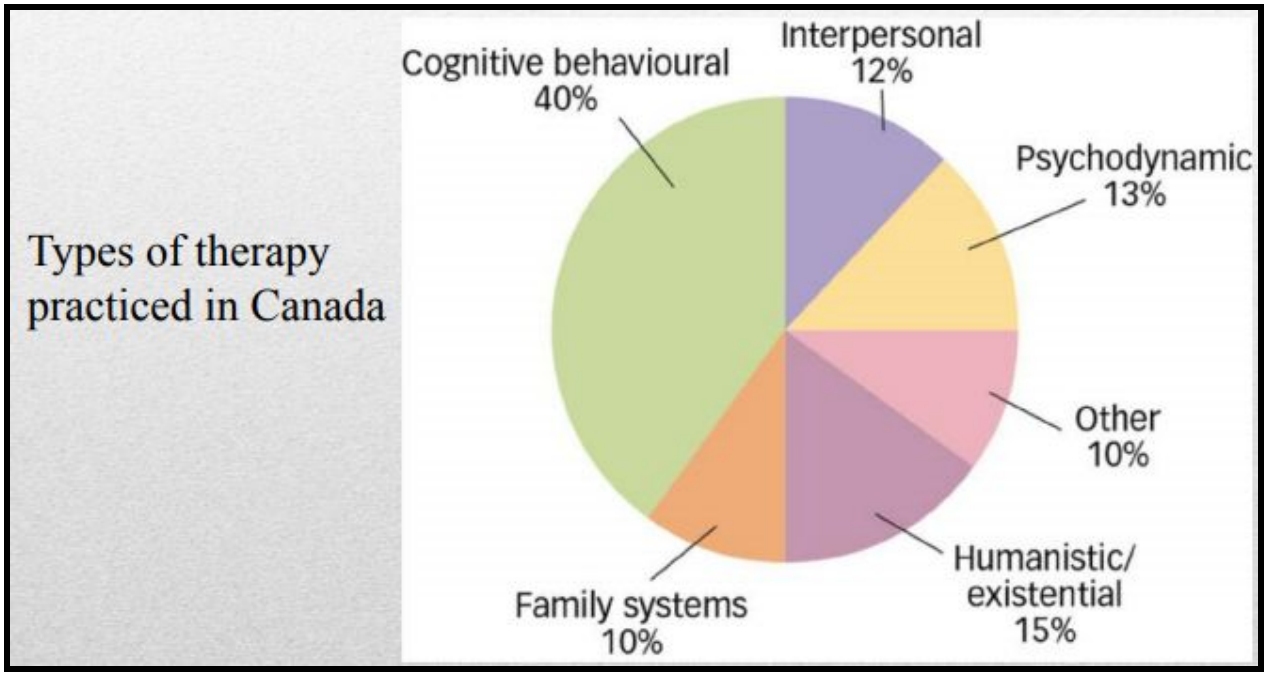
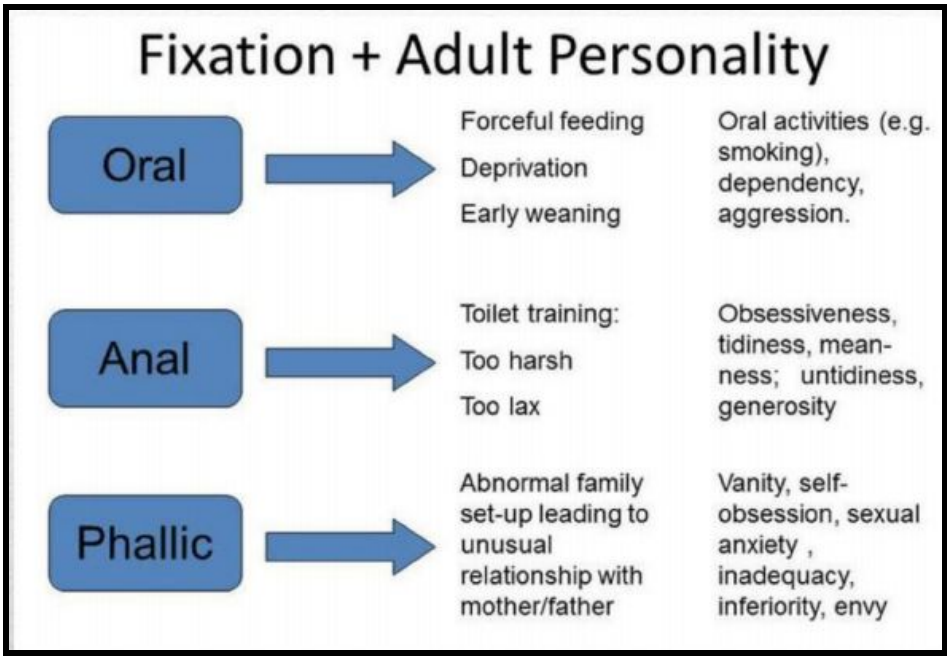
Lecture Notes:

- Types of clinicians:
    1. Psychiatrist
        a. Medical doctor
        b. Can diagnose, prescribe, and practice psychotherapy
    2. Psychologist
        a. Can diagnose and practice psychotherapy
        b. **Note:** There are 2 main types of psychologists, research psychologists and clinical psychologists. Research psychologists cannot diagnose.
    3. School psychologist
        a. Can diagnose but cannot practice psychotherapy.
    4. Clinical counsellor
        a. Can diagnose but cannot practice psychotherapy.
    5. Social worker
        a. Can diagnose but cannot practice psychotherapy.
- After a patient is diagnosed, there are 2 main forms of treatment:
    1. Psychological treatment:
        a. Also called **psychotherapy**.
        b. Techniques in psychotherapy are referred to as **orientations**.



        c. **Psychodynamic therapy** has its roots in Freud's methods of **psychoanalysis**. This therapy is centred on the belief that psychological problems come from ineffectively repressing aggressive and sexual urges in childhood. Psychoanalysis attempts to give the patient insight into these conflicts. One topic that is expected to be discussed in a psychoanalytic session is childhood events. Recall that Freud talked about stages of pychosexual development and he argued that if disruptions occurred during one of these stages, then it led to specific behaviours in adulthood. (This is shown below.)



