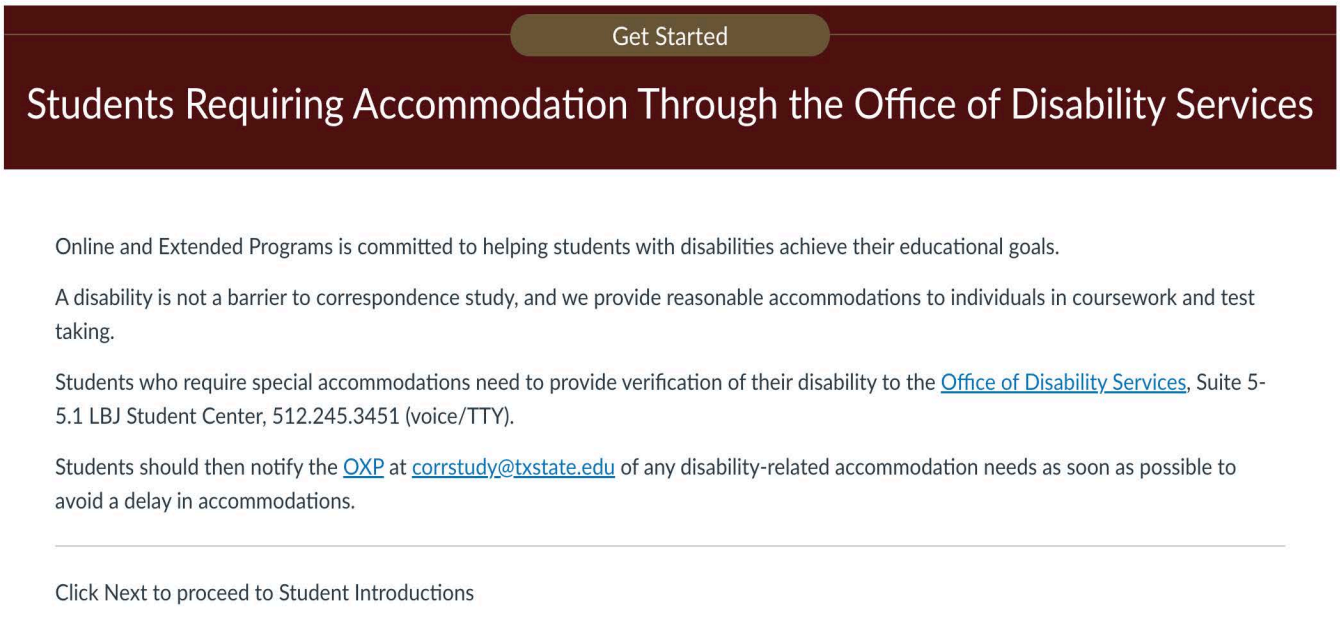
of things that spoil a good student-teacher relationship. A list of academically dishonest behaviors include:

- passing off others' work as one's own;
- copying off of another person during an examination;
- signing another person's name on an attendance sheet;
- in written papers, paraphrasing from an outside source while failing to credit the source or copying more than four words in sequence without quotation marks and appropriate citation.

The Psychology Department faculty believe that appropriate penalties for academic dishonesty include an "F" in the course and/or prosecution through the Student Justice System.

Notice of Intellectual Property Rights

As stated per **Texas State Honor Code, UPPS No. 07.10.01, Issue no. 8**.



Module 1

Introduction

When I went for my first interview at a residential treatment center after getting my master's degree, I encountered a middle-aged gentleman as I got out of my car. The man was short, stocky, and dressed in shorts and a t-shirt. He was not a very big man, yet his legs were incredibly swollen and drew my attention, as did his string of curse words which were not directed at anyone in particular. Shortly, a woman staff person came up to him and began softly talking to him, yet he continued to curse, rant, and ramble. Then he threw himself on the car next to mine. Eventually, he calmed and walked away with the woman, muttering to himself. That was my introduction to Joe, a man who I came to know had schizophrenia and many health problems, including phlebitis, which affected his circulation and caused the swelling in his legs. I learned that his temper outbursts and rants were often brought on when he wanted a cigarette and had smoked them all. I also learned that he was a mostly gentle soul who enjoyed telling stories, making up names for people he liked, and spending time with others.

