moods in reaction to setbacks. What's more, the experience of depression itself seems to reinforce these pessimistic ways of thinking, so that even after the depression lifts, the child is left with what amounts to an emotional scar, a set of convictions fed by the depression and solidified in the mind: that he can't do well in school, is unlikable, and can do nothing to escape his own brooding moods. These fixed ideas can make the child all the more vulnerable to another depression down the road.

SHORT-CIRCUITING DEPRESSION

The good news: there is every sign that teaching children more productive ways of looking at their difficulties lowers their risk of depression.* In a study of one Oregon high school, about one in four students had what psychologists call a "low-level depression," not severe enough to say it was beyond ordinary unhappiness as yet.[35] Some may have been in the early weeks or months of what was to become a depression.

In a special after-school class seventy-five of the mildly depressed students learned to challenge the thinking patterns associated with depression, to become more adept at making friends, to get along better with their parents, and to engage in more social activities they found pleasant. By the end of the eight-week program, 55 percent of the students had recovered from their mild depression, while only about a quarter of equally depressed students who were not in the program had begun to pull out of their depression. A year later a quarter of those in the comparison group had gone on to fall into a major depression, as opposed to only 14 percent of students in the depression-prevention program. Though they lasted just eight sessions, the classes seemed to have cut the risk of depression in half.[36]

Similarly promising findings came from a special once-a-week class given to ten- to thirteen-year-old youngsters at odds with their parents and showing some signs of depression. In after-school sessions they learned some basic emotional skills, including handling disagreements, thinking before acting, and, perhaps most important, challenging the pessimistic beliefs associated with depression—for example, resolving to study harder after doing poorly on an exam instead of thinking, "I'm just not smart enough."

"What a child learns in these classes is that moods like anxiety, sadness, and anger don't just descend on you without your having any control over them, but that you can change the way you feel by what you think," points out psychologist Martin Seligman, one of the developers of the twelve-week program. Because disputing the depressing thoughts vanquishes the gathering mood of gloom, Seligman added, "it's an instant reinforcer that becomes a habit."

Again the special sessions lowered depression rates by one half—and did so as long as two years later. A year after the classes ended, just 8 percent of those who participated scored at a moderate-to-severe level on a test of depression, versus 29 percent of children in a comparison group. And after two years, about 20 percent of those in the course were showing some signs of at least mild depression, compared to 44 percent of those in the comparison group.

Learning these emotional skills at the cusp of adolescence may be especially helpful, Seligman observes, "These kids seem to be better at handling the routine teenage agonies of rejection. They seem to have learned this at a crucial window for risk of depression, just as they enter the teen years. And the lesson seems to persist and grow a bit stronger over the course of the years after they learn it, suggesting the kids are actually using it in their day-to-day lives."

Other experts on childhood depression applaud the new programs. "If you want to make a real difference for psychiatric illness like depression, you have to do something before the kids get sick in the first place," Kovacs commented. "The real solution is a psychological inoculation."

EATING DISORDERS

During my days as a graduate student in clinical psychology in the late 1960s, I knew two women who suffered from eating disorders, though I realized this only after many years had passed. One was a brilliant graduate student in mathematics at Harvard, a friend from my undergraduate days; the other was on the staff at M.I.T. The mathematician, though skeletally thin, simply could not bring herself to eat; food, she said, repulsed her. The librarian had an ample figure and was given to bingeing on ice cream, Sara Lee carrot cake, and other desserts; then—as she once confided with some embarrassment—she would secretly go off to the bathroom and make herself vomit.

Today the mathematician would be diagnosed with anorexia nervosa, the librarian with bulimia.

In those years there were no such labels. Clinicians were just beginning to comment on the problem; Hilda Bruch, the pioneer in this movement, published her seminal article on eating disorders in 1969.[37] Bruch, puzzled by women who were starving themselves to death, proposed that one of the several underlying causes lay in an inability to label and respond appropriately to bodily urges—notably, of course, hunger. Since then the clinical literature on eating disorders has mushroomed, with a multitude of hypotheses about the causes, ranging from ever-younger girls feeling compelled to compete with unattainably high standards of female beauty, to intrusive mothers who enmesh their daughters in a controlling web of guilt and blame.

Most of these hypotheses suffered from one great drawback: they were extrapolations from observations made during therapy. Far more desirable, from a scientific viewpoint, are studies of large groups of people over a period of several years, to see who among them eventually comes down with the problem. That kind of study allows a clean comparison that can tell, for example, if having controlling parents predisposes a girl to eating disorders. Beyond that, it can identify the cluster of conditions that leads to the problem, and distinguish them from conditions that might seem to be a cause, but which actually are found as often in people without the problem as in those who come for treatment.

