working memory—which holds in mind the consequences of various routes of action while making a decision—their deficit could support a slide into alcoholism by helping them ignore the long-term drawbacks of drinking, even as they found an immediate sedation from anxiety through alcohol.

This craving for calm seems to be an emotional marker of a genetic susceptibility to alcoholism. A study of thirteen hundred relatives of alcoholics found that the children of alcoholics who were most at risk for becoming alcoholics themselves were those who reported having chronically high levels of anxiety. Indeed, the researchers concluded that alcoholism develops in such people as "self-medication of anxiety symptoms."[57]

A second emotional pathway to alcoholism comes from a high level of agitation, impulsivity, and boredom. This pattern shows up in infancy as being restless, cranky, and hard to handle, in grade school as having the "fidgets," hyperactivity, and getting into trouble, a propensity that, as we have seen, can push such children to seek out friends on the fringe—sometimes leading to a criminal career or the diagnosis of "antisocial personality disorder." Such people (and they are mainly men) have as their main emotional complaint agitation; their main weakness is unrestrained impulsivity; their usual reaction to boredom—which they often feel—is an impulsive search for risk and excitement. As adults, people with this pattern (which may be tied to deficiencies in two other neurotransmitters, serotonin and MAO) find that alcohol can soothe their agitation. And the fact that they can't stand monotony makes them ready to try anything; coupled with their general impulsivity, it makes them prone to abusing an almost random list of drugs besides alcohol.[58]

While depression can drive some to drink, the metabolic effects of alcohol often simply worsen the depression after a short lift. People who turn to alcohol as an emotional palliative do so much more often to calm anxiety than for depression; an entirely different class of drugs soothes the feelings of people who are depressed—at least temporarily. Feeling chronically unhappy puts people at greater risk for addiction to stimulants such as cocaine, which provide a direct antidote to feeling depressed. One study found that more than half the patients being treated at a clinic for cocaine addiction would have been diagnosed with severe depression before they started their habit, and the deeper the preceding depression, the stronger the habit.[59]

Chronic anger may lead to still another kind of susceptibility. In a

study of four hundred patients being treated for addiction to heroin and other opioids, the most striking emotional pattern was a lifelong difficulty handling anger and a quickness to rage. Some of the patients themselves said that with opiates they finally felt normal and relaxed.[60]

Though the predisposition to substance abuse may, in many cases, be brain-based, the feelings that drive people to "self-medicate" themselves through drink or drugs can be handled without recourse to medication, as Alcoholics Anonymous and other recovery programs have demonstrated for decades. Acquiring the ability to handle those feelings—soothing anxiety, lifting depression, calming rage—removes the impetus to use drugs or alcohol in the first place. These basic emotional skills are taught remedially in treatment programs for drug and alcohol abuse. It would be far better, of course, if they were learned early in life, well before the habit became established.

NO MORE WARS: A FINAL COMMON PREVENTIVE PATHWAY

Over the last decade or so "wars" have been proclaimed, in turn, on teen pregnancy, dropping out, drugs, and most recently violence. The trouble with such campaigns, though, is that they come too late, after the targeted problem has reached epidemic proportions and taken firm root in the lives of the young. They are crisis intervention, the equivalent of solving a problem by sending an ambulance to the rescue rather than giving an inoculation that would ward off the disease in the first place. Instead of more such "wars," what we need is to follow the logic of prevention, offering our children the skills for facing life that will increase their chances of avoiding any and all of these fates.[61]

My focus on the place of emotional and social deficits is not to deny the role of other risk factors, such as growing up in a fragmented, abusive, or chaotic family, or in an impoverished, crime- and drug-ridden neighborhood. Poverty itself delivers emotional blows to children: poorer children at age five are already more fearful, anxious, and sad than their better-off peers, and have more behavior problems such as frequent tantrums and destroying things, a trend that continues through the teen years. The press of poverty corrodes family life too: there tend to be fewer expressions of parental warmth, more depression in mothers (who are often single and jobless), and a

greater reliance on harsh punishments such as yelling, hitting, and physical threats.[62]

But there is a role that emotional competence plays over and above family and economic forces—it may be decisive in determining the extent to which any given child or teenager is undone by these hardships or finds a core of resilience to survive them. Long-term studies of hundreds of children brought up in poverty, in abusive families, or by a parent with severe mental illness show that those who are resilient even in the face of the most grinding hardships tend to share key emotional skills.[63] These include a winning sociability that draws people to them, self-confidence, an optimistic persistence in the face of failure and frustration, the ability to recover quickly from upsets, and an easygoing nature.

