Examine Biomedical, Individual, and Group Approaches to Treatment

Answers to questions about this heading are primarily addressed in other sections. I will provide a summary of the assumptions for each approach and direct you to appropriate studies. *All treatments probably affect neurotransmission and neural circuitry.* So it is up to the clinician and patient to decide which approach is the “best fit.”

It is important that you understand that all treatments probably do the same thing to the brain. The Goldapple study reviewed in section 7.13 documents that the prefrontal cortex–limbic system pathway is altered with both antidepressants and cognitive therapy. However, the way that the pathway is altered differs. The end result is the same though. Other treatment studies should document brain changes in patients as therapy progresses. Bandura writes that raising self-efficacy alters neurotransmitters. Acupuncture, exercise, and diet also alter neurotransmitters. But different treatments alter neurotransmitters at different rates. Drug therapies probably work the fastest, for example. Decisions about which treatment to use depend on the situation of the patient as well as the preference of the practitioner, which tend to relate to their training.

1. **Biomedical treatments.**
   - a. Western psychiatric biomedical treatments. Clinicians taking this approach view mental illnesses as diseases that are treated with drugs and/or, for example, electroconvulsive therapy. The treatments “work” if symptoms are reduced. Hecker and Thorpe (2005) warn that common errors in thinking about Western psychiatric treatments lie in several areas. First, it is wrong to assume that biomedical treatments are the only logical treatments for disorders with strong biological abnormalities. Second, it is wrong to assume that, if a biomedical treatment reduces symptoms, then psychological factors are not important. The opposite claim is also problematic, that psychological treatments reducing symptoms rule out the importance of biological factors. Taking a bidirectional approach should reduce making these thinking mistakes. Section 7.13 includes a discussion of drug treatments, including two experiments.
   - b. TCM. Refer to section 5.10 for the assumptions and philosophy of TCM along with experiments on acupuncture and depression. Section 7.15 includes an eclectic approach that involves Chinese herbal medicines.
   - c. Dietary treatments. Refer to section 3.8 for the assumptions and goals of dietary treatments for depression and an experiment.

2. **Individual treatments.** There are many types of individual treatment. I highlight cognitive therapy. Section 7.13 includes assumptions and goals of cognitive therapy and representative studies.

3. **Group treatments.** The IB syllabus lists therapies that are delivered to more than one person at a time as “group therapy.” Most therapies can be administered to more than one person at a time. This is how I define group therapy as separate from family therapy, where the group is the family. Even though I trained as a family therapist and recognize its effectiveness for treating many disorders, such as schizophrenia, bipolar disorder, and AN, I selected mindfulness-based cognitive therapy (MBCT) and group interpersonal therapy (IPT) as my examples for depression treatment. Section 7.13 includes a group MBCT and an IPT efficacy study for treating depression. Family therapy is not as effective in treating depression as other therapies, though research suggests that marital therapy is beneficial. In addition, there are so many types of family therapy that efficacy studies are very challenging to design.
Avoid making a sweeping claim that "family therapy" works. Identify which type is used, learn its assumptions and techniques, and evaluate relevant efficacy studies.

Paula Truax (2001) writes that group therapy is effective for treating depression as long as the client is enthusiastic about getting therapy in a group setting and has mild to moderate symptoms. Persons with severe depression, suicidal tendencies, or with other mental illness in addition to depression are usually excluded from samples so it is not known if group therapy is effective for them.

Truax's opinions are based on McDermott's 2001 meta-analysis on group depression treatment. The general results of the meta-analysis are as follows: 48 studies conducted between 1970 and 1998 were included in the study; the average age of study participants was 44; and 70% were women. All but one study used CT and/or behavioral therapy. Several findings are important. First, depressed persons receiving group psychotherapy improved significantly more than those getting no treatment. Second, there was no significant difference between the progress of depressed persons getting group psychotherapy and those getting individual treatment. Last, CT and psychodynamic therapy was compared in eight of the studies, and in all eight, depressed persons receiving group CT improved significantly over those getting psychodynamic group therapy.

It is no surprise to me that the therapies with good outcome research—meaning studied in experiments—results for individual therapy also have good outcome results when used in groups. The client's preference is probably the key to selecting the right treatment setting. Is the person enthusiastic about group therapy? If not, individual therapy is just as effective.

The group therapies supported with outcome research, such as CT and interpersonal therapy (IPT), appear more effective than group therapies supported with process research, meaning it relies on nonexperimental evidence, such as psychodynamic. Truax thinks that counselors should use therapies supported with outcome research, where it is easier to show that the therapy reduces depressive symptoms. Truax's opinion does not mean that process-oriented therapies are useless. However, the short-term nature of most outcome research is not appropriate for process-oriented therapies. Many therapies using outcome research seek to reduce symptoms, while the therapies using process research seek to restructure the personality.

**Note to the teacher**

If your students study treatments for AN, Google the free publication, *The Maudsley family-based treatment for adolescent anorexia nervosa*, by Daniel LeGrange. Pamela Keel (2005) writes that family-based treatments are probably the most effective ones for AN and the Maudsley program has some good results.

Hecker and Thorpe (2005) write that most all psychotherapies originated from psychoanalysis. As Freudian assumptions about the therapy process were challenged, one of the questions asked was, why not have others present during therapy? In addition, offering therapies in groups addresses a logistical concern for therapists. How can hardworking therapists deliver counseling to everyone needing it? At best, it is only possible to deliver individual therapy to a small number of persons at a time.

I expect to see more therapies conducted in groups in the future, as health-care dollars are limited.

Hecker and Thorpe claim that group counseling is beneficial for many reasons. These include acceptance by peers and belonging to a group, particularly for lonely persons living in
a depersonalized world. Any individual therapy can be administered in a group settings, but make sure that efficacy studies support the therapies both individually and in groups. Hecker and Thorpe identified 10 therapeutic factors that are common to all therapies offered in a group setting. These are “instilling hope, universality (the person is not the only one with the problem), imparting information, altruism (group members helping each other), corrective recapitulation of problems from a person’s original family, developing social skills, imitating others, emotional processing and cognitive reflection, interpersonal learning, and group cohesiveness” (p. 376).

7.13 Examine Biomedical, Individual, and Group Approaches to the Treatment of One Disorder

Taking a level of analysis point of view
A wide variety of treatments are available for depression. While I use the categories listed in the IB syllabus, treatments affect people at all three levels of analysis. First, treatments affect the brain. Second, treatments affect a person’s thinking. Last, Arthur Kleinman (2004) says that culture affects the perception and acceptance of treatments, even affecting how drugs alter the brain.

Any source claiming that a particular treatment is best for everyone with a set of symptoms is guilty of oversimplification. Treatment choice really depends on many factors, such as the severity of the symptoms, the cause of the problem if one can be identified, cultural beliefs, and the presence of other mental and/or physical health problems. No one treatment works for everyone. Some people do not respond to any treatment. Some people get better without any formal treatment. Helping professionals often use more than one treatment at the same time, called an eclectic, or combination, approach.

Note to the teacher
I included a lot of information in this section. The purpose of all this information is to show why evaluating treatments cannot be oversimplified and why students must tolerate uncertainty.

I suggest that students read the material and then practice summing up the main points. This way they can make useful generalizations about the material on the IB exam.

A cross-cultural list of depression treatments
Depression treatments include but are not limited to the following:

- **Biomedical treatments**
  - drug therapy
  - ECT
  - acupuncture
  - herbal medicine, such as St. John’s Wort
  - dietary change
  - exercise
  - vagus nerve stimulation
  - transcranial magnetic stimulation
**Individual treatments**

Biomedical treatments are given individually, but the IB syllabus uses the term “individual” to refer to treatments that attend to the specific needs of a person and involve one-on-one therapy sessions or community-based cultural treatment.

- cognitive therapy (CT)
- mindfulness-based cognitive therapy (MBCT)—a combination of meditation and CT
- interpersonal therapy (IPT)
- well-being therapy
- psychodynamic therapy
- humanistic therapy
- behavior therapy
- guided mastery therapy to raise self-efficacy
- faith healers, shamans, or other culture-based community treatments

**Group treatments**

- family therapy
- marital therapy
- group psychotherapy

Some treatments are more effective than others. The IB syllabus suggests that therapies should have a high degree of **efficacy**. The studies reviewed in this book meet this standard. After the next section that outlines some key questions we need to ask to determine whether or not treatments are successful, I discuss some treatments that represent a variety of opinions and highlight some newer research. I cannot review all available treatments, but my goal is to provide a more balanced, cross-cultural view of treatment than is found in most introductory texts.

The hardest thing about evaluating treatment is that no **efficacy study compares all available treatments**. So we cannot rank them in order of effectiveness. In fact, all the treatments reviewed in this book have evidence showing that they are effective. Researchers typically test a treatment against one or two others. Sometimes, drug studies only compare antidepressants to other antidepressants and maybe placebos and leave out talking therapies. Sometimes, study results conflict. Ask the question, to what extent are the samples and study conditions comparable? Always remain aware of which treatments are used for comparisons.