Making sense of others' behavior is not always easy, even when they are not behaving in a particularly abnormal manner. However, we do notice when a behavior is odd, outside our usual experience. When we see this type of behavior, we endeavor to explain it, categorize it, and, perhaps, do something about it to relieve the perceived pain of the person experiencing it, or to help ourselves deal with the person more effectively.

The study of mental disorders and their manifestations, causes, and related treatments is called psychopathology. In relating to others with mental disorders, it is not always easy to remain objective and not let our fears or preconceived ideas about them get in our way. *Stigma* is the term used to describe the shame or disgrace ascribed to something or someone seen as socially unacceptable. It is influenced by destructive beliefs and attitudes. People with mental illness are often the subjects of stigma.

Click Next to proceed to Module 1: Objectives and Assignments

◂ Previous Next ▸

Module 1

Objectives and Assignments

Objectives

After completing this module, you should be able to

explain the concept of psychopathology;

1. describe and contrast various definitions of mental disorder;
2. identify historical explanations and treatments of mental disorders;
3. describe current trends in conceptualizing and treating abnormal behavior;
4. name the major professions involved in treatment of abnormal behavior; and
5. describe what clinical researchers do.

Assignments

Your assignments for this module are to

- read Chapter 1 in *Fundamentals of Abnormal Psychology 10th Edition* (Note: the material in this module is meant to augment, not replace, reading the textbook chapter);
- read the Module 1 content, and
- complete Assignment 1.

Click Next to proceed to What is Psychological Abnormality?

◂ Previous Next ▸

Module 1

What is Psychological Abnormality?

Most definitions of mental disorder contain at least four components: personal distress, disability, deviance, and dysfunction. The *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (*DSM-5)* includes these concepts in the definition. Personal distress means that the person is greatly distressed by the behavior involved. Not all mental disorders cause personal distress. Certainly, we can observe the distress in a person with an acute anxiety disorder, but those with antisocial personality disorder may not experience any strong emotional response. Disability means that the disorder results in some impairment in social or occupational functioning. Examples of this may include marital conflicts, missing work, or not performing well on the job. If a behavior violates a social norm, such as the way one conducts oneself in public or in dealings with others, it may be called deviant.

Ritualistic behaviors of persons with autistic spectrum disorders may violate social norms, as may the behavior of some people with schizophrenia who talk back to auditory hallucinations. Dysfunction occurs when an organism or a person is not performing up to one's potential. Wakefield provided a definition of "harmful dysfunction" that includes a value component and a scientific component based on objective measurement. The *DSM-5* refers to the interrelatedness of behavioral, psychological, and biological dysfunctions. Note that your textbook refers to the 4 D's as deviance, distress, dysfunction, and danger. It should be further noted that danger may be a feature of abnormal psychological functioning, but it is an exception rather than a rule. Most people with mental disorders are not dangerous.

Click Next to proceed to What is treatment?

◂ Previous Next ▸

Module 1

What is Treatment?

To ameliorate a person's suffering and symptoms of abnormal behavior, treatment, often called therapy, is a method for improving symptoms and assisting the person to live a more normal life. According to Jerome Frank, a theorist, these 3 conditions must be met to define treatment:

1. There must be a sufferer who seeks relief from a healer.
2. There must be a trained healer whose expertise is accepted by the sufferer and his or her social group.
3. There must be a series of contacts between the healer and the sufferer, through which the healer attempts to produce changes in the sufferer's emotional state, attitudes, and behavior.

Clinicians have varied approaches to treatment based on their theoretical orientation. If their orientation is based on an illness model, they may refer to the sufferer as a patient, while those who see the abnormal behavior as a problem may refer to the sufferer as a client.

Click next to proceed to Historical Views and Treatment of Abnormality.