But the vast majority of children face such difficulties without these advantages. Of course, many of these skills are innate, the luck of genes—but even qualities of temperament can change for the better, as we saw in Chapter 14. One line of intervention, of course, is political and economic, alleviating the poverty and other social conditions that breed these problems. But apart from these tactics (which seem to move ever lower on the social agenda) there is much that can be offered to children to help them grapple better with such debilitating hardships.

Take the case of emotional disorders, afflictions that about one in two Americans experiences over the course of life. A study of a representative sample of 8,098 Americans found that 48 percent suffered from at least one psychiatric problem during their lifetime.[64] Most severely affected were the 14 percent of people who developed three or more psychiatric problems at once. This group was the most troubled, accounting for 60 percent of all psychiatric disorders occurring at any one time, and 90 percent of the most severe and disabling ones. While they need intensive care now, the optimal approach would be, wherever possible, to prevent these problems in the first place. To be sure, not every mental disorder can be prevented—but there are some, and perhaps many, that can. Ronald Kessler, the University of Michigan sociologist who did the study, told me, “We need to intervene early in life. Take a young girl who has a social phobia in the sixth grade, and starts drinking in junior high school to handle her social anxieties. By her late twenties, when she shows up in our study, she’s still fearful, has become both an alcohol and drug abuser, and is depressed because her life is so messed up. The big

question is, what could we have done early in her life to have headed off the whole downward spiral?"

The same holds, of course, for dropping out or violence, or most of the litany of perils faced by young people today. Educational programs to prevent one or another specific problem such as drug use and violence have proliferated wildly in the last decade or so, creating a mini-industry within the education marketplace. But many of them —including many of the most slickly marketed and most widely used —have proven to be ineffective. A few, to the chagrin of educators, even seemed to increase the likelihood of the problems they were meant to head off, particularly drug abuse and teen sex.

Information Is Not Enough

An instructive case in point is sexual abuse of children. As of 1993, about two hundred thousand substantiated cases were reported annually in the United States, with that number growing by about 10 percent per year. And while estimates vary widely, most experts agree that between 20 and 30 percent of girls and about half that number of boys are victims of some form of sexual abuse by age seventeen (the figures rise or fall depending on how sexual abuse is defined, among other factors).[65] There is no single profile of a child who is particularly vulnerable to sexual abuse, but most feel unprotected, unable to resist on their own, and isolated by what has happened to them.

With these risks in mind, many schools have begun to offer programs to prevent sexual abuse. Most such programs are tightly focused on basic information about sexual abuse, teaching kids, for example, to know the difference between "good" and "bad" touching, alerting them to the dangers, and encouraging them to tell an adult if anything untoward happens to them. But a national survey of two thousand children found that this basic training was little better than nothing—or actually worse than nothing—in helping children do something to prevent being victimized, whether by a school bully or a potential child molester.[66] Worse, the children who had only such basic programs and who had subsequently become victims of sexual assault were actually *half* as likely to report it afterward than were children who had had no programs at all.

By contrast, children given more comprehensive training—including related emotional and social competences—were better able

to protect themselves against the threat of being victimized: they were far more likely to demand to be left alone, to yell or fight back, to threaten to tell, and to actually tell if something bad did happen to them. This last benefit—reporting the abuse—is preventive in a telling sense: many child molesters victimize hundreds of children. A study of child molesters in their forties found that, on average, they had one victim a month since their teenage years. A report on a bus driver and a high-school computer teacher reveals they molested about three hundred children each year between them—yet not one of the children reported the sexual abuse; the abuse came to light only after one of the boys who had been abused by the teacher started to sexually abuse his sister.[67]

Those children who got the more comprehensive programs were three times more likely than those in minimal programs to report abuse. What worked so well? These programs were not one-shot topics, but were given at different levels several times over the course of a child's school career, as part of health or sex education. They enlisted parents to deliver the message to the child along with what was taught in school (children whose parents did this were the very best at resisting threats of sexual abuse).