**Some things to think about when evaluating treatments**

The direction that treatments should have high efficacy requires that we tackle the question, what counts as evidence?

Each treatment has strengths and limitations. How do clinicians know if a treatment “works”? Is one better than another? **It might depend on whom you ask.**

Consider the following:

1. Treatment selection should reflect the **potential benefits versus potential risks** of the treatment.

2. Modern-day clinicians want **evidence-based treatments** from efficacy experiments. **But clinicians do not all value the same kind of evidence.** What does it mean for a treatment to “work”? Does it mean to reduce the symptoms? Does it mean to restructure the personality? Does it mean to change an underlying pattern of thinking? Does it mean to change an underlying physical problem that contributes to the symptoms? Does it
mean to do something to increase one’s resilience to the symptoms in the future? Does it mean that clients say they feel better?

3. The questions in #2 are controversial. Jeffrey Hecker and Geoffrey Thorpe (2005) divide research into two categories, outcome research and process research. Both categories reflect different research values and goals.

4. Outcome researchers seek evidence-based treatments with efficacy, meaning that an experiment shows that a treatment causes a change. Efficacy studies use randomized clinical trials (RCTs). There is currently a debate about the extent to which these RCTs must use experiments that are double-blind and placebo controlled, referred to as the gold standard in Western psychiatric treatments (and physical health treatments). Should all treatments have to meet this gold standard? Many drug efficacy studies adhere to this gold standard. Some talking therapies, such as cognitive therapy, can be tested in RCTs meeting the “gold standard,” sometimes testing cognitive therapy against drugs and placebo controls. But many drug or talking therapy efficacy studies use the RCT format without a placebo control. Clinicians using other types of talking therapies often view RCTs as restrictive. In addition, modern TCM practitioners use evidence-based medicine but do not favor placebo controls. The standard for outcome research is debated.

5. What place should process research have in modern evidence-based psychology? Any therapy that takes a long time to “work,” such as psychodynamic therapy, is best suited to process research. The goal of psychodynamic therapies is to restructure the personality and this takes a long time, perhaps two years. While some brief psychodynamic therapy is experimental in an attempt to work within the demands of the accepted gold standard, the brief duration violates its main goal. Process research is also best for humanistic therapy. Carl Rogers (1961) produced a large amount of process research showing that a person’s ideal self and actual self became more strongly correlated during therapy and after a follow-up period. Process research relies on correlation studies or case studies.

6. Sometimes clinicians do not follow the research and have an allegiance to the theories they studied in college. Should any treatment ever be used when there is no evidence (either outcome or process evidence) for its effectiveness?

7. Placebos are problematic for all depression treatments. However, new research may reduce the impact of placebos. This research is reviewed later in this section.

8. How do we know that any treatment works in the long run?

9. Why do some people get better without any formal treatment?

10. How does culture affect treatment?

11. To complicate the study of treatments, there are no studies that compare all available treatments. A study comparing all available treatments is not really practical.

12. The fact is that depression is increasing. Why are rates increasing when so many treatments are available?

There is no one answer to which kind of evidence is best. There are just opinions, each with advantages and disadvantages. The debate is important because what is accepted as evidence determines which treatments those who control health care monies offer.

No one in a modern society is against evidence-based practices. "What is seldom appreciated, however, is that evidence-based practice is a construct (i.e., an idea, abstraction, or theoretical entity) and thus must be operationalized (turned into something concrete)" (Weston
& Bradley, 2005, p. 266). There are many ways to operationalize the concept “evidence” and debates focus on the extent to which all evidence should meet the gold standard.

A gold standard of mental health treatment evidence was established in the mid 1990s that gave RCTs using placebo controls top status (Weston & Bradley, 2005). An APA task force and other research that followed it distinguished empirically supported outcome-based treatments from less structured longer-term process-based treatments process that many practicing psychotherapists used (Weston et al., 2004).

Long-term therapies do not fit neatly into this gold standard, which uses the U.S. Food and Drug Administration (FDA) model of RCTs. In addition, TCM treatments are evidence-based, but do not typically use a placebo control.

The gold standard reflects very specific values. A list is then generated of either “supported” and approved treatments, or “unsupported” or unapproved treatments (Weston & Bradley, 2005). The argument is that any other type of study contains too many confounding variables to be credible. Included in the argument is that clinicians need standardized diagnoses and manualized treatment plans where every clinician administers the therapy the same way (Weston et al., 2004).

Weston & Bradley believe that RCTs have their place, but are they the best way to test treatments for all disorders?

Strengths of RCTs include the following:

1. They establish clear cause and effect.
2. They use tightly defined samples to control for confounding variables.
3. They seek to keep harmful therapies from being used.
4. Mental health care is expensive. Is it harmful to society to spend money on treatments that are not supported by RCTs?

Disadvantages of using RCTs include the following:

1. Many therapy applications emerge from practice and are applied individually in accordance with an individual's personality. Weston and Bradley believe the best results from the most experienced therapists should be compared to other treatments in RCTs, but only after best practices are established in the field.
2. The samples used in RCTs are limited to patients with clearly defined single diagnoses. For example, in an RCT on depression, participants cannot be too severely depressed, cannot be suicidal, or have a second mental health problem, such as substance abuse. These homogeneous participants are rarely what clinicians encounter in practice.
3. Using a manualized approach to treatment does not guarantee that a clinician applies the treatment correctly and effectively.
4. How is improvement defined? A treatment can appear supported using one way of examining outcome and unsuccessful using other criteria. Symptoms reduced over the course of a brief trial are not the same thing as recovery over a longer time frame. Sometimes patients test as improved in brief RCTs but are not followed over the long term. When followed, there are mixed results. For example, depressed patients tend to show poorer progress over time than patients with panic disorder.

Do the advantages of using RCTs outweigh their limitations? Should long-term therapies and TCM not be used because they do not fit a particular research model?

There are outcome experiments investigating brief psychodynamic therapies. In addition, there are studies, though not all controlled, investigating the outcome of humanistic thera-
pies and longer-term psychodynamic therapies. For students studying psychodynamic and humanistic therapies, here is an overview of the research.

Short-term psychodynamic therapy (STPP) is studied in experiments but with no placebo control. Morn (2005) reviewed a meta-analysis of the effectiveness of 17 STPP experiments. These experiments randomly assigned participants to get STPP, another treatment, or a waiting list. In addition, all the therapists were trained to use a manualized approach, and data were collected so that a comparison could be made on client progress. The disorders treated were depression PTSD, AN, social phobia, and cocaine dependence. Results showed that those receiving STPP were better off than those receiving other treatments or on the waiting list. In addition, 95% of the STPP group was still better than those in the other two conditions after a 13-month follow-up period.

Short-term psychodynamic therapy was designed to fit into RCTs lasting from eight to about 16 weeks.

Hecker and Thorpe (2005) reviewed a meta-analysis from Elliott in 2002 about the effectiveness of humanistic therapy. Elliott concluded that persons getting humanistic therapies made large gains. These gains were stable even after a follow-up time of a year or more. The gains made during humanistic therapy were similar to the gains made in other types of therapy. However, any time that humanistic therapy was compared to cognitive therapy (CT), those getting CT made changes more rapidly. Elliott points out many criticisms of humanistic studies. Many of the studies were uncontrolled, the therapists did not use manuals, and many of the participants in the studies did not have a formal diagnosis. Elliott admitted that scientific minded persons examining his meta-analysis would not be happy.

Let's examine some treatments and see what must be considered.

Acupuncture, a biomedical treatment, is reviewed in section 5.10. The authors wrote that acupuncture could be used alone or in combination with drug therapy. Dietary change, a biomedical treatment, is included in section 3.8. Christensen (1990) wrote that persons using dietary treatments should be screened to make sure that diet is a factor in the depression.

This chapter includes discussions on drug therapy, exercise, cognitive therapy, group mindfulness-based cognitive therapy, and group interpersonal therapy. Section 7.14 examines eclectic treatments for depression.
Assessing Biomedical Treatment Effectiveness

What is the current effectiveness rate for antidepressants?

What does this mean for the argument of biochemical causes of depression?

Outline the new treatment being researched which targets the role of the hormone cortisol

Treatment #1: Biomedical treatment—antidepressant drugs

Western psychiatrists often prescribe antidepressants as the “first line of defense” against depression, though drugs are sometimes combined with psychotherapy. There is a long list of antidepressant medications. One group is the SSRIs, the selective serotonin reuptake inhibitors, such as Prozac. Other drugs affect more than one neurotransmitter. For example, the SNRIs, such as Cymbalta, affect serotonin and norepinephrine reuptake inhibitors. New drugs are undergoing efficacy testing all of the time.

A few words about the future of antidepressants

Leonard Rapp and colleagues (2001) write that future antidepressants may be different from today’s antidepressants. The first antidepressants became available about 50 years ago. The trend over time is to find drugs with fewer side effects that help people with depression fully recover.

