

EMOTIONAL INTELLIGENCE APPLIED

Intimate Enemies

To love and to work, Sigmund Freud once remarked to his disciple Erik Erikson, are the twin capacities that mark full maturity. If that is the case, then maturity may be an endangered way station in life—and current trends in marriage and divorce make emotional intelligence more crucial than ever.

Consider divorce rates. The rate *per year* of divorces has more or less leveled off. But there is another way of calculating divorce rates, one that suggests a perilous climb: looking at the odds that a given newly married couple will have their marriage *eventually* end in divorce. Although the overall rate of divorce has stopped climbing, the *risk* of divorce has been shifting to newlyweds.

The shift gets clearer in comparing divorce rates for couples wed in a given year. For American marriages that began in 1890, about 10 percent ended in divorce. For those wed in 1920, the rate was about 18 percent; for couples married in 1950, 30 percent. Couples that were newly wed in 1970 had a fifty-fifty chance of splitting up or staying together. And for married couples starting out in 1990, the likelihood that the marriage would end in divorce was projected to be close to a staggering 67 percent!¹ If the estimate holds, just three in ten of recent newlyweds can count on staying married to their new partner.

It can be argued that much of this rise is due not so much to a decline in emotional intelligence as to the steady erosion of social pressures—the stigma surrounding divorce, or the economic dependence of wives on their husbands—that used to keep couples together in even the most miserable of matches. But if social pressures are no longer the glue that holds a marriage together, then the emotional forces between wife and husband are that much more crucial if their union is to survive.

These ties between husband and wife—and the emotional fault lines that can break them apart—have been assayed in recent years with a precision never seen before. Perhaps the biggest breakthrough in understanding what holds a marriage together or tears it apart has come from the use of sophisticated physiological measures that allow the moment-to-moment tracking of the emotional nuances of a couple's encounter. Scientists are now able to detect a husband's otherwise invisible adrenaline surges and jumps in blood pressure, and to observe fleeting but telling microemotions as they flit across a wife's face. These physiological measures reveal a hidden biological subtext to a couple's difficulties, a critical level of emotional reality that is typically imperceptible to or disregarded by the couple themselves. These measures lay bare the emotional forces that hold a relationship together or destroy it. The fault lines have their earliest beginnings in the differences between the emotional worlds of girls and boys.

HIS MARRIAGE AND HERS: CHILDHOOD ROOTS

As I was entering a restaurant on a recent evening, a young man stalked out the door, his face set in an expression both stony and sullen. Close on his heels a young woman came running, her fists desperately pummeling his back while she yelled, "Goddamn you! Come back here and be nice to me!" That poignant, impossibly self-contradictory plea aimed at a retreating back epitomizes the pattern most commonly seen in couples whose relationship is distressed: She seeks to engage, he withdraws. Marital therapists have long noted that by the time a couple finds their way to the therapy office they are in this pattern of engage-withdraw, with his complaint about her "unreasonable" demands and outbursts, and her lamenting his indifference to what she is saying.

This marital endgame reflects the fact that there are, in effect, two emotional realities in a couple, his and hers. The roots of these emotional differences, while they may be partly biological, also can be traced back to childhood, and to the separate emotional worlds boys and girls inhabit while growing up. There is a vast amount of research on these separate worlds, their barriers reinforced not just by the different games boys and girls prefer, but by young children's fear of being teased for having a "girlfriend" or "boyfriend."² One study of children's friendships found that three-year-olds say about half their friends are of the opposite sex; for five-year-olds it's about 20 percent, and by age seven almost no boys or girls say they have a best friend of the opposite sex.³ These separate social universes intersect little until teenagers start dating.

Meanwhile, boys and girls are taught very different lessons about handling emotions. Parents, in general, discuss emotions—with the exception of anger—more with their daughters than their sons.⁴ Girls are exposed to more information about emotions than are boys: when parents make up stories to tell their preschool children, they use more emotion words when talking to daughters than to sons; when mothers play with their infants, they display a wider range of emotions to daughters than to sons; when mothers talk to daughters about feelings, they discuss in more detail the emotional state itself than they do with their sons—though with the sons they go into more detail about the causes and consequences of emotions like anger (probably as a cautionary tale).

Leslie Brody and Judith Hall, who have summarized the research on differences in emotions between the sexes, propose that because girls develop facility with language more quickly than do boys, this leads them to be more experienced at articulating their feelings and more skilled than boys at using words to explore and substitute for emotional reactions such as physical fights; in contrast, they note, "boys, for whom the verbalization of affects is de-emphasized, may become largely unconscious of their emotional states, both in themselves and in others."⁵

At age ten, roughly the same percent of girls as boys are overtly aggressive, given to open confrontation when angered. But by age thirteen, a telling difference between the sexes emerges: Girls become more adept than boys at artful aggressive tactics like ostracism, vicious gossip, and indirect vendettas. Boys, by and large, simply continue being confrontational when angered, oblivious to these more covert strategies.⁶ This is just one of many ways that boys—and later, men—are less sophisticated than the opposite sex in the byways of emotional life.

When girls play together, they do so in small, intimate groups, with an emphasis on minimizing hostility and maximizing cooperation, while boys' games are in larger groups, with an emphasis on competition. One key difference can be seen in what happens when games boys or girls are playing get disrupted by someone getting hurt. If a boy who has gotten hurt gets upset, he is expected to get out of the way and stop crying so the game can go on. If the same happens among a group of girls who are playing, the *game stops* while everyone gathers around to help the girl who is crying. This difference between boys and girls at play epitomizes what Harvard's Carol Gilligan points to as a key disparity between the sexes: boys take pride in a lone, tough-minded independence and autonomy, while girls see themselves as part of a web of connectedness. Thus boys are threatened by anything that might challenge their independence, while girls are more threatened by a rupture in their relationships. And, as Deborah Tannen has pointed out in her book *You Just Don't Understand*, these differing perspectives mean that men and women want and expect very different things out of a conversation, with men content to talk about "things," while women seek emotional connection.

In short, these contrasts in schooling in the emotions foster very different skills, with girls becoming "adept at reading both verbal and nonverbal emotional signals, at expressing and communicating their feelings," and boys becoming adept at "minimizing emotions having to do with vulnerability, guilt, fear and hurt."⁷ Evidence for these different stances is very strong in the scientific literature. Hundreds of studies have found, for example, that on average women are more empathic than men, at least as measured by the ability to read someone else's unstated feelings from facial expression, tone of voice, and other nonverbal cues. Likewise, it is generally easier to read feelings from a woman's face than a man's; while there is no difference in facial expressiveness among very young boys and girls, as they go through the elementary-school grades boys become less expressive, girls more so. This may partly reflect another key difference: women, on average, experience the entire range of emotions with greater intensity and more volatility than men—in this sense, women *are* more "emotional" than men.⁸

All of this means that, in general, women come into a marriage groomed for the role of emotional manager, while men arrive with much less appreciation of the importance of this task for helping a relationship survive. Indeed, the most important element for women—but not for men—in satisfaction with their relationship reported in a study of 264 couples was the sense that the couple has “good communication.”⁹ Ted Huston, a psychologist at the University of Texas who has studied couples in depth, observes, “For the wives, intimacy means talking things over, especially talking about the relationship itself. The men, by and large, don’t understand what the wives want from them. They say, ‘I want to do things with her, and all she wants to do is talk.’ ” During courtship, Huston found, men were much more willing to spend time talking in ways that suited the wish for intimacy of their wives-to-be. But once married, as time went on the men—especially in more traditional couples—spent less and less time talking in this way with their wives, finding a sense of closeness simply in doing things like gardening together rather than talking things over.

This growing silence on the part of husbands may be partly due to the fact that, if anything, men are a bit Pollyannaish about the state of their marriage, while their wives are attuned to the trouble spots: in one study of marriages, men had a rosier view than their wives of just about everything in their relationship—lovemaking, finances, ties with in-laws, how well they listened to each other, how much their flaws mattered.¹⁰ Wives, in general, are more vocal about their complaints than are their husbands, particularly among unhappy couples. Combine men’s rosy view of marriage with their aversion to emotional confrontations, and it is clear why wives so often complain that their husbands try to wiggle out of discussing the troubling things about their relationship. (Of course this gender difference is a generalization, and is not true in every case; a psychiatrist friend complained that in his marriage his wife is reluctant to discuss emotional matters between them, and he is the one who is left to bring them up.)

The slowness of men to bring up problems in a relationship is no doubt compounded by their relative lack of skill when it comes to reading facial expressions of emotions. Women, for example, are more sensitive to a sad expression on a man’s face than are men in detecting sadness from a woman’s expression.¹¹ Thus a woman has to be all the sadder for a man to notice her feelings in the first place, let alone for him to raise the question of what is making her so sad.