When just such a study was done with more than nine hundred girls in the seventh through tenth grades, emotional deficits—particularly a failure to tell distressing feelings from one another and to control them—were found to be key among the factors leading to eating disorders.[38] Even by tenth grade, there were sixty-one girls in this affluent, suburban Minneapolis high school who already had serious symptoms of anorexia or bulimia. The greater the problem, the more the girls reacted to setbacks, difficulties, and minor annoyances with intense negative feelings that they could not soothe, and the less their awareness of what, exactly, they were feeling. When these two emotional tendencies were coupled with being highly dissatisfied with their body, then the outcome was anorexia or bulimia. Overly controlling parents were found not to play a prime role in causing eating disorders. (As Bruch herself had warned, theories based on hindsight were unlikely to be accurate; for example, parents can easily become intensely controlling *in response* to their daughter's eating

disorder, out of desperation to help her.) Also judged irrelevant were such popular explanations as fear of sexuality, early onset of puberty, and low self-esteem.

Instead, the causal chain this prospective study revealed began with the effects on young girls of growing up in a society preoccupied with unnatural thinness as a sign of female beauty. Well in advance of adolescence, girls are already self-conscious about their weight. One six-year-old, for example, broke into tears when her mother asked her to go for a swim, saying she'd look fat in a swimsuit. In fact, says her pediatrician, who tells the story, her weight was normal for her height.[39] In one study of 271 young teenagers, half the girls thought they were too fat, even though the vast majority of them were normal in weight. But the Minneapolis study showed that an obsession with being overweight is not in and of itself sufficient to explain why some girls go on to develop eating disorders.

Some obese people are unable to tell the difference between being scared, angry, and hungry, and so lump all those feelings together as signifying hunger, which leads them to overeat whenever they feel upset.[40] Something similar seems to be happening in these girls. Gloria Leon, the University of Minnesota psychologist who did the study of young girls and eating disorders, observed that these girls "have poor awareness of their feelings and body signals; that was the strongest single predictor that they would go on to develop an eating disorder within the next two years. Most children learn to distinguish among their sensations, to tell if they're feeling bored, angry, depressed, or hungry—it's a basic part of emotional learning. But these girls have trouble distinguishing among their most basic feelings. They may have a problem with their boyfriend, and not be sure whether they're angry, or anxious, or depressed—they just experience a diffuse emotional storm that they do not know how to deal with effectively. Instead they learn to make themselves feel better by eating; that can become a strongly entrenched emotional habit."

But when this habit for soothing themselves interacts with the pressures girls feel to stay thin, the way is paved for eating disorders to develop. "At first she might start with binge eating," Leon observes. "But to stay thin she may turn to vomiting or laxatives, or intense physical exertion to undo the weight gain from overeating. Another avenue this struggle to handle emotional confusion can take is for the girl not to eat at all—it can be a way to feel you have at least some

control over these overwhelming feelings."

The combination of poor inner awareness and weak social skills means that these girls, when upset by friends or parents, fail to act effectively to soothe either the relationship or their own distress. Instead their upset triggers the eating disorder, whether it be that of bulimia or anorexia, or simply binge eating. Effective treatments for such girls, Leon believes, need to include some remedial instruction in the emotional skills they lack. "Clinicians find," she told me, "that if you address the deficits therapy works better. These girls need to learn to identify their feelings and learn ways to soothe themselves or handle their relationships better, without turning to their maladaptive eating habits to do the job."

ONLY THE LONELY: DROPOUTS

It's a grade-school drama: Ben, a fourth grader with few friends, has just heard from his one buddy, Jason, that they aren't going to play together this lunch period—Jason wants to play with another boy, Chad, instead. Ben, crushed, hangs his head and cries. After his sobs subside, Ben goes over to the lunch table where Jason and Chad are eating.

"I hate your guts!" Ben yells at Jason.

"Why?" Jason asks.

"Because you lied," Ben says, his tone accusatory. "You said this whole week that you were gonna play with me and you lied."

Ben then stalks off to his empty table, crying quietly. Jason and Chad go over to him and try to talk to him, but Ben puts his fingers in his ears, determinedly ignoring them, and runs out of the lunchroom to hide behind the school Dumpster. A group of girls who have witnessed the exchange try to play a peacemaker role, finding Ben and telling him that Jason is willing to play with him too. But Ben will have none of it, and tells them to leave him alone. He nurses his wounds, sulking and sobbing, defiantly alone.[41]

A poignant moment, to be sure; the feeling of being rejected and friendless is one most everyone goes through at some point in childhood or adolescence. But what is most telling about Ben's reaction is his failure to respond to Jason's efforts to repair their friendship, a stance that extends his plight when it might have ended. Such an inability to seize key cues is typical of children who are

unpopular; as we saw in Chapter 8, socially rejected children typically are poor at reading emotional and social signals; even when they do read such signals, they may have limited repertoires for response.