Rapp and colleagues, as well as Sapolsky (2004) and Lambert (2008), say that many questions remain about what causes depression and what helps people get better. While many of the existing antidepressants target serotonin and/or norepinephrine, it is not really clear that these neurotransmitters explain depression. The fact that current antidepressant drugs are effective for only 56–60% of the patients using them is evidence that currently available antidepressants have not ended depression (Lambert, 2008). Please refer back to section 3.4 for Sapolsky’s discussion of depression and section 7.9 for Lambert’s views.

New drugs are being studied to treat depression all the time. Researchers were already investigating about 26 new substances in 2001 (Rapp et al., 2001). Two promising candidates are substance P and drugs targeting stress hormones.

Substance P is a neuropeptide, which acts like a neurotransmitter. Substance P is found in the brain, spinal cord tissue, and in other parts of the body. Substance P has a receptor in the brain called NK, is known to interact with serotonin, and coexists with norepinephrine. The theory is that blocking substance P receptors reduces depression. While initial tests were encouraging, a second round of tests was inconsistent. Substance P is used now to treat pain and the side effects of chemotherapy.

Another promising research area targets stress hormones. Depressed persons over-produce stress hormones. Samuel Barones (2003) describes the potential benefit of a drug that targets overactive stress systems. Pharmaceutical companies are trying to develop a drug that binds to corticotrophin releasing hormone (CRH) receptors. CRH is a hormone that stops the secretion of cortisol in normal persons. Depressed persons may have an abnormally functioning hypothalamus, which means that cortisol production continues when it should stop. Theoretically, a drug blocking CRH stimulation in the pituitary gland would lower cortisol levels in depressed persons. This idea is still under investigation.

Many other substances are being studied to treat depression (Rapp et al., 2001). One example is nitric oxide (NO). Recall that one study from section 3.4 about genetics and aggression investigated NO. Higher levels of NO are associated with lower aggression. This is particularly interesting because studies on meditation show that NO increases during the relaxation response in meditators (Dusek et al., 2006). However, NO only increases after extensive meditation training and practice. Just understand that any drug developed in the future to increase NO levels will give the brain a greater “punch” of NO than meditation, just as SSRIs gives the brain far more serotonin than a turkey sandwich (which contains tryptophan that the body converts into serotonin). We’ll see what happens with NO research.

Rapp and colleagues warn that theories about these new substances are still in their conceptual stages. Most of the efficacy trials on new drugs, which can take years to complete, are variations of those already in use. The most promising of the new drugs is substance P.

* Use this information when discussing the biological (hormone) cause of depression, especially in a response linking causation and treatment.
Effectiveness of an Eclectic Treatment

An efficacy study comparing antidepressants, cognitive therapy, and their combination

Martin Keller and colleagues (2008) designed an experiment to compare the effectiveness of the antidepressant nefazodone with CT or with a combination of the drug and CT. This experiment is also useful for section 7.14 about eclectic treatment approaches.

The aim of the study was to clarify some of the existing research inconsistencies. Published studies show that antidepressants have efficacy for treating depression in both the initial stage of treatment and the maintenance phase of treatment (after the symptoms go into remission). But it is less clear if combination treatments are really better than either a drug or CT alone.

Participants were 681 persons with depression from 12 different outpatient clinics as measured by the Hamilton Rating Scale for Depression. Participants were between the ages of 18 and 75. As typical of most efficacy studies, participants must be homogeneous for comparison purposes. This means that persons with certain characteristics are excluded. Some of the exclusion characteristics were high risk for suicide, the presence of a second mental health problem such as OCD, substance abuse, or schizophrenia, and previous failure to respond to nefazodone.

Participants were randomly assigned to receive nefazodone, CT, or a combination for 12 weeks. Progress was measured with the Hamilton Rating Scale. Twenty-four percent of all participants did not complete the full 12 weeks, with 14% of the drug group, 7% of the combination group, and 1% of the CT group withdrawing.

Results showed several things. First, participants in all three groups showed significant improvement. Second, persons in the drug alone group improved more rapidly than persons in the CT group during weeks 1 through 4. Third, by week 12, the efficacy for the drug alone (55% improvement) and for CT (52% improvement) was the same; it just took longer for the CT to have an impact. Last, the combination group showed the greatest change, an 85% improvement.

Keller and colleagues noted some limitations to their study. One, there was no placebo group. However, previous research showed that the drug was more effective than a placebo. Another limitation is the exclusion guidelines for the sample that restrict the study's generalizability. Last, while drug companies typically provide financial support for any drug efficacy study, you should know that Bristol-Myers Squibb, the makers of nefazodone, financially supported the experiment.


Aim:

Method:

Findings:

Evaluation:

What does this show about CT vs drug treatment?

Does it provide support for the effectiveness of an eclectic approach to treatment?
seen and treated by primary care physicians, most of the research targets secondary care provided by psychiatrists. Arroll and colleagues write that care for depressed persons by primary care physicians varies a great deal, probably because of doubts about the effectiveness of different drugs and psychotherapies. Arroll and colleagues state that up to 40% of depressed persons fail to respond to an antidepressant. Of those patients who do respond, few are considered cured. This meta-analysis sought to clarify the role of antidepressants in primary care practices.

The meta-analysis included all efficacy studies from numerous databases, such as MEDLINE, that met certain requirements. All of the studies selected for the meta-analysis were required to be RCTs that compared either a tricyclic antidepressant (TCA), an SSRI, or both, with a placebo. The meta-analysis targeted adults with depression and left out studies on adolescents and the elderly.

Arroll and colleagues located 12 studies that met the meta-analysis requirements. Some tested SSRIs against a placebo, some tested TCAs against a placebo, and some tested both SSRIs and TCAs against a placebo. The sample size of participants taking SSRIs (sertraline, escitalopram, or citalopram) was 890. The sample size of participants taking a TCA (dothiepin, amitriptyline, mianserin, or imipramine) was 596. The sample size of persons taking placebo was 1267. The participants included both mild cases and persons with major depression.

Results of the meta-analysis showed that both SSRIs and TCAs were significantly more effective than taking a placebo when prescribed by a primary care physician. The results suggest that antidepressants are effective for reducing a range of depressive symptoms.

These conclusions come with a warning that many of the studies available for the meta-analysis contain design flaws. The concerns include the following:

1. There were few available experiments on primary care treatment and most of those were small-scale studies. If primary care physicians treat most depression, why do most efficacy studies target persons treated in other settings? More research should be conducted about primary care treatment of depression.

2. All of the SSRIs versus placebo experiments had commercial ties.

3. Arroll noted that many of the reviewed studies contained selection biases and handled the withdrawal of participants (such as after experiencing side effects) incorrectly. When poor-quality studies are pooled with all the others, the positive treatments are exaggerated as much as 30%–50%.

4. The meta-analysis findings agreed with research suggesting that TCAs may take as long as two weeks to become effective and those patients might be able to take lower doses.

5. Depressed persons do not necessarily need to see a psychiatrist. However, more research should be conducted on the primary care doctor and depression treatment.

**Culture and antidepressants: The example of Japan**

What happens when antidepressants become popular in non-Western cultures? Thinking about the increasing use of antidepressants in Japan gives us a chance to consider both the positive and the negative consequences of exporting Western biomedical treatments to non-Western cultures.

Laurence Kirmayer (2002) wrote that 2001 marked a turning point in Japanese psychiatry. Before 2001, antidepressants were rarely used. After 2001, antidepressant use dramatically increased. Its popularity may continue to grow in a globalizing world.

How can we explain the surge of interest in antidepressants? Might the use of antidepressants help more people get the treatment they need? Or might taking antidepressant drugs
conflict with the values of traditional Japanese culture? What are the implications of answers to these questions?

Kirmayer writes that Japan’s case gives us a chance to really think through some “cultural assumptions about the nature of depression, emotion, personality, and the good life” (p. 296).

Antidepressant medications, particularly the SSRIs, are popular Western biomedical treatments. Japan has a tradition of using drug treatments for physical and mental health other than antidepressants. In addition, Japan offers more mental health services than most Asian countries. So the problem is not a reluctance to use biomedical treatments. The reluctance is specific to antidepressants.

Antidepressants had a small market in Japan up until 2001. After 2001, SSRI use increased to the equivalent of 25 million U.S. dollars every month.

Depression symptoms are a problem in Japan. So why did it take so long for antidepressant drugs to become popular? Kirmayer identifies many factors.

1. The history of Japanese psychiatry
2. Japanese persons tend to view distress in terms of psychosomatic symptoms.
3. The Japanese government requires new efficacy trials using Japanese samples before any drug is adopted for use.
4. Cultural variations in the social meaningfulness of a group of symptoms
5. The Japanese view of the self

Let’s talk a little about each.

Historically, severe psychotic disorders were the focus of Japanese psychiatry and treatment took place in hospital settings. This emphasis probably contributed to the stigma of mental illness throughout Japan.

Perhaps to reduce stigmatization and also to conform to socially defined perceptions of distress in Japan (these perceptions are socially meaningful and reified by the group), Japanese persons with “depressive” symptoms preferred to see internal medicine doctors for psychosomatic complaints. Although it is estimated that about 20% of patients seen by clinicians are “depressed,” Japanese doctors have traditionally prescribed antianxiety drugs or just told patients to “relax.”