However, psychodynamic approaches have changed a lot since Freud. The Interpersonal psychotherapy (IPT) has replaced some of Freud's methods with a focus on:

1. Grief (loss of a relationship)
2. Role disputes (conflicts within a relationship)
3. Role transitions (changes in life status, jobs, etc.)
4. Interpersonal deficits (lack of skills to start/maintain relationships)

d. Humanistic/existential therapies:
   - Humanistic psychologists emphasize:
     - The importance of striving for personal improvement.
     - Free will.
     - The positive aspects of the human experience.
   - One type of humanistic therapy is **person-centred therapy**. It assumes that individuals have a tendency toward growth; centres on acceptance and genuine reactions from the therapist. Person-centred therapy assumes that individuals have a tendency toward growth. It centres on acceptance and genuine reactions from therapists. Person-centred therapists abide by these 3 principles:
     - Congruence (words, body language, etc.)
     - Empathy
     - **Unconditional** positive regard

e. Behavioural/cognitive therapy:
   - Behavioural and cognitive therapies are the most common type of psychotherapy in Canada, probably because of the wealth of evidence suggesting their efficacy.
   - Behavioural/cognitive therapy relies on **behaviourism**, study of observable, measurable variables. It focuses on changing behaviour (action) or cognition (thoughts) to combat mental illness.

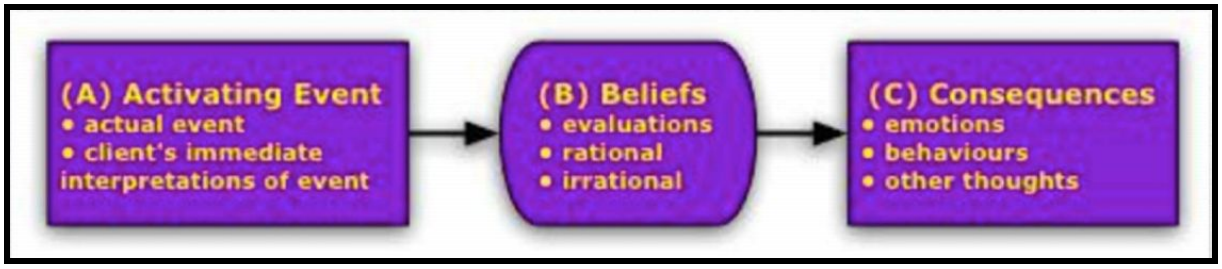
- Behavioural therapy mostly centres around conditioning:
  - **Operant conditioning/Instrumental conditioning:**
  - Rewards for positive behaviour; punishments for negative behaviour.
  - One method is token economy. This is when the therapist rewards positive behaviour with vouchers.
  - **Classical conditioning:**
  - Exposure therapy.
  - Harmless, repeated exposure to a stimulus believed to be threatening → reduction in threat response.
- Like behavioural therapy works to change actions, **cognitive therapy** works to change unhealthy thought patterns leading to mental illness.
- Cognitive therapists focus on restructuring of irrational thought processes:
  - A therapeutic approach that teaches clients to question the automatic beliefs, assumptions, and predictions that lead to negative emotions. They replace irrational, negative thoughts with rational, positive ones.
  - E.g. 1: "I will never be able to make friends."
    What friends have you had in the past? Where? When?
  - E.g. 2:"I will never be able to succeed in school."
    What successes have you had in the past? Where? When?
- Many therapists combine behavioural and cognitive orientations into one technique: **cognitive-behavioural therapy (CBT)**. CBT is the most common psychological treatment for depression and anxiety.
  CBT is:
  - Problem focused
  - Action oriented
  - Transparent (unlike psychoanalysis)

2. Biological treatment

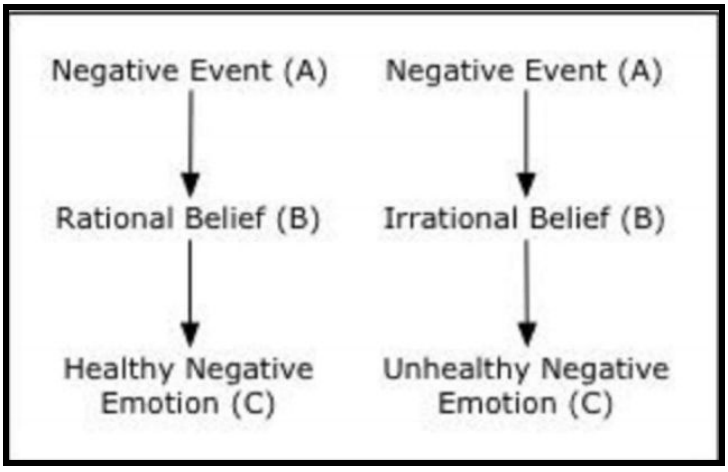
- Why should we treat psychological disorders:
  1. Personal and social costs:
     a. Inability to carry out daily activities
     b. Inability to manage relationships
  2. Financial cost:
     a. ~$51 billion per year in lost work
- These impairments are just as severe as those associated with physical illness
- Getting access to treatment is one of the biggest challenges in mental health. 20% of Canadians suffer from a moderate to serious mental health disorder at some point in their lives but only ~40% of these individuals seek treatment. Of the people who do seek treatment, 1/3 of them are unsatisfied with the level of treatment they receive. This is surprising because Canada has comparatively great access to mental health treatment. Other countries often present worse figures than these.
- Why do people fail to get treatment:

1. People don't realize they have a disorder. People do not typically understand mental illness as well as they understand physical illness.
2. Psychological beliefs prevent people from seeking treatment. Some common ones include:
    a. Belief that they can treat themselves (72.6%).
    b. Belief that mental health problems are not that severe (16.4%).
    c. Belief that they will be stigmatized by others for seeking mental health treatment (9.1%). E.g. Consider the 2 scenarios below. People aren't shy/afraid to say the first one, but are shy/afraid to say the second one.
        i. "I have to leave work early today for a doctor's appointment."
        ii. "I have to leave work early today for a psychotherapist appointment."
3. There are structural barriers to seeking care. People don't know where to look and there are not enough clinicians. Furthermore, OHIP does not cover psychologists/counsellors/social workers and private insurance often has low limits on these types of professionals, so many people have to pay out of pocket. It costs $225/hr to visit a psychologist in Ontario and many private insurance plans only give you $300-$500 per year for counselling.