◂ Previous Next ▸

Module 1

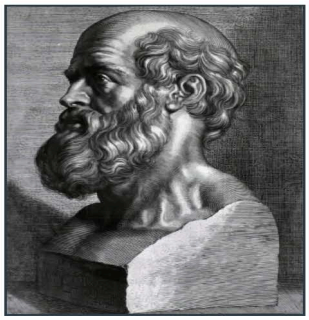
Historical Views of Treatment of Abnormality

Prehistory to Ancient

Throughout the ages, western thought has evolved its view of mental disorders. Other cultures may have different beliefs based on their own histories. The ideas we have about mental disorders are influenced by our cultural heritage.

In prehistoric times, mental and physical disorders were believed to be closely linked. Any type of abnormality was attributed to evil spirits that could reside within or take possession of one's body. Many illnesses were attributed to demonic possession, offended spirits, or sorcery. Demonology, as this belief was called, often held the victim responsible for the problem. Records of the Greeks, Chinese, Egyptians, and early Christians recount demonic possessions. This belief led to various treatments to get the body rid of the demons. There were exorcisms that included elaborate prayers, noise making, drinking foul-tasting concoctions to cause vomiting, flogging, and starvation. Trephining (drilling holes in the skull) was also employed to provide an opening to allow the demon to escape.

Hippocrates, the Greek physician, is often referred to as the father of modern medicine. He questioned beliefs in the supernatural and looked for more naturalistic explanations. He saw the brain as the central organ of intellectual activity and deviant behavior as being caused by brain pathology. He classified disorders into three categories: mania, melancholia, and phrenitis (brain fever). He believed that normal brain functioning was dependent on a balance of four bodily fluids he called humors. These included blood, black bile, yellow bile, and phlegm. If there was an imbalance, the person would suffer a disorder. His remedies included telling patients to live a more quiet life, eat more vegetables, get more exercise, and perhaps, bleeding.



Hippocrates, the father of modern medicine, was among the first to classify mental disorders. (source)

Medieval

Early Modern

Click Next to proceed to Evolution of Approaches to Mental Disorders.

◂ Previous Next ▸

Module 1

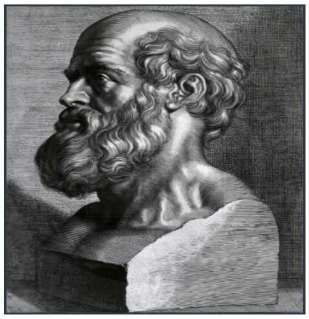
Historical Views of Treatment of Abnormality

Prehistory to Ancient

Medieval

In the Middle Ages, history saw the collapse of the Roman Empire and the rise of Christianity, and supernatural causes were once again emphasized. Scientific endeavors were discarded as the acceptance of nature as a manifestation of God's will strengthened. The death of Galen, a Greek physician, in about 200 A.D. signaled the beginning of the Dark Ages (5th through 10th centuries). The fervor of Christianity brought with it ideas of heresy and punishment. Scientific thought went underground, and the written works were preserved by monks and Arab scholars. Some monks also began to take care of people with mental disorders and would pray for them and have them engage in rituals tied to moon phases. In some cases, the care was not very kind, and those with mental illness were forced to repent and atone for their evil ways that incurred God's wrath.

In the 13th century, Europeans turned back to demonology to explain widespread disasters and famines. Witchcraft was seen as being caused by Satan and as a denial of God. Some witches were thought to be unwilling victims of punishment for their sins, while others were believed to have willingly entered into a pact with the devil in exchange for supernatural powers. There came to be very little differentiation between the two types of witches; both were tortured to gain confessions of their wrongdoings. Any unusual behavior was viewed as an indication of witchcraft, and many individuals with mental illness and other innocent people were killed. Later in this same century, hospitals began to care for those with mental illness as municipalities started to take over from the churches. Lunacy trials began to be held in England to determine a person's mental health based on the crown's responsibility for protecting people with mental illness.



Hippocrates, the father of modern medicine, was among the first to classify mental disorders. (source)

Early Modern

Click Next to proceed to Evolution of Approaches to Mental Disorders.