Regulatory bodies in Japan are another limiting factor. Government policy requires new efficacy trials on Japanese samples showing that the drug is effective for use with Japanese patients. Remember that culture affects responses to drug treatments, so it makes sense to require new efficacy testing. These efficacy trials are in addition to those already conducted in the West. RCTs are hard to conduct in Japan for many reasons, such as the stigma of participation. In addition, it is costly to run efficacy trials, so those running them must perceive an economic benefit from marketing the drug in Japan. Both Zoloft and Buspar were not accepted for use in Japan because efficacy trials were unsuccessful. The negative results could have been a real failure of the drug to work in Japanese persons or problems with the samples. But since efficacy trials in Japan involve the use of many clinics and include both mild and severe cases, positive effects of the drugs might not be detected. The result is that the drugs are not as widely available as they are in the West.

Between traditions of doctoring in Japan, the problem of stigma, the use of psychosomatic medicine, and the difficulty of running efficacy trials, it is not surprising that antidepressant use in Japan got off to a slow start.

But despite these factors, Kirmayer thinks that cultural variation is the key to understanding the reluctance of the Japanese to use antidepressants. Each culture has a set of socially meaningful values that defines groups of symptoms. The historical practice of treating “depression” as
anxiety reflects values of traditional Japanese culture and influences how a set of symptoms are classified by physicians.

The DSM-IV and the ICD-10 reflect socially meaningful ways of classifying a set of symptoms in the West. But is the category “major depression” meaningful to the Japanese? While new and younger Japanese psychiatrists are now promoting antidepressants, cultural values still keep them from widespread use in psychosomatic medicine. Kirmayer quoted Kobayakama Toshi-Hiro, an important psychopharmacologist. Toshi-Hiro made several important points. First, mental disease is less prevalent in the Japanese than in Westerners, perhaps because Westerners are more preoccupied with themselves. This is in contrast with the Japanese, who focus on interrelatedness. Since Western behavior is already exaggerated, the use of a drug that heightens a person’s individual performance is accepted. The Japanese do not want their behavior exaggerated, so sedative drugs are more popular.

Perhaps these comments from a Japanese psychopharmacologist help situate what is socially meaningful for Japanese persons. It challenges the notion that diagnosing and treating depression can be universal.

Is the reluctance to use antidepressants in Japan simply their failure to adapt to modern times? Or is the reluctance an expression of traditional culture?

Personality differs according to culture and SSRIs modify a person’s personality.

Do the Japanese think it is acceptable to enhance one’s individual personality? The desired effects of taking an antidepressant are not the same in Japan as they are in the West. Before taking an SSRI, a person in the West may be sad and say, “I am depressed,” meaning the individual is generally unhappy. Antidepressants make a person more outgoing and extroverted, an individualist view of the self. But in Japan, a collectivist culture, calmness, containment, and focusing on the larger social group are valued. Taking an SSRI might make the individual stand out, something not valued in Japan. In addition, the Japanese tend to view mood disturbance as social or moral problems. There is not even a word in Japanese that is the exact equivalent of depression. There are related Japanese expressions, such as yuruse, meaning grief, but it also refers to gloominess of spirits and weather.

Kirmayer gives a second example from Sri Lanka. Many persons in Sri Lanka meet the Western diagnostic category of depression. But their Buddhist point of view keeps them from being disabled. To a Buddhist, “depressive symptoms” show one’s wisdom. Antidepressants interfere with the meditations that transform the self to the ultimate goal of enlightenment.

Kirmayer writes that antidepressants alter one’s narrative construction of the self, the self-talk that makes meaning of human lives, in three ways. First, taking a drug often energizes an individual, and narratives reflect this enhancement. Second, one’s attributions have a new target after taking antidepressants; the drug is responsible for behavior. Third, taking a drug may make a person less empathetic to others, changing the very nature of social relationships.

Kirmayer concludes that the consequences are great for a culture when individuals take antidepressants. As Western psychiatry influences non-Western cultures more and more, perhaps we should take some time and think about the consequences. For example, the WHO Nations for Mental Health Program promotes biomedical treatments throughout the world. This program is supported by Eli Lilly and other drug companies. To what extent is the promotion of biomedicine beneficial?

Arthur Kleinman (2004) also asks questions about exporting Western biomedical treatments and writes, “The professional culture, driven by the political economy of the pharmaceutical industry, may represent the leading edge of a worldwide shift in norms” p. 309. The shift in norms comes with both benefits and consequences.

We don’t want to keep people from getting help when needed, but do cultural considerations make taking antidepressants less of a clear solution?
The problem of placebos

**Placebos** complicate depression research. Participants in antidepressant efficacy trials respond positively to placebos almost as often as they respond positively to antidepressants.

While high placebo responses to depression treatments currently complicate treatment outcome research evaluation, new research may reduce those concerns.

Two themes emerge from new research on placebos.

1. Placebos are assumed by many, but not all, Western physicians to be useful in R.C.T.s of mental health treatments. A placebo is defined in R.C.T.s as an inactive substance, something that has no effect on the patient. Placebos keep the experiments double-blind. **But recent research suggests that placebos are not inert substances**. What does this mean for the interpretation of research using placebo controls?

2. If placebos are not inert substances, is there a way to control for placebo effects so they do not confound R.C.T.s? At the same time, might controlling for placebo effects enhance the ethics of including placebo controls in R.C.T.s?

Let's explore the first problem.

Donald Price and colleagues (2008) write that a shift has occurred in our understanding of placebos. *The older view that placebo are inert substances comes with a paradox; how can an inert substance have an effect?*

Scientists now think that the placebo effect is a real effect resulting from the “stimulation of an active therapy within a psychosocial context” (Price et al., 2008, p. 2.3). Many environmental, psychosocial, cognitive, and emotional factors, as well as the perception of somatic sensations, affect the expectations that may lead to a placebo effect.

Environmental and psychosocial factors include classical conditioning as well as the verbal and nonverbal behaviors of the person running the study. For example, research investigating placebos and pain medications use an open-hidden method to study researcher verbal and nonverbal behaviors. In these studies, participants either receive a drug openly from a person or in the hidden condition from a computerized dispenser. Those in the open condition respond better to the pain medication than those receiving it from the machine. This is one way to see the placebo effect in pain medications. In other research, those told that the drug was a potent painkiller responded more positively to the drug than those told either nothing or that it might or might not be effective.

Cognitive and emotional factors influencing the placebo effect include expectancy combined with emotions related to the desire to change or a combination of expectancy and memories of the effectiveness of past treatments.

Somatic perceptions also play a role. Some studies ask participants if they think they are getting the real treatment or a placebo. Participants who think they are getting the real drug report more positive physical changes.

Positive responses experienced by study participants are not just figments of the mind. Actual brain changes accompany the reported positive changes. Here is **neuroplasticity** at work again.

To sum up, real biological and cognitive changes occur during a placebo response.

*If placebo control groups are such a problem, why not just stop using them?* There are even professionals who argue that placebo groups are unethical. But Price and colleagues feel it is essential to drug efficacy trials that changes in the drug condition be significantly different from changes in placebo controls and a no-treatment group (which many have argued is also unethical). Without a no-treatment group, it is impossible to see a true placebo effect.

How do new findings about placebos affect the questions raised in problem #2?
Advances in neuroimaging now allow scientists to see the brain at work when responding to a placebo. It may be possible to screen study participants for the likelihood that they are placebo responders. Being a placebo responder might become a subject variable that is controlled in future research. This is potentially advantageous for future antidepressant efficacy studies because, right now, the evidence is not clearly in the favor of antidepressants.

Michael Craig Miller (2003) reviewed and commented on placebos in the Harvard Mental Health Letter. Studies over time report better results for placebo groups than for groups taking the drugs, but perhaps this is because of sampling limitations. Early antidepressant research primarily used participants with severe symptoms; those more likely to respond to the real drug. But now persons with severe symptoms are diagnosed earlier and are less likely to be referred to efficacy studies. More recent studies use patients with milder symptoms, those more likely to respond to influences, such as hope. Miller warns not to overvalue currently available antidepressants, but they are probably very effective for at least a minority of patients.

Is it possible to create profiles of placebo responders, non-placebo responders, medication responders, and medication nonresponders? And if so, might this help identify the real effects of a drug in clinical efficacy studies? Andrew Leuchter (2002, 2004) says yes to both questions.

In a neuroimaging study about the brain and placebos, 51 participants were randomly assigned to one of two placebo controlled RCTs testing the effectiveness of fluoxetine (the SSRI Prozac) or venlafaxine (the SNRI Effexor) for nine weeks (Leuchter et al., 2002). Cor-dance, or data about regional brain activity, was collected by qualitative electroencephalography (QEEG) before the start of the study and at the end of one-, two-, four-, and eight-week periods. At the end of the study, 51% of persons getting the antidepressants and 38% getting the placebos responded positively. It is interesting that the drug and placebo responders could not be distinguished by the results of the Hamilton Rating Scale for Depression. But QEEG results showed great differences in the prefrontal cordance between the groups. The placebo responders showed an increase in prefrontal cordance, very different from even their baseline brain activity, and the medication responders showed a decrease in prefrontal cordance.