Consider the implications of this emotional gender gap for how couples handle the grievances and disagreements that any intimate relationship inevitably spawns. In fact, specific issues such as how often a couple has sex, how to discipline the children, or how much debt and savings a couple feels comfortable with are not what make or break a marriage. Rather, it is *how* a couple discusses such sore points that matters more for the fate of their marriage. Simply having reached an agreement about *how* to disagree is key to marital survival; men and women have to overcome the innate gender differences in approaching rocky emotions. Failing this, couples are vulnerable to emotional rifts that eventually can tear their relationship apart. As we shall see, these rifts are far more likely to develop if one or both partners have certain deficits in emotional intelligence.

MARITAL FAULT LINES

Fred: Did you pick up my dry cleaning?

Ingrid: (In a mocking tone) “Did you pick up my dry cleaning.” Pick up your own damn dry cleaning. What am I, your maid?

Fred: Hardly. If you were a maid, at least you’d know how to clean.

If this were dialogue from a sitcom, it might be amusing. But this painfully caustic interchange was between a couple who (perhaps not surprisingly) divorced within the next few years.¹² Their encounter took place in a laboratory run by John Gottman, a University of Washington psychologist who has done perhaps the most detailed analysis ever of the emotional glue that binds couples together and the corrosive feelings that can destroy marriages.¹³ In his laboratory, couples’ conversations are

videotaped and then subjected to hours of microanalysis designed to reveal the subterranean emotional currents at play. This mapping of the fault lines that may lead a couple to divorce makes a convincing case for the crucial role of emotional intelligence in the survival of a marriage.

During the last two decades Gottman has tracked the ups and downs of more than two hundred couples, some just newlyweds, others married for decades. Gottman has charted the emotional ecology of marriage with such precision that, in one study, he was able to predict which couples seen in his lab (like Fred and Ingrid, whose discussion of getting the dry cleaning was so acrimonious) would divorce within three years with *94 percent accuracy*, a precision unheard of in marital studies!

The power of Gottman's analysis comes from his painstaking method and the thoroughness of his probes. While the couples talk, sensors record the slightest flux in their physiology; a second-by-second analysis of their facial expressions (using the system for reading emotions developed by Paul Ekman) detects the most fleeting and subtle nuance of feeling. After their session, each partner comes separately to the lab and watches a videotape of the conversation, and narrates his or her secret thoughts during the heated moments of the exchange. The result is akin to an emotional X-ray of the marriage.

An early warning signal that a marriage is in danger, Gottman finds, is harsh criticism. In a healthy marriage husband and wife feel free to voice a complaint. But too often in the heat of anger complaints are expressed in a destructive fashion, as an attack on the spouse's character. For example, Pamela and her daughter went shoe shopping while her husband, Tom, went to a bookstore. They agreed to meet in front of the post office in an hour, and then go to a matinee. Pamela was prompt, but there was no sign of Tom. "Where is he? The movie starts in ten minutes," Pamela complained to her daughter. "If there's a way for your father to screw something up, he will."

When Tom showed up ten minutes later, happy about having run into a friend and apologizing for being late, Pamela lashed out with sarcasm: "That's okay—it gave us a chance to discuss your amazing ability to screw up every single plan we make. You're so thoughtless and self-centered!"

Pamela's complaint is more than that: it is a character assassination, a critique of the person, not the deed. In fact, Tom had apologized. But for this lapse Pamela brands him as "thoughtless and self-centered." Most couples have moments like this from time to time, where a complaint about something a partner has done is voiced as an attack against the person rather than the deed. But these harsh personal criticisms have a far more corrosive emotional impact than do more reasoned complaints. And such attacks, perhaps understandably, become more likely the more a husband or wife feels their complaints go unheard or ignored.

The differences between complaints and personal criticisms are simple. In a complaint, a wife states specifically what is upsetting her, and criticizes her husband's *action*, not her husband, saying how it made her feel: "When you forgot to pick up my clothes at the cleaner's it made me feel like you don't care about me." It is an expression of basic emotional intelligence: assertive, not belligerent or passive. But in a personal criticism she uses the specific grievance to launch a global attack on her husband: "You're always so selfish and uncaring. It just proves I can't trust you to do anything right." This kind of criticism leaves the person on the receiving end feeling ashamed, disliked, blamed, and defective—all of which are more likely to lead to a defensive response than to steps to improve things.

All the more so when the criticism comes laden with contempt, a particularly destructive emotion. Contempt comes easily with anger; it is usually expressed not just in the words used, but also in a tone of voice and an angry expression. Its most obvious form, of course, is mockery or insult—"jerk," "bitch," "wimp." But just as hurtful is the body language that conveys contempt, particularly the sneer or curled lip that are the universal facial signals for disgust, or a rolling of the eyes, as if to say, "Oh, brother!"

Contempt's facial signature is a contraction of the "dimpler," the muscle that pulls the corners of the mouth to the side (usually the left) while the eyes roll upward. When one spouse flashes this expression, the other, in a tacit emotional exchange, registers a jump in heart rate of two or three beats per minute. This hidden conversation takes its toll; if a husband shows contempt regularly, Gottman found, his wife will be more prone to a range of health problems, from frequent colds and flus to

bladder and yeast infections, as well as gastrointestinal symptoms. And when a wife's face shows disgust, a near cousin of contempt, four or more times within a fifteen-minute conversation, it is a silent sign that the couple is likely to separate within four years.

Of course, an occasional show of contempt or disgust will not undo a marriage. Rather, such emotional volleys are akin to smoking and high cholesterol as risk factors for heart disease—the more intense and prolonged, the greater the danger. On the road to divorce, one of these factors predicts the next, in an escalating scale of misery. Habitual criticism and contempt or disgust are danger signs because they indicate that a husband or wife has made a silent judgment for the worse about their partner. In his or her thoughts, the spouse is the subject of constant condemnation. Such negative and hostile thinking leads naturally to attacks that make the partner on the receiving end defensive—or ready to counterattack in return.

The two arms of the fight-or-flight response each represent ways a spouse can respond to an attack. The most obvious is to fight back, lashing out in anger. That route typically ends in a fruitless shouting match. But the alternative response, fleeing, can be more pernicious, particularly when the “flight” is a retreat into stony silence.

Stonewalling is the ultimate defense. The stonewaller just goes blank, in effect withdrawing from the conversation by responding with a stony expression and silence. Stonewalling sends a powerful, unnerving message, something like a combination of icy distance, superiority, and distaste. Stonewalling showed up mainly in marriages that were heading for trouble; in 85 percent of these cases it was the husband who stonewalled in response to a wife who attacked with criticism and contempt.¹⁴ As a habitual response stonewalling is devastating to the health of a relationship: it cuts off all possibility of working out disagreements.

TOXIC THOUGHTS

The children are being rambunctious, and Martin, their father, is getting annoyed. He turns to his wife, Melanie, and says in a sharp tone, “Dear, don’t you think the kids could quiet down?”

His actual thought: “She’s too easy on the kids.”

Melanie, responding to his ire, feels a surge of anger. Her face grows taut, her brows knit in a frown, and she replies, “The kids are having a good time. Anyhow, they’ll be going up to bed soon.”

Her thought: “There he goes again, complaining all the time.”

Martin now is visibly enraged. He leans forward menacingly, his fists clenched, as he says in an annoyed tone, “Should I put them to bed now?”

His thought: “She opposes me in everything. I’d better take over.”

Melanie, suddenly frightened by Martin’s wrath, says meekly, “No, I’ll put them to bed right away.”

Her thought: “He’s getting out of control—he could hurt the kids. I’d better give in.”

These parallel conversations—the spoken and the silent—are reported by Aaron Beck, the founder of cognitive therapy, as an example of the kinds of thinking that can poison a marriage.¹⁵ The real emotional exchange between Melanie and Martin is shaped by their thoughts, and those thoughts, in turn, are determined by another, deeper layer, which Beck calls “automatic thoughts”—fleeting, background assumptions about oneself and the people in one’s life that reflect our deepest emotional attitudes. For Melanie the background thought is something like, “He’s always bullying me with his anger.” For Martin, the key thought is, “She has no right to treat me like this.” Melanie feels like an innocent victim in their marriage, and Martin feels righteous indignation at what he feels is unjust treatment.

Thoughts of being an innocent victim or of righteous indignation are typical of partners in troubled marriages, continually fueling anger and hurt.¹⁶ Once distressing thoughts such as righteous indignation become automatic, they are self-confirming: the partner who feels victimized is constantly scanning everything his partner does that might confirm the view that she is victimizing him, ignoring or discounting any acts of kindness on her part that would question or disconfirm that view.