Beyond that, social and emotional competences made the difference. It is not enough for a child simply to know about "good" and "bad" touching; children need the self-awareness to know when a situation *feels* wrong or distressing long before the touching begins. This entails not just self-awareness, but also enough self-confidence and assertiveness to trust and act on those feelings of distress, even in the face of an adult who may be trying to reassure her that "it's okay." And then a child needs a repertoire of ways to disrupt what is about to happen—everything from running away to threatening to tell. For these reasons, the better programs teach children to stand up for what they want, to assert their rights rather than be passive, to know what their boundaries are and defend them.

The most effective programs, then, supplemented the basic sexual-abuse information with essential emotional and social skills. These programs taught children to find ways to solve interpersonal conflicts more positively, to have more self-confidence, not to blame themselves if something happened, and to feel they had a network of support in teachers and parents whom they could turn to. And if something bad did happen to them, they were far more likely to tell.

The Active Ingredients

Such findings have led to a reenvisioning of what the ingredients of an optimal prevention program should be, based on those that impartial evaluations showed to be truly effective. In a five-year project sponsored by the W. T. Grant Foundation, a consortium of researchers studied this landscape and distilled the active ingredients that seemed crucial to the success of those programs that worked.[68] The list of key skills the consortium concluded should be covered, no matter what specific problem it is designed to prevent, reads like the ingredients of emotional intelligence (see Appendix D for the full list).[69]

The emotional skills include self-awareness; identifying, expressing, and managing feelings; impulse control and delaying gratification; and handling stress and anxiety. A key ability in impulse control is knowing the difference between feelings and actions, and learning to make better emotional decisions by first controlling the impulse to act, then identifying alternative actions and their consequences before acting. Many competences are interpersonal: reading social and emotional cues, listening, being able to resist negative influences, taking others' perspectives, and understanding what behavior is acceptable in a situation.

These are among the core emotional and social skills for life, and include at least partial remedies for most, if not all, of the difficulties I have discussed in this chapter. The choice of specific problems these skills might inoculate against is nearly arbitrary—similar cases for the role of emotional and social competences could have been made for, say, unwanted teen pregnancy or teen suicide.

To be sure, the causes of all such problems are complex, interweaving differing ratios of biological destiny, family dynamics, the politics of poverty, and the culture of the streets. No single kind of intervention, including one targeting emotions, can claim to do the whole job. But to the degree emotional deficits add to a child's risk—and we have seen that they add a great deal—attention must be paid to emotional remedies, not to the exclusion of other answers, but along with them. The next question is, what would an education in the emotions look like?

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* In children, unlike adults, medication is not a clear alternative to therapy or preventive education for treating depression; children metabolize medications differently than do adults. Tricyclic antidepressants, often successful with adults, have failed in controlled studies with

children to prove better than an inactive placebo drug. Newer depression medications, including Prozac, are as yet untested for use in children. And desipramine, one of the most common (and safest) tricyclics used with adults, has, at this writing, become the focus of FDA scrutiny as a possible cause of death in children.

16

Schooling the Emotions

The main hope of a nation lies in the proper education of its youth.

—ERASMUS

It's a strange roll call, going around the circle of fifteen fifth graders sitting Indian-style on the floor. As a teacher calls their names the students respond not with the vacant "Here" standard in schools, but instead call out a number that indicates how they feel; one means low spirits, ten high energy.

Today spirits are high:

"Jessica."

"Ten: I'm jazzed, it's Friday."

"Patrick."

"Nine: excited, a little nervous."

"Nicole."

"Ten: peaceful, happy …"

It's a class in Self Science at the Nueva School, a school retrofitted into what used to be the grand manse of the Crocker family, the dynasty that founded one of San Francisco's biggest banks. Now the building, which resembles a miniature version of the San Francisco Opera House, houses a private school that offers what may be a model course in emotional intelligence.