Leuchter and colleagues believed the results showed two things. First, the placebo response is really an active treatment rather than an inactive treatment. Second, the placebo response is really very different from the drug response. This is of particular interest to researchers because it is reported that 50%–75% of the positive response in antidepressant efficacy studies is because of the placebo effect. Leuchter’s results suggest that placebo responders are entirely different from drug responders. Replication was suggested using different samples.

In an attempt to further identify distinguishing characteristics between placebo responders and drug responders, Leuchter and colleagues (2004) analyzed data on the same participants. Placebo responders can possibly be identified before the start of an efficacy study. Placebo responders start off with lower cordance in the frontocentral brain region and have somewhat faster cognitive processing than placebo nonresponders, meaning that the depressive symptoms affected their cognitive processing less than placebo nonresponders. Again, the authors suggest replication. Since the medication responders in the study may have responded positively because of things other than the medication, including a placebo response not measured, the study results are tentative.

Perhaps in the near future scientists will use this information to know more about the mechanisms by which drugs and placebos work, something Lambert, Sapolsky, and others
say need clarification. In addition, for those who consider placebo controls to be unethical, perhaps future drug trials will help screen participants for studies and also help to understand what is happening to those patients responding to placebos.

**Treatment #2: Biomedical treatment—exercise**

Exercise may be a good choice for certain types of patients. Exercise probably affects the brain by releasing serotonin and endorphins, though more research needs to confirm the exact effects.

Michael Babyak and colleagues (2000) conducted an experiment and found that exercise was as effective as drug treatments and combination treatments of drugs and exercise in patients with major depression. A 10-month follow-up found that those continuing to exercise had fewer depression relapses than those taking medication.

Through advertisements, researchers recruited 156 experiment participants interested in exercise. Subjects were aged 50 and older and met specific guidelines. For example, they were not taking medication at the time of the study, were not substance abusers, were not suicidal, and were not in psychotherapy that started in the year prior to the study.

All met the DSM-IV requirements for major depression as determined by the Hamilton Rating Scale for Depression and the Beck Depression Inventory.

Participants were randomly assigned to one of three groups. The first group received three aerobic exercise sessions each week for 16 weeks. The second group took Zoloft, an SSRI. The third group took both the exercise program and Zoloft.

Patient depression symptoms were measured at the start of treatment, at the end of the 16-week period, and six months after the end of the experiment, for a total of 16 months.

All three groups showed similar remission rates at the end of the 16-week period, 60.4% for the exercise group, 65.5% for the medication group, and 68.8% for the combined group. But the most interesting results were those after six months. Follow-up was possible with 133 of the original 156 participants. The Beck Depression Inventory (self-report) was used to measure follow-up success. After the full 10-month period, those who exercised reported lower depression rates than those taking medication, even those taking medication along with an aerobic program.

The authors conclude that exercise is a valuable depression treatment. The finding that those exercising had fewer relapses than those in the combination group was unexpected. The researchers considered several reasons for the success of the exercise group. These reasons are related to the sample. In initial interviews, people who responded to study advertisements were more likely to show negative attitudes toward drug treatments. Some of the participants in the combined group reported that they thought the drug interfered with the exercise. It is possible that exercise increases one’s sense of high personal self-efficacy for mastering a task, and taking a drug at the same time as exercising interferes with setting priorities. Expectations for improvement were also likely from the beginning of the study, as participants were motivated enough to respond to an advertisement for an exercise experiment.

Setting manageable priorities is an essential feature of high self-efficacy. The exercise study may be related to social learning factors of depression and the role that increased self-efficacy plays in treatment.

Babyak and colleagues write that it is impossible to infer that continued exercise between the end of the original 16 weeks and the end of the six-month follow-up period was the cause of continued depression relief. Participants may have continued to exercise because they were less depressed. The authors speculate that “these results suggest a potential
reciprocal relationship between exercise and depression: feeling less depressed may make it more likely that patients will continue to exercise, and continuing to exercise makes it less likely that the patient will suffer a return of depression symptoms” (p. 637).

Treatment #3: Individual treatment—cognitive therapy

**Assumptions and goals of cognitive therapy**

Aaron Beck, the founder of cognitive therapy (CT), writes that our thoughts are primarily responsible for how we feel and behave (Engler, 2002). Negative cognitive style is a risk factor for developing depressive symptoms. The following explanation is from Barbara Engler’s text.

The cognitive triad—thoughts about the self, the world, and the future—are the result of cognitive schemas. Schemas develop in the context of our experiences and often mirror the schemas of significant others, particularly parents. These schemas become the individual rules and beliefs that guide behavior.

Schemas of depressed persons are negative and pessimistic. Beck divides thoughts into automatic or controlled. Automatic beliefs occur just below one’s surface awareness and are more difficult to change than conscious controlled thoughts. Destructive self-monologues are examples of automatic thoughts in depressed persons, such as “I am either a total failure or a complete success.”

The automatic thoughts of depressed people are full of cognitive distortions. One kind of distortion magnifies problems, making things worse than they are in reality. An example of magnification is “anything less than an A on a test is a failure; I will never go to college and have a good future.” Another cognitive distortion is dichotomous thinking, or thinking in extremes. An example of dichotomous thinking is “I am either a total failure or a complete success.”

Negative and pessimistic cognitive distortions become part of a depressed person’s cognitive triad. A depressed person believes that he/she is incapable of managing life, that the world is difficult and harsh, and views the future with pessimism.

Cognitive therapy attempts to bring negative automatic thoughts to conscious awareness. The therapy focuses on present perceptions of events and the automatic distortions that are applied to the events. The therapist challenges the client to examine the validity of automatic thoughts.

**Is CT effective?**

A large body of research shows that CT is beneficial for persons with depression and is cross-culturally applicable. CT is the most studied psychotherapy and is frequently compared to drug treatments.

Specific themes emerge from studying CT. First, CT appears to make important changes in the brain. Second, CT is often as effective as or better than drug treatments and placebos. Third, CT works well with mild to moderate cases of depression. Fourth, some believe that CT is also effective with severe cases, though this finding is more controversial. Fifth, CT is frequently used in combination with drug therapy. Last, CT is relevant cross-culturally. Surveys and case studies investigate CT cross-culturally, sometimes as part of eclectic treatments.

Examine research with a critical eye. Here are some things to consider. Subject characteristics vary by study and population validity is limited. Individual study designs also limit ecological validity. Do the researchers represent particular biases? For example, do re-
searchers have ties to drug companies, or are they associated with the creation of a particular therapy?

The following are two different kinds of studies on the efficacy of CT. The first examines important brain changes after getting CT. The second examines the effectiveness of CT for severe depression that also illustrates how to use a placebo control ethically. However, the study does not have a no-treatment group, probably for ethical reasons.

I conclude with a brief discussion about cross-cultural applications of CT, citing a survey on Thai individuals receiving CT and a case study about a Native American Indian.

**Study #1: A PET scan study about brain changes during CT**

Kimberly Goldapple and colleagues (2004) used PET scans to document brain activity before and after 15 to 20 sessions of CT therapy over seven weeks in 14 patients. This is a small sample and there is no control group. PET scans from a previous study of patients taking Paxil were used for comparison. This study is also useful for section 3.7 on how the environment affects physiology.

Patients were measured as responders or nonresponders to therapy by the Beck Depression Inventory and the Hamilton Rating Scale for Depression. There were significant brain changes from baseline data of participants after therapy. The authors assumed that getting CT caused the brain changes. The authors recognized that future research needed experiments where patients were randomly assigned to CT, drugs, placebos, and no treatment to confirm the results.

Participants were recruited through newspaper advertisements in Toronto, Canada. Participants met the DSM-IV criteria for major depression. Patients were screened to ensure that they had, for example, no substance abuse problems or antidepressant treatment within the month prior to the study.

PET scans measured changes in glucose metabolism in specific brain regions. The authors concluded that "each treatment targets different primary sites with differential top-down and bottom-up effects—medial frontal and cingulate cortices with cognitive therapy and limbic and subcortical regions with pharmacology, both resulting in a net change in critical prefrontal—hippocampal pathways" (p. 39). Both CT and drugs affect a complex system of brain parts rather than one specific brain area, and the changes are the same after treatment. If you receive CT, the brain changes start in the cortex and work their way down to the limbic system (top-down). If you take antidepressants, the brain changes start at the subcortical level and work their way up to the cortex (bottom-up).

This is valuable evidence; CT has the same net effect on the brain as drug therapies.

The authors found no significant difference between the pattern of brain changes in milder and in severe cases. As the sample is small, this finding needs replication.

It is important to note that the brain changes made during CT are different from the brain changes made in previous studies investigating placebo controls in drug efficacy studies. Research shows that Prozac placebos mimic brain changes made with the real drug. The authors predict that placebos will mimic the effects in the brain of any treatment with which they are compared. Studies should investigate this prediction and include a no-treatment group for comparison, though using a no-treatment group raises some ethical concerns.