These thoughts are powerful; they trip the neural alarm system. Once the husband’s thought of being victimized triggers an emotional hijacking, he will for the time being easily call to mind and ruminate

on a list of grievances that remind him of the ways she victimizes him, while not recalling anything she may have done in their entire relationship that would disconfirm the view that he is an innocent victim. It puts his spouse in a no-win situation: even things she does that are intentionally kind can be reinterpreted when viewed through such a negative lens and dismissed as feeble attempts to deny she is a victimizer.

Partners who are free of such distress-triggering views can entertain a more benign interpretation of what is going on in the same situations, and so are less likely to have such a hijacking, or if they do, tend to recover from it more readily. The general template for thoughts that maintain or alleviate distress follows the pattern outlined in Chapter 6 by psychologist Martin Seligman for pessimistic and optimistic outlooks. The pessimistic view is that the partner is inherently flawed in a way that cannot change and that guarantees misery: “He’s selfish and self-absorbed; that’s the way he was brought up and that’s the way he will always be; he expects me to wait on him hand and foot and he couldn’t care less about how I feel.” The contrasting optimistic view would be something like: “He’s being demanding now, but he’s been thoughtful in the past; maybe he’s in a bad mood— I wonder if something’s bothering him about his work.” This is a view that does not write off the husband (or the marriage) as irredeemably damaged and hopeless. Instead it sees a bad moment as due to circumstances that can change. The first attitude brings continual distress; the second soothes.

Partners who take the pessimistic stance are extremely prone to emotional hijackings; they get angry, hurt, or otherwise distressed by things their spouses do, and they stay disturbed once the episode begins. Their internal distress and pessimistic attitude, of course, makes it far more likely they will resort to criticism and contempt in confronting the partner, which in turn heightens the likelihood of defensiveness and stonewalling.

Perhaps the most virulent of such toxic thoughts are found in husbands who are physically violent to their wives. A study of violent husbands by psychologists at Indiana University found that these men think like schoolyard bullies: they read hostile intent into even neutral actions by their wives, and use this misreading to justify to themselves their own violence (men who are sexually aggressive with dates do something similar, viewing the women with suspicion and so disregarding their objections).¹⁷ As we saw in Chapter 7, such men are particularly threatened by perceived slights, rejection, or public embarrassment by their wives. A typical scenario that triggers thoughts “justifying” violence in wife-batterers: “You are at a social gathering and you notice that for the past half hour your wife has been talking and laughing with the same attractive man. He seems to be flirting with her.” When these men perceive their wives as doing something suggesting rejection or abandonment, their reactions run to indignation and outrage. Presumably, automatic thoughts like “She’s going to leave me” are triggers for an emotional hijacking in which battering husbands respond impulsively, as the researchers put it, with “incompetent behavioral responses”— they become violent.¹⁸

FLOODING: THE SWAMPING OF A MARRIAGE

The net effect of these distressing attitudes is to create incessant crisis, since they trigger emotional hijackings more often and make it harder to recover from the resulting hurt and rage. Gottman uses the apt term *flooding* for this susceptibility to frequent emotional distress; flooded husbands or wives are so overwhelmed by their partner’s negativity and their own reaction to it that they are swamped by dreadful, out-of-control feelings. People who are flooded cannot hear without distortion or respond with clear-headedness; they find it hard to organize their thinking, and they fall back on primitive reactions. They just want things to stop, or want to run or, sometimes, to strike back. Flooding is a self-perpetuating emotional hijacking.

Some people have high thresholds for flooding, easily enduring anger and contempt, while others may be triggered the moment their spouse makes a mild criticism. The technical description of flooding is in terms of heart rate rise from calm levels.¹⁹ At rest, women’s heart rates are about 82 beats per minute, men’s about 72 (the specific heart rate varies mainly according to a person’s body size). Flooding begins at about 10 beats per minute above a person’s resting rate; if the heart rate reaches 100 beats per minute (as it easily can do during moments of rage or tears), then the body is pumping

adrenaline and other hormones that keep the distress high for some time. The moment of emotional hijacking is apparent from the heart rate: it can jump 10, 20, or even as many as 30 beats per minute within the space of a single heartbeat. Muscles tense; it can seem hard to breathe. There is a swamp of toxic feelings, an unpleasant wash of fear and anger that seems inescapable and, subjectively, takes “forever” to get over. At this point—full hijacking—a person’s emotions are so intense, their perspective so narrow, and their thinking so confused that there is no hope of taking the other’s viewpoint or settling things in a reasonable way.

Of course, most husbands and wives have such intense moments from time to time when they fight—it’s only natural. The problem for a marriage begins when one or another spouse feels flooded almost continually. Then the partner feels overwhelmed by the other partner, is always on guard for an emotional assault or injustice, becomes hypervigilant for any sign of attack, insult, or grievance, and is sure to overreact to even the least sign. If a husband is in such a state, his wife saying, “Honey, we’ve got to talk,” can elicit the reactive thought, “She’s picking a fight again,” and so trigger flooding. It becomes harder and harder to recover from the physiological arousal, which in turn makes it easier for innocuous exchanges to be seen in a sinister light, triggering flooding all over again.

This is perhaps the most dangerous turning point for a marriage, a catastrophic shift in the relationship. The flooded partner has come to think the worst of the spouse virtually all the time, reading everything she does in a negative light. Small issues become major battles; feelings are hurt continually. With time, the partner who is being flooded starts to see any and all problems in the marriage as severe and impossible to fix, since the flooding itself sabotages any attempt to work things out. As this continues it begins to seem useless to talk things over, and the partners try to soothe their troubled feelings on their own. They start leading parallel lives, essentially living in isolation from each other, and feel alone within the marriage. All too often, Gottman finds, the next step is divorce.

In this trajectory toward divorce the tragic consequences of deficits in emotional competences are self-evident. As a couple gets caught in the reverberating cycle of criticism and contempt, defensiveness and stonewalling, distressing thoughts and emotional flooding, the cycle itself reflects a disintegration of emotional self-awareness and self-control, of empathy and the abilities to soothe each other and oneself.

MEN: THE VULNERABLE SEX

Back to gender differences in emotional life, which prove to be a hidden spur to marital meltdowns. Consider this finding: Even after thirty-five or more years of marriage, there is a basic distinction between husbands and wives in how they regard emotional encounters. Women, on average, do not mind plunging into the unpleasantness of a marital squabble nearly so much as do the men in their lives. That conclusion, reached in a study by Robert Levenson at the University of California at Berkeley, is based on the testimony of 151 couples, all in long-lasting marriages. Levenson found that husbands uniformly found it unpleasant, even aversive, to become upset during a marital disagreement, while their wives did not mind it much.²⁰

Husbands are prone to flooding at a lower intensity of negativity than are their wives; more men than women react to their spouse’s criticism with flooding. Once flooded, husbands secrete more adrenaline into their bloodstream, and the adrenaline flow is triggered by lower levels of negativity on their wife’s part; it takes husbands longer to recover physiologically from flooding.²¹ This suggests the possibility that the stoic, Clint Eastwood type of male imperturbability may represent a defense against feeling emotionally overwhelmed.

The reason men are so likely to stonewall, Gottman proposes, is to protect themselves from flooding; his research showed that once they began stonewalling, their heart rates dropped by about ten beats per minute, bringing a subjective sense of relief. But—and here’s a paradox—once the men started stonewalling, it was the wives whose heart rate shot up to levels signaling high distress. This limbic tango, with each sex seeking comfort in opposing gambits, leads to a very different stance toward emotional confrontations: men want to avoid them as fervently as their wives feel compelled to seek them.

Just as men are far more likely to be stonewallers, so the women are more likely to criticize their husbands.²² This asymmetry arises as a result of wives pursuing their role as emotional managers. As they try to bring up and resolve disagreements and grievances, their husbands are more reluctant to engage in what are bound to be heated discussions. As the wife sees her husband withdraw from engagement, she ups the volume and intensity of her complaint, starting to criticize him. As he becomes defensive or stonewalls in return, she feels frustrated and angry, and so adds contempt to underscore the strength of her frustration. As her husband finds himself the object of his wife's criticism and contempt, he begins to fall into the innocent-victim or righteous-indignation thoughts that more and more easily trigger flooding. To protect himself from flooding, he becomes more and more defensive or simply stonewalls altogether. But when husbands stonewall, remember, it triggers flooding in their wives, who feel completely stymied. And as the cycle of marital fights escalates it all too easily can spin out of control.

HIS AND HERS: MARITAL ADVICE

Given the grim potential outcome of the differences in how men and women deal with distressing feelings in their relationship, what can couples do to protect the love and affection they feel for each other—in short, what protects a marriage? On the basis of watching interaction in the couples whose marriages have continued to thrive over the years, marital researchers offer specific advice for men and for women, and some general words for both.