◂ Previous Next ▸

Module 1

Historical Views of Treatment of Abnormality

Prehistory to Ancient

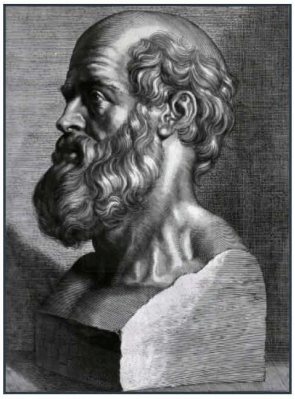
Medieval

Early Modern

Hospitals for the treatment of persons with mental illness did not come about until the 15th century. As leprosy gradually disappeared from Europe, the hospitals used to lepers were converted to asylums for people with mental illness. One famous asylum was the Priory of Mary of Bethlehem (also called Bedlam), whose conditions were deplorable, with patients being viewed as if in a zoo.

Philippe Pinel, a French physician in the 19th century, is credited with instituting the moral treatment movement. He is said to have removed the chains of the inmates of the mental hospital in which he worked and to have replaced their dungeons with sunny rooms. He encouraged outdoor exercise and treated patients with kindness. However, historians have discovered that these treatments were for the wealthy and that the lower classes were still tortured and that straightjackets were used to replace their shackles.

The moral treatment movement grew and spread throughout Europe and the United States. Mental hospitals espousing this way of thinking were small, privately owned, and humanitarian in their approach. Benjamin Rush was a physician in Pennsylvania credited with the United States evolution to moral treatment. Dorothea Dix was a teacher and a crusader for improved conditions in mental hospitals. She worked hard to get a number of state hospitals built to care for persons with mental illness. However, the large public hospitals took in many patients and, with their small staff, were unable to provide the individual attention needed to continue humanitarian treatment. Physicians also took over the hospitals and focused more on equipment than care. The hospitals returned to their previous state of overcrowding and poor care.



Hippocrates, the father of modern medicine, was among the first to classify mental disorders. (source)

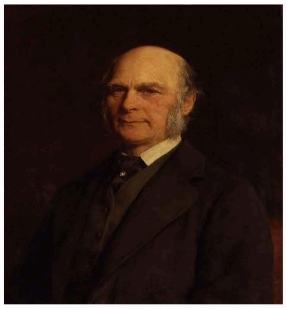
Click Next to proceed to Evolution of Approaches to Mental Disorders.

Previous Next

Module 1

Evolution of Approaches to Mental Disorders

Beyond the supernatural ideas about psychopathology noted above, there have been two primary approaches employed: the biological viewpoint and the psychological viewpoint. The biological viewpoint states that mental disorders are a result of physiological phenomena such as damage or disease, while the psychological approach holds that there is an emotional basis for mental illness.



Sir Francis Galton (source)

Biological Approach

While there were early efforts, such as those of Hippocrates and Galen, to consider biological bases of mental disorders, there was still much to be discovered by the mid-1800s when the somatogenic perspective gained favor again. The biological view of mental disorders was strengthened by the discovery of the organic basis of general paresis, a progressively degenerative and irreversible disorder caused by the venereal disease syphilis. People with this disorder had physical and mental deterioration, progressive paralysis, and delusions of grandeur (the belief that they had some special power, etc.). Pasteur's germ theory of disease led to the discovery of the specific syphilis microorganism. It was then reasoned that, if this mental disorder could have a biological basis, so could others, and the searches began.

Sir Francis Galton (1822-1911) is credited with originating research on twins. He attributed many behavioral characteristics to heredity. Scientists then began to investigate the heritability of mental illness. Galton was also the creator of the eugenics movement that sought to limit the spread of undesirable characteristics through forced sterilization. Thousands of people with mental illness and developmental disabilities were forcibly sterilized until the practice was ended in 1945.