Dropping out of school is a particular risk for children who are social rejects. The dropout rate for children who are rejected by their peers is between two and eight times greater than for children who have friends. One study found, for example, that about 25 percent of children who were unpopular in elementary school had dropped out before completing high school, compared to a general rate of 8 percent.[42] Small wonder: imagine spending thirty hours a week in a place where no one likes you.

Two kinds of emotional proclivities lead children to end up as social outcasts. As we have seen, one is the propensity to angry outbursts and to perceive hostility even where none is intended. The second is being timid, anxious, and socially shy. But over and above these temperamental factors, it is children who are "off"—whose awkwardness repeatedly makes people uncomfortable—who tend to be shunted aside.

One way these children are "off" is in the emotional signals they send. When grade schoolers with few friends were asked to match an emotion such as disgust or anger with faces that displayed a range of emotions, they made far more mismatches than did children who were popular. When kindergarteners were asked to explain ways they might make friends with someone or keep from having a fight, it was the unpopular children—the ones others shied away from playing with—who came up with self-defeating answers ("Punch him" for what to do when both children wanted the same toy, for example), or vague appeals for help from a grown-up. And when teenagers were asked to role-play being sad, angry, or mischievous, the more unpopular among them gave the least convincing performances. It is perhaps no surprise that such children come to feel that they are helpless to do any better at making friends; their social incompetence becomes a self-fulfilling prophecy. Instead of learning new approaches to making friends, they simply keep doing the same things that have not worked for them in the past, or come up with even more inept responses.[43]

In the lottery of liking, these children fall short on key emotional criteria: they are not seen as fun to be with, and they don't know how to make another child feel good. Observations of unpopular children at play show, for example, that they are much more likely than others

to cheat, sulk, quit when losing, or show off and brag about winning. Of course, most children want to win at a game—but win or lose, most children are able to contain their emotional reaction so that it does not undermine the relationship with the friend they play games with.

While children who are socially tone-deaf—who continually have trouble reading and responding to emotions—end up as social isolates, this does not apply, of course, to children who go through a temporary period of feeling left out. But for those who are continually excluded and rejected, their painful outcast status clings to them as they continue their school years. The consequences of ending up at the social margins are potentially great as a child continues on into adulthood. For one, it is in the cauldron of close friendships and the tumult of play that children refine the social and emotional skills that they will bring to relationships later in life. Children who are excluded from this realm of learning are, inevitably, disadvantaged.

Understandably, those who are rejected report great anxiety and many worries, as well as being depressed and lonely. In fact, how popular a child was in third grade has been shown to be a better predictor of mental-health problems at age eighteen than anything else—teachers' and nurses' ratings, school performance and IQ, even scores on psychological tests.[44] And, as we have seen, in later stages of life people who have few friends and are chronically lonely are at greater risk for medical diseases and an early death.

As psychoanalyst Harry Stack Sullivan pointed out, we learn how to negotiate intimate relations—to work out differences and share our deepest feelings—in our first close friendships with same-sex chums. But children who are socially rejected are only half as likely as their peers to have a best friend during the crucial years of elementary school, and so miss out on one of the essential chances for emotional growth.[45] One friend can make the difference—even when all others turn their backs (and even when that friendship is not all that solid).

COACHING FOR FRIENDSHIP

There is hope for rejected children, despite their ineptness. Steven Asher, a University of Illinois psychologist, has designed a series of "friendship coaching" sessions for unpopular children that has shown some success.[46] Identifying third and fourth graders who were the

least liked in their classes, Asher gave them six sessions in how to "make playing games more fun" through being "friendly, fun, and nice." To avoid stigma, the children were told that they were acting as "consultants" to the coach, who was trying to learn what kinds of things make it more enjoyable to play games.

The children were coached to act in ways Asher had found typical of more popular children. For example, they were encouraged to think of alternative suggestions and compromises (rather than fighting) if they disagree about the rules; to remember to talk with and ask questions about the other child while they play; to listen and look at the other child to see how he's doing; to say something nice when the other person does well; to smile and offer help or suggestions and encouragement. The children also tried out these basic social amenities while playing games such as Pick-up Sticks with a classmate, and were coached afterward on how well they did. This minicourse in getting along had a remarkable effect: a year later the children who were coached—all of whom were selected because they were the least-liked in their class—were now solidly in the middle of classroom popularity. None were social stars, but none were rejects.

Similar results have been found by Stephen Nowicki, an Emory University psychologist.[47] His program trains social outcasts to hone their ability to read and respond appropriately to other children's feelings. The children, for example, are videotaped while practicing expression of feelings such as happiness and sadness, and are coached to improve their emotional expressiveness. They then try out their newly honed skills with a child they want to make friends with.