The authors believe there could be a selection bias in their study. Some of the participants reported previous negative experiences with drug therapy. Might these people be more motivated to be part of a CT study, and might their motivation affect the brain changes?
It makes sense that all therapies affect the brain and the evidence is growing. This is why Goldapple's research is so important; it is one of the first to document the process.

Study #2: Is CT effective for severely depressed persons?

Robert DeRubeis and colleagues (2005) compared CT to antidepressant drugs in a randomized placebo controlled experiment. The sample included both moderately and severely depressed patients.

Previous literature suggests that drug therapy is the most used therapy in the United States to treat severe depression. But is this the best practice? Outcome research shows that CT is effective with mild and moderate cases. Is it also effective for severe cases?

An early experiment showed that CT was more effective than drug treatments, even in severe cases. But several criticisms limit the interpretation of that study. First, Aaron Beck was one of the researchers and his interests may have biased the study. Second, patients received low doses of the drugs, which were tapered off before the final results were tallied. Third, a study funded by the National Institute of Mental Health (NIMH) found, among other things, that the skill of cognitive therapists was not equal at all of the research sites, perhaps influencing patient progress. The NIMH position is that drugs are the most effective treatment for severe depression. The NIMH position is very influential in practice.

The varied findings about treating severe depression needed clarification.

The aim of the DeRubeis experiment was to see how best to treat severe depression in a randomized placebo controlled experiment. DeRubeis said that many other researchers supported Beck's findings, contrary to the NIMH position.

The 240 participants recruited from media advertisements who met DSM-IV diagnoses for depression by clinical interviews and the Hamilton Rating Scale were randomly assigned to one of three groups. One group received Paxil (n=120), one group was assigned a drug placebo (n=60), and one group was assigned CT (n=60). Treatment was given for 16 weeks for the Paxil and CT groups, but for ethical reasons, placebo treatment ended after eight weeks, long enough to see differences between it and Paxil. For the first eight weeks, double-blind procedures were used with the Paxil and drug placebo groups. At the end of eight weeks, placebo patients were offered other treatment at no cost, and those taking but not responding to Paxil had their treatment supplemented with other medications.

The experiment was administered at two sites, Vanderbilt University and the University of Pennsylvania. Participants were primarily middle-aged, white, and had some college education. Males dominated the Pennsylvania sample. "Overall, but especially at Vanderbilt, the sample was highly chronic or recurrent, with early onsets and a substantial rate of hospitalization" (p. 412). This means that most of the participants had severe symptoms. Many of the patients also had other mental disorders, something that usually excludes participants from efficacy studies. The authors believed that having another disorder would not affect treatment response.

Data on symptom reduction were gathered through the Hamilton Rating Scale at the end of eight weeks for all three treatments and then 16 weeks for CT and Paxil. At the end of eight weeks, 50% of the Paxil group, 43% of the CT group, and 25% of the placebo group showed positive symptom reduction. At the end of 16 weeks, there was no overall significant difference between the responses of those receiving Paxil and those receiving CT when data from both sites were combined. However, the results differed between the sites. There was no significant difference at the Pennsylvania site and a significant difference at the Vanderbilt site.

The authors concluded that both moderate and severe cases responded better to both drugs and CT than a placebo. The different findings from the Vanderbilt and Pennsylvania sites were probably related to therapist skill rather than characteristics of the sample. The re-
sults of this experiment do not support American Psychological Association and NIMH recommendations that severely depressed patients need drug treatments. The authors conclude that when administered by a qualified therapist, CT is just as effective as drugs for severely depressed patients.

**Culture and CT for depression**

James Scorzelli (2001) suggests that CT is applicable cross-culturally as long as therapists take both the etics of counseling theory and eremic features of a person’s cultural context into account. Etics refer to aspects of a therapy that are universally beneficial, such as the way that a therapist establishes a relationship with a client. Ereric approaches apply the therapy in culturally meaningful ways, such as using a culture’s specific way of problem solving in counseling sessions.

An opportunity sample of 58 school and rehabilitation counselors in Thailand responded to survey questions about perceptions of using cognitive therapy in Thailand. Participants also wrote down the reasons for their responses. Results showed that 93.1% of the sample said that cognitive approaches to counseling did not conflict with their beliefs. Buddhist beliefs that the mind is the creator of problems were a theme that emerged in a content analysis of participant reasoning. Religion was not the primary reason given in the 6.9% who said that cognitive therapy conflicted with cultural beliefs. Instead, they said things such as “Thai families decide for the person.”

Scorzelli writes that perceptions about the cross-cultural applicability of CT may vary considerably. The results of Scorzelli’s 1994 survey of psychology and special education graduate students from India shows some variations. The students said that CT conflicted with cultural values; however, there were no consistent themes to their reasons.

Scorzelli believes that the backgrounds of the two research groups probably account for the different opinions. The Thai participants were all professional counselors and the Indian participants were students. Religion also varied. The Thai participants were primarily Buddhists and the Indian participants were primarily Hindu.

The results are not generalizable to all Thai therapists or Indian students because the samples are nonrepresentative.

Scorzelli warns therapists to consider cultural values of clients but to avoid applying presumed group norms to individuals.

Case studies also support cross-cultural applications of CT. Maureen Kenny (2006) documented the case of Andrea, a 37-year-old Native American (Seminole) Indian. Andrea’s treatment was eclectic, involving CT, antidepressants, Alcoholics Anonymous (AA), client-centered therapy, and behavioral therapy. Andrea’s case is also useful for section 7.14 on eclectic treatments. While Andrea’s combination treatment included client-centered and behavioral therapies, they supplemented CT, antidepressants, and AA (Andrea also had substance-abuse problems). Sensitivity to Andrea’s cultural background was essential throughout the therapy.

Andrea’s case adds something valuable to the scant research available on treating depressive symptoms in Native American Indians.

Andrea had many stressors, such as her grandmother and brother’s death, her adolescent daughter’s pregnancy, a difficult divorce, a new relationship, and struggles to maintain an eight-year sobriety. Andrea reported many symptoms, such as headaches, excessive worrying, inferiority, anxiety (though not enough to receive a diagnosis for an anxiety disorder), hypersonnia, fatigue, low energy, irritability, and fear of losing control. Andrea met the DSM-IV requirements for major depression.

Kenny treated Andrea in 49 sessions over 22 months. Please note that Andrea’s insurance plan did not limit the number of counseling sessions.
Andrea's primary treatment consisted of CT, antidepressants, which were reduced by a consulting psychiatrist after eight months of treatment, and AA. Client-centered therapy techniques, such as active listening and reflection of feeling, were used throughout the 49 sessions as "supportive therapy." Behavioral therapy consisted of assertiveness training (role-playing rehearsal) and was added three months into the treatment to help Andrea set limits on taking responsibility for others, especially her daughter, and attend to her own needs. The behavioral therapy helped Andrea develop "cognitive rehearsal strategies" to cope with everyday life demands.

Andrea made numerous changes after 22 months of treatment. She started and maintained a new relationship, coped better with her daughter, and reported improved mood and higher energy levels. In addition, Andrea stopped taking antidepressants. Kenny reports that it took a long time for Andrea to share her cultural values. For example, it took several months for Andrea to discuss a cultural event, a corn dance. It may take a long time to develop a productive client-counselor relationship with persons outside of Western culture. In particular, Native American Indians are unlikely to share sacred practices with a therapist early in treatment. This report raises concerns about using brief therapies with persons outside of Western cultures; will the therapy last long enough for the client-therapist relationship to develop?

Kenny warns that case studies are unique to an individual, so Andrea's treatment plan cannot be generalized to all Native American Indians with depressive symptoms. The case does provide insights into an approach that may help others.

I end the discussion of culture and CT with two observations. First, surveys and case studies are process research. It is unknown if Andrea's eclectic treatments "caused" her changes. In addition, Scorzelli's survey study was meant to show if CT was compatible to non-Western cultures. Second, future research about cross-cultural applications of CT must take into account the different ways that persons display cognitive distortions. I expect this to vary considerably depending on one's culture.

Treatment #4: Group treatment—mindfulness-based cognitive therapy
John Teasdale and colleagues (2000) ran an experiment investigating the idea that mindfulness-based cognitive therapy (MBCT) reduced the risk of relapse after depressive symptoms were in remission. MBCT is not recommended as a primary treatment for depression.

Note to the teacher

I highly recommend the film Alternative Therapies: A Scientific Exploration: Meditation (2008), available from the Films for the Humanities and Sciences. It reviews MBCT and other scientific research, such as Sarah Lazar's brain imaging studies about how meditation changes the brain. Lazar's research is also relevant for section 3.7 on the effects of the environment on physiology.

The purpose of the film is to see how science is quantifying meditation. Meditation research is new and we are directed to take a tentative view pending more investigation.

Students studying the health option are required to "evaluate strategies for coping with stress," so the material has another use.