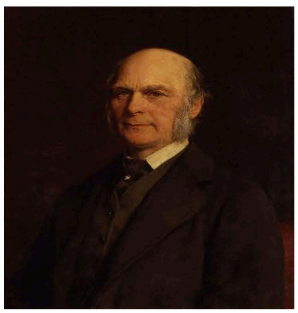
Radical biological treatments were in part the product of overcrowded mental hospitals with inadequate staffing. Insulin was used to induce comas in people with schizophrenia and was, at first, embraced when significant improvements were reported. Later, it was found that many patients treated with insulin suffered serious health risks, such as irreversible coma or death, and the practice was discontinued. Electroconvulsive therapy (ECT) was originated by Italian physicians studying epilepsy. They induced seizures experimentally to the human head and, in 1938, tried this on a patient with schizophrenia. The practice soon began being used for severe depression as well, and this treatment is still used for this disorder, though the voltage and duration of the shock are significantly reduced from those early days. Another radical treatment, the prefrontal lobotomy, was introduced by Egas Moniz, a Portuguese psychiatrist, in 1935. This procedure destroys connections between the frontal lobes and other parts of the brain. He reported success initially, and the procedure was adopted throughout the world for the next 20 years, especially for patients who were violent. While the patients did become more manageable, the procedure fell out of favor when many people, including a member of the Kennedy family of Massachusetts, suffered serious losses in their cognitive abilities.

Psychological Approach

Module 1

Evolution of Approaches to Mental Disorders

Beyond the supernatural ideas about psychopathology noted above, there have been two primary approaches employed: the biological viewpoint and the psychological viewpoint. The biological viewpoint states that mental disorders are a result of physiological phenomena such as damage or disease, while the psychological approach holds that there is an emotional basis for mental illness.



Sir Francis Galton (source)

Biological Approach

Psychological Approach

Psychological—also called psychogenic—viewpoints came about as some scientists observed that there were some disorders that did not have a physiological basis and seemed to be caused by psychological or emotional factors. These types of theories first gained popularity in Austria and France, and then spread to the United States. Mesmer, an Austrian physician who practiced in Paris in the late 1700s to early 1800s, developed a treatment called mesmerism, an early form of hypnotism, which he used to treat hysteria. Hysteria was a term used to describe physical incapacities that could not be explained by physical disorder. His methods were later denounced as quackery. Later in the 1800s, Charcot also studied hysteria and began using hypnosis to reduce symptoms. Shortly thereafter, Josef Breuer, a Viennese physician, began treating a young woman whom he called Anna O. who displayed a number of hysterical symptoms. He discovered that she began talking more freely when hypnotized and that her symptoms improved if she was able to also remember the event she associated with the first appearance of that symptom and relive the emotions she felt. He termed this reliving of and release of emotions catharsis, and this method came to be known as the cathartic method. Sigmund Freud studied under Breuer and came to believe that unconscious conflicts were the cause of psychopathology, and referred to his ideas as psychoanalytic theory. His treatment, or psychoanalysis, was conducted outside the hospital setting and came to be known as outpatient therapy.

Current Trends

Chemical Treatment and Deinstitutionalization

Many changes have happened in the last several decades that affect the way individuals with abnormal behavior are understood and treated. One of the major breakthroughs occurred in the 1950s with the introduction of psychotropic medications, or drugs that alleviate symptoms by altering brain chemistry. These include antipsychotic medications to deal with disordered thinking, antidepressant medications that alter mood, and anti-anxiety medications to alleviate tension. Thousands of people with serious mental disorders were able to leave mental hospitals due to the use of these medications. There was even a deinstitutionalization policy enacted nationwide to get these former patients back to the community. The trend has continued, and most individuals are treated with medications and psychotherapy on an outpatient basis; when hospitalization is necessary, it is usually only short-term.

Psychotherapy and Treatment

People with mild or moderate mental disorders can generally be treated through outpatient psychotherapy either from a private practitioner or through a low-cost clinic setting. Psychotherapy can assist with relationship problems, vocational problems, school issues, and adjustment issues and is often used in conjunction with medication for the treatment of more serious disorders. Some programs specialize in treating certain disorders, such as eating disorders or substance abuse.

Prevention

Prevention has also become a focus. Identifying persons at high risk and providing supports are but one type of preventive effort. Correcting underlying social conditions is another. Positive Psychology is yet another method of promoting mental health. It promotes positive feelings, traits, and abilities.

Diversity

Because we live in a society that is rife with diversity, it is important for understand how race, gender, and age, among other factors, affect the ways in which mental disorders are expressed and best treated through multicultural methods.

