catecholamines; the result is increasing catecholamine levels. With the neural brakes on anxiety disarmed by the drug injections, the yohimbine triggered panic in 9 of 15 PTSD patients, and lifelike flashbacks in 6. One vet had a hallucination of a helicopter being shot down in a trail of smoke and a bright flash; another saw the explosion by a land mine of a Jeep with his buddies in it—the same scene that had haunted his nightmares and appeared as flashbacks for more than 20 years. The yohimbine study was conducted by Dr. John Krystal, director of the Laboratory of Clinical Psychopharmacology at the National Center for PTSD at the West Haven, Conn., VA Hospital.

- 9. Fewer alpha-2 receptors in men with PTSD: see Charney, "Psychobiologic Mechanisms."
- 10. The brain, trying to lower the rate of CRF secretion, compensates by decreasing the number of receptors that release it. One telltale sign that this is what happens in people with PTSD comes from a study in which eight patients being treated for the problem were injected with CRF. Ordinarily, an injection of CRF triggers a flood of ACTH, the hormone that streams through the body to trigger catecholamines. But in the PTSD patients, unlike a comparison group of people without PTSD, there was no discernible change in levels of ACTH—a sign that their brains had cut back on CRF receptors because they already were overloaded with the stress hormone. The research was described to me by Charles Nemeroff, a Duke University psychiatrist.
- 11. I interviewed Dr. Nemeroff in The New York Times (June 12, 1990).
- 12. Something similar seems to occur in PTSD: For instance, in one experiment Vietnam vets with a PTSD diagnosis were shown a specially edited 15-minute film of graphic combat scenes from the movie *Platoon*. In one group, the vets were injected with naloxone, a substance that blocks endorphins; after watching the movie, these vets showed no change in their sensitivity to pain. But in the group without the endorphin blocker, the men's pain sensitivity decreased 30 percent, indicating an increase in endorphin secretion. The same scene had no such effect on veterans who did not have PTSD, suggesting that in the PTSD victims the nerve pathways that regulate endorphins were overly sensitive or hyperactive —an effect that became apparent only when they were reexposed to something reminiscent of the original trauma. In this sequence the amygdala first evaluates the emotional importance of what we see. The study was done by Dr. Roger Pitman, a Harvard psychiatrist. As with other symptoms of PTSD, this brain change is not only learned under duress, but can be triggered once again if there is something reminiscent of the original terrible event. For example, Pitman found that when laboratory rats were shocked in a cage, they developed the same endorphin-based analgesia found in the Vietnam vets shown Platoon. Weeks later, when the rats were put into the cages where they had been shocked—but without any current being turned on—they once again became insensitive to pain, as they originally had been when shocked. See Roger Pitman, "Naloxone-Reversible Analgesic Response to Combat-Related Stimuli in Posttraumatic Stress Disorder," Archives of General Medicine (June 1990). See also Hillel Glover,

- "Emotional Numbing: A Possible Endorphin-Mediated Phenomenon Associated with Post-Traumatic Stress Disorders and Other Allied Psychopathologic States," *Journal of Traumatic Stress* 5, 4 (1992).
- 13. The brain evidence reviewed in this section is based on Dennis Charney's excellent article, "Psychobiologic Mechanisms."
- 14. Charney, "Psychobiologic Mechanisms," 300.
- 15. Role of prefrontal cortex in unlearning fear: In Richard Davidson's study, volunteers had their sweat response measured (a barometer of anxiety) while they heard a tone followed by a loud, obnoxious noise. The loud noise triggered a rise in sweat. After a time, the tone alone was enough to trigger the same rise, showing that the volunteers had learned an aversion to the tone. As they continued to hear the tone without the obnoxious noise, the learned aversion faded away—the tone sounded without any increase in sweat. The more active the volunteers' left prefrontal cortex, the more quickly they lost the learned fear.