- ABC Model:



    - This is another diagram of the ABC Model. There are 2 paths:



    - The therapist can't change A, but can change B. Therefore, therapists try to change B.

- **Biological treatment** consists broadly of:
    - Medications (antipsychotic, anti-anxiety, antidepressants, herbal/natural products)
    - Electroconvulsive therapy (ECT)
    - Transcranial magnetic stimulation (TMS)

    - Psychosurgery (destruction or repair of specific brain areas)
- We'll focus on the most common of these, medication. The use of medication for psychological illness began with an accident. Thorazine is a sedative that blocks dopamine receptors. It was given to patients with schizophrenia to make them sleepy. It resulted in euphoric, calm patients instead of agitated patients. Introduction of these **antipsychotic medications** changed the way that schizophrenia is treated. Newer antipsychotics regulate both **dopamine** and **serotonin** and may be more effective.
- Since the discovery of antipsychotics, other mental illnesses have come to be treated with medication.
- **Anti-anxiety medications (benzodiazepines)**:
    - Facilitate GABA neurotransmitter activity → inhibit anxiety.
    - But:
        - Drug tolerance
        - Withdrawal symptoms
        - Side effects: drowsiness, poor coordination
- Antidepressants were also discovered accidentally. **Monoamine oxidase inhibitors**, used to treat tuberculosis in the 1950s, coincidentally elevated patients' moods. It prevented break-down of serotonin and dopamine and had intolerable side effects (dizziness, loss of sexual interest). Most antidepressant medications today are **reuptake inhibitors**. They prevent neurotransmitters from being taken back up and increase concentration of these neurotransmitters in the synaptic space. Reuptake inhibitors can work on many neurotransmitters or just one. While antidepressants are quite effective for treating depression and may have some anti-anxiety effects, they are not used for bipolar disorders. Furthermore, they can have wide-ranging side effects, including:
    - Difficulty concentrating
    - Sexual side effects
    - Weight gain
    - Emotional "numbness"
    - Withdrawal symptoms (e.g., brain 'zaps')
- In addition to psychotherapy and biological interventions, there are natural treatments for psychopathology, particularly for depression and anxiety.

Textbook Notes:

- **Module 16.1 Treating Psychological Disorders:**
- **Barriers to Psychological Treatment:**
- In both Canada and the U.S., surveys show that approximately two-thirds of people with mental health issues do not seek help from the mental health system. Furthermore, even when people do seek therapy, about half of them significantly delay doing so after first becoming aware of their mental health issues, often for years.
- There are many barriers that prevent or delay people from seeking psychological treatment. One problem that almost everyone struggles with is that disorders themselves are inherently ambiguous; there is no objective, easily definable line between "mentally healthy" and "mentally ill" and no litmus test that can tell a person with a high degree of certainty that they need to seek help.
- Also, people very commonly are motivated to not see themselves as mentally ill, so much so that they minimize their symptoms, basically tricking themselves and others to think that they are healthier than they really are. To some, having a mental illness would feel like a sign of weakness or a personal failing, and they may not want to see themselves that way, or may not want to feel like a burden to their families and loved

ones. Other people may be unwilling to risk the social stigma and fear they might embarrass themselves or their families, or they may not trust the psychological or psychiatric professions and be skeptical of the efficacy and safety of different treatments.

- Overcoming such skepticism may make a big difference in helping people seek treatment; for example, in one study, 99% of respondents said they would seek mental health treatment if they believed it would be helpful.
- **Logistical Barriers: Expense and Availability:**
- Two of the main barriers to mental health treatment are about access, whether people can afford the cost and the time for treatment.
- Government healthcare coverage in Canada generally only includes treatment by psychiatrists, leaving counsellors, psychologists, and many types of therapists less able to reach many people who can't afford their services.
- To help overcome these barriers, some community organizations provide offices in lower-income areas where private psychotherapists are scarce and needed. Community mental health centres sometimes provide therapy on a sliding scale, which means the cost of a one-hour session varies depending on the patient's income and whether he has additional health benefits from his employer that would cover some of the therapy costs. Drug treatments can also be made more affordable by using generic products as opposed to brand-name ones.
- **Involuntary Treatment:**
- In Canada and the United States, as well as many other countries, people can be compelled through the courts or on the advice of social service agencies or doctors to be treated for mental illness. The majority of these cases arise due to the person engaging in highly erratic or disturbing behaviour, which results in legal trouble and the perception that the person may be a risk to themselves or others. Involuntary treatment can also be required after the person commits harm to others, as in some cases of domestic violence.
- Proponents of this practice argue that it improves mental health, reduces the costs of mental illness on society, and increases the effectiveness of treatment by ensuring that people with severe disorders receive treatment that they might otherwise avoid; it also may protect society from people who may otherwise commit harm.
- People who are opposed are concerned that this practice is unethical because it can restrict the freedom and take away the rights of people who have not done anything harmful to themselves or others, force people to receive medications that may alter brain function and have dangerous side effects, and easily be misapplied to certain ethnic groups and lower socioeconomic classes.
- **Mental Health Providers:**
- **Clinical psychologists** have obtained PhDs and are able to formally diagnose and treat mental health issues ranging from the everyday and mild to the chronic and severe.
- **Counselling psychologists** are mental health professionals who typically work with people who need help with more common problems such as stress and coping; issues concerning identity, sexuality, and relationships; anxiety and depression; and developmental issues such as childhood trauma. Counselling psychologists may have either a Master's or PhD degree.
- **Psychiatrists** are medical doctors who specialize in mental health and who are allowed to diagnose and treat mental disorders through prescribing medications. Many psychiatrists also work within an integrative biopsychosocial perspective and perform

psychological counselling and therapy, or work closely with other professionals who provide such services.