Insurance

Treatment is impacted by insurance coverage. Managed care has been the leading model for coverage for the last several years. In this type of program, the insurance company specifies such components of coverage as what therapists will be on its panel of providers, what types of therapies may be approved, and how long a person with a specific disorder may be seen in therapy. Often, mental health coverage is set at a lower rate than that for physical ailments, though some federal laws are attempting to bring about mental health parity so that this treatment will be on par with other medical treatment. However, it is not yet clear if these laws will have significant impact.

Professional Service Providers

Who are the professionals that treat mental disorders? In the not-too-distant past, up to the 1950s, psychotherapy was provided primarily by psychiatrists who trained as physicians, then specialized in psychiatry. However, there are now a number of mental health professionals available for the provision of psychotherapy, and more often than not, psychiatrists specialize in prescribing medication. Licensed psychologists are doctoral-level professionals who have several years of education generally followed by two years of internship, during which time they are closely supervised in doing psychotherapy with individuals, couples, families, and/or groups. They may have degrees in clinical psychology, counseling psychology, or school psychology. Assessment and research are also areas in which many psychologists excel. Other disciplines usually require a master's degree and supervised experience. Professionals in these disciplines include psychological associates (in Texas) social workers, licensed professional counselors, marriage and family therapists, and psychiatric nurses. They may use technology to provide treatment and information through postings on websites or through telehealth activities.

Module 1

What Do Clinical Researchers Do?

Clinical researchers employ the scientific method to test hypotheses about abnormal behavior and to find general, or nomothetic, explanations of human behavior and the effectiveness of treatment. The scientific method consists of the systematic collection and evaluation of information through controlled observations.

Case Study

One type of research is the case study which focuses on describing one person's past, current functioning, and symptoms. It may describe the hypothesized view of the development of the problem as well as the treatment provided. Case studies can help researchers gain insights as to the usefulness of a theory or the effectiveness of treatment, and they can be a springboard for future research. They are limited in that they are subjective, and they do not allow for generalization to the larger population.

Correlational Method

A second type of research is the correlational method. This type of research looks at the degree to which variations in one variable are associated with changes in another variable. There is no causal relationship or explanation provided by the analysis of these relationships. However, the clinician need not know the cause to be able to provide an intervention such as when a person becomes more depressed, they may be more likely to engage in suicidal behavior.

Experimental Method

A third type of research is the experimental method in which the researcher manipulates a variable (the independent variable) and observes the effect on another observed variable (the dependent variable). This type of research looks for causes. Results are examined using statistical analyses. The researcher must be careful to eliminate any confounding variables that may affect the dependent variable, thus interfering with the results of manipulation of the independent variable. Sometimes, environmental factors, such as the temperature of the room, may affect the speed with which a task is completed, thus providing confusing information. To deal with the possibility of confounds, the researcher uses a control group, random assignment, and a masked, or blind, design. A control group is a group that is similar to the experimental group but is not exposed to the independent variable. To help ensure that the experimental group and the control group do not have inherent differences that may affect the results of the experiment, random assignment is used. In masked, or blind, designs, the participants are not aware of which group they are assigned. This is to protect against participant bias. In some cases, it may be useful for the researcher to also be unaware of which group a participant is in to protect against experimenter bias. This is called a double-masked, or double-blind, study.

Alternative Research Designs

There are several alternative research designs. These may be termed quasi-experimental or mixed designs. These may not include all the elements discussed in the section above. One such design is the **matched design** in which participants are not randomly assigned but are selected based on membership in an existing group. An example might be the study of battered spouses. The researchers would examine this group in comparison with a control group that has not been in a battering relationship but is matched on characteristics such as age, ethnicity, and gender. **Natural experiments** examine the effects of unusual or unpredictable events such as natural disasters. **Analogue experiments** are conducted in laboratories in an attempt to replicate conditions that happen in real life, but under controlled conditions. **Single-subject experimental design** in which one participant is examined before and after the independent variable has been manipulated. This helps strengthen confidence that a treatment caused a change in behavior. In **longitudinal studies**, a group of individuals is observed on several occasions over time. **Epidemiological studies** look at the incidence and prevalence of a problem in a specific population.