In another experiment showing the prefrontal lobes' role in getting over a fear, lab rats —as is so often the case in these studies—learned to fear a tone paired with an electric shock. The rats then had what amounts to a lobotomy, a surgical lesion in their brain that cut off the prefrontal lobes from the amygdala. For the next several days the rats heard the tone without getting an electric shock. Slowly, over a period of days, rats who have once learned to fear a tone will gradually lose their fear. But for the rats with the disconnected prefrontal lobes, it took nearly twice as long to unlearn the fear—suggesting a crucial role for the prefrontal lobes in managing fear and, more generally, in mastering emotional lessons. This experiment was done by Maria Morgan, a graduate student of Joseph LeDoux's at the Center for Neural Science, New York University.

- 16. Recovery from PTSD: I was told about this study by Rachel Yehuda, a neurochemist and director of the Traumatic Stress Studies Program at the Mt. Sinai School of Medicine in Manhattan. I reported on the results in *The New York Times* (Oct. 6, 1992).
- 17. Childhood trauma: Lenore Terr, Too Scared to Cry (New York: HarperCollins, 1990).
- 18. Pathway to recovery from trauma: Judith Lewis Herman, *Trauma and Recovery* (New York: Basic Books, 1992).
- 19. "Dosing" of trauma: Mardi Horowitz, *Stress Response Syndromes* (Northvale, NJ: Jason Aronson, 1986).
- 20. Another level at which relearning goes on, at least for adults, is philosophical. The eternal question of the victim—"Why me?"—needs to be addressed. Being the victim of trauma shatters a person's faith that the world is a place that can be trusted, and that what happens to us in life is just—that is, that we can have control over our destiny by living a righteous life. The answers to the victim's conundrum, of course, need not be philosophical or religious; the task is to rebuild a system of belief or faith that allows living once again as though the world and the people in it can be trusted.

- 21. That the original fear persists, even if subdued, has been shown in studies where lab rats were conditioned to fear a sound, such as a bell, when it was paired with an electric shock. Afterward, when they heard the bell they reacted with fear, even though no shock accompanied it. Gradually, over the course of a year (a very long time for a rat—about a third of its life), the rats lost their fearfulness of the bell. But the fear was restored in full force when the sound of the bell was once again paired with a shock. The fear came back in a single instant—but took months and months to subside. The parallel in humans, of course, is when a traumatic fear from long ago, dormant for years, floods back in full force with some reminder of the original trauma.
- 22. Luborsky's therapy research is detailed in Lester Luborsky and Paul Crits-Christoph, *Understanding Transference: The CCRT Method* (New York: Basic Books, 1990).

## **Chapter 14. Temperament Is Not Destiny**

- 1. See, for example, Jerome Kagan et al., "Initial Reactions to Unfamiliarity," *Current Directions in Psychological Science* (Dec. 1992). The fullest description of the biology of temperament is in Kagan, *Galen's Prophecy*.
- 2. Tom and Ralph, archetypically timid and bold types, are described in Kagan, *Galen's Prophecy*, pp. 155–57.
- 3. Lifelong problems of the shy child: Iris Bell, "Increased Prevalence of Stress-related Symptoms in Middle-aged Women Who Report Childhood Shyness," *Annals of Behavior Medicine* 16 (1994).
- 4. The heightened heart rate: Iris R. Bell et al., "Failure of Heart Rate Habituation During Cognitive and Olfactory Laboratory Stressors in Young Adults With Childhood Shyness," *Annals of Behavior Medicine* 16 (1994).
- 5. Panic in teenagers: Chris Hayward et al., "Pubertal Stage and Panic Attack History in Sixth- and Seventh-grade Girls," *American Journal of Psychiatry* vol. 149(9) (Sept. 1992), pp. 1239–43; Jerold Rosenbaum et al., "Behavioral Inhibition in Childhood: A Risk Factor for Anxiety Disorders," *Harvard Review of Psychiatry* (May 1993).
- 6. The research on personality and hemispheric differences was done by Dr. Richard Davidson at the University of Wisconsin, and by Dr. Andrew Tomarken, a psychologist at Vanderbilt University: see Andrew Tomarken and Richard Davidson, "Frontal Brain Activation in Repressors and Nonrepressors," Journal of Abnormal Psychology 103 (1994).
- 7. The observations of how mothers can help timid infants become bolder were done with Doreen Arcus. Details are in Kagan, *Galen's Prophecy*.
- 8. Kagan, Galen's Prophecy, pp. 194–95.
- 9. Growing less shy: Jens Asendorpf, "The Malleability of Behavioral Inhibition: A Study of Individual Developmental Functions," *Developmental Psychology* 30, 6 (1994).

- 10. Hubel and Wiesel: David H. Hubel, Thorsten Wiesel, and S. Levay, "Plasticity of Ocular Columns in Monkey Striate Cortex," *Philosophical Transactions of the Royal Society of London* 278 (1977).
- 11. Experience and the rat's brain: The work of Marian Diamond and others is described in Richard Thompson, *The Brain* (San Francisco: W. H. Freeman, 1985).
- 12. Brain changes in treating obsessive-compulsive disorder: L. R. Baxter et al., "Caudate Glucose Metabolism Rate Changes With Both Drug and Behavior Therapy for Obsessive-Compulsive Disorder," *Archives of General Psychiatry* 49 (1992).
- 13. Increased activity in prefrontal lobes: L. R. Baxter et al., "Local Cerebral Glucose Metabolic Rates in Obsessive-Compulsive Disorder," *Archives of General Psychiatry* 44 (1987).
- 14. Prefrontal lobes maturity: Bryan Kolb, "Brain Development, Plasticity, and Behavior," *American Psychologist* 44 (1989).
- 15. Childhood experience and prefrontal pruning: Richard Davidson, "Asymmetric Brain Function, Affective Style and Psychopathology: The Role of Early Experience and Plasticity," *Development and Psychopathology* vol. 6 (1994), pp. 741–58.
- 16. Biological attunement and brain growth: Schore, Affect Regulation.
- 17. M. E. Phelps et al., "PET: A Biochemical Image of the Brain at Work," in N. A. Lassen et al., *Brain Work and Mental Activity: Quantitative Studies with Radioactive Tracers* (Copenhagen: Munksgaard, 1991).

## PART FIVE: EMOTIONAL LITERACY

## **Chapter 15. The Cost of Emotional Illiteracy**

- 1. Emotional literacy: I wrote about such courses in *The New York Times* (March 3, 1992).
- 2. The statistics on teen crime rates are from the Uniform Crime Reports, *Crime in the U.S.*, 1991, published by the Department of Justice.
- 3. Violent crimes in teenagers: In 1990 the juvenile arrest rate for violent crimes climbed to 430 per 100,000, a 27 percent jump over the 1980 rate. Teen arrest rates for forcible rape rose from 10.9 per 100,000 in 1965 to 21.9 per 100,000 in 1990. Teen murder rates more than quadrupled from 1965 to 1990, from 2.8 per 100,000 to 12.1; by 1990 three of four teenage murders were with guns, a 79 percent increase over the decade. Aggravated assault by teenagers jumped by 64 percent from 1980 to 1990.i See, e.g., Ruby Takanashi, "The Opportunities of Adolescence," *American Psychologist* (Feb. 1993).
- 4. In 1950 the suicide rate for those 15 to 24 was 4.5 per 100,000. By 1989 it was three times higher, 13.3. Suicide rates for children 10 to 14 almost tripled between 1968 and 1985. Figures on suicide, homicide victims, and pregnancies are from *Health*, 1991, U.S. Department of Health and Human Services, and Children's Safety Network, *A Data Book of Child and Adolescent Injury* (Washington, DC: National Center for Education in Maternal and Child Health, 1991).
- 5. Over the three decades since 1960, rates of gonorrhea jumped to a level four times higher among children 10 to 14, and three times higher among those 15 to 19. By 1990, 20 percent of AIDS patients were in their twenties, many having become infected during their teen years. Pressure to have sex early is getting stronger. A survey in the 1990s found that more than a third of younger women say that pressure from peers made them decide to have sex the first time; a generation earlier just 13 percent of women said so. See Ruby Takanashi, "The Opportunities of Adolescence," and Children's Safety Network, *A Data Book of Child and Adolescent Injury*.
- 6. Heroin and cocaine use for whites rose from 18 per 100,000 in 1970 to a rate of 68 in 1990—about three times higher. But over the same two decades among blacks, the rise was from a 1970 rate of 53 per 100,000 to a staggering 766 in 1990—close to *13 times* the rate 20 years before. Drug use rates are from *Crime in the U.S.*, *1991*, U.S. Department of Justice.
- 7. As many as one in five children have psychological difficulties that impair their lives in some way, according to surveys done in the United States, New Zealand, Canada, and Puerto Rico. Anxiety is the most common problem in children under 11, afflicting 10 percent with phobias severe enough to interfere with normal life, another 5 percent with generalized anxiety and constant worry, and another 4 percent with intense anxiety about

being separated from their parents. Binge drinking climbs during the teenage years among boys to a rate of about 20 percent by age 20. I reported much of this data on emotional disorders in children in *The New York Times* (Jan. 10, 1989).

- 8. The national study of children's emotional problems, and comparison with other countries: Thomas Achenbach and Catherine Howell, "Are America's Children's Problems Getting Worse? A 13-Year Comparison," *Journal of the American Academy of Child and Adolescent Psychiatry* (Nov. 1989).
- 9. The comparison across nations was by Urie Bronfenbrenner, in Michael Lamb and Kathleen Sternberg, *Child Care in Context: Cross-Cultural Perspectives* (Englewood, NJ: Lawrence Erlbaum, 1992).
- 10. Urie Bronfenbrenner was speaking at a symposium at Cornell University (Sept. 24, 1993).
- 11. Longitudinal studies of aggressive and delinquent children: see, for example, Alexander Thomas et al., "Longitudinal Study of Negative Emotional States and Adjustments from Early Childhood Through Adolescence," *Child Development*, vol. 59 (Sept. 1988).
- 12. The bully experiment: John Lochman, "Social-Cognitive Processes of Severely Violent, Moderately Aggressive, and Nonaggressive Boys," *Journal of Clinical and Consulting Psychology*, 1994.
- 13. The aggressive boys research: Kenneth A. Dodge, "Emotion and Social Information Processing," in J. Garber and K. Dodge, *The Development of Emotion Regulation and Dysregulation* (New York: Cambridge University Press, 1991).
- 14. Dislike for bullies within hours: J. D. Coie and J. B. Kupersmidt, "A Behavioral Analysis of Emerging Social Status in Boys' Groups," *Child Development* 54 (1983).
- 15. Up to half of unruly children: See, for example, Dan Offord et al., "Outcome, Prognosis, and Risk in a Longitudinal Follow-up Study," *Journal of the American Academy of Child and Adolescent Psychiatry* 31 (1992).
- 16. Aggressive children and crime: Richard Tremblay et al., "Predicting Early Onset of Male Antisocial Behavior from Preschool Behavior," *Archives of General Psychiatry* (Sept. 1994).
- 17. What happens in a child's family before the child reaches school is, of course, crucial in creating a predisposition to aggression. One study, for example, showed that children whose mothers rejected them at age 1, and whose birth was more complicated, were four times as likely as others to commit a violent crime by age 18. Adriane Raines et al., "Birth Complications Combined with Early Maternal Rejection at Age One Predispose to Violent Crime at Age 18 Years," *Archives of General Psychiatry* (Dec. 1994).
- 18. While low verbal IQ has appeared to predict delinquency (one study found an eight-point difference in these scores between delinquents and nondelinquents), there is evidence that impulsivity is more directly and powerfully at cause for both the low IQ scores and delinquency. As for the low scores, impulsive children don't pay attention well enough to learn the language and reasoning skills on which verbal IQ scores are based, and so

- impulsivity lowers those scores. In the Pittsburgh Youth Study, a well-designed longitudinal project where both IQ and impulsivity were assessed in ten- to twelve-year-olds, impulsivity was almost three times more powerful than verbal IQ in predicting delinquency. See the discussion in: Jack Block, "On the Relation Between IQ, Impulsivity, and Delinquency," *Journal of Abnormal Psychology* 104 (1995).
- 19. "Bad" girls and pregnancy: Marion Underwood and Melinda Albert, "Fourth-Grade Peer Status as a Predictor of Adolescent Pregnancy," paper presented at the meeting of the Society for Research on Child Development, Kansas City, Missouri (Apr. 1989).
- 20. The trajectory to delinquency: Gerald R. Patterson, "Orderly Change in a Stable World: The Antisocial Trait as Chimera," *Journal of Clinical and Consulting Psychology* 62 (1993).
- 21. Mind-set of aggression: Ronald Slaby and Nancy Guerra, "Cognitive Mediators of Aggression in Adolescent Offenders," *Developmental Psychology* 24 (1988).
- 22. The case of Dana: from Laura Mufson et al., *Interpersonal Psychotherapy for Depressed Adolescents* (New York: Guilford Press, 1993).
- 23. Rising rates of depression worldwide: Cross-National Collaborative Group, "The Changing Rate of Major Depression: Cross-National Comparisons," *Journal of the American Medical Association* (Dec. 2, 1992).
- 24. Ten times greater chance of depression: Peter Lewinsohn et al., "Age-Cohort Changes in the Lifetime Occurrence of Depression and Other Mental Disorders," *Journal of Abnormal Psychology* 102 (1993).
- 25. Epidemiology of depression: Patricia Cohen et al., New York Psychiatric Institute, 1988; Peter Lewinsohn et al., "Adolescent Psychopathology: I. Prevalence and Incidence of Depression in High School Students," *Journal of Abnormal Psychology* 102 (1993). See also Mufson et al., *Interpersonal Psychotherapy*. For a review of lower estimates: E. Costello, "Developments in Child Psychiatric Epidemiology," *Journal of the Academy of Child and Adolescent Psychiatry* 28 (1989).
- 26. Patterns of depression in youth: Maria Kovacs and Leo Bastiaens, "The Psychotherapeutic Management of Major Depressive and Dysthymic Disorders in Childhood and Adolescence: Issues and Prospects," in I. M. Goodyer, ed., Mood Disorders in Childhood and Adolescence (New York: Cambridge University Press, 1994).
- 27. Depression in children: Kovacs, op. cit.
- 28. I interviewed Maria Kovacs in *The New York Times* (Jan. 11, 1994).
- 29. Social and emotional lag in depressed children: Maria Kovacs and David Goldston, "Cognitive and Social Development of Depressed Children and Adolescents," *Journal of the American Academy of Child and Adolescent Psychiatry* (May 1991).
- 30. Helplessness and depression: John Weiss et al., "Control-related Beliefs and Self-reported Depressive Symptoms in Late Childhood", *Journal of Abnormal Psychology* 102 (1993).

- 31. Pessimism and depression in children: Judy Garber, Vanderbilt University. See, e.g., Ruth Hilsman and Judy Garber, "A Test of the Cognitive Diathesis Model of Depression in Children: Academic Stressors, Attributional Style, Perceived Competence and Control," *Journal of Personality and Social Psychology* 67 (1994); Judith Garber, "Cognitions, Depressive Symptoms, and Development in Adolescents," *Journal of Abnormal Psychology* 102 (1993).
- 32. Garber, "Cognitions."
- 33. Garber, "Cognitions."
- 34. Susan Nolen-Hoeksema et al., "Predictors and Consequences of Childhood Depressive Symptoms: A Five-Year Longitudinal Study," *Journal of Abnormal Psychology* 101 (1992).
- 35. Depression rate halved: Gregory Clarke, University of Oregon Health Sciences Center, "Prevention of Depression in At-Risk High School Adolescents," paper delivered at the American Academy of Child and Adolescent Psychiatry (Oct. 1993).
- 36. Garber, "Cognitions."
- 37. Hilda Bruch, "Hunger and Instinct," *Journal of Nervous and Mental Disease* 149 (1969). Her seminal book, *The Golden Cage: The Enigma of Anorexia Nervosa* (Cambridge, MA: Harvard University Press) was not published until 1978.
- 38. The study of eating disorders: Gloria R. Leon et al., "Personality and Behavioral Vulnerabilities Associated with Risk Status for Eating Disorders in Adolescent Girls," *Journal of Abnormal Psychology* 102 (1993).
- 39. The six-year-old who felt fat was a patient of Dr. William Feldman, a pediatrician at the University of Ottawa.
- 40. Noted by Sifneos, "Affect, Emotional Conflict, and Deficit."
- 11. The vignette of Ben's rebuff is from Steven Asher and Sonda Gabriel, "The Social World of Peer-Rejected Children," paper presented at the annual meeting of the American Educational Research Association, San Francisco (Mar. 1989).
- **12.** The dropout rate among socially rejected children: Asher and Gabriel, "The Social World of Peer-Rejected Children."
- 13. The findings on the poor emotional competence of unpopular children are from Kenneth Dodge and Esther Feldman, "Social Cognition and Sociometric Status," in Steven Asher and John Coie, eds., *Peer Rejection in Childhood (New* York: Cambridge University Press, 1990).
- 14. Emory Cowen et al., "Longterm Follow-up of Early Detected Vulnerable Children," *Journal of Clinical and Consulting Psychology* 41 (1973).
- 15. Best friends and the rejected: Jeffrey Parker and Steven Asher, "Friendship Adjustment, Group Acceptance and Social Dissatisfaction in Childhood," paper presented at the annual meeting of the American Educational Research Association, Boston (1990).

- 46. The coaching for socially rejected children: Steven Asher and Gladys Williams, "Helping Children Without Friends in Home and School Contexts," in *Children's Social Development: Information for Parents and Teachers*(Urbana and Champaign: University of Illinois Press, 1987).
- 17. Similar results: Stephen Nowicki, "A Remediation Procedure for Nonverbal Processing Deficits," unpublished manuscript, Duke University (1989).
- 18. Two fifths are heavy drinkers: a survey at the University of Massachusetts by Project Pulse, reported in *The Daily Hampshire Gazette (Nov.* 13, 1993).
- 19. Binge drinking: Figures are from Harvey Wechsler, director of College Alcohol Studies at the Harvard School of Public Health (Aug. 1994).
- 50. More women drink to get drunk, and risk of rape: report by the Columbia University Center on Addiction and Substance Abuse (May 1993).
- 51. Leading cause of death: Alan Marlatt, report at the annual meeting of the American Psychological Association (Aug. 1994).
- 52. Data on alcoholism and cocaine addiction are from Meyer Glantz, acting chief of the Etiology Research Section of the National Institute for Drug and Alcohol Abuse.
- 53. Distress and abuse: Jeanne Tschann, "Initiation of Substance Abuse in Early Adolescence," *Health Psychology* 4 (1994).
- 54. I interviewed Ralph Tarter in The New York Times (Apr. 26, 1990).
- 55. Tension levels in sons of alcoholics: Howard Moss et al., "Plasma GABA-like Activity in Response to Ethanol Challenge in Men at High Risk for Alcoholism" *Biological Psychiatry* 27(6) (Mar. 1990).
- 56. Frontal lobe deficit in sons of alcoholics: Philip Harden and Robert Pihl, "Cognitive Function, Cardiovascular Reactivity, and Behavior in Boys at High Risk for Alcoholism," *Journal of Abnormal Psychology* 104 (1995).
- 57. Kathleen Merikangas et al., "Familial Transmission of Depression and Alcoholism," *Archives of General Psychiatry (Apr.* 1985).
- 58. The restless and impulsive alcoholic: Moss et al.
- 59. Cocaine and depression: Edward Khantzian, "Psychiatric and Psychodynamic Factors in Cocaine Addiction," in Arnold Washton and Mark Gold, eds., *Cocaine: A Clinician's Handbook* (New York: Guilford Press, 1987).
- 50. Heroin addiction and anger: Edward Khantzian, Harvard Medical School, in conversation, based on over 200 patients he has treated who were addicted to heroin.
- 51. No more wars: The phrase was suggested to me by Tim Shriver of the Collaborative for the Advancement of Social and Emotional Learning at the Yale Child Studies Center.
- 52. Emotional impact of poverty: "Economic Deprivation and Early Childhood Development" and "Poverty Experiences of Young Children and the Quality of Their Home

- Environments." Greg Duncan and Patricia Garrett each described their research findings in separate articles in *Child Development* (Apr. 1994).
- 53. Traits of resilient children: Norman Garmezy, *The Invulnerable Child* (New York: Guilford Press, 1987). I wrote about children who thrive despite hardship in *The New York Times* (Oct. 13, 1987).
- 54. Prevalence of mental disorders: Ronald C. Kessler et al., "Lifetime and 12-month Prevalence of DSM-III-R Psychiatric Disorders in the U.S.," *Archives of General Psychiatry* (Jan. 1994).
- 55. The figure for boys and girls reporting sexual abuse in the United States are from Malcolm Brown of the Violence and Traumatic Stress Branch of the National Institute of Mental Health; the number of substantiated cases is from the National Committee for the Prevention of Child Abuse and Neglect. A national survey of children found the rates to be 3.2 percent for girls and 0.6 percent for boys in a given year: David Finkelhor and Jennifer Dziuba-Leatherman, "Children as Victims of Violence: A National Survey," *Pediatrics* (Oct. 1984).
- 56. The national survey of children about sexual abuse prevention programs was done by David Finkelhor, a sociologist at the University of New Hampshire.
- 57. The figures on how many victims child molesters have are from an interview with Malcolm Gordon, a psychologist at the Violence and Traumatic Stress Branch of the National Institute of Mental Health.
- 58. W. T. Grant Consortium on the School-Based Promotion of Social Competence, "Drug and Alcohol Prevention Curricula," in J. David Hawkins et al., *Communities That Care* (San Francisco: Jossey-Bass, 1992).
- 59. W. T. Grant Consortium, "Drug and Alcohol Prevention Curricula," p. 136.

## Chapter 16. Schooling the Emotions

- 1. I interviewed Karen Stone McCown in The New York Times (Nov. 7, 1993).
- 2. Karen F. Stone and Harold Q. Dillehunt, *Self Science: The Subject Is Me* (Santa Monica: Goodyear Publishing Co., 1978).
- 3. Committee for Children, "Guide to Feelings," Second Step 4-5(1992), p. 84.
- 4. The Child Development Project: See, e.g., Daniel Solomon et al., "Enhancing Children's Prosocial Behavior in the Classroom," *American Educational Research Journal*(Winter 1988).
- 5. Benefits from Head Start: Report by High/Scope Educational Research Foundation, Ypsilanti, Michigan (Apr. 1993).
- 6. The emotional timetable: Carolyn Saarni, "Emotional Competence: How Emotions and Relationships Become Integrated," in R. A. Thompson, ed., *Socioemotional*