- Historically, in Canada and most U.S. states, clinical psychologists have not been allowed to prescribe medications, so in many settings psychologists and psychiatrists work together, combining medications with psychological therapies.
- **Inpatient Treatment and Deinstitutionalization:**
- In the 1800s and 1900s, it was common practice to confine people in an asylum. These actions were generally not considered to be "treatments" because there was no hope that the individuals would get better. Instead, the goals were to protect the public and to provide basic care for individuals whose families could not do so.
- This pattern continued until the 1960s, when people started to take a dim view toward merely housing those with disorders in dismal asylums. One major contribution to the shift in attitudes was that effective treatments began to be developed for some disorders, largely in the form of medications. As patients' symptoms became more treatable, a society-wide movement toward **deinstitutionalization** occurred, which involved the movement of large numbers of psychiatric in-patients from their care facilities back into regular society, generally after having their symptoms alleviated through medication.
- Of course, some people still require intensive, long-term care. In place of asylums, many chronic inpatients now live in residential treatment centres. These centres allow inpatients to enjoy much more personal freedom, depending on the severity of the patients' symptoms. Low-level **residential treatment centres** are housing facilities in which residents receive psychological therapy and life skills training, with the explicit goal of helping residents become re-integrated into society.
- **The Importance of Community Psychology:**
- **Community psychology** focuses on identifying how individuals' mental health is influenced by the community in which they live, and emphasizes community-level variables such as social programs, support networks, and community resource centres to help those with mental illness adjust to the challenges of everyday life.
- Through working at a community level rather than narrowly focusing on individuals, community psychologists hope to prevent or minimize the development of disorders, seeking to enhance the factors that strengthen people and make them more resilient to the kinds of stresses that can otherwise undermine mental health.
- **Empirically Supported Treatments:**
- **Empirically supported treatments** (also called evidence-based therapies) are treatments that have been tested and evaluated.
- The most rigorous way of testing whether a certain therapy works is through an experiment. An experiment generally involves randomly assigning volunteers to a treatment group and to a control group. Ideally, experiments are also double-blind, which in this case means that neither the patient nor the individual evaluating the patient is aware of which group the patient is in. However, this level of rigour is often close to impossible to attain when evaluating therapies. One common problem is that it is ethically problematic to place people into a control group that receives no treatment of any kind, because it effectively denies them treatment that they need. It is also generally impossible to use double-blind procedures, given that a therapist, of course, knows which type of treatment she administers, and many clients likely do as well.
- Also, it can be very difficult to assess the general effectiveness of a therapeutic approach if therapists themselves differ widely in their own level of relevant skills.

Furthermore, each client and therapist is unique, and much of the effectiveness of therapy comes from the **therapeutic alliance**—the relationship that emerges in therapy.

- Therefore, even though many therapists may provide the same therapy, each therapist will have a slightly different personal approach, and each combination of client and therapist will be unique.
- **Working the Scientific Literacy Model: Can Self-Help Treatments Be Effective?:**
- **Bibliotherapy** is the use of self-help books and other reading materials as a form of therapy.
- **Module 16.2 Psychological Therapies:**
- **Insight Therapies:**
- **Insight therapies** is a general term referring to therapy that involves dialogue between client and therapist for the purposes of gaining awareness and understanding of psychological problems and conflicts.
- Historically, the formal beginning of insight therapy came with the development of psychoanalysis by Sigmund Freud and its evolution into **psychodynamic therapies**, forms of insight therapy that emphasize the need to discover and resolve unconscious conflicts.
- **Psychoanalysis: Exploring The Unconscious:**
- Psychoanalysis sprang out of Freud's understanding of consciousness. Freud hypothesized that much of our consciousness occurs at the unconscious level, outside of our awareness. In particular, many fundamental urges, such as sexuality and aggression, were thought to constantly influence how we think and behave, although we are not explicitly aware of these processes. In fact, because these urges are generally socially unacceptable, we actively protect ourselves from becoming aware of them through a variety of psychological defences. As a result, the true causes of our behaviour, and thus of our psychological issues, are hidden in the unconscious. This led Freud to emphasize the importance of "making the unconscious conscious," believing that the process of bringing material from the unconscious into consciousness allowed clients to gain insight into their problems and the past experiences from which they stem.
- Core Ideas Forming the Basis of Psychoanalysis:

Adults' psychological conflicts have their origins in early experiences.
These conflicts affect the thoughts and emotions of the individual, and their source often remains outside of conscious awareness.
The unconscious conflicts and their effects are called neuroses (anxieties).
By accessing the unconscious mind, the analyst and client can gain a better understanding of the early conflicts that lead to neuroses.
Once the conflicts are brought to the surface, the analyst and the client can work through them together.