Men and women, in general, need different emotional fine-tuning. For men, the advice is not to sidestep conflict, but to realize that when their wife brings up some grievance or disagreement, she may be doing it as an act of love, trying to keep the relationship healthy and on course (although there may well be other motives for a wife's hostility). When grievances simmer, they build and build in intensity until there's an explosion; when they are aired and worked out, it takes the pressure off. But husbands need to realize that anger or discontent is not synonymous with personal attack—their wives' emotions are often simply underliners, emphasizing the strength of her feelings about the matter.

Men also need to be on guard against short-circuiting the discussion by offering a practical solution too early on—it's typically more important to a wife that she feel her husband hears her complaint and empathizes with her *feelings* about the matter (though he need not agree with her). She may hear his offering advice as a way of dismissing her feelings as inconsequential. Husbands who are able to stay with their wives through the heat of anger, rather than dismissing their complaints as petty, help their wives feel heard and respected. Most especially, wives want to have their feelings acknowledged and respected as valid, even if their husbands disagree. More often than not, when a wife feels her view is heard and her feelings registered, she calms down.

As for women, the advice is quite parallel. Since a major problem for men is that their wives are too intense in voicing complaints, wives need to make a purposeful effort to be careful not to attack their husbands—to complain about what they did, but not criticize them as a person or express contempt. Complaints are not attacks on character, but rather a clear statement that a particular action is distressing. An angry personal attack will almost certainly lead to a husband's getting defensive or stonewalling, which will be all the more frustrating, and only escalate the fight. It helps, too, if a wife's complaints are put in the larger context of reassuring her husband of her love for him.

THE GOOD FIGHT

The morning paper offers an object lesson in how not to resolve differences in a marriage. Marlene Lenick had a dispute with her husband, Michael: he wanted to watch the Dallas Cowboys–Philadelphia Eagles game, she wanted to watch the news. As he settled down to watch the game, Mrs. Lenick told him that she had “had enough of that football,” went into the bedroom to fetch a .38 caliber

handgun, and shot him twice as he sat watching the game in the den. Mrs. Lenick was charged with aggravated assault and freed on a \$50,000 bond; Mr. Lenick was listed in good condition, recovering from the bullets that grazed his abdomen and tunneled through his left shoulder blade and neck.²³

While few marital fights are that violent—or that costly—they offer a prime chance to bring emotional intelligence to marriage. For example, couples in marriages that last tend to stick to one topic, and to give each partner the chance to state their point of view at the outset.²⁴ But these couples go one important step further: they show each other that they are being listened to. Since feeling heard is often exactly what the aggrieved partner really is after, emotionally an act of empathy is a masterly tension reducer.

Most notably missing in couples who eventually divorce are attempts by either partner in an argument to de-escalate the tension. The presence or absence of ways to repair a rift is a crucial difference between the fights of couples who have a healthy marriage and those of couples who eventually end up divorcing.²⁵ The repair mechanisms that keep an argument from escalating into a dire explosion are simple moves such as keeping the discussion on track, empathizing, and tension reduction. These basic moves are like an emotional thermostat, preventing the feelings being expressed from boiling over and overwhelming the partners' ability to focus on the issue at hand.

One overall strategy for making a marriage work is not to concentrate on the specific issues—childrearing, sex, money, housework—that couples fight about, but rather to cultivate a couple's shared emotional intelligence, thereby improving the chances of working things out. A handful of emotional competences—mainly being able to calm down (and calm your partner), empathy, and listening well—can make it more likely a couple will settle their disagreements effectively. These make possible healthy disagreements, the “good fights” that allow a marriage to flourish and which overcome the negativities that, if left to grow, can destroy a marriage.²⁶

Of course, none of these emotional habits changes overnight; it takes persistence and vigilance at the very least. Couples will be able to make the key changes in direct proportion to how motivated they are to try. Many or most emotional responses triggered so easily in marriage have been sculpted since childhood, first learned in our most intimate relationships or modeled for us by our parents, and then brought to marriage fully formed. And so we are primed for certain emotional habits—overreacting to perceived slights, say, or shutting down at the first sign of a confrontation—even though we may have sworn that we would not act like our parents.

Calming Down

Every strong emotion has at its root an impulse to action; managing those impulses is basic to emotional intelligence. This can be particularly difficult, though, in love relationships, where we have so much at stake. The reactions triggered here touch on some of our deepest needs—to be loved and feel respected, fears of abandonment or of being emotionally deprived. Small wonder we can act in a marital fight as though our very survival were at stake.

Even so, nothing gets resolved positively when husband or wife is in the midst of an emotional hijacking. One key marital competence is for partners to learn to soothe their own distressed feelings. Essentially, this means mastering the ability to recover quickly from the flooding caused by an emotional hijacking. Because the ability to hear, think, and speak with clarity dissolves during such an emotional peak, calming down is an immensely constructive step, without which there can be no further progress in settling what's at issue.

Ambitious couples can learn to monitor their pulse rates every five minutes or so during a troubling encounter, feeling the pulse at the carotid artery a few inches below the earlobe and jaw (people who do aerobic workouts learn to do this easily).²⁷ Counting the pulse for fifteen seconds and multiplying by four gives the pulse rate in beats per minute. Doing so while feeling calm gives a baseline; if the pulse rate rises more than, say, ten beats per minute above that level, it signals the beginning of flooding. If the pulse climbs this much, a couple needs a twenty-minute break from each other to cool down before resuming the discussion. Although a five-minute break may feel long enough, the actual physiological recovery time is more gradual. As we saw in Chapter 5, residual anger triggers more anger; the longer wait gives the body more time to recover from the earlier arousal.

For couples who, understandably, find it awkward to monitor heart rate during a fight, it is simpler to have a pre-stated agreement that allows one or another partner to call the time-out at the first signs of flooding in either partner. During that time-out period, cooling down can be helped along by engaging in a relaxation technique or aerobic exercise (or any of the other methods we explored in Chapter 5) that might help the partners recover from the emotional hijacking.

Detoxifying Self-talk

Because flooding is triggered by negative thoughts about the partner, it helps if a husband or wife who is being upset by such harsh judgments tackles them head-on. Sentiments like “I’m not going to take this anymore” or “I don’t deserve this kind of treatment” are innocent-victim or righteous-indignation slogans. As cognitive therapist Aaron Beck points out, by catching these thoughts and challenging them—rather than simply being enraged or hurt by them—a husband or wife can begin to become free of their hold.²⁸

This requires monitoring such thoughts, realizing that one does not have to believe them, and making the intentional effort to bring to mind evidence or perspectives that put them in question. For example, a wife who feels in the heat of the moment that “he doesn’t care about my needs—he’s always so selfish” might challenge the thought by reminding herself of a number of things her husband has done that are, in fact, thoughtful. This allows her to reframe the thought as: “Well, he does show he cares about me sometimes, even though what he just did was thoughtless and upsetting to me.” The latter formulation opens the possibility of change and a positive resolution; the former only fomented anger and hurt.

Nondefensive Listening and Speaking

He: “You’re shouting!”

She: “Of course I’m shouting—you haven’t heard a word I’m saying. You just don’t listen!”

Listening is a skill that keeps couples together. Even in the heat of an argument, when both are seized by emotional hijackings, one or the other, and sometimes both, can manage to listen past the anger, and hear and respond to a partner’s reparative gesture. Couples headed for divorce, though, get absorbed in the anger and fixated on the specifics of the issue at hand, not managing to hear—let alone return—any peace offerings that might be implicit in what their partner is saying. Defensiveness in a listener takes the form of ignoring or immediately rebutting the spouse’s complaint, reacting to it as though it were an attack rather than an attempt to change behavior. Of course, in an argument what one spouse says is often in the form of an attack, or is said with such strong negativity that it is hard to hear anything other than an attack.

Even in the worst case, it’s possible for a couple to purposely edit what they hear, ignoring the hostile and negative parts of the exchange—the nasty tone, the insult, the contemptuous criticism—to hear the main message. For this feat it helps if partners can remember to see each other’s negativity as an implicit statement of how important the issue is to them—a demand for attention to be paid. Then if she yells, “Will you *stop* interrupting me, for *cris-sake!*” he might be more able to say, without reacting overtly to her hostility, “Okay, go ahead and finish.”

The most powerful form of nondefensive listening, of course, is empathy: actually hearing the feelings *behind* what is being said. As we saw in Chapter 7, for one partner in a couple to truly empathize with the other demands that his own emotional reactions calm down to the point where he is receptive enough for his own physiology to be able to mirror the feelings of his partner. Without this physiological attunement, a partner’s sense of what the other is feeling is likely to be entirely offbase. Empathy deteriorates when one’s own feelings are so strong that they allow no physiological harmonizing, but simply override everything else.

One method for effective emotional listening, called “mirroring,” is commonly used in marital therapy. When one partner makes a complaint, the other repeats it back in her own words, trying to capture not just the thought, but also the feelings that go with it. The partner mirroring checks with the other to be sure the restatement is on target, and if not, tries again until it is right—something that

seems simple, but is surprisingly tricky in execution.²⁹ The effect of being mirrored accurately is not just feeling understood, but having the added sense of being in emotional attunement. That in itself can sometimes disarm an imminent attack, and goes far toward keeping discussions of grievances from escalating into fights.

The art of nondefensive speaking for couples centers around keeping what is said to a specific complaint rather than escalating to a personal attack. Psychologist Haim Ginott, the grandfather of effective-communication programs, recommended that the best formula for a complaint is “XYZ”: “When you did X, it made me feel Y, and I’d rather you did Z instead.” For example: “When you didn’t call to tell me you were going to be late for our dinner appointment, I felt unappreciated and angry. I wish you’d call to let me know you’ll be late” instead of “You’re a thoughtless, self-centered bastard,” which is how the issue is all too often put in couples’ fights. In short, open communication has no bullying, threats, or insults. Nor does it allow for any of the innumerable forms of defensiveness—excuses, denying responsibility, counterattacking with a criticism, and the like. Here again empathy is a potent tool.

Finally, respect and love disarm hostility in marriage, as elsewhere in life. One powerful way to de-escalate a fight is to let your partner know that you can see things from the other perspective, and that this point of view may have validity, even if you do not agree with it yourself. Another is to take responsibility or even apologize if you see you are in the wrong. At a minimum, validation means at least conveying that you are listening, and can acknowledge the emotions being expressed, even if you can’t go along with the argument: “I see you’re upset.” And at other times, when there is no fight going on, validation takes the form of compliments, finding something you genuinely appreciate and voicing some praise. Validation, of course, is a way to help soothe your spouse, or to build up emotional capital in the form of positive feelings.

Practicing

Because these maneuvers are to be called upon during the heat of confrontation, when emotional arousal is sure to be high, they have to be overlearned if they are to be accessible when needed most. This is because the emotional brain engages those response routines that were learned earliest in life during repeated moments of anger and hurt, and so become dominant. Memory and response being emotion-specific, in such moments reactions associated with calmer times are less easy to remember and act on. If a more productive emotional response is unfamiliar or not well practiced, it is extremely difficult to try it while upset. But if a response is practiced so that it has become automatic, it has a better chance of finding expression during emotional crisis. For these reasons, the above strategies need to be tried out and rehearsed during encounters that are not stressful, as well as in the heat of battle, if they are to have a chance to become an acquired first response (or at least a not-too-belated second response) in the repertoire of the emotional circuitry. In essence, these antidotes to marital disintegration are a small remedial education in emotional intelligence.

Managing with Heart

Melburn McBroom was a domineering boss, with a temper that intimidated those who worked with him. That fact might have passed unremarked had McBroom worked in an office or factory. But McBroom was an airline pilot.

One day in 1978 McBroom's plane was approaching Portland, Oregon, when he noticed a problem with the landing gear. So McBroom went into a holding pattern, circling the field at a high altitude while he fiddled with the mechanism.

As McBroom obsessed about the landing gear, the plane's fuel gauges steadily approached the empty level. But his copilots were so fearful of McBroom's wrath that they said nothing, even as disaster loomed. The plane crashed, killing ten people.

Today the story of that crash is told as a cautionary tale in the safety training of airline pilots.¹ In 80 percent of airline crashes, pilots make mistakes that could have been prevented, particularly if the crew worked together more harmoniously. Teamwork, open lines of communication, cooperation, listening, and speaking one's mind—rudiments of social intelligence—are now emphasized in training pilots, along with technical prowess.

The cockpit is a microcosm of any working organization. But lacking the dramatic reality check of an airplane crash, the destructive effects of miserable morale, intimidated workers, or arrogant bosses—or any of the dozens of other permutations of emotional deficiencies in the workplace—can go largely unnoticed by those outside the immediate scene. But the costs can be read in signs such as decreased productivity, an increase in missed deadlines, mistakes and mishaps, and an exodus of employees to more congenial settings. There is, inevitably, a cost to the bottom line from low levels of emotional intelligence on the job. When it is rampant, companies can crash and burn.

The cost-effectiveness of emotional intelligence is a relatively new idea for business, one some managers may find hard to accept. A study of 250 executives found that most felt their work demanded "their heads but not their hearts." Many said they feared that feeling empathy or compassion for those they worked with would put them in conflict with their organizational goals. One felt the idea of sensing the feelings of those who worked for him was absurd—it would, he said, "be impossible to deal with people." Others protested that if they were not emotionally aloof they would be unable to make the "hard" decisions that business requires—although the likelihood is that they would deliver those decisions more humanely.²

That study was done in the 1970s, when the business environment was very different. My argument is that such attitudes are outmoded, a luxury of a former day; a new competitive reality is putting emotional intelligence at a premium in the workplace and in the marketplace. As Shoshona Zuboff, a psychologist at Harvard Business School, pointed out to me, "corporations have gone through a radical revolution within this century, and with this has come a corresponding transformation of the emotional landscape. There was a long period of managerial domination of the corporate hierarchy when the manipulative, jungle-fighter boss was rewarded. But that rigid hierarchy started breaking down in the 1980s under the twin pressures of globalization and information technology. The jungle fighter symbolizes where the corporation has been; the virtuoso in interpersonal skills is the corporate future."³

Some of the reasons are patently obvious—imagine the consequences for a working group when someone is unable to keep from exploding in anger or has no sensitivity about what the people around him are feeling. All the deleterious effects of agitation on thinking reviewed in Chapter 6 operate in the

workplace too: When emotionally upset, people cannot remember, attend, learn, or make decisions clearly. As one management consultant put it, “Stress makes people stupid.”

On the positive side, imagine the benefits for work of being skilled in the basic emotional competences—being attuned to the feelings of those we deal with, being able to handle disagreements so they do not escalate, having the ability to get into flow states while doing our work. Leadership is not domination, but the art of persuading people to work toward a common goal. And, in terms of managing our own career, there may be nothing more essential than recognizing our deepest feelings about what we do—and what changes might make us more truly satisfied with our work.

Some of the less obvious reasons emotional aptitudes are moving to the forefront of business skills reflect sweeping changes in the workplace. Let me make my point by tracking the difference three applications of emotional intelligence make: being able to air grievances as helpful critiques, creating an atmosphere in which diversity is valued rather than a source of friction, and networking effectively.

CRITICISM IS JOB ONE

He was a seasoned engineer, heading a software development project, presenting the result of months of work by his team to the company’s vice president for product development. The men and women who had worked long days week after week were there with him, proud to present the fruit of their hard labor. But as the engineer finished his presentation, the vice president turned to him and asked sarcastically, “How long have you been out of graduate school? These specifications are ridiculous. They have no chance of getting past my desk.”

The engineer, utterly embarrassed and deflated, sat glumly through the rest of the meeting, reduced to silence. The men and women on his team made a few desultory—and some hostile—remarks in defense of their effort. The vice president was then called away and the meeting broke up abruptly, leaving a residue of bitterness and anger.

For the next two weeks the engineer was obsessed by the vice president’s remarks. Dispirited and depressed, he was convinced he would never get another assignment of importance at the company, and was thinking of leaving, even though he enjoyed his work there.

Finally the engineer went to see the vice president, reminding him of the meeting, his critical remarks, and their demoralizing effect. Then he made a carefully worded inquiry: “I’m a little confused by what you were trying to accomplish. I assume you were not just trying to embarrass me—did you have some other goal in mind?”

The vice president was astonished—he had no idea that his remark, which he meant as a throwaway line, had been so devastating. In fact, he thought the software plan was promising, but needed more work—he hadn’t meant to dismiss it as utterly worthless at all. He simply had not realized, he said, how poorly he had put his reaction, nor that he had hurt anyone’s feelings. And, belatedly, he apologized.⁴

It’s a question of feedback, really, of people getting the information essential to keep their efforts on track. In its original sense in systems theory, *feedback* meant the exchange of data about how one part of a system is working, with the understanding that one part affects all others in the system, so that any part heading offcourse could be changed for the better. In a company everyone is part of the system, and so feedback is the lifeblood of the organization—the exchange of information that lets people know if the job they are doing is going well or needs to be fine-tuned, upgraded, or redirected entirely. Without feedback people are in the dark; they have no idea how they stand with their boss, with their peers, or in terms of what is expected of them, and any problems will only get worse as time passes.

In a sense, criticism is one of the most important tasks a manager has. Yet it’s also one of the most dreaded and put off. And, like the sarcastic vice president, too many managers have poorly mastered the crucial art of feedback. This deficiency has a great cost: just as the emotional health of a couple depends on how well they air their grievances, so do the effectiveness, satisfaction, and productivity of

people at work depend on how they are told about nagging problems. Indeed, how criticisms are given and received goes a long way in determining how satisfied people are with their work, with those they work with, and with those to whom they are responsible.

The Worst Way to Motivate Someone

The emotional vicissitudes at work in marriage also operate in the workplace, where they take similar forms. Criticisms are voiced as personal attacks rather than complaints that can be acted upon; there are ad hominem charges with dollops of disgust, sarcasm, and contempt; both give rise to defensiveness and dodging of responsibility and, finally, to stonewalling or the embittered passive resistance that comes from feeling unfairly treated. Indeed, one of the more common forms of destructive criticism in the workplace, says one business consultant, is a blanket, generalized statement like “You’re screwing up,” delivered in a harsh, sarcastic, angry tone, providing neither a chance to respond nor any suggestion of how to do things better. It leaves the person receiving it feeling helpless and angry. From the vantage point of emotional intelligence, such criticism displays an ignorance of the feelings it will trigger in those who receive it, and the devastating effect those feelings will have on their motivation, energy, and confidence in doing their work.

This destructive dynamic showed up in a survey of managers who were asked to think back to times they blew up at employees and, in the heat of the moment, made a personal attack.⁵ The angry attacks had effects much like they would in a married couple: the employees who received them reacted most often by becoming defensive, making excuses, or evading responsibility. Or they stonewalled—that is, tried to avoid all contact with the manager who blew up at them. If they had been subjected to the same emotional microscope that John Gottman used with married couples, these embittered employees would no doubt have been shown to be thinking the thoughts of innocent victimhood or righteous indignation typical of husbands or wives who feel unfairly attacked. If their physiology were measured, they would probably also display the flooding that reinforces such thoughts. And yet the managers were only further annoyed and provoked by these responses, suggesting the beginning of a cycle that, in the business world, ends in the employee quitting or being fired—the business equivalent of a divorce.

Indeed, in a study of 108 managers and white-collar workers, inept criticism was ahead of mistrust, personality struggles, and disputes over power and pay as a reason for conflict on the job.⁶ An experiment done at Rensselaer Polytechnic Institute shows just how damaging to working relationships a cutting criticism can be. In a simulation, volunteers were given the task of creating an ad for a new shampoo. Another volunteer (a confederate) supposedly judged the proposed ads; volunteers actually received one of two prearranged criticisms. One critique was considerate and specific. But the other included threats and blamed the person’s innate deficiencies, with remarks like, “Didn’t even try; can’t seem to do anything right” and “Maybe it’s just lack of talent. I’d try to get someone else to do it.”

Understandably, those who were attacked became tense and angry and antagonistic, saying they would refuse to collaborate or cooperate on future projects with the person who gave the criticism. Many indicated they would want to avoid contact altogether—in other words, they felt like stonewalling. The harsh criticism made those who received it so demoralized that they no longer tried as hard at their work and, perhaps most damaging, said they no longer felt capable of doing well. The personal attack was devastating to their morale.

Many managers are too willing to criticize, but frugal with praise, leaving their employees feeling that they only hear about how they’re doing when they make a mistake. This propensity to criticism is compounded by managers who delay giving any feedback at all for long periods. “Most problems in an employee’s performance are not sudden; they develop slowly over time,” J. R. Larson, a University of Illinois at Urbana psychologist, notes. “When the boss fails to let his feelings be known promptly, it leads to his frustration building up slowly. Then, one day, he blows up about it. If the criticism had been given earlier on, the employee would have been able to correct the problem. Too often people criticize only when things boil over, when they get too angry to contain themselves. And that’s when

they give the criticism in the worst way, in a tone of biting sarcasm, calling to mind a long list of grievances they had kept to themselves, or making threats. Such attacks backfire. They are received as an affront, so the recipient becomes angry in return. It's the worst way to motivate someone."

The Artful Critique

Consider the alternative.

An artful critique can be one of the most helpful messages a manager can send. For example, what the contemptuous vice president could have told the software engineer—but did not—was something like: "The main difficulty at this stage is that your plan will take too long and so escalate costs. I'd like you to think more about your proposal, especially the design specifications for software development, to see if you can figure out a way to do the same job more quickly." Such a message has the opposite impact of destructive criticism: instead of creating helplessness, anger, and rebellion, it holds out the hope of doing better and suggests the beginning of a plan for doing so.

An artful critique focuses on what a person has done and can do rather than reading a mark of character into a job poorly done. As Larson observes, "A character attack—calling someone stupid or incompetent—misses the point. You immediately put him on the defensive, so that he's no longer receptive to what you have to tell him about how to do things better." That advice, of course, is precisely the same as for married couples airing their grievances.

And, in terms of motivation, when people believe that their failures are due to some unchangeable deficit in themselves, they lose hope and stop trying. The basic belief that leads to optimism, remember, is that setbacks or failures are due to circumstances that we can do something about to change them for the better.

Harry Levinson, a psychoanalyst turned corporate consultant, gives the following advice on the art of the critique, which is intricately entwined with the art of praise:

- *Be specific.* Pick a significant incident, an event that illustrates a key problem that needs changing or a pattern of deficiency, such as the inability to do certain parts of a job well. It demoralizes people just to hear that they are doing "something" wrong without knowing what the specifics are so they can change. Focus on the specifics, saying what the person did well, what was done poorly, and how it could be changed. Don't beat around the bush or be oblique or evasive; it will muddy the real message. This, of course, is akin to the advice to couples about the "XYZ" statement of a grievance: say exactly what the problem is, what's wrong with it or how it makes you feel, and what could be changed.

"Specificity," Levinson points out, "is just as important for praise as for criticism. I won't say that vague praise has no effect at all, but it doesn't have much, and you can't learn from it."⁷

- *Offer a solution.* The critique, like all useful feedback, should point to a way to fix the problem. Otherwise it leaves the recipient frustrated, demoralized, or demotivated. The critique may open the door to possibilities and alternatives that the person did not realize were there, or simply sensitize her to deficiencies that need attention—but should include suggestions about how to take care of these problems.

- *Be present.* Critiques, like praise, are most effective face to face and in private. People who are uncomfortable giving a criticism—or offering praise—are likely to ease the burden on themselves by doing it at a distance, such as in a memo. But this makes the communication too impersonal, and robs the person receiving it of an opportunity for a response or clarification.

- *Be sensitive.* This is a call for empathy, for being attuned to the impact of what you say and how you say it on the person at the receiving end. Managers who have little empathy, Levinson points out, are most prone to giving feedback in a hurtful fashion, such as the withering put-down. The net effect of such criticism is destructive: instead of opening the way for a corrective, it creates an emotional backlash of resentment, bitterness, defensiveness, and distance.

Levinson also offers some emotional counsel for those at the receiving end of criticism. One is to see the criticism as valuable information about how to do better, not as a personal attack. Another is to watch for the impulse toward defensiveness instead of taking responsibility. And, if it gets too upsetting, ask to resume the meeting later, after a period to absorb the difficult message and cool down

a bit. Finally, he advises people to see criticism as an opportunity to work together with the critic to solve the problem, not as an adversarial situation. All this sage advice, of course, directly echoes suggestions for married couples trying to handle their complaints without doing permanent damage to their relationship. As with marriage, so with work.

DEALING WITH DIVERSITY

Sylvia Skeeter, a former army captain in her thirties, was a shift manager at a Denny's restaurant in Columbia, South Carolina. One slow afternoon a group of black customers—a minister, an assistant pastor, and two visiting gospel singers—came in for a meal, and sat and sat while the waitresses ignored them. The waitresses, recalls Skeeter, “would kind of glare, with their hands on their hips, and then they'd go back to talking among themselves, like a black person standing five feet away didn't exist.”

Skeeter, indignant, confronted the waitresses, and complained to the manager, who shrugged off their actions, saying, “That's how they were raised, and there's nothing I can do about it.” Skeeter quit on the spot; she is black.

If that had been an isolated incident, this moment of blatant prejudice might have passed unnoted. But Sylvia Skeeter was one of hundreds of people who came forward to testify to a widespread pattern of antiblack prejudice throughout the Denny's restaurant chain, a pattern that resulted in a \$54 million settlement of a class-action suit on behalf of thousands of black customers who had suffered such indignities.

The plaintiffs included a detail of seven African-American Secret Service agents who sat waiting for an hour for their breakfast while their white colleagues at the next table were served promptly—as they were all on their way to provide security for a visit by President Clinton to the United States Naval Academy at Annapolis. They also included a black girl with paralyzed legs in Tampa, Florida, who sat in her wheelchair for two hours waiting for her food late one night after a prom. The pattern of discrimination, the class-action suit held, was due to the widespread assumption throughout the Denny's chain—particularly at the level of district and branch manager—that black customers were bad for business. Today, largely as a result of the suit and publicity surrounding it, the Denny's chain is making amends to the black community. And every employee, especially managers, must attend sessions on the advantages of a multiracial clientele.

Such seminars have become a staple of in-house training in companies throughout America, with the growing realization by managers that even if people bring prejudices to work with them, they must learn to act as though they have none. The reasons, over and above human decency, are pragmatic. One is the shifting face of the workforce, as white males, who used to be the dominant group, are becoming a minority. A survey of several hundred American companies found that more than three quarters of new employees were nonwhite—a demographic shift that is also reflected to a large extent in the changing pool of customers.⁸ Another reason is the increasing need for international companies to have employees who not only put any bias aside to appreciate people from diverse cultures (and markets) but also turn that appreciation to competitive advantage. A third motivation is the potential fruit of diversity, in terms of heightened collective creativity and entrepreneurial energy.

All this means the culture of an organization must change to foster tolerance, even if individual biases remain. But how can a company do this? The sad fact is that the panoply of one-day, one-video, or single-weekend “diversity training” courses do not really seem to budge the biases of those employees who come to them with deep prejudice against one or another group, whether it be whites biased against blacks, blacks against Asians, or Asians resenting Hispanics. Indeed, the net effect of inept diversity courses—those that raise false expectations by promising too much, or simply create an atmosphere of confrontation instead of understanding—can be to heighten the tensions that divide groups in the workplace, calling even greater attention to these differences. To understand what *can* be done, it helps to first understand the nature of prejudice itself.

The Roots of Prejudice

Dr. Vamik Volkan is a psychiatrist at the University of Virginia now, but he remembers what it was like growing up in a Turkish family on the island of Cyprus, then bitterly contested between Turks and Greeks. As a boy Volkan heard rumors that the local Greek priest's cincture had a knot for each Turkish child he had strangled, and remembers the tone of dismay in which he was told how his Greek neighbors ate pigs, whose meat was considered too filthy to eat in his own Turkish culture. Now, as a student of ethnic conflict, Volkan points to such childhood memories to show how hatreds between groups are kept alive over the years, as each new generation is steeped in hostile biases like these.⁹ The psychological price of loyalty to one's own group can be antipathy toward another, especially when there is a long history of enmity between the groups.

Prejudices are a kind of emotional learning that occurs early in life, making these reactions especially hard to eradicate entirely, even in people who as adults feel it is wrong to hold them. "The emotions of prejudice are formed in childhood, while the beliefs that are used to justify it come later," explained Thomas Pettigrew, a social psychologist at the University of California at Santa Cruz, who has studied prejudice for decades. "Later in life you may want to change your prejudice, but it is far easier to change your intellectual beliefs than your deep feelings. Many Southerners have confessed to me, for instance, that even though in their minds they no longer feel prejudice against blacks, they feel squeamish when they shake hands with a black. The feelings are left over from what they learned in their families as children."¹⁰

The power of the stereotypes that buttress prejudice comes in part from a more neutral dynamic in the mind that makes stereotypes of all kinds self-confirming.¹¹ People remember more readily instances that support the stereotype while tending to discount instances that challenge it. On meeting at a party an emotionally open and warm Englishman who disconfirms the stereotype of the cold, reserved Briton, for example, people can tell themselves that he's just unusual, or "he's been drinking."

The tenacity of subtle biases may explain why, while over the last forty years or so racial attitudes of American whites toward blacks have become increasingly more tolerant, more subtle forms of bias persist: people disavow racist attitudes while still acting with covert bias.¹² When asked, such people say they feel no bigotry, but in ambiguous situations still act in a biased way—though they give a rationale other than prejudice. Such bias can take the form, say, of a white senior manager—who believes he has no prejudices—rejecting a black job applicant, ostensibly not because of his race but because his education and experience "are not quite right" for the job, while hiring a white applicant with about the same background. Or it might take the form of giving a briefing and helpful tips to a white salesman about to make a call, but somehow neglecting to do the same for a black or Hispanic salesman.

Zero Tolerance for Intolerance

If people's long-held biases cannot be so easily weeded out, what *can* be changed is what they *do* about them. At Denny's, for example, waitresses or branch managers who took it upon themselves to discriminate against blacks were seldom, if ever, challenged. Instead, some managers seem to have encouraged them, at least tacitly, to discriminate, even suggesting policies such as demanding payment for meals in advance from black customers only, denying blacks widely advertised free birthday meals, or locking the doors and claiming to be closed if a group of black customers was coming. As John P. Relman, an attorney who sued Denny's on behalf of the black Secret Service agents, put it, "Denny's management closed their eyes to what the field staff was doing. There must have been some message . . . which freed up the inhibitions of local managers to act on their racist impulses."¹³

But everything we know about the roots of prejudice and how to fight it effectively suggests that precisely this attitude—turning a blind eye to acts of bias—allows discrimination to thrive. To do nothing, in this context, is an act of consequence in itself, letting the virus of prejudice spread unopposed. More to the point than diversity training courses—or perhaps essential to their having much effect—is that the norms of a group be decisively changed by taking an active stance against any

acts of discrimination, from the top echelons of management on down. Biases may not budge, but acts of prejudice can be quashed, if the climate is changed. As an IBM executive put it, “We don’t tolerate slights or insults in any way; respect for the individual is central to IBM’s culture.”¹⁴

If research on prejudice has any lesson for making a corporate culture more tolerant, it is to encourage people to speak out against even low-key acts of discrimination or harassment—offensive jokes, say, or the posting of girly calendars demeaning to women coworkers. One study found that when people in a group heard someone make ethnic slurs, it led others to do the same. The simple act of naming bias as such or objecting to it on the spot establishes a social atmosphere that discourages it; saying nothing serves to condone it.¹⁵ In this endeavor, those in positions of authority play a pivotal role: their failure to condemn acts of bias sends the tacit message that such acts are okay. Following through with action such as a reprimand sends a powerful message that bias is not trivial, but has real—and negative—consequences.

Here too the skills of emotional intelligence are an advantage, especially in having the social knack to know not just when but *how* to speak up productively against bias. Such feedback should be couched with all the finesse of an effective criticism, so it can be heard without defensiveness. If managers and coworkers do this naturally, or learn to do so, bias incidents are more likely to fall away.

The more effective diversity training courses set a new, organizationwide, explicit ground rule that makes bias in any form out-of-bounds, and so encourages people who have been silent witnesses and bystanders to voice their discomforts and objections. Another active ingredient in diversity courses is perspective-taking, a stance that encourages empathy and tolerance. To the degree that people come to understand the pain of those who feel discriminated against, they are more likely to speak out against it.

In short, it is more practical to try to suppress the expression of bias rather than trying to eliminate the attitude itself; stereotypes change very slowly, if at all. Simply putting people of different groups together does little or nothing to lower intolerance, as witness cases of school desegregation in which intergroup hostility rose rather than decreased. For the plethora of diversity training programs that are sweeping through the corporate world, this means a realistic goal is to change the *norms* of a group for showing prejudice or harassing; such programs can do much to raise into the collective awareness the idea that bigotry or harassment are not acceptable and will not be tolerated. But to expect that such a program will uproot deeply held prejudices is unrealistic.

Still, since prejudices are a variety of emotional learning, relearning is possible—though it takes time and should not be expected as the outcome of a one-time diversity training workshop. What can make a difference, though, is sustained camaraderie and daily efforts toward a common goal by people of different backgrounds. The lesson here is from school desegregation: when groups fail to mix socially, instead forming hostile cliques, the negative stereotypes intensify. But when students have worked together as equals to attain a common goal, as on sports teams or in bands, their stereotypes break down—as can happen naturally in the workplace, when people work together as peers over the years.¹⁶

But to stop at battling prejudice in the workplace is to miss a greater opportunity: taking advantage of the creative and entrepreneurial possibilities that a diverse workforce can offer. As we shall see, a working group of varied strengths and perspectives, if it can operate in harmony, is likely to come to better, more creative, and more effective solutions than those same people working in isolation.

ORGANIZATIONAL SAVVY AND THE GROUP IQ

By the end of the century, a third of the American workforce will be “knowledge workers,” people whose productivity is marked by adding value to information—whether as market analysts, writers, or computer programmers. Peter Drucker, the eminent business maven who coined the term “knowledge worker,” points out that such workers’ expertise is highly specialized, and that their productivity depends on their efforts being coordinated as part of an organizational team: writers are not publishers; computer programmers are not software distributors. While people have always worked in tandem,

notes Drucker, with knowledge work, “teams become the work unit rather than the individual himself.”¹⁷ And that suggests why emotional intelligence, the skills that help people harmonize, should become increasingly valued as a workplace asset in the years to come.

Perhaps the most rudimentary form of organizational teamwork is the meeting, that inescapable part of an executive’s lot—in a boardroom, on a conference call, in someone’s office. Meetings—bodies in the same room—are but the most obvious, and a somewhat antiquated, example of the sense in which work is shared. Electronic networks, e-mail, teleconferences, work teams, informal networks, and the like are emerging as new functional entities in organizations. To the degree that the explicit hierarchy as mapped on an organizational chart is the skeleton of an organization, these human touch-points are its central nervous system.

Whenever people come together to collaborate, whether it be in an executive planning meeting or as a team working toward a shared product, there is a very real sense in which they have a group IQ, the sum total of the talents and skills of all those involved. And how well they accomplish their task will be determined by how high that IQ is. The single most important element in group intelligence, it turns out, is not the average IQ in the academic sense, but rather in terms of emotional intelligence. The key to a high group IQ is social harmony. It is this ability to harmonize that, all other things being equal, will make one group especially talented, productive, and successful, and another—with members whose talent and skill are equal in other regards—do poorly.

The idea that there is a group intelligence at all comes from Robert Sternberg, the Yale psychologist, and Wendy Williams, a graduate student, who were seeking to understand why some groups are far more effective than others.¹⁸ After all, when people come together to work as a group, each brings certain talents—say, a high verbal fluency, creativity, empathy, or technical expertise. While a group can be no “smarter” than the sum total of all these specific strengths, it can be much dumber if its internal workings don’t allow people to share their talents. This maxim became evident when Sternberg and Williams recruited people to take part in groups that were given the creative challenge of coming up with an effective advertising campaign for a fictitious sweetener that showed promise as a sugar substitute.

One surprise was that people who were *too* eager to take part were a drag on the group, lowering its overall performance; these eager beavers were too controlling or domineering. Such people seemed to lack a basic element of social intelligence, the ability to recognize what is apt and what inappropriate in give-and-take. Another negative was having deadweight, members who did not participate.

The single most important factor in maximizing the excellence of a group’s product was the degree to which the members were able to create a state of internal harmony, which lets them take advantage of the full talent of their members. The overall performance of harmonious groups was helped by having a member who was particularly talented; groups with more friction were far less able to capitalize on having members of great ability. In groups where there are high levels of emotional and social static—whether it be from fear or anger, from rivalries or resentments—people cannot offer their best. But harmony allows a group to take maximum advantage of its most creative and talented members’ abilities.

While the moral of this tale is quite clear for, say, work teams, it has a more general implication for anyone who works within an organization. Many things people do at work depend on their ability to call on a loose network of fellow workers; different tasks can mean calling on different members of the network. In effect, this creates the chance for ad hoc groups, each with a membership tailored to offer an optimal array of talents, expertise, and placement. Just how well people can “work” a network—in effect, make it into a temporary, ad hoc team—is a crucial factor in on-the-job success.

Consider, for example, a study of star performers at Bell Labs, the world-famous scientific think tank near Princeton. The labs are peopled by engineers and scientists who are all at the top on academic IQ tests. But within this pool of talent, some emerge as stars, while others are only average in their output. What makes the difference between stars and the others is not their academic IQ, but their *emotional* IQ. They are better able to motivate themselves, and better able to work their informal networks into ad hoc teams.

The “stars” were studied in one division at the labs, a unit that creates and designs the electronic switches that control telephone systems—a highly sophisticated and demanding piece of electronic

engineering.¹⁹ Because the work is beyond the capacity of any one person to tackle, it is done in teams that can range from just 5 or so engineers to 150. No single engineer knows enough to do the job alone; getting things done demands tapping other people's expertise. To find out what made the difference between those who were highly productive and those who were only average, Robert Kelley and Janet Caplan had managers and peers nominate the 10 to 15 percent of engineers who stood out as stars.

When they compared the stars with everyone else, the most dramatic finding, at first, was the paucity of differences between the two groups. "Based on a wide range of cognitive and social measures, from standard tests for IQ to personality inventories, there's little meaningful difference in innate abilities," Kelley and Caplan wrote in the *Harvard Business Review*. "As it develops, academic talent was not a good predictor of on-the-job productivity," nor was IQ.

But after detailed interviews, the critical differences emerged in the internal and interpersonal strategies "stars" used to get their work done. One of the most important turned out to be a rapport with a network of key people. Things go more smoothly for the standouts because they put time into cultivating good relationships with people whose services might be needed in a crunch as part of an instant ad hoc team to solve a problem or handle a crisis. "A middle performer at Bell Labs talked about being stumped by a technical problem," Kelley and Caplan observed. "He painstakingly called various technical gurus and then waited, wasting valuable time while calls went unreturned and e-mail messages unanswered. Star performers, however, rarely face such situations because they do the work of building reliable networks before they actually need them. When they call someone for advice, stars almost always get a faster answer."

Informal networks are especially critical for handling unanticipated problems. "The formal organization is set up to handle easily anticipated problems," one study of these networks observes. "But when unexpected problems arise, the informal organization kicks in. Its complex web of social ties form every time colleagues communicate, and solidify over time into surprisingly stable networks. Highly adaptive, informal networks move diagonally and elliptically, skipping entire functions to get things done."²⁰

The analysis of informal networks shows that just because people work together day to day they will not necessarily trust each other with sensitive information (such as a desire to change jobs, or resentment about how a manager or peer behaves), nor turn to them in crisis. Indeed, a more sophisticated view of informal networks shows that there are at least three varieties: communications webs—who talks to whom; expertise networks, based on which people are turned to for advice; and trust networks. Being a main node in the expertise network means someone will have a reputation for technical excellence, which often leads to a promotion. But there is virtually no relationship between being an expert and being seen as someone people can trust with their secrets, doubts, and vulnerabilities. A petty office tyrant or micromanager may be high on expertise, but will be so low on trust that it will undermine their ability to manage, and effectively exclude them from informal networks. The stars of an organization are often those who have thick connections on all networks, whether communications, expertise, or trust.

Beyond a mastery of these essential networks, other forms of organizational savvy the Bell Labs stars had mastered included effectively coordinating their efforts in teamwork; being leaders in building consensus; being able to see things from the perspective of others, such as customers or others on a work team; persuasiveness; and promoting cooperation while avoiding conflicts. While all of these rely on social skills, the stars also displayed another kind of knack: taking initiative—being self-motivated enough to take on responsibilities above and beyond their stated job—and self-management in the sense of regulating their time and work commitments well. All such skills, of course, are aspects of emotional intelligence.

There are strong signs that what is true at Bell Labs augurs for the future of all corporate life, a tomorrow where the basic skills of emotional intelligence will be ever more important, in teamwork, in cooperation, in helping people learn together how to work more effectively. As knowledge-based services and intellectual capital become more central to corporations, improving the way people work together will be a major way to leverage intellectual capital, making a critical competitive difference. To thrive, if not survive, corporations would do well to boost their collective emotional intelligence.

Mind and Medicine

“Who taught you all this, Doctor?”
The reply came promptly:
“Suffering.”

— ALBERT CAMUS, *The Plague*

A vague ache in my groin sent me to my doctor. Nothing seemed unusual until he looked at the results of a urine test. I had traces of blood in my urine.

“I want you to go to the hospital and get some tests . . . kidney function, cytology . . .,” he said in a businesslike tone.

I don’t know what he said next. My mind seemed to freeze at the word *cytology*. Cancer.

I have a foggy memory of his explaining to me when and where to go for diagnostic tests. It was the simplest instruction, but I had to ask him to repeat it three or four times. *Cytology*—my mind would not leave the word. That one word made me feel as though I had just been mugged at my own front door.

Why should I have reacted so strongly? My doctor was just being thorough and competent, checking the limbs in a diagnostic decision tree. There was a tiny likelihood that cancer was the problem. But this rational analysis was irrelevant at that moment. In the land of the sick, emotions reign supreme; fear is a thought away. We can be so emotionally fragile while we are ailing because our mental well-being is based in part on the illusion of invulnerability. Sickness—especially a severe illness—bursts that illusion, attacking the premise that our private world is safe and secure. Suddenly we feel weak, helpless, and vulnerable.

The problem is when medical personnel ignore how patients are reacting *emotionally*, even while attending to their physical condition. This inattention to the emotional reality of illness neglects a growing body of evidence showing that people’s emotional states can play a sometimes significant role in their vulnerability to disease and in the course of their recovery. Modern medical care too often lacks emotional intelligence.

For the patient, any encounter with a nurse or physician can be a chance for reassuring information, comfort, and solace—or, if handled unfortunately, an invitation to despair. But too often medical caregivers are rushed or indifferent to patients’ distress. To be sure, there are compassionate nurses and physicians who take the time to reassure and inform as well as administer medically