Chapter 3

COGNITIVE CONCEPTUALIZATION

A cognitive conceptualization provides the framework for understanding a patient. To initiate the process of formulating a case, you will ask yourself the following questions:

> "What is the patient's diagnosis(es)?"
>
> "What are his current problems? How did these problems develop and how are they maintained?"
>
> "What dysfunctional thoughts and beliefs are associated with the problems? What reactions (emotional, physiological, and behavioral) are associated with his thinking?"

Then you will hypothesize how the patient developed this particular psychological disorder:

> "How does the patient view himself, others, his personal world, his future?"
>
> "What are the patient's underlying beliefs (including attitudes, expectations, and rules) and thoughts?"
>
> "How is the patient coping with his dysfunctional cognitions?"

"What stressors (precipitants) contributed to the development of his current psychological problems, or interfere with solving these problems?"

"If relevant, what early experiences may have contributed to the patient's current problems? What meaning did the patient glean from these experiences, and which beliefs originated from, or became strengthened by, these experiences?"

"If relevant, what cognitive, affective, and behavioral mechanisms (adaptive and maladaptive) did the patient develop to cope with these dysfunctional beliefs?"

You begin to construct a cognitive conceptualization during your first contact with a patient and continue to refine your conceptualization throughout treatment. This organic, evolving formulation helps you plan for efficient and effective therapy (Kuyken et al., 2009; Needleman, 1999; Persons, 2008; Tarrier, 2006). In this chapter I describe the cognitive model, the theoretical basis of cognitive behavior therapy. I then discuss the relationship of thoughts and beliefs and present the case example of Sally, used throughout this book.

THE COGNITIVE MODEL

Cognitive behavior therapy is based on the *cognitive model*, which hypothesizes that people's emotions, behaviors, and physiology are influenced by their perception of events.

Situation/event
↓
Automatic thoughts
↓
Reaction (emotional, behavioral, physiological)

It is not a situation in and of itself that determines what people feel, but rather how they *construe* a situation (Beck, 1964; Ellis, 1962). Imagine, for example, a situation in which several people are reading a basic text on cognitive behavior therapy. They have quite different emotional and behavioral responses to the same situation, based on what is going through their minds as they read.

Reader A thinks, "This really makes sense. Finally, a book that will really teach me to be a good therapist!" Reader A feels mildly excited and keeps reading.

Reader B, on the other hand, thinks, "This approach is too simplistic. It will never work." Reader B feels disappointed and closes the book.

Reader C has the following thoughts: "This book isn't what I expected. What a waste of money." Reader C is disgusted and discards the book altogether.

Reader D thinks, "I really need to learn all this. What if I don't understand it? What if I never get good at it?" Reader D feels anxious and keeps reading the same few pages over and over.

Reader E has different thoughts: "This is just too hard. I'm so dumb. I'll never master this. I'll never make it as a therapist." Reader E feels sad and turns on the television.

The way people feel emotionally and the way they behave are associated with how they interpret and think about a situation. *The situation itself does not directly determine how they feel or what they do*; their emotional response is mediated by their perception of the situation. Cognitive behavior therapists are particularly interested in the level of thinking that may operate simultaneously with a more obvious, surface level of thinking.

For example, while you are reading this text, you may notice two levels in your thinking. Part of your mind is focusing on the information in the text; that is, you are trying to understand and integrate the information. At another level, however, you may be having some quick, evaluative thoughts. These thoughts are called *automatic thoughts* and are not the result of deliberation or reasoning. Rather, these thoughts seem to spring up spontaneously; they are often quite rapid and brief. You may barely be aware of these thoughts; you are far more likely to be aware of the emotion or behavior that follows. Even if you are aware of your thoughts, you most likely accept them uncritically, believing that they are true. You don't even think of questioning them. You can learn, however, to identify your automatic thoughts by attending to your shifts in affect, your behavior, and/or your physiology. Ask yourself, "What was just going through my mind?" when:

- You begin to feel dysphoric.
- You feel inclined to behave in a dysfunctional way (or to avoid behaving in an adaptive way).
- You notice distressing changes in your body or mind.