- There are four techniques that have been particularly important in the practice of therapy, historically, and are still in use in many different ways today.
- The first technique is **free association**, during which clients are encouraged to talk or write without censoring their thoughts in any way. Instead, the person allows everything that pops into the mind to come spilling out, no matter how odd or meaningless it may seem. Freud believed that this uncensored thought barrage would reveal clues to the unconscious in ways that clients may not normally have access to.
- The second is **dream analysis**, which is a method of examining the details of a dream (the manifest content), in order to gain insight into the true meaning of the dream, the emotional, unconscious material that is being communicated symbolically (the latent content).
- The third strategy is to pay attention to signs of **resistance**. Resistance occurs in therapy when unconscious material surfaces that the client wishes to avoid. Resistance involves engaging in strategies that keep the information from fully manifesting in conscious awareness. Resistance may be subtle, such as the client using humour to avoid talking about something painful, or it may be obvious, such as the client skipping sessions, becoming angry at the therapist, or becoming cynical about the whole process. This is actually considered a promising signal for the psychoanalyst because it means that they are beginning to access the unconscious motives of clients' present difficulties. Psychoanalysts then attempt to push through the resistance by making clients aware of how and what they are resisting.
- A fourth tool used by psychotherapists involves **transference**, whereby clients direct certain patterns or emotional experiences toward the therapist, rather than the original person involved in the experiences (e.g., their parents).
- **Modern Psychodynamic Therapies:**
- In contrast to Freudian methods, these new approaches are more concerned with the client's conscious rather than unconscious experience. They also acknowledge the effect of cultural and interpersonal influences on individual behaviour, and the impact of important needs such as love, power, belonging, and security. Finally, they are more optimistic about people's ability to reach healthy functioning.
- One example is **object relations therapy**, a variation of psychodynamic therapy that focuses on how early childhood experiences and emotional attachments influence later psychological functioning.
- In contrast to psychoanalysis, object relations therapy does not centre on repressed sexual and aggressive conflicts. Instead, the focus is on "objects," which are the clients' mental representations of themselves and important others. The basic view is that the quality of the early relationship between the child and these "objects" results in the development of mental models for the child.
- **Humanistic–Existential Psychotherapy:**
- The humanistic-existential approach emphasized individual strengths and the potential for growth, and assumed that human nature is fundamentally positive, rather than the essentially negative perspective advanced by psychoanalytic approaches. This shift toward the positive was believed to help individuals access their own sense of personal agency for overcoming their problems.
- Contrasting Psychoanalytic and Humanistic Views of Major Psychological Issues and Debates

Issue	Psychoanalysis	Humanistic Therapy
Conscious vs unconscious	Focuses on unconscious drives	Focuses on conscious experience
Determinism vs free will	Behaviour is determined by repressed sexual and aggressive instincts	Behaviour is chosen freely
Weaknesses vs strengths	Everyone has neuroses	Everyone has strengths
Responsibility for change	The analyst interprets and explains to the client what is wrong	The therapist asks the client what is wrong and attempts to help clarify issues
Mechanism of change	Insight into unconscious conflicts allows problems to be worked through	Unconditional positive regard allows a person to heal and become more authentically themselves

- Humanistic and existential therapies share many similarities: to help people express their authentic selves, to overcome alienation, to become more loving, and to take responsibility for their experiences so that they learn to dwell fully in the present. The major difference between them is that humanistic therapists focus on removing the obstacles that prevent self-actualization from unfolding naturally, whereas existential therapists emphasize the importance of facing painful experiences such as feelings about isolation, death, and meaninglessness, believing that self-actualization involves transforming by facing one's fears and negativity. Even though attaining insight is still an important aspect of these therapies, rather than interpreting the hidden meanings of dreams and free associations, the therapist's role is to listen empathically in order to understand the clients' internal world. This is referred to as a **phenomenological approach**, which means that the therapist addresses the clients' feelings and thoughts as they unfold in the present moment, rather than looking for unconscious motives or dwelling in the past.
- American psychologist Carl Rogers (1902–1987) developed a version of humanistic therapy called **client-centred therapy** (or **person-centred therapy**), which focuses on individuals' abilities to solve their own problems and reach their full potential with the encouragement of the therapist.
- As a humanist, Rogers believed that all individuals could develop and reach their full potential. However, people experience psychological problems when others impose conditions of worth, meaning that they appear to judge or lose affection for a person who does not live up to expectations. Conditions of worth can impact psychological health over the long term, because they increase insecurities within the individual; as a result,

the person is likely to change his behaviour in an attempt to regain affection. If this happens frequently, then the individual's behaviour starts to be primarily about gaining affection and approval, living in order to please others rather than being able to express his own authentic self. That, to Carl Rogers, is a key aspect of most psychological dysfunction.

- Emotion-focused therapy (EFT) is one promising type of person-centred therapy that has evolved from the humanistic–existential tradition. EFT is based on the well-supported belief that it is better to face and accept difficult emotions and thoughts rather than bottle them inside. Therapists employing this form of therapy aim to help clients overcome their tendency to suppress disturbing thoughts and emotions, so that clients are less defensive overall and have fuller access to their whole range of experiences and emotions.
- **Behavioural, Cognitive, and Group Therapies:**
- **Behavioural therapies** attempt to directly address problem behaviours and the environmental factors that trigger them.
- **Systematic Desensitization:**
- To help people learn to handle such an anxiety-inducing situation, therapists will often employ a behavioural technique known as **systematic desensitization**, in which gradual exposure to a feared stimulus or situation is coupled with relaxation training.
- First, the client is guided towards being able to identify and track their own feelings of anxiety versus relaxation, so that they gain greater awareness "in the moment" of when they are feeling anxious and, critically, what it feels like when those feelings subside. Once the client has this kind of inner awareness, the therapist will expose them to a very mild version of the fear-inducing situation, such as imagining walking up to the front of the room where he is going to give the speech. As the client engages in this exercise and feels his anxiety starts to rise, he practises relaxing or engaging in behavioural strategies in order to counteract the anxiety he may feel. With practice, the anxious response to that particular trigger will lessen, and the client then progresses to more realistic and concrete manifestations of the situation, each time practising relaxing until he can learn to tolerate his feelings and counteract them with a relaxation response. This escalation of the intensity of the triggering experience continues slowly, step-by-step, until the client can eventually handle the real thing.
- In some cases, clients may undergo a process called flooding, in which case the client goes straight to the most challenging part of the hierarchy, exposing himself to the scenario that causes the most anxiety and panic.
- **Working the Scientific Literacy Model: Virtual Reality Therapies:**
- **Virtual reality exposure (VRE)** is a treatment that uses graphical displays to create an experience in which the client seems to be immersed in an actual environment. This much more vivid environment feels more like the real thing, and shows promise for helping people learn to relax in the face of their fears. Also, virtual reality therapy may help to reduce a person's tendency to use avoidance strategies.
- **Aversive Conditioning:**
- **Aversive conditioning** is a behavioural technique that involves replacing a positive response to a stimulus with a negative response, typically by using punishment.
- **Cognitive–Behavioural Therapies:**
- Behavioural therapies, despite their effectiveness at changing problem behaviours, do not directly address problematic thoughts. This is extremely important because some

disorders, such as depression, are caused and maintained, in part, by dysfunctional habits of thinking.