The Web site www.mbct.com is a resource for this therapy. According to the Web site, MBCT "combines ideas of CT with meditative practices and attitudes based on the cultivation of mindfulness."
Relapse or recurrent depression is a common and costly problem. Teasdale and colleagues write that antidepressants are an effective and cost-efficient way to stabilize depression but that patients do not need to continue taking the drugs for a lengthy time period. Could MBCT as a follow-up therapy keep patients stable after the symptoms are in remission?

MBCT can easily be delivered as a group skills training program rather than individual therapy in order to further promote cost effectiveness.

MBCT practitioners believe that “when a negative mood happens again, a relatively small amount of such mood can trigger or reanimate the old thinking pattern” (www.mbct.com) in persons who have successfully completed their primary treatment. Learning to be mindful of such triggers, which means to be aware of negative thoughts and feelings and then disengage from them, can help limit relapse.

MBCT is different from CT. CT aims to change the content or meanings of thoughts. MBCT involves learning to disengage from thinking, where thoughts are reframed as “mental events” (Teasdale et al., 2000, p. 616). Thoughts are just thoughts, and they do not always represent reality. This way, a person can acknowledge the existence of the thoughts or emotions without having them trigger the negative associations that start a relapse. MBCT gives people a different way to relate to their thoughts and emotions.

The sample consisted of 145 depressed patients in remission or recovery from major depression. Participants were randomly assigned to receive treatment as usual (TAU) or to attend MBCT training. The researchers followed the progress of participants for one year. Those assigned to the TAU condition were told to consult their family doctor or get any other help they would normally choose if their symptoms returned. The MBCT program was delivered in eight weekly sessions, each lasting two hours. Between sessions, participants completed homework, which consisted of listening to both guided (through tapes) and unguided imagery exercises as well as exercises to apply their skills to everyday life situations.

Key components of MBCT training were empowerment and having an open and accepting response to all thoughts and emotions. Participants learned that they had a choice; they no longer had to automatically accept and react to negative thoughts and emotions as they did in the past. Teasdale and colleagues used the analogy of driving on a familiar road, “of suddenly realizing that one has been driving for miles on automatic pilot unaware of the road or other vehicles, preoccupied with planning future activities or ruminating on a current concern” (p. 618) to describe automatic responses to thoughts and emotions. MBCT teaches “mindful driving,” where one is fully conscious of each moment and responds without the shackles of old habits.

Results showed that relapse rates of participants in MBCT were approximately 50% less than the relapse rates of participants in the TAU condition. The effectiveness was strongest for participants with three or more episodes of depression. Why does MBCT appear more suitable for persons with three or more episodes of depression? The authors speculate that persons with three or more episodes were most likely to have had their relapses triggered by negative thoughts.

These findings were replicated by S. Helen Ma and John Teasdale (2004). It appears that MBCT is an effective and cost-efficient way to prevent relapse in persons with three or more depressive episodes.

Treatment #5: Group treatment—interpersonal therapy

A cross-cultural experiment on group interpersonal therapy with adolescent war survivors

Paul Bolton’s experiment on group interpersonal therapy (IPT) for depression relates to the IB course in four ways. First, it is an outcome study about group therapy for this option. Second, this experiment is an example of how a therapy developed in the West, IPT,
is also useful cross-culturally. Third, this study relates to a topic in the human relations option titled “Discuss the effects of short-term and long-term exposure to violence.” One effect of long-term exposure to violence is an increased risk of mental illness, including depression and anxiety. Fourth, this study is also useful for evaluating treatments for anxiety disorders.

Paul Bolton and colleagues (2007) write that the war in Uganda is extremely violent and persistent, with about 1.8 million people, particularly ethnic Acholi, displaced over 20 years of fighting. Although existing qualitative research shows that children exposed to war have an increased risk of mental illness, few studies evaluate intervention strategies with RCTs. The existing research needed method triangulation.

Participants were 14- to 17-year-old Acholi adolescents who were internally displaced because of war and currently living in one of two camps in Northern Uganda. Adolescents were selected for the study based on the results of the Acholi Psychosocial Assessment Instrument (APA1). The APA1 was developed to study locally defined depression-like and anxiety-like disorders that are similar in many, but not all, respects to the DSM-IV categories. Depression-like symptoms were created by combining the definitions of three categories of locally defined behaviors. One category is Ppir, which includes “Has lots of thoughts, wants to be alone, is easily annoyed, holds head, drinks alcohol, and has lots of worries” (p. 520). Another category is Tito Tam, which includes “Experiences body pain, feels that brain isn’t functioning, and thinks of self as being of no use” (p. 520). The last category is Kuma, which includes “Has loss of appetite, feels pain in the heart, does not sleep at night, and feels cold” (p. 520). The APA1 also assessed anxiety-like symptoms. The local population used the term Ma Luro, which includes “Clinging to elders, constantly runs, dislikes noise, has fast heart rate, and thinks people are chasing him/her” (p. 520). The APA1 was tested for reliability and validity on a similar sample before use in this RCT.

IPT was selected because of the strong outcome research supporting its effectiveness as an individual depression treatment. IPT was designed in the 1970s to treat depression (Hecker & Thorpe, 2005). IPT examines the person’s past and current social roles and assumes that mental illness occurs within a social system and that one’s social (interpersonal) roles are keys for recovery.

In addition to IPT, Bolton and colleagues thought that creative play (CP) was also beneficial. CP was thought to strengthen resilience through creative verbal and nonverbal activities.

Participants were randomly assigned to receive group IPT, CP, or to a waiting list (the no-treatment control). The treatment consisted of 16 weekly sessions.

Results showed that participants in the IPT group had a significant reduction of depression-like symptoms (the definition for a cure was a 50% reduction in symptoms) over the waiting list controls. When the data were analyzed by gender, the significance differences were just for girls. Those in the CP group showed no significant depression-like symptom reduction over the waiting list controls. Further, anxiety-like symptoms failed to improve in either IPT or CP.

Bolton and colleagues conclude that group IPT effectively treats depression symptoms in girls displaced by war. Why did the boys fail to improve? Perhaps boys are less willing to share emotions in group settings. Even though the depression symptoms of girls were significantly reduced, neither girls nor boys tested as improving in day-to-day functioning right after the study. It may be that improved functioning may follow improvement in symptoms after more time passes. Remember, this study defined the treatment as “working” if there was a reduction of symptoms.
7.14 Discuss the Use of Eclectic Approaches to Treatment

Eclectic approaches to treatment, sometimes called combination or integrative approaches, means to combine two or more therapies to maximize a person’s progress.

Sometimes helping professionals have a primary orientation, such as cognitive, but supplement it with techniques from family therapy. Other combinations are drug therapies and CT, drug therapies and acupuncture, and CT and meditation therapy (meditation helps to maintain change after symptoms are in remission). Many other combination treatments are possible.

I discuss two studies about the efficacy of eclectic approaches for treating depression. The first examines the combination of antidepressant drugs and psychotherapy. The second is the combination of antidepressants and Traditional Chinese Medicine (TCM).

Advantages of using an eclectic approach

This list of advantages comes from a discussion of integrative approaches for family therapists (Lebow, 2003), but I find these ideas useful for evaluating any eclectic approach.

1. Eclectic approaches have a broader theoretical base and may be more sophisticated than approaches using a single theory.
2. Eclectic approaches offer the clinician greater flexibility in treatment. Individual needs are better matched to treatments when more options are available.
3. There are more chances for finding efficacious treatments if two or more treatments are studied in combination.
4. Eclectic treatments apply to a broader range of clients. Failure to offer eclectic approaches may limit clinicians to helping only clients suitable for a single approach.
5. The clinician using eclectic approaches is not biased toward one treatment and may have greater objectivity about selecting different treatments.
6. Clinicians using an eclectic approach adapt their primary treatment with the benefits of other treatments that have evidence of effectiveness.

Limitations of using an eclectic approach

Lebow lists some disadvantages of eclectic approaches.

1. Sometimes clinicians use eclectic approaches in place of a clear theory. Eclectic approaches are not substitutes for having a clear orientation that is supplemented with other tested treatments.
2. Sometimes eclectic approaches are applied inconsistently. It takes knowledge and skill to deliver eclectic approaches effectively.
3. At what point does using an eclectic approach turn into setting grandiose goals for the client?
4. Sometimes eclectic approaches are too complex for one clinician to manage.
5. There is always a danger that clinicians might call themselves “eclectic” when they really have no clear direction for treatment.
6. I added this last one to Lebow’s list: Eclectic approaches should be backed up by efficacy studies that examine if specific combinations of treatment “work.” Sometimes,
clinicians use eclectic approaches without examining the evidence. I know that eclectic approaches are sometimes hard to study. But treatments that lack evidence are potentially dangerous.

Eclectic approach #1: Antidepressants and cognitive therapy

Timothy-Peterson (2006) writes that drug/psychotherapy combinations are valuable as long as the two are combined in specific ways.

Peterson cites both the Goldapple and DeRubeis studies reviewed in section 7.13 and challenges some of their interpretations. Tolerate uncertainty. There is disagreement about which treatments work. No one can "prove" their argument anyway. Weigh the strengths and limitations of all of the viewpoints before coming to a conclusion.