Such programs have reported a 50 to 60 percent success rate in raising the popularity of rejected children. These programs (at least as presently designed) seem to work best for third and fourth graders rather than children in higher grades, and to be more helpful for socially inept children than for highly aggressive ones. But that is all a matter for fine-tuning; the hopeful sign is that many or most rejected children can be brought into the circle of friendship with some basic emotional coaching.

DRINKING AND DRUGS: ADDICTION AS SELF-MEDICATION

Students at the local campus call it *drinking to black*—bingeing on beer to the point of passing out. One of the techniques: attach a funnel to a

garden hose, so that a can of beer can be downed in about ten seconds. The method is not an isolated oddity. One survey found that two fifths of male college students down seven or more drinks at a time, while 11 percent call themselves "heavy drinkers." Another term, of course, might be "alcoholics."[48] About half of college men and almost 40 percent of women have at least two binge-drinking episodes in a month.[49]

While in the United States use of most drugs among young people generally tapered off in the 1980s, there is a steady trend toward more alcohol use at ever-younger ages. A 1993 survey found that 35 percent of college women said they drank to get drunk, while just 10 percent did so in 1977; overall, one in three students drinks to get drunk. That poses other risks: 90 percent of all rapes reported on college campuses happened when either the assailant or the victim—or both—had been drinking.[50] Alcohol-related accidents are the leading cause of death among young people between fifteen and twenty-four.[51]

Experimentation with drugs and alcohol might seem a rite of passage for adolescents, but this first taste can have long-lasting results for some. For most alcoholics and drug abusers, the beginnings of addiction can be traced to their teen years, though few of those who so experiment end up as alcoholics or drug abusers. By the time students leave high school, over 90 percent have tried alcohol, yet only about 14 percent eventually become alcoholics; of the millions of Americans who experimented with cocaine, fewer than 5 percent became addicted.[52] What makes the difference?

To be sure, those living in high-crime neighborhoods, where crack is sold on the corner and the drug dealer is the most prominent local model of economic success, are most at risk for substance abuse. Some may end up addicted through becoming small-time dealers themselves, others simply because of the easy access or a peer culture that glamorizes drugs—a factor that heightens the risk of drug use in any neighborhood, even (and perhaps especially) the most well-off. But still the question remains, of the pool of those exposed to these lures and pressures, and who go on to experiment, which ones are most likely to end up with a lasting habit?

One current scientific theory is that those who stay with the habit, becoming increasingly dependent on alcohol or drugs, are using these substances as a medication of sorts, a way to soothe feelings of anxiety, anger, or depression. Through their early experimentation

they hit upon a chemical fix, a way to calm the feelings of anxiety or melancholy that have tormented them. Thus of several hundred seventh- and eighth-grade students tracked for two years, it was those who reported higher levels of emotional distress who subsequently went on to have the highest rates of substance abuse.[53] This may explain why so many young people are able to experiment with drugs and drinking without becoming addicted, while others become dependent almost from the start: those most vulnerable to addiction seem to find in the drug or alcohol an instant way to soothe emotions that have distressed them for years.

As Ralph Tarter, a psychologist at the Western Psychiatric Institute and Clinic in Pittsburgh, put it, "For people who are biologically predisposed, the first drink or dose of a drug is immensely reinforcing, in a way others just don't experience. Many recovering drug abusers tell me, 'The moment I took my first drug, I felt normal for the first time.' It stabilizes them physiologically, at least in the short term."[54] That, of course, is the devil's bargain of addiction: a short-term good feeling in exchange for the steady meltdown of one's life.

Certain emotional patterns seem to make people more likely to find emotional relief in one substance rather than another. For example, there are two emotional pathways to alcoholism. One starts with someone who was high-strung and anxious in childhood, who typically discovers as a teenager that alcohol will calm the anxiety. Very often they are children—usually sons—of alcoholics who themselves have turned to alcohol to soothe their nerves. One biological marker for this pattern is undersecretion of GABA, a neurotransmitter that regulates anxiety—too little GABA is experienced as a high level of tension. One study found that sons of alcoholic fathers had low levels of GABA and were highly anxious, but when they drank alcohol, their GABA levels rose as their anxiety fell.[55] These sons of alcoholics drink to ease their tension, finding in alcohol a relaxation that they could not seem to get otherwise. Such people may be vulnerable to abusing sedatives as well as alcohol for the same anxiety-reduction effect.

A neuropsychological study of sons of alcoholics who at age twelve showed signs of anxiety such as a heightened heart rate in response to stress, as well as impulsivity, found the boys also had poor frontal lobe functioning.[56] Thus the brain areas that might have helped ease their anxiety or control their impulsiveness brought them less help than in other boys. And since the pre-frontal lobes also handle