- **Cognitive–behavioural therapy (CBT)** is a form of therapy that consists of procedures such as cognitive restructuring, stress inoculation training, and exposing people to experiences they may have a tendency to avoid, as in systematic desensitization.
- Applying Cognitive–Behavioural Therapy to the Cognitive Symptoms of Depression

Cognitive Symptoms	**Example of CBT Coping Strategy**
Internal Attributions: blaming oneself excessively for negative things that happen.	Recognize the role that a person contributed to his problem, but also examine the role of other contextual factors (e.g., the situation, the behaviour of other people).
Stable Attributions: assuming that situations are permanent and irreversible.	In order to highlight the temporary nature of a person's difficulties, provide examples of how things that were true in the past are no longer the case.
Global Attributions: assuming that the results of one negative event will apply to all aspects of a person's life.	Challenge the person to explain exactly how the effects of one negative event will spill over into other parts of his life; provide examples of situations when spillover did not

- **Mindfulness-Based Cognitive Therapy:**
- Mindfulness practice and cognitive–behavioural therapy begin in somewhat similar ways, the goal of each is to get the client better acquainted with her thoughts and feelings, in the present moment of experiencing them. But after this emphasis on increased self-awareness, the two approaches differ significantly. In CBT, there is a basic orientation of "fixing oneself." The purpose of becoming aware of one's patterns of thoughts, feelings, and behaviours is to gain greater control so that the negative patterns get replaced with more positive ones. In contrast, the practice of mindfulness involves consciously adopting an orientation of "accepting" oneself fully. Strictly speaking, from a mindfulness perspective, you don't necessarily have to "do" anything about problematic thoughts and feelings; instead, you make the active choice to accept them as they are, to simply observe them without reacting.
- A key way in which mindfulness affects a person is through the experience of **decentring**, which occurs when a person is able to "step back" from their normal consciousness and examine themselves more objectively, as an observer.
- **Mindfulness-based cognitive therapy (MBCT)** involves combining mindfulness meditation with standard cognitive–behavioural therapy tools.
- **Group and Family Therapies:**
- Family therapists generally take a **systems approach**, an orientation that encourages therapists to see an individual's symptoms as being influenced by many different interacting systems; one important system is the family system, which can play a big role in the development and maintenance of psychological disorders.

- **Evaluating Cognitive–Behavioural Therapies:**
- Behavioural therapies have been shown to be particularly effective at treating symptoms associated with anxiety disorders, such as obsessive-compulsive disorder and specific phobias. They have also proved useful for increasing behavioural skills and decreasing problematic behaviours.
- Cognitive–behavioural therapy has been quite effective in treating depression.
- **Module 16.3 Biomedical Therapies:**
- **Psychopharmacotherapy**—the use of drugs to manage or reduce clients' symptoms—is by far the most frequently used biomedical option, and is often employed in conjunction with some form of psychological therapy. Other options, such as surgery or electrically stimulating the brain, are typically used only in situations where no other available treatments have succeeded.
- **Drug Treatments:**
- **Psychotropic drugs** are medications designed to alter psychological functioning.
- Psychotropic drugs have been developed to take many different courses of action. First, all psychotropic drugs are designed to cross the **blood–brain barrier**, a network of tightly packed cells that only allow specific types of substances to move from the bloodstream to the brain in order to protect delicate brain cells against harmful infections and other substances. After crossing this barrier, psychotropic drugs then affect one or more neurotransmitters. The specific neurotransmitter(s) targeted by a drug will determine which disorders will be responsive to that medication.
- **Antidepressants:**
- **Antidepressant drugs** are medications designed to reduce symptoms of depression.
- In general, antidepressant drugs target areas of the brain that, when functioning normally, are rich in monoamine neurotransmitters, serotonin, norepinephrine, and dopamine. Since multiple neurotransmitters are involved, antidepressants come in several varieties, each with its own way of altering brain chemistry.
- **Monoamine oxidase inhibitors (MAOIs)** were the first type of antidepressant to be developed and widely used. They work by deactivating monoamine oxidase (MAO), an enzyme that breaks down serotonin, dopamine, and norepinephrine at the synaptic clefts of nerve cells. When MAO is inhibited, fewer dopamine, serotonin, and norepinephrine neurotransmitters are metabolized, which in turn leaves more of them available for synaptic transmission. Although MAOIs often effectively relieve symptoms of depression, they are used less frequently than other antidepressants, in part because they can cause many side effects, some quite dangerous, especially when they interact with other medications and certain types of foods (e.g. aged cheeses, smoked meats, alcoholic beverages).
- **Tricyclic antidepressants** were among the earliest types of antidepressants on the market and appear to work by blocking the reuptake of serotonin and norepinephrine. Unfortunately, they also seem to cause many undesirable side effects, including nausea, weight gain, sexual dysfunction, and even seizures.
- Prozac is a **selective serotonin reuptake inhibitor (SSRI)**, a class of antidepressant drugs that block the reuptake of serotonin. These antidepressants alleviate some proportion of the symptoms of depression in some clients, although they also come with certain side effects, as discussed in the opening vignette of this module.
- While antidepressant drugs can alleviate depression (in some individuals), they do not make people happier than they were before becoming depressed.