Having identified your automatic thoughts, you can, and probably already do to some extent, evaluate the validity of your thinking. For example, if you have a lot to do, you may have the automatic thought, "I'll never get it all finished." But you may do an automatic reality check, recalling past experiences and reminding yourself, "It's okay. You know you always get done what you need to." When you find your interpretation of a situation is erroneous and you correct it, you probably discover that your mood improves, you behave in a more functional way, and/or your physiological arousal decreases. In cognitive terms, when dysfunctional thoughts are subjected to objective reflection, one's emotions, behavior, and physiological reaction generally change. Chapter 11 offers specific guidelines on how to evaluate automatic thoughts.

But where do automatic thoughts spring from? What makes one person construe a situation differently from another person? Why may the same person interpret an identical event differently at one time than at another? The answer has to do with more enduring cognitive phenomena: beliefs.

BELIEFS

Beginning in childhood, people develop certain ideas about themselves, other people, and their world. Their most central or *core beliefs* are enduring understandings so fundamental and deep that they often do not articulate them, even to themselves. The person regards these ideas as absolute truths—just the way things "are" (Beck, 1987). For example, Reader E, who thought he was too unintelligent to master this text, frequently has a similar concern when he has to engage in a new task (e.g., learning a new skill on the computer, figuring out how to put together a bookcase, or applying for a bank loan). He seems to have the core belief, "I'm incompetent." This belief may operate only when he is in a depressed state, or it may be activated much of the time. When this core belief is activated, Reader E interprets situations through the lens of this belief, even though the interpretation may, on a rational basis, be patently invalid.

Reader E tends to focus selectively on information that confirms his core belief, disregarding or discounting information to the con-

trary. For example, Reader E did not consider that other intelligent, competent people might not fully understand the material in their first reading. Nor did he entertain the possibility that the author had not presented the material well. He did not recognize that his difficulty in comprehension could be due to a lack of concentration, rather than a lack of brainpower. He forgot that he often had difficulty initially when presented with a body of new information, but later had a good track record of mastery. Because his incompetence belief was activated, he automatically interpreted the situation in a highly negative, self-critical way. In this way, his belief is maintained, even though it is inaccurate and dysfunctional. It is important to note that he is not purposely trying to process information in this way; it occurs automatically.

Figure 3.1 illustrates this distorted way of processing information. The circle with a rectangular opening represents Reader E's schema. In Piagetian terms, the schema is a hypothesized mental structure that organizes information. Within this schema is Reader E's core belief: "I'm incompetent." When Reader E is presented with negative data this schema becomes activated, and the data, contained in negative rectangles, are immediately processed as confirming his core belief, which makes the belief stronger.

But a different process occurs when Reader E is presented with positive data (such as analyzing which health care plan would be best for his family). Positive data are encoded in the equivalent of positive triangles, which cannot fit into the schema. His mind automatically discounts the data ("I chose a health care plan, *but* it took me a long time.") When his boss praised him, he immediately thought, "My boss is wrong. I didn't do that project well. I didn't deserve it [his praise]." These interpretations, in essence, change the shape of the data from positive triangles to negative rectangles. Now the data fit into the schema and, as a result, strengthen the negative core belief.

There are also positive data that Reader E just does not notice. He does not negate some evidence of competence, such as paying his bills on time or fixing a plumbing problem. Rather, he does not seem to process these positive data at all; they bounce off the schema. Over time, Reader E's core belief of incompetence becomes stronger and stronger.

Sally, too, has a core belief of incompetence. Fortunately, when she is not depressed a different schema (which contains the core belief, "I'm reasonably competent") is activated much, but not all, of the time. But when she is depressed, the incompetence schema predominates. One important part of therapy is to help Sally view negative data in a more realistic and adaptive way. Another important part of therapy is to help her identify and process positive data in a straightforward way.