Peterson says that there are many good reasons for using drug/psychotherapy combination treatments. For example, studies by Hollan as well as those sponsored by the American Psychiatric Association show that when a patient has, for example, social problems, psychotherapy ensures that the problems do not undermine the benefits of the drug therapy. In addition, Hollan found that even when combined, both psychotherapy and drugs maintain their individual benefits, giving the patient a more complete treatment. These complementary benefits reduce relapse. Last, a study by Segal noted that about 40% of patients do not take antidepressants as directed. Compliance with doctor's instructions increases after psychotherapy.

Peterson examined research on drug and psychotherapy combination treatments when they were used in three different ways. The first combination is the simultaneous use of drugs and psychotherapy. The second is when drugs and psychotherapy are combined sequentially, meaning that one or the other is used in addition to the first as needed to control symptoms. The third is stage-oriented use of antidepressants and psychotherapy, meaning that drugs are used in the acute phase and psychotherapy is used alone or in addition to continued drug therapy during the maintenance phase.

Peterson makes these claims about the effectiveness of drug/psychotherapy combinations:

1. The strongest evidence is for the stage-oriented combination treatment. Antidepressants are the most beneficial treatment during the acute phase. After a patient's symptoms go away, psychotherapy either alone or combined with continued antidepressants is the most effective way to prevent relapse. Patients first responding to drug therapy during the maintenance phase maintained their remission best if the psychotherapy was CT.

2. Research on the simultaneous use of drugs and psychotherapy during the acute phase of depression shows only a moderate increase in the reduction of symptoms. Peterson does say that combining antidepressants and psychotherapy in the acute phase may prevent or delay relapse, but the evidence is inconsistent. There is contrasting evidence about the simultaneous use of drugs and psychotherapy either in the acute or maintenance treatment phases. One study reviewed was the DeRubeis experiment. DeRubeis found that CT alone was just as effective for treating severely depressed patients, contrary to the claim that drugs were the best acute phase treatment. But there is more to the DeRubeis study than the results reported in section 7.13. Participants who responded to CT in the first eight weeks were removed from the study and compared to those who responded to antidepressants. Now, these participants were assigned to either continue antidepressants or a placebo in a 12-month maintenance-phase period. DeRubeis found that those receiving three more CT therapy sessions in this 12-month maintenance phase had fewer re-
lapses (37%) than those who continued on the drug (27%) or a placebo (16%). However, CT was only significant statistically over the placebo group and not the group taking the drug. To complicate the argument, contrasting research to the DeRubeis experiment found something different. A larger study with chronically depressed outpatients showed that patients getting combined nefazodone/CT had the lowest relapse rates during the maintenance phase. It is the reality of treatment outcome research; different studies have different findings and are sometimes hard to compare.

3. There is some evidence that the sequential use of drugs and psychotherapy is beneficial. For example, an experiment by Frank in 2000 found that women with chronic depression were best treated first with IPT. Those who still needed help to reduce symptoms were given SSRIs to supplement the IPT.

4. Peterson agrees that Goodapple’s neuroimaging study shows that both drug therapy and CT cause changes in the brain. Peterson believes that many questions still remain about the brain changes. Do the different pathways to brain changes have the same end effect? Are the effects complementary in some way?

Eclectic approach #2: Antidepressants and Chinese herbal medicine combinations

Antidepressants are one strategy Chinese psychiatrists use to treat depression. However, they seek ways to minimize the amount of the drug needed to reduce symptoms. Bob Flaws (2003) translated an article from Chinese to English written by Liu Jing-feng and Zhang Hong-xue in 2002. The study tested the effectiveness of combining antidepressants and Chinese herbal medicine to treat depression.

One hundred twenty participants were assigned to receive either a Chinese herbal formula/antidepressant combination treatment or antidepressants alone.

The combination treatment used 11 Chinese medicinal herbs thought to “calm the spirit” plus others if the participant also had other symptoms. In addition, this group took both chlorpromazine and amitriptyline.

The comparison group took a larger dose of both chlorpromazine and amitriptyline.

Results showed that 41 participants in the combination treatment groups were pronounced cured, meaning that all symptoms disappeared and they returned to their normal work and personal lives. Twelve participants had a marked improvement, meaning most of their symptoms disappeared and they regained part of their work and personal life routine. Seven improved somewhat, meaning some of their symptoms ended though they did not return to their normal work and personal lives. All of the participants in this condition experienced some improvement.

A total of 36 participants in the drug only comparison group were cured, eight achieved marked improvement, 14 improved, and two showed no change.

The Chinese researchers wrote that “all depression damages the spirit; [therefore,] to treat depression [one] must calm the spirit” (p. 2). The Chinese herbal formula used in the experiment was designed more than 40 years ago.

Flaws noticed that, when Chinese medicinal herbs were combined with smaller doses of antidepressants, “the treatment effect is better, the course of treatment is shorter, and side effects are less” (p. 2). Western doctors know that the greater the dose and the longer patients stay on drug therapy, the greater the risk of side effects. The participants in the combination treatment had better results with one-third less of the antidepressant drugs than the comparison group.
7.15 Discuss the Relationship between Etiology and Therapeutic Approach in Relation to One Disorder

Modern models of “causation” are more complex than older models. The older models suggesting one “cause” are reductionist. Here are nine points to consider about the relationship between etiology and therapeutic approach. Depression is my primary example, but the same reasoning applies to any mental illness.

1. No one treatment works for everyone. Even if “causation” is established, the selected therapeutic approach should take into account a client’s cultural values, a client’s ability to tolerate drug treatments, a client’s enthusiasm for group therapy, a client’s willingness to address negative cognitive style, or a client’s ability to start and follow through (self-efficacy) with the lifestyle changes necessary for dietary or exercise treatments.

2. It is often difficult or impossible to identify a specific “cause” of any mental disorder. Walker-Tesser model shows that causation is really an interrelated group of contributing factors. One risk factor is not enough to cause any disorder. The more risk factors, the greater the risk of mental illness. Besides, correlation studies are the main research method used to investigate “cause.”

3. It is still possible to treat “symptoms,” even when causes are unknown. For example, antidepressants or cognitive therapy treat depressive symptoms. Many clinicians measure symptoms before and after treatment with assessment instruments such as the Hamilton Rating Scale for Depression and the Beck Depression Inventory. Many consider a treatment to “work” if the symptoms are reduced. Just keep in mind that not everyone agrees with this definition of “work.” For example, TCM practitioners do not think that treating “symptoms” is enough.

4. A primary therapeutic approach is frequently aimed at reducing the greatest risk factor. Genetics is not the greatest risk factor. Genetics are predispositions that increase one’s risk of developing a disorder. We presently cannot change genes. Those thinking that advances in genetic engineering will end mental illness need to think through all of the biological and ethical implications of genetic engineering. Genetics do not determine behavior anyway. Gene expression depends on many factors. For example, the Caspi study (2003) about depression in section 3.4 shows that genes predispose someone for greater reactivity toward stress. The best therapeutic approaches for someone with two short risk alleles might be those reducing stress. While drug therapies reduce symptoms for many persons, the drugs do not improve one’s stress management. Cognitive therapy or treatment involving lifestyle changes may help someone react to stress acquire greater coping skills.

5. Culture affects beliefs about “causes” and treatments. First, cultural differences in gene expression complicate how we think about selecting a therapeutic approach. Japanese samples carry 70%-80% of the two short risk alleles for 5-HTT and Caucasian samples carry 40%-45%. However, depression rates in the West are greater than they are in non-Western countries. Are there culturally based protective factors against mental illness in Japan that say something about the cause of mental illness? Refer to section 7.13 for the discussion about Japanese attitudes toward using antidepressants. Perhaps the Japanese will use more antidepressants in the future, but at least now, they are in a transition period where traditional Japanese culture still determines a lot of what is valued. How does traditional Japanese culture manage “depressive” symptoms? Does the answer to this question change your view of how to treat depression in non-Western countries? Second, cultural values affect what is viewed as disordered. For example, the Bagandan people in Uganda do not even think that many of the “symptoms” labeled mental illness in the West are actually illnesses requiring medical treatment. Their view affects what is considered a “cause.”
6. Gender considerations affect knowledge about causation. Depression or eating disorder diagnoses may not take into account the way that both males and females express the disorders. Beliefs about “causes” and treatments then run the risk of reinforcing stereotypes.

7. If a “cause” is known, then treat it. For example, Larry Christensen developed a questionnaire to assess the extent to which diet was a primary contributing factor to depression (section 3.8). Participants in his studies were only persons whose diet was a factor.

8. The desire to locate specific “causes” is part of Western medical thinking. TCM practitioners do not look for a cause. Instead, physical and mental illnesses are considered interrelated. TCM practitioners claim that, if a person suffers from liver Qi imbalance, then acupuncture to rebalance liver Qi is necessary. But diet and other lifestyle habits also play a role and must change as well for a person to regain balance. Section 5.10 reviews TCM assumptions and acupuncture research.

9. Eclectic treatments may be the best approach when more than one “cause” of a disorder is known.

I advise taking a tentative approach to answering IB questions from this heading. Use the existing studies in this book for support.