- **Mood Stabilizers:**
- In contrast to antidepressants, which are primarily used to treat depression (unipolar disorder), **mood stabilizers** are drugs used to prevent or reduce the severity of mood swings experienced by people with bipolar disorder.
- **Lithium** was one of the first mood stabilizers to be prescribed regularly in psychiatry, and from the 1950s to the 1980s was the standard drug treatment for depression and bipolar disorder. Lithium, a salt compound, can be quite effective, but it can also be toxic to the kidneys and endocrine system.
- **Antianxiety Drugs:**
- Sometimes referred to as tranquilizers, **antianxiety drugs** affect the activity of gamma-aminobutyric acid (GABA), an inhibitory neurotransmitter that reduces neural activity. These drugs are prescribed to alleviate nervousness and tension, and to prevent and reduce panic attacks.
- These drugs appear to temporarily alter the structure of GABA receptors, allowing more GABA molecules to inhibit neural activity. The effects of antianxiety drugs are relatively short-lived. They take effect within minutes of ingestion and may last for only a few hours. Given that these drugs facilitate inhibition of the nervous system, it is not surprising that their side effects include drowsiness, tiredness, and impaired attention, especially when they are taken at high doses. More serious side effects include memory impairments, depression, and decreased sex drive. These drugs also have the potential to induce abuse and withdrawal symptoms.
- **Antipsychotic Drugs:**
- **Antipsychotic drugs** are generally used to treat symptoms of psychosis, including delusions, hallucinations, and severely disturbed or disorganized thought. Antipsychotics are the common treatment for schizophrenia and are sometimes prescribed to people with severe mood disorders.
- The first generation of antipsychotic medications (e.g., Thorazine, Halodol) was designed to block dopamine receptors, because symptoms of schizophrenia are related to dopamine activity in the frontal lobes and basal ganglia. However, these drugs had significant side effects, such as seizures, anxiety, nausea, and impotence. One of the more severe and often permanent side effects, **tardive dyskinesia**, is a movement disorder involving involuntary movements and facial tics.
- Newer antipsychotic medications are referred to as **atypical antipsychotics** or second-generation antipsychotics. These drugs are less likely to produce side effects including movement disorders (like tardive dyskinesia) that commonly occur with first-generation antipsychotics.
- **Evaluating Drug Therapies:**
- Many people believe that drugs are designed to target the root physical causes of psychological disorders, and that they should therefore be more effective than psychological approaches to therapy. However, these beliefs are not warranted.
- In many cases, drugs are not more effective than psychological therapies. Approximately 50% to 60% of people who take antidepressants improve within a few months, compared to 30% of people who improve after taking a placebo. Interestingly, about 50% to 60% of people also improve from psychological therapy. Thus, we cannot conclude that drugs are more effective or should replace other approaches to therapy.
- In other cases, such as most anxiety disorders, psychological treatments such as cognitive–behavioural therapy are generally the most effective treatment.

- In many situations, a combination of treatment approaches may work best; for example, combining psychological therapy with antidepressants has been shown to be more effective in treating major depression than medication alone.
- **Technological and Surgical Methods:**
- **Frontal lobotomy** is surgically severing the connections between different regions of the brain.
- **Leucotomy** is the surgical destruction of brain tissues in the prefrontal cortex.
- **Focal Lesions:**
- **Focal lesions** are small areas of brain tissue that are surgically destroyed.
- These brain lesions are only used in some severe cases, when all other treatments have not worked to satisfaction.
- **Electroconvulsive Therapy:**
- **Electroconvulsive therapy (ECT)** involves passing an electrical current through the brain in order to induce a temporary seizure.
- This procedure was introduced in the 1930s and has been viewed negatively for much of its history, in part because in its early days it was generally unsafe and easily abused.
- Over the years, ECT techniques have improved dramatically. Patients' experiences are much less negative; they are now given sedatives and muscle relaxants to reduce the discomfort they may experience and to prevent injury related to the convulsions. ECT has gone from being viewed as a torturous "shock treatment" to a relatively safe procedure, although it is still reserved for the most severe cases of disorders such as depression and bipolar disorder. The side effects are relatively mild, typically consisting of some amnesia for events occurring around the time of the treatment.
- **Repetitive Transcranial Magnetic Stimulation:**
- **Repetitive transcranial magnetic stimulation (rTMS)** is a therapeutic technique in which a focal area of the brain is exposed to a powerful magnetic field across several different treatment sessions.
- The magnetic field can be used to stimulate or inhibit the activity of particular brain areas. Researchers have found that stimulating the left prefrontal cortex, which is typically associated with positive emotional experiences, improves some symptoms of depression. They have also found that reducing the activity of the right prefrontal cortex, which is associated with negative emotional experiences, has the same effect.
- rTMS does not have immediate effects. Treatment typically involves between 10 and 25 rTMS sessions, although some accelerated programs are being tested.
- rTMS has a number of advantages over other treatments. It does not involve anesthesia, induce a seizure, or produce cognitive impairments. Additionally, rTMS may hold considerable promise for reducing symptoms of other mental disorders, such as schizophrenia.
- **Deep Brain Stimulation:**
- **Deep brain stimulation (DBS)** is a technique that involves electrically stimulating specific regions of the brain.
- The procedure involves inserting thin electrode-tipped wires into the brain and carefully routing them to the targeted brain regions. A small battery connected to the wires is then inserted just beneath the skin surface.
- Unlike many of the drugs reviewed previously, DBS produces instantaneous results, and seems to work on even severe cases of depression that have been unresponsive to other treatments.

- Nevertheless, the technique does come with some risk, most obviously the risk of some internal bleeding and infection from the surgical insertion of the wires. DPS can also cause unintended behavioural effects; most are relatively benign and temporary experiences, such as spontaneous laughter and penile erections, but in some cases it may trigger troublesome states of depression or aggression.

Definitions:

- **Antianxiety drugs:** Affect the activity of gamma-aminobutyric acid (GABA), an inhibitory neurotransmitter that reduces neural activity.
- **Antidepressant drugs:** Medications designed to reduce symptoms of depression.
- **Antipsychotic drugs:** Generally used to treat symptoms of psychosis, including delusions, hallucinations, and severely disturbed or disorganized thought.
- **Atypical antipsychotics:** Drugs that are less likely to produce side effects including movement disorders (like tardive dyskinesia) that commonly occur with first-generation antipsychotics.
- **Aversive conditioning:** A behavioural technique that involves replacing a positive response to a stimulus with a negative response, typically by using punishment.
- **Behavioural therapy:** Therapies that attempt to directly address problem behaviours and the environmental factors that trigger them.
- **Bibliotherapy:** The use of self-help books and other reading materials as a form of therapy.
- **Blood–brain barrier:** A network of tightly packed cells that only allow specific types of substances to move from the bloodstream to the brain in order to protect delicate brain cells against harmful infections and other substances.
- **Client-centered therapy:** A humanistic therapy method that focuses on individuals' ability to solve their own problems and reach their full potential with the encouragement of the therapist.
- **Clinical psychologists:** Have obtained PhDs and are able to formally diagnose and treat mental health issues ranging from the everyday and mild to the chronic and severe.
- **Cognitive–behavioural therapy (CBT):** A form of therapy that consists of procedures such as cognitive restructuring, stress inoculation training, and exposing people to experiences they may have a tendency to avoid.
- **Community psychology:** An area of psychology that focuses on identifying how individuals' mental health is influenced by the community in which they live, and emphasizes community-level variables such as social programs, support networks, and community resource centres to help those with mental illness adjust to the challenges of everyday life.
- **Counselling psychologists:** Mental health professionals who typically work with people who need help with more common problems such as stress and coping; issues concerning identity, sexuality, and relationships; anxiety and depression; and developmental issues such as childhood trauma.
- **Decentring:** Occurs when a person is able to "step back" from their normal consciousness and examine themselves more objectively, as an observer.
- **Deep brain stimulation (DBS):** A technique that involves electrically stimulating specific regions of the brain.
- **Deinstitutionalization:** The movement of large numbers of psychiatric in-patients from their care facilities back into regular society.

- **Dream analysis:** A method of examining the details of a dream (the manifest content), in order to gain insight into the true meaning of the dream, the emotional, unconscious material that is being communicated symbolically (the latent content).
- **Electroconvulsive therapy (ECT):** Involves passing an electrical current through the brain in order to induce a temporary seizure.
- **Empirically supported treatments:** Treatments that have been tested and evaluated.
- **Focal lesions:** Small areas of brain tissue that are surgically destroyed.
- **Free association:** Clients are encouraged to talk or write without censoring their thoughts in any way.
- **Frontal lobotomy:** Surgically severing the connections between different regions of the brain.
- **Insight therapies:** A general term referring to therapy that involves dialogue between client and therapist for the purposes of gaining awareness and understanding of psychological problems and conflicts.
- **Leucotomy:** The surgical destruction of brain tissues in the pre-frontal cortex.
- **Lithium:** One of the first mood stabilizers to be prescribed regularly in psychiatry, and from the 1950s to the 1980s, was the standard drug treatment for depression and bipolar disorder.
- **Mindfulness-based cognitive therapy (MBCT):** Involves combining mindfulness meditation with standard cognitive–behavioural therapy tools.
- **Monoamine oxidase inhibitors (MAOIs):** Work by deactivating monoamine oxidase (MAO), an enzyme that breaks down serotonin, dopamine, and norepinephrine at the synaptic clefts of nerve cells.
- **Mood stabilizers:** Drugs used to prevent or reduce the severity of mood swings experienced by people with bipolar disorder.
- **Object relations therapy:** A variation of psychodynamic therapy that focuses on how early childhood experiences and emotional attachments influence later psychological functioning.
- **Phenomenological approach:** The therapist addresses the clients' feelings and thoughts as they unfold in the present moment, rather than looking for unconscious motives or dwelling in the past.
- **Psychiatrists:** Medical doctors who specialize in mental health and who are allowed to diagnose and treat mental disorders primarily through prescribing medications.
- **Psychodynamic therapy:** Forms of insight therapy that emphasize the need to discover and resolve unconscious conflicts.
- **Psychopharmacotherapy:** The use of drugs to attempt to manage or reduce clients' symptoms.
- **Psychotherapy:** Processes for resolving personal, emotional, behavioral, and social problems so as to improve well-being.
- **Psychotropic drugs:** Medications designed to alter psychological functioning.
- **Repetitive transcranial magnetic stimulation (rTMS):** A therapeutic technique in which a focal area of the brain is exposed to a powerful magnetic field across several different treatment sessions.
- **Residential treatment centres:** Housing facilities in which residents receive psychological therapy and life skills training with the explicit goal of helping residents become re-integrated into society.
- **Resistance:** Engaging in strategies that keep information from fully manifesting in conscious awareness.

- **Selective serotonin reuptake inhibitors (SSRIs):** A class of antidepressant drugs that block the reuptake of the neurotransmitter serotonin.
- **Systematic desensitization:** Gradual exposure to a feared stimulus or situation is coupled with relaxation training.
- **Systems approach:** An orientation that encourages therapists to see an individual's symptoms as being influenced by many different interacting systems.
- **Tardive dyskinesia:** A movement disorder involving involuntary movements and facial tics.
- **Therapeutic alliance:** The relationship between the therapist and the patient that emerges in therapy.
- **Transference:** A psychodynamic process whereby clients direct certain patterns or emotional experiences toward the therapist, rather than the original person involved in the experiences (e.g., their parents).
- **Tricyclic antidepressants:** Appear to work by blocking the reuptake of serotonin and norepinephrine.
- **Virtual reality exposure (VRE):** A treatment that uses graphical displays to create an experience in which the client seems to be immersed in an actual environment.