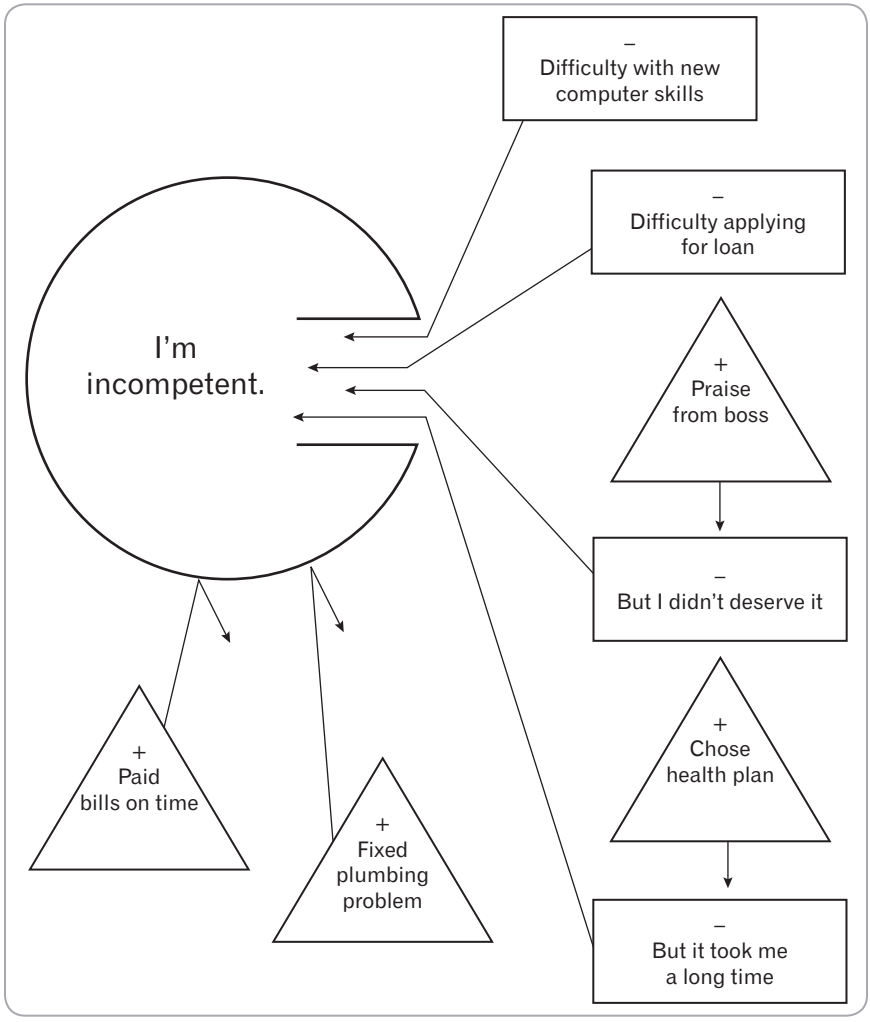


FIGURE 3.1. Information-processing model. This diagram demonstrates how negative data are immediately processed, strengthening the core belief, while positive data are discounted (changed into negative data) or unnoticed.

Core beliefs are the most fundamental level of belief; they are global, rigid, and overgeneralized. *Automatic thoughts*, the actual words or images that go through a person's mind, are situation specific and may be considered the most superficial level of cognition. The following section describes the class of *intermediate beliefs* that exists between the two.