The subject in Self Science is feelings—your own and those that erupt in relationships. The topic, by its very nature, demands that teachers and students focus on the emotional fabric of a child's life—a focus that is determinedly ignored in almost every other classroom in America. The strategy here includes using the tensions and traumas of children's lives as the topic of the day. Teachers speak to real issues—hurt over being left out, envy, disagreements that could escalate into a schoolyard battle. As Karen Stone McCown, developer of the Self Science Curriculum and founder of Nueva, put it, "Learning doesn't take place in isolation from kids' feelings. Being emotionally literate is as important for learning as instruction in math and reading."[1]

Self Science is a pioneer, an early harbinger of an idea that is spreading to schools coast to coast.* Names for these classes range from "social development" to "life skills" to "social and emotional learning." Some, referring to Howard Gardner's idea of multiple intelligences, use the term "personal intelligences." The common thread is the goal of raising the level of social and emotional competence in children as a part of their regular education—not just something taught remedially to children who are faltering and identified as "troubled," but a set of skills and understandings essential for every child.

The emotional-literacy courses have some remote roots in the affective-education movement of the 1960s. The thinking then was that psychological and motivational lessons were more deeply learned if they involved an immediate experience of what was being taught conceptually. The emotional-literacy movement, though, turns the term *affective education* inside out—instead of using affect to educate, it educates affect itself.

More immediately, many of these courses and the momentum for their spread come from an ongoing series of school-based prevention programs, each targeting a specific problem: teen smoking, drug abuse, pregnancy, dropping out, and most recently violence. As we saw in the last chapter, the W. T. Grant Consortium's study of prevention programs found they are far more effective when they teach a core of emotional and social competences, such as impulse control, managing anger, and finding creative solutions to social predicaments. From this principle a new generation of interventions has emerged.

As we saw in Chapter 15, interventions designed to target the specific deficits in emotional and social skills that undergird problems such as aggression or depression can be highly effective as buffers for children. But those well-designed interventions, in the main, have been run by research psychologists as experiments. The next step is to take the lessons learned from such highly focused programs and generalize them as a preventive measure for the entire school population, taught by ordinary teachers.

This more sophisticated and more effective approach to prevention includes information about problems such as AIDS, drugs, and the like, at the points in youngsters' lives when they are beginning to face them. But its main, ongoing subject is the core competence that is brought to bear on any of these specific dilemmas: emotional

intelligence.

This new departure in bringing emotional literacy into schools makes emotions and social life themselves topics, rather than treating these most compelling facets of a child's day as irrelevant intrusions or, when they lead to eruptions, relegating them to occasional disciplinary trips to the guidance counselor or the principal's office.

The classes themselves may at first glance seem uneventful, much less a solution to the dramatic problems they address. But that is largely because, like good childrearing at home, the lessons imparted are small but telling, delivered regularly and over a sustained period of years. That is how emotional learning becomes ingrained; as experiences are repeated over and over, the brain reflects them as strengthened pathways, neural habits to apply in times of duress, frustration, hurt. And while the everyday substance of emotional literacy classes may look mundane, the outcome—decent human beings—is more critical to our future than ever.

A LESSON IN COOPERATION

Compare a moment from a class in Self Science with the classroom experiences you can recall.

A fifth-grade group is about to play the Cooperation Squares game, in which the students team up to put together a series of square-shaped jigsaw puzzles. The catch: their teamwork is all in silence, with no gesturing allowed.

The teacher, Jo-An Vargo, divides the class into three groups, each assigned to a different table. Three observers, each familiar with the game, get an evaluation sheet to assess, for example, who in the group takes the lead in organizing, who is a clown, who disrupts.

The students dump the pieces of the puzzles on the table and go to work. Within a minute or so it's clear that one group is surprisingly efficient as a team; they finish in just a few minutes. A second group of four is engaged in solitary, parallel efforts, each working separately on their own puzzle, but getting nowhere. Then they slowly start to work collectively to assemble their first square, and continue to work as a unit until all the puzzles are solved.

But the third group still struggles, with only one puzzle nearing completion, and even that looking more like a trapezoid than a square. Sean, Fairlie, and Rahman have yet to find the smooth