

## Psychology 105 Chapter 14 - Therapy

### Term Papers Due May 8

Final Exam covers Ch 13-16, Lectures & Lecture notes 4/10 - 5/8, and overarching concepts (correlation, experiments, scientific method)

### Final Exam Take-home essay

-Handed out May 8

-Due May 15 at Final Exam

### Final Exam in classroom

-May 15 6-8

-Room 606

If you want your final exam returned, turn it in with a self-stamped, self-addressed envelope.

Legal size: 75¢ postage

9" x 12": \$1.14 postage

Spring 2008

## Therapy for Psychological Disorders: Outline

- Nature of therapy for psychological disorders
- Some Psychological therapies
  - Behavioral therapies
  - Cognitive therapy
  - Cognitive-Behavioral therapy
- Biomedical therapies
  - Drug therapy
  - Psychosurgery
  - ECT and Magnetic therapy
- Supplemental Viewgraphs

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## Psychotherapy

- *Psychotherapy - a form of treatment:*
  - Based on a psychological framework
  - Used to help clients cope with and/or change their troublesome thoughts, emotions, and behaviors
  - Has the goal of altering behaviors, emotions and/or mental processes
  - Techniques mostly use dialog between patient and therapist
- In some forms of psychotherapy, emphasis is placed on understanding the origins of the troublesome thoughts, emotions and behaviors; in others, the focus is on coping or change

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## Why Do People Enter Psychotherapy?

- Clinical problems (anxiety, depression, bipolar disorder, OCD, phobias, anorexia, schizophrenia, drug dependency, personality disorders, dissociative disorders, bizarre or dysfunctional behaviors...)
  - Problems with relationships (marriage, shyness, roommates ...)
  - Problems with self or life (self-esteem, guilt, bereavement, school, work, anger, emotional control, unhappiness ...)
- Common theme: goal of altering behavior, emotions or mental processes*

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## Types of Therapists

- Clinical Psychologist (Ph.D., Psy.D.)
  - Counseling Psychologist (Ph.D., Psy.D., Ed.D.)
  - Psychiatrist (M.D.)
  - Psychoanalyst (M.D., Ph.D, Psy.D.)
  - Psychiatric Nurse Practitioner (B.S.N., M.A.N.)
  - Clinical Social Worker (aka psychiatric social worker)  
- MSW, Ph.D SW
  - Counselor (MA)
  - Pastoral Counselor (DD, MA)
- "Typical" degrees are shown; most also participate in at least a year of supervised therapy, often more.

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## Psychological Therapies

- *Psychological Therapies* attempt to modify *emotions, mental processes and behaviors* using psychologically-based techniques
- Most started out as a response to a particular set of problems
- Modern-day psychotherapists tend to be eclectic in their choice of techniques, selecting therapy techniques from different approaches, as appropriate for each client; talking therapies are often combined with drugs
- Some psychotherapeutic techniques are more effective than others for different types of mental disorders; research into empirically supported treatments is ongoing

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### Behavioral Therapies

- **Assumption:** Problems arise from failure to learn adaptive behavior or from learning of maladaptive behavior
- **Goal:** Therapies attempts to **change behaviors and accompanying emotional responses**
- **Techniques:** based on classical conditioning, operant conditioning, observational learning
- Most effective for disorders where **specific behaviors** can be targeted, e.g., phobias, anxiety disorders, addiction, PTSD, sexual dysfunction, social behaviors
- Little emphasis on origins of problems; focus is on changing behaviors in the present
- **Duration:** usually a few weeks to a few months

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### Behavioral Therapies - Classical Conditioning

- **Assumptions:** A response is learned when a formerly neutral stimulus (CS) is paired with an unconditioned stimulus (UCS) that leads to a conditioned response (CR) to the CS.
- Most frequently used to reduce fear (Conditioned Emotional Response)
- **Extinction technique: Exposure Therapy**
  - through repeated presentation of the CS without the US, extinguish the CR
  - Also operant extinction: escaping phobic stimulus is reinforced (negatively) by reduction of anxiety; forcing exposure removes negative reinforcement of escape/avoidance

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### Classical Conditioning - Counterconditioning

**Counterconditioning techniques:** techniques of training a new, **incompatible** response, to a CS, e.g., relaxation instead of fear (Wolpe) - uses →

- **Systematic Desensitization** - technique to extinguish original CR to CS and substitute a new CR
  - Therapist and client develop an **anxiety hierarchy** - list of situations that makes client anxious, ranging from mildly anxious to extremely anxious
  - Client learns progressive relaxation technique
  - Stimuli that produce more and more anxiety (hierarchy) are introduced, while client remains relaxed;
  - Technique substitutes a new **relaxation response** to the CS for the old fear/anxiety response to the CS
- **Exposure Therapy** is sometimes added to counterconditioning - uses real objects paired with relaxation in addition to imagined objects, to help extinguish the original fear response

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### Behavioral Therapies - Operant Conditioning

- **Technique:** Changing behaviors by **managing their consequences (contingency management)**
- Used to treat and manage behavior problems at home and in school, prisons, mental hospitals, with nonverbal patients, people with autism & schizophrenia
- **Fundamentals**
  - Analyze undesirable behavior to determine what is reinforcing (maintaining) it
  - Remove that reinforcer (extinction)
  - Reinforce other desired, incompatible behaviors
    - Sometimes shaping of new behaviors is necessary

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### Behavioral Therapies - Observational Learning

- **Technique:** People learn by **observing others** (Bandura) - uses observation as technique for training desirable behaviors
- **Participant modeling** (example)
  - therapist performs or shows video of desired behavior
  - client imitates desired behavior
  - therapist may reinforce new, imitated behavior, or give client additional opportunity to practice it
- **Duration** of behavioral therapies: A few weeks to a few months, sometimes more

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### Cognitive Therapies

- **Goal:** Changing maladaptive beliefs and thought patterns
- **Assumption:** abnormal behavior and emotional distress start with problems in **what** we think and **how** we think, leading to distressing emotions and behaviors
  - Emotional problems are not caused by external events; they are caused by how we **interpret** them
- **Techniques:**
  - Emphasizes rational thinking as key to treating mental disorder
  - Attempts to **change thought patterns and cognitions**
- Little emphasis on origins of problems; focus is on changing thinking patterns in the present.
- **Duration:** a few months

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### Beck's Cognitive Therapy

- Initially developed to treat depression, now used with many other disorders
- Theory is that depression is often a result of negative thought patterns and self-talk
- Therapist helps identify negative thoughts and alternative, positive ways of formulating ideas and beliefs
  - Re-evaluate the evidence for the belief
  - Reattribute blame to situational factors
  - Discuss alternative ways of viewing situation and self

### Beck's Cognitive Therapy

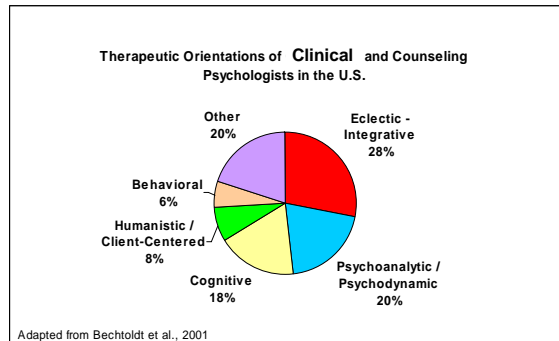
- Therapist acts as guide in helping client identify and modify irrational thoughts and beliefs:
  - Situation: Andrea didn't return my call
    - *people don't like talking to me*
    - + *maybe Andrea's little brother didn't give her the message*
  - Situation: I flunked my algebra test
    - *I'm too stupid to understand algebra*
    - + *Even the teacher said the algebra test was hard*
  - Situation: My mother screamed at me because I didn't pick up the dry cleaning
    - *My mother hates me - I can't do anything right*
    - + *My mother is having problems at work and gets frustrated easily; I can keep a list of what she asks me to do*

### Cognitive-Behavioral Therapy

- Combines techniques from cognitive and behavioral therapies
- **Goal:** modify dysfunctional behaviors and cognitions.
- **Assumptions:** that making an irrational self-statement can be cause of maladaptive behavior
- **Techniques:**
  - modify cognitive thought processes by replacing irrational thoughts with rational ones
  - modify behaviors by counterconditioning, exposure therapy, changing reinforcement contingencies or using observational learning

Video: [Cognitive-Behavioral therapy: a drug addict](#)

### Psychotherapy in the US



### Effectiveness of Psychological Therapies

Data from meta-analyses:

- Psychotherapy can lead to improvement for many disorders
- The type of psychotherapy seems to be less critical than the quality of the relationship between therapist and client
- Greatest improvement observed in first few months of therapy
- Common elements in successful therapy: therapeutic alliance, empathy, genuineness, warmth, help in organizing thoughts, and patient's expectation of improvement
- Many patients will improve without therapy, but those undergoing therapy are more likely to improve, improve more rapidly, less likely to experience recurrence of problem
- Therapy doesn't "cure," but it can teach coping responses and healthy thoughts and behaviors
- In some studies, psychotherapy plus medication is more effective than either psychotherapy or medication alone

### Biomedical Therapies

- Video Clip: [Early treatment of mental disorders](#)
- *Biomedical therapies operate under the medical model of identifying and treating a disease*
- *Seek to change the function or structure of the brain by administration of*
  - *Drugs*
  - *Surgery*
  - *Electrical or magnetic stimulation*

## Drug Therapy

Prior to discovery of antipsychotic drugs in 1950s, schizophrenic and other severely disturbed patients were treated essentially as prisoners, kept in seclusion and under control, often with strait jackets and restraints; treatments were ineffective

- 1<sup>st</sup> antipsychotic drug - chlorpromazine (Thorazine);
  - strong tranquilizer, dopamine antagonist
  - Reduces hallucinations, delusions
  - enabled schizophrenic patients to communicate, be calm, have fewer delusions and hallucinations, interact socially
  - has significant, serious side effects
- Antipsychotic drugs have nearly emptied mental hospitals ... and about 1/3 of homeless people in US suffer from severe mental disorders such as schizophrenia

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## Some Antipsychotic Drugs

Drug	Used to treat	Category	Mechanism	Effect	Common Side Effects
Thorazine (chlorpromazine)	Positive Schizophrenia	Antipsychotic (major tranquilizer)	Dopamine antagonist	Reduces hallucinations, delusions, agitation	Tardive dyskinesia*, dizziness
Halldol (halperidol)	Positive Schizophrenia	Antipsychotic (major tranquilizer)	Dopamine antagonist	Reduces hallucinations, delusions, agitation	Tardive dyskinesia, dizziness
Clozaril (clozapine)	Positive Schizophrenia sometimes Negative Schizophrenia	Antipsychotic (major tranquilizer)	Dopamine antagonist, anticholinergic, adrenergic, antihistaminic, antiserotonergic	Reduces hallucinations, delusions, agitation	Seizures, heart failure, increased REM sleep, reduced immunity
Zyprexa (olanzapine)	Schizophrenia Bipolar I (acute mixed or manic episodes)	Antipsychotic	dopamine and serotonin antagonist, other neurotransmitters also affected	Reduces hallucinations, delusions, agitation; stabilizes mood	Diabetes, weight gain, tardive dyskinesia, increased mortality in elderly

Ps: \*Tardive dyskinesia: repetitive, involuntary, purposeless movements

## Antidepressant Drugs

- Three major classes of antidepressant drugs for treating Unipolar depression:
  - **MAO Inhibitors** - suppress breakdown of monoamine-type neurotransmitters (norepinephrine, dopamine, serotonin) at synapse (Parnate, Nardil)
  - **Tricyclic antidepressants** - affect synaptic re-uptake of serotonin, norepinephrine (Elavil, Tofanil, Anafranil, Pamelor)
  - **SSRIs** - **S**elective **S**erotonin **R**euptake **I**nhibitors - slow down reuptake of serotonin at synapse (e.g. Prozac, Zoloft, Paxil, Celexa, Lexapro)
  - **SNRIs** - **S**erotonin & **N**orepinephrine **R**euptake **I**nhibitors - slow down reuptake of norepinephrine and serotonin at the synapse - Effexor, Cymbalta
  - Other common antidepressants: Wellbutrin, Zyban - work on multiple neurotransmitter systems

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## Antidepressants

- SSRIs and SNRIs are widely prescribed, but their use on people who are not severely depressed is controversial; they may also help alleviate social anxiety, OCD, Premenstrual Dysphoria Disorder and dysthymia
- All antidepressants can have unpleasant side effects, which vary from person to person; dry mouth, sexual dysfunction, insomnia, sleepiness, increased blood pressure (MAO inhibitors)
- Withdrawing from antidepressants can be unpleasant, with physical and psychological symptoms, if done too abruptly (physiological dependency, no addiction)
- Suicide and SSRIs: increased suicide ideation and rate of suicide attempts in patients on SSRIs after initiation or increased dose:
  - increased energy as depression starts to lift?
  - Overall, suicide rate decreases among depressed patients taking SSRIs, compared to no treatment

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## Mood Stabilizers

- For treating Bipolar Disorder
- **Lithium (Lithobid)** - dampens mood swings, particularly manic swings; toxic in high concentrations, so periodic blood tests needed; dry mouth, thirst, diarrhea, liver damage.
- **Depakote** - originally developed to treat epilepsy, more effective than Lithium with fewer side effects (weight gain, liver function problems, insomnia, nausea)
- **Tegretol** - effective, but potentially causes loss of red and white blood cells
- **Zyprexa** - fast acting and effective, but promotes significant weight gain, diabetes, increased mortality in elderly (and others?)

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## Antianxiety Drugs

- Used for treating anxiety-related disorders, insomnia, stress
  - **Benzodiazepines** ("minor tranquilizers" - Valium, Librium, Xanax, Ativan)
    - Increase GABA (inhibitory neurotransmitter), decrease brain activity in areas affective by anxiety
  - **Barbiturates** ("sleeping pills" - Seconal, Nembutal)
    - CNS depressants - induce relaxation and sleepiness
    - Modern sleeping pills (Ambien, Lunesta) less addictive, but still have addictive potential.
- Work by sedating user
- Can be physically and psychologically addicting; should be used for short-term or occasional treatment only
- Buspar - non-sedating antianxiety drug; low potential for addiction

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### Antianxiety drugs

- Not for use for ordinary anxiety and stress; other management techniques preferred
- Not to be taken for more than 1-2 weeks at a time (widely ignored)
- Abrupt withdrawal can cause physical withdrawal symptoms
- Impair ability to perform complex motor tasks, tasks requiring alertness
- Can lead to death when taken in combination with alcohol and each other
- SSRIs increasingly used to manage chronic anxiety

### Evaluation of Drug Therapies

- Cheaper in short term than psychotherapy; encouraged by "managed care."
- Several studies found that drugs in combination with psychotherapy appear to be more effective in long run than drugs alone (quicker recovery, fewer relapses)
- Many drug therapies (e.g., SSRI) appear only slightly more effective than placebo in clinical trials
- Antipsychotic drugs have made it possible for many people (especially schizophrenics) to be released from mental hospitals to receive outpatient treatment
  - downside is that patients must remain on drugs, but often don't outside of hospital or controlled setting

### Psychosurgery

- Trephination - oldest form of psychosurgery, involved cutting a hole in the skull to let the bad spirits out (or possibly relieve pressure following a head injury)
- Prefrontal Lobotomy - invented by Moniz in 1930s
  - Used 1930s - 1950s to treat agitated schizophrenics and people with severe compulsions or anxiety
  - Severs nerve connections between frontal lobes and deep brain, especially thalamus and hypothalamus
  - New personality emerged: less intense emotional arousal, but also loss of basic mental functioning: inability to plan ahead, indifference to others, childlike actions, emotional and intellectual flatness, no coherent sense of self (like Phineas Gage).
  - Moniz received a Nobel Prize in Medicine for his work
  - Advent of psychoactive drugs effectively ended era of lobotomies

### Electroconvulsive Therapy - ECT

- Used to treat severe depression that doesn't respond to drugs - treatment of last resort
- Application of voltage to head, induces seizure (sedative, muscle relaxant given)
- Results in lifting of depression
- Side effects
  - memory deficits (sometimes permanent)
  - temporary disorientation
- High rate of relapse [ECT Video](#)

#### Other Experimental Electrical Therapies for deep depression

- Vagal nerve stimulation - 'pacemaker' jolts vagus nerve every few minutes
- Deep Brain Stimulation - implanted electrode stimulates cortical region near limbic system that is overactive in depression

### TMS - Transcranial Magnetic Stimulation

- TMS - Transcranial Magnetic Stimulation
  - Pulsed magnetic fields, which alter neural response in targeted brain regions
  - Experimental therapy, still being researched in clinical trials
  - Initial results promising for reduction of depression, schizophrenic hallucinations

No reported seizures at low intensity, no memory or cognitive defects, minimal side effects?

### Supplementary Viewgraphs

#### Beginning Psychotherapy - Goals

- Identify the problem
- Identify cause of problem (not all therapies)
- Make a prognosis
- Select and agree on a form of treatment
- Identify specific goals for treatment outcome

### Conditions for Successful Therapy

- Trust in therapist
  - Seeing him or her as an ally
  - Trust in confidentiality
  - Confidence in therapist's training, expertise and credentials
  - Empathy
- Belief that therapy will help

### Therapy Settings

- Most therapy takes place in a therapist's office
- Patients that are severely depressed, manic, anxious or psychotic may be hospitalized
  - In the past, many such patients were consigned to long-term stays in mental institutions
  - With medication, now most are released and treated as outpatients, even psychotics

### Therapy Settings

- In-patient: mental hospital, mental ward
- Out-patient: foster home, group home, living with family
- Issues with out-patient treatment:
  - Keeping patients on medication
  - Lack of funding and community resources
  - Tracking and follow-up of patients
- Successes with out-patient treatment:
  - With good community support, fewer returns to mental hospital

### Cultural Issues

- **Western, individualistic:** mental disorder is seen as result of disease, genetics, distorted mental and emotional processes, stressors; treatment is mostly one-on-one
- **Collectivistic:** mental disorder is seen as result of disruption of relationship between individual and social/physical environment, including ancestors. Community participation often emphasized in therapy.
- Therapists need to understand and be sensitive to cultural background of clients, including values, history of discrimination, socialization, differences in culturally "acceptable" behaviors
- Therapists need to be sensitive to their own cultural biases

### Behavioral - Classical Conditioning

#### Aversion Therapy

- Pairs attractive stimulus (CS) with aversive stimulus (US) to condition a repulsion reaction to CS
- Negative responses to aversive stimuli become elicited by the CS
- Used for treatment of addiction
  - Alcohol (CS) → Relaxation (old CR)
  - Alcohol (CS) + Antabuse (US) → Nausea (UR)
  - Alcohol (CS) → Nausea (new CR)
- To avoid abuse, strictly regulated by state laws and association guidelines

### Behavioral - Operant Conditioning

#### Token Economies

- Tokens - secondary reinforcement - are used to strengthen desired behaviors, and can be exchanged for privileges, food, cigarettes, gifts, etc.
- Often used in schools, detox centers, mental institutions, prisons
- Enables immediate reward

### Cognitive: Albert Ellis' Rational-Emotive Behavior Therapy (REBT)

- Attacks client's irrational beliefs and behaviors. More directive and confrontational than most therapies.
- Assumptions: Individuals with mental disorders base their lives on unrealistic beliefs and unachievable goals: Shoulds and Musts.
  - "Don't should on yourself."
  - "Stop musterbating" (A. Ellis)

### Cognitive: REBT-2

Therapist points out how emotional reactions may spring from irrational beliefs about an event

- I must be loved by every significant person in my life...
- I need someone stronger than myself on whom to depend or rely...
- I must be able to solve every problem I confront ...  
... or else my life is awful

### Psychodynamic Therapies

- **Goal:** Seek to change a person's emotional responses and cognitions by helping clients gain insight into their thought processes and beliefs.
- **Assumptions:**
  - Events, responses, emotions from the past, especially infancy and childhood, influence client's current thoughts, emotions, behaviors.
  - Understanding and working through the past helps change thought processes and beliefs.
- **Techniques:** analysis of past, application of insights to present
- **Contrast**
  - Behavioral and Cognitive therapies: deal with the problem in the present, here and now
  - Psychodynamic therapies: seek to understand history, childhood origins of problem

### Psychodynamic Therapies - Psychoanalysis

- Originated by Freud
- **Assumption:** psychological tension is created by forbidden impulses and threatening memories locked in the unconscious, and is source of disordered thoughts and behaviors
- **Goal:** reveal and work through contents of unconscious mind, restructure personality, thereby freeing client from disordered thoughts and behaviors
- **Technique:** Exploring unconscious content, motivations and conflict, experiences of infancy and early childhood, and personality dynamics by use of free association, dream analysis, interpretation, analysis of transference and resistance; once revealed, insight can be gained and personality may be restructured
- **Duration:** May take years to complete
- Other psychodynamic therapies grew out of dissatisfaction with some of Freud's theories, function on adaptive functioning of ego

### Psychodynamic - Tools of Psychoanalysis

Tools of Psychoanalysis - for revealing contents of the Unconscious

- **Free association**
- **Dream analysis** - symbols
- **Overcoming resistance** - unconscious, anxiety-produced attempts by patient to subvert or hinder psychotherapy; signs that patient is near something significant; therapist works to overcome resistance
- **Transference** - projection of attributes of significant others (e.g. parents) onto therapist
- **Analysis of Transference** - analyzing and interpreting client's relationship with therapist

### Psychoanalysis and Psychodynamic Therapies

Problems with Psychoanalysis:

- Time consuming, takes several years, very expensive
- Requires highly motivated, highly verbal, introspective, intelligent, affluent clients
- No evidence that it works any better than other therapies

#### Other psychodynamic therapies

- focus on recurring themes, important relationships, gaining perspective and insight, less on overall personality change; most still focus on past

Modern psychoanalytic and psychodynamic approaches are more directive to reduce time and cost, and place more emphasis on social environment, relationships, later experiences, and self-concept

### Humanistic Therapies - Client Centered Therapy

- **Goal:** for clients to gain insight into their fundamental value and self-worth as human beings, realizing their full potential
- **Assumptions:**
  - People have tendency towards positive growth and self-actualization, which may be blocked by unhealthy environment, criticism from others, negative self evaluation
  - People have free will and can make conscious choices to change
  - Psychopathology arises from problems with one's self concept or incongruence between one's self concept and feedback from others
  - Patients have the keys to their own psychological health and happiness
- **Techniques:**
  - Therapist provides **genuineness, acceptance, unconditional positive regard, empathy**, to encourage clients to accept themselves, appreciate self-worth, foster personal growth
  - **Nondirective** - client takes the lead, with some guidance from therapist
  - Therapist uses **active listening, reflects back the client's feelings**
- Focuses mostly on present and future
- **Duration:** several months or more

### Family Counseling

- **Assumptions:** Family is a **system** of people whose lives are intertwined and who are interdependent on each other (emphasis on socio-cultural factors)
- **Goals:** develop cooperative problem solving rather than blaming.
- **Techniques:**
  - Analyze and modify relationships, communications and dynamics among members
  - Therapist often acts as mediator, translator, referee
- Focus is on solving present problems
- **Duration:** several weeks to several months

### Marriage Counseling, Couples Therapy

- **Assumptions:** vary - many relationships have problems due to poor communications (socio-cultural emphasis)
- **Goal:** improve couple's communication patterns and problem solving skills, and thence their relationship
- **Techniques:**
  - Focuses more on **process** of relationship than on individual personalities
  - Teach communication skills
    - active listening,
    - negotiating for a win-win in a dispute,
    - taking responsibility
      - for one's own thoughts and feelings,
      - for one's part in relationship
- Focus is primarily on solving present problems

### Group Therapies

- **Group Therapies** - Therapies that treat two or more clients who have similar problems at one time.
- **Assumptions:** social context allows people to interact others with similar problems and receive feedback on their own behaviors
- **Goals:** achieve therapeutic effect a lower cost, in less time
- **Techniques:** vary - use guided group interactions
- **Advantages:**
  - Less costly
  - Patients learn from each other
  - Reassuring to know you aren't alone
  - Often recommended for clients having problems with social behaviors and relationships
- Focus typically on solving present problems
- **Duration:** several weeks to several months

### Support and Self-Help Groups

- Give participants opportunity to meet others having or having gone through similar problems
- Support groups exist for almost any conceivable problem, live or on internet
- Often not run by professional therapist; sometimes have no leader, or peer-leader
- Alcoholics Anonymous is the oldest (~87,000 support groups worldwide); its 12-step program has been adopted by many other groups where behavioral change is the goal

### Drug Therapy - Stimulants

- Stimulants (amphetamines, Ritalin, Adderall) increase activity levels in brain; used to treat narcolepsy and ADD, ADHD
- Highly energizing; may interfere with normal sleep patterns
- Amphetamines are addictive, and long-term use can lead to psychotic episodes
- **Strattera** - for ADHD, new non-amphetamine, enhances norepinephrine levels in brain