Attitudes, Rules, and Assumptions

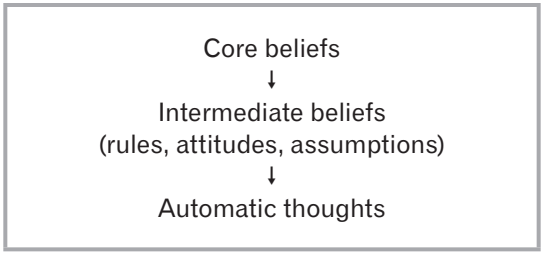
Core beliefs influence the development of an intermediate class of beliefs, which consists of (often unarticulated) attitudes, rules, and assumptions. Reader E, for example, had the following intermediate beliefs:

Attitude: "It's terrible to fail."

Rule: "Give up if a challenge seems too great."

Assumptions: "If I try to do something difficult, I'll fail. If I avoid doing it, I'll be okay."

These beliefs influence his view of a situation, which in turn influences how he thinks, feels, and behaves. The relationship of these intermediate beliefs to core beliefs and automatic thoughts is depicted below:



How do core beliefs and intermediate beliefs arise? People try to make sense of their environment from their early developmental stages. They need to organize their experience in a coherent way in order to function adaptively (Rosen, 1988). Their interactions with the world and other people, influenced by their genetic predisposition, lead to certain understandings: their beliefs, which may vary in their accuracy and functionality. Of particular significance to the cognitive behavior therapist is that dysfunctional beliefs can be unlearned, and more reality-based and functional new beliefs can be developed and strengthened through treatment.

The quickest way to help patients feel better and behave more adaptively is to facilitate the direct modification of their core beliefs as soon as possible, because once they do so, patients will tend to interpret future situations or problems in a more constructive way. It is possible to undertake belief modification earlier in treatment with patients who have straightforward depression and who held reasonable and adaptive beliefs about themselves before the onset of their disorder. But when patients' beliefs are entrenched, you can lose credibility and endanger

the therapeutic alliance if you question the validity of core beliefs too early.

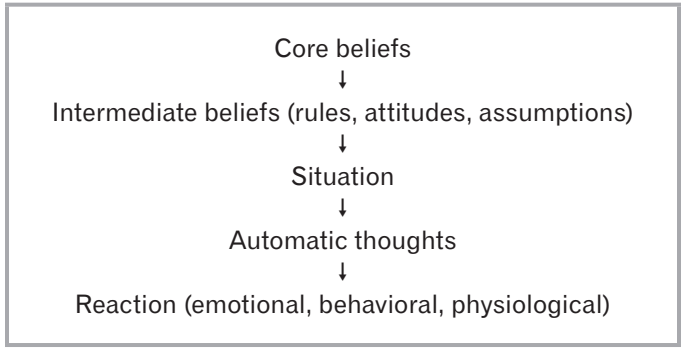
The usual course of treatment in cognitive behavior therapy, therefore, involves an initial emphasis on identifying and modifying automatic thoughts that derive from the core beliefs (and on interventions that indirectly modify core beliefs). Therapists teach patients to identify these cognitions that are closest to conscious awareness, and to gain distance from them by learning:

- Just because they believe something doesn't necessarily mean it is true.
- Changing their thinking so it is more reality based and useful helps them feel better and progress toward their goals.

It is easier for patients to recognize the distortion in their specific thoughts than in their broad understandings of themselves, their worlds, and others. But through repeated experiences in which they gain relief by working at a more superficial level of cognition, patients become more open to evaluating the beliefs that underlie their dysfunctional thinking. Relevant intermediate-level beliefs and core beliefs are evaluated in various ways and subsequently modified so that patients' perceptions of and conclusions about events change. This deeper modification of more fundamental beliefs makes patients less likely to relapse (Evans et al., 1992; Hollon, DeRubeis, & Seligman, 1992).

RELATIONSHIP OF BEHAVIOR TO AUTOMATIC THOUGHTS

The hierarchy of cognition, as it has been explained to this point, can be illustrated as follows:



In a specific situation, one's underlying beliefs influence one's perception, which is expressed by situation-specific automatic thoughts. These thoughts, in turn, influence one's emotional, behavioral, and physiological reaction. Figure 3.2 illustrates the cognitive conceptualization of Reader E in this particular situation, illustrating how his beliefs influence his thinking, which in turns influences his reaction.

Note that had Reader E been able to *evaluate* his thinking, his emotions, physiology, and behavior may have been positively affected. For example, he may have responded to his thoughts by saying, "Wait a minute. This may be hard, but it's not necessarily impossible. I've been able to understand this type of book before. If I keep at it, I'll probably understand it better." Had he responded in such a way, he might have reduced his sadness and kept reading.

To summarize, this reader felt discouraged because of his thoughts in a particular situation. Why did he have these thoughts when another reader did not? Unarticulated core beliefs about his incompetence influenced his perception of the situation.

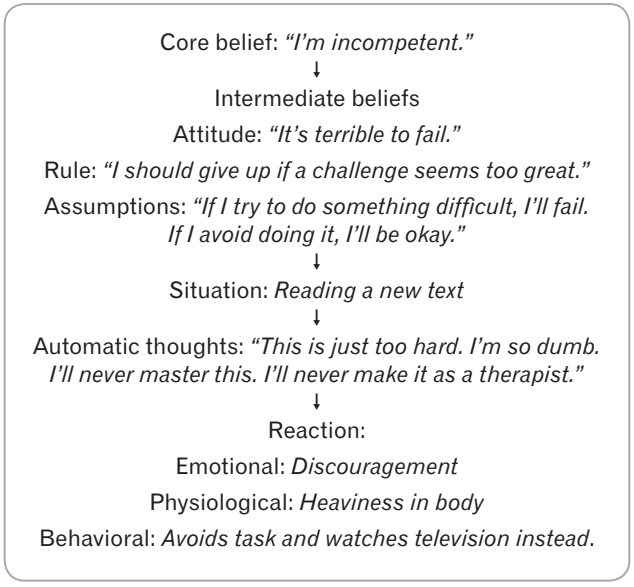


FIGURE 3.2. Cognitive conceptualization of Reader E.

A More Complex Cognitive Model

It is important to note that the sequence of the perception of situations leading to automatic thoughts that then influence people's reactions is an oversimplification at times. Thinking, mood, behavior, physiology, and the environment all can affect one another. Triggering situations can be:

- Discrete events (such as getting a low mark on a paper).
- A stream of thoughts (such as thinking about doing schoolwork or intrusive thoughts).
- A memory (such as getting a poor grade in the past).
- An image (such as the disapproving face of a professor).
- An emotion (such as noticing how intense one's dysphoria is).
- A behavior (such as staying in bed).
- A physiological or mental experience (such as noticing one's rapid heartbeat or slowed-down thinking).

There may be a complex sequence of events with many different triggering situations, automatic thoughts, and reactions, as pictured in Figure 3.3.

As explained in the beginning of this chapter, it is essential for you to learn to conceptualize patients' difficulties in cognitive terms in order to determine how to proceed in therapy—when to work on a specific problem or goal, automatic thought, belief, or behavior; what techniques to choose; and how to improve the therapeutic relationship. The basic questions to ask yourself are:

"How did this patient end up here?"

"What vulnerabilities were significant?"

"How has the patient coped with her vulnerability?"

"Did certain life events (traumas, experiences, interactions) predispose her to her current difficulties?"

"What are the patient's automatic thoughts, and what beliefs did they spring from?"

It is important to put yourself in your patients' shoes, to develop empathy for what they are undergoing, to understand how they are feeling, and to perceive the world through their eyes. Given their history

Situation: *Sally feels exhausted (physiological trigger) when she wakes up.*
↓
Automatic thought: *"I'm too tired to get up. There's no use in getting out of bed. I don't have enough energy to go to class or study."*
↓
Emotion: *Sadness*
↓
Physiological response: *Heaviness in body.*
↓
Automatic thoughts: *"What if [my chemistry professor] gives a pop quiz? What if he won't let me take a makeup quiz? What if this counts against my grade? [image of a failing mark on her transcript]"*
↓
Emotion: *Anxiety*
↓
Physiological response: *Heart starts to beat quickly.*
↓
Situation: *Notices rapid heartbeat.*
↓
Automatic thought: *"My heart's beating so fast. What's wrong with me?"*
↓
Emotion: *Increased anxiety*
↓
Physiological response: *Body feels tense, heart continues to beat rapidly.*
↓
Automatic thought: *"I'd better just stay in bed."*
↓
Emotion: *Relief*
↓
Physiological response: *Tension and heart rate reduce.*
↓
Behavior: *Stays in bed.*

Sally eventually gets up, arrives at class 20 minutes after it started, then has a host of automatic thoughts about being late and missing part of the lecture.

FIGURE 3.3. Complex cognitive model sequence.

and set of beliefs, their perceptions, thoughts, emotions, and behavior should make sense.

It is helpful to view therapy as a journey, and the conceptualization as the road map. You and the patient discuss the goals of therapy, the final destination. There are a number of ways to reach that destination: for example, by main highways or back roads. Sometimes detours change the original plan. As you become more experienced and better at conceptualization, you fill in the relevant details in the map, and

your efficiency and effectiveness improve. At the beginning, however, it is reasonable to assume that you may not accomplish therapy in the most effective or efficient way. An accurate cognitive conceptualization aids you in determining what the main highways are and how best to travel.

Conceptualization begins at the first contact with patients and is refined at every subsequent contact. You make hypotheses about patients, based not just on the cognitive formulation of the case, but also on the specific data patients present. You confirm, disconfirm, or modify your hypotheses as patients present new data. The conceptualization, therefore, is fluid. At strategic points, you will directly check your hypotheses and formulation with patients. Generally, if the conceptualization is on target, patients confirm that it "feels right"—they agree that the picture the therapist presents truly resonates with them.

Sally, for example, suffered from persistent sadness, anxiety, and loneliness. As part of her intake evaluation, I elicited a sampling of her automatic thoughts. I asked Sally when she generally was most distressed—in which situations or times of day. Sally replied that she felt worst at bedtime, as she lay in bed, trying to fall asleep. Having ascertained that the previous night was a typical example, I asked the key question: "What was going through your mind last night, as you were lying in bed, trying to fall asleep?" Sally replied, "I'll never be able to finish my term paper. I'll probably flunk out of here. I'll never be able to make anything of myself." Sally also reported an image, an automatic thought in a pictorial form, which flashed through her mind. She saw herself, weighed down by a heavy backpack, trudging aimlessly down the street, looking quite downtrodden, directionless, and desperate. During the course of therapy, I rounded out my conceptualization. I organized my thinking through the use of a Cognitive Conceptualization Diagram (page 200) and a Cognitive Case Write-Up (Appendix A).

Sally's Core Beliefs

As a child, Sally tried to make sense of herself, others, and her world. She learned through her own experiences, through interactions with others, through direct observation, and through others' explicit and implicit messages to her. Her perceptions were also undoubtedly influenced by her genetic inheritance. Sally had a highly achieving older brother. As a young child, she perceived that she could not do anything as well as her brother and started to believe, although she did not put it into words, that she was incompetent and inferior. She kept comparing her performance to that of her brother and invariably came up lacking. She frequently had thoughts such as: "I can't draw like Robert can." "He

rides his bike better than I do." "I'll never be as good a reader as he is. He does everything better than I do."

Not all children with older siblings develop these kinds of dysfunctional beliefs. But Sally's ideas were reinforced by her mother, who frequently criticized her: "You did a terrible job straightening up your room. Can't you do anything right?" "Your brother got a good report card. But you? You'll never amount to anything." Sally, like most children, placed enormous stock in her mother's words, believing that her mother was correct about nearly everything. So when her mother criticized her, implying or directly stating that Sally was incompetent, Sally believed her.

At school, Sally also compared herself to her peers. While she was an above-average student, she compared herself only to the best students, again coming up short. She had thoughts such as: "I'm not as good as they are." "I'll never be able to understand all this as well as they can." So the idea that she was incompetent and inferior was reinforced.

Without recognizing that she was doing so, Sally often screened out or discounted positive information that contradicted these ideas. When she got a high mark on a test, she would tell herself, "The test was easy." When she learned ballet and became one of the better dancers in the group, she thought, "I'll never be as good as my teacher." She usually made negative interpretations, thereby confirming her dysfunctional beliefs. For example, when her mother yelled at her for getting a B on a test, she thought, "Mom's right. I am stupid." She consistently interpreted negative events as demonstrating her shortcomings. In addition, when she experienced positive events such as winning an award, she often discounted them: "I was just lucky. It was a fluke."

This process led to Sally's developing a negative core belief about herself. Sally's negative beliefs were not rock solid, however. Her father, although he traveled for business and was home only intermittently, was generally encouraging and supportive. When he taught her to hit a baseball, for example, he would praise her efforts. "That's good … good swing … you're getting it … keep going." Some of Sally's teachers, too, praised her performance in school. Sally also had positive experiences with friends. She saw that if she tried hard, she could do some things better than her friends could—baseball, for example. So Sally also developed a counterbalancing positive belief that she was competent in at least some ways.

Sally's core beliefs about her world and about other people were, for the most part, positive and functional. She generally believed that other people were well-intentioned, and she perceived her world as being relatively safe, stable, and predictable.

Again, Sally's core beliefs about herself, others, and her world were her most basic beliefs, which she had never really articulated until she entered treatment. As a teenager, her more positive core beliefs were dominant until she became depressed, and then her highly negative core beliefs became activated.

Sally's Attitudes, Rules, and Assumptions

Somewhat more amenable to modification than her core beliefs were Sally's intermediate beliefs. These attitudes, rules, and assumptions developed in the same way as core beliefs, as Sally tried to make sense of her world, of others, and of herself. Mostly through interactions with her family and significant others, she developed the following attitudes and rules:

> "I should be great at everything I try."
> "I should always do my best."
> "It's terrible to waste your potential."

As was the case with her core beliefs, Sally had not fully articulated these intermediate beliefs. But the beliefs nevertheless influenced her thinking and guided her behavior. In high school, for example, she did not try out for the school newspaper (although it interested her) because she assumed she could not write well enough. She felt both anxious before exams, thinking that she might not do well, and guilty, thinking that she should have studied more.

When her more positive core beliefs predominated, however, she saw herself in a more positive light, although she never completely believed that she was competent. She developed the assumption "If I work hard, I can overcome my shortcomings and do well in school." When she became depressed, however, Sally did not really believe this assumption any longer and substituted the belief, "Because of my deficiencies, I'll never amount to anything."

Sally's Coping Strategies

The idea of being incompetent had always been quite painful to Sally, and she developed certain behavioral strategies to cope or compensate for what she saw as her shortcomings. As might be gleaned from her intermediate beliefs, Sally worked hard at school and at sports. She overprepared her assignments and studied quite hard for tests. She also became vigilant for signs of inadequacy and redoubled her efforts if she

failed to master something at school. She rarely asked others for help for fear they would recognize her inadequacy.

Sally's Automatic Thoughts

While Sally did not articulate these core beliefs and intermediate beliefs (until therapy), she was at least somewhat aware of her automatic thoughts in specific situations. In high school, for example (during which time she was not depressed), she tried out for the girls' softball and hockey teams. She made the softball team and thought, "That's great. I'll get Dad to practice batting with me." When she failed to make the hockey team she was disappointed, but not particularly self-critical.

In college, however, Sally became depressed during her freshman year. Later, when she considered playing an informal softball game with students in her dorm, her depression influenced her thinking: "I'm no good. I probably won't even be able to hit the ball." Similarly, when she got a C on an English literature examination, she thought, "I'm so stupid. I'll probably fail the course. I'll never be able to make it through college."

To summarize, in her nondepressed high school years, Sally's more positive core beliefs were activated, and she had relatively more positive (and more realistic) thoughts. In her freshman year in college, however, her negative beliefs predominated during her depression, which led her to interpret situations quite negatively and to have predominantly negative (and unrealistic) thoughts. These distorted thoughts also led her to *behave* in self-defeating ways, which led to automatic thoughts about her behavior. Instead of interpreting her avoidance as a symptom of depression, she thought, "I'm a basket case," which then led to increased dysphoria and maladaptive behavior.

Sequence Leading to Sally's Depression

How did Sally became depressed? Depression is caused by a variety of biopsychological and psychosocial factors. Sally may have had a genetic predisposition toward developing depressogenic beliefs. Not all negative events, however, led her to feel dysphoric. She was able to get along until her innate vulnerability, influenced by the presence of negative beliefs, was challenged by a series of matching stressors (the "diathesis–stress" model; Beck, 1967).

When Sally began college, she had several experiences that she interpreted in a highly negative fashion. One such experience occurred the first week. She had a conversation with other freshmen in her dorm who were relating the number of advanced placement courses and

exams they had taken that had exempted them from several basic freshman courses. Sally, who had no advanced placement credits, began to think how superior these students were to her. In her economics class, her professor outlined the course requirements and Sally immediately thought, "I won't be able to do the research paper." She had difficulty understanding the first chapter in her chemistry text and she thought, "If I can't even understand Chapter 1, how will I ever make it through the course?"

Sally's beliefs made her vulnerable to interpreting events in a negative way. She did not question her thoughts, but rather accepted them uncritically. As the weeks went on, Sally began to have more and more negative thoughts about herself and began to feel more and more discouraged and sad. She began to spend an inordinate amount of time studying, although she did not accomplish a great deal because of decreased concentration. She continued to be highly self-critical, and even had negative thoughts about her depressive symptoms: "What's wrong with me? I shouldn't feel this way. Why am I so down? I'm just hopeless." She withdrew somewhat from new friends at school and stopped calling her old friends for support. She discontinued running and swimming and other activities that had previously provided her with a sense of accomplishment. Thus she experienced a paucity of positive inputs. Eventually, her appetite decreased, her sleep became disturbed, and she became enervated and listless. Sally's perception of and behavior in the circumstances at the time facilitated the expression of a biological and psychological vulnerability to depression.

Conceptualizing a patient in cognitive terms is crucial to determining the most efficient and effective course of treatment. It also aids in developing empathy, an ingredient that is critical in establishing a good working relationship with the patient. In general, the questions to ask when conceptualizing patients are:

"How did the patient come to develop this disorder?"

"What were significant life events, experiences, and interactions?"

"What are the patient's most basic beliefs about himself, his world, and others?"

"What are the patient's assumptions, expectations, rules, and attitudes (intermediate beliefs)?"

"What strategies has the patient used throughout life to cope with these negative beliefs?"

"Which automatic thoughts, images, and behaviors help to maintain the disorder?"

"How did the patient's developing beliefs interact with life situations to make the patient vulnerable to the disorder?"

"What is happening in the patient's life right now and what are the patient's perceptions?"

Again, conceptualization begins at the first contact and is an ongoing process. You base your hypotheses on information you have collected from the patient, using the most parsimonious explanations and refraining from interpretations and inferences not clearly based on actual data. You will check out the conceptualization with patients at strategic points to ensure that it is accurate, as well as to help patients understand themselves and their difficulties. Your conceptualization is always subject to modification as you continually uncover new data that will lead you to confirm, refine, or discard your previous hypotheses. The ongoing process of conceptualization is emphasized throughout this book; Chapter 14 illustrates further how historical events shape patients' understanding of themselves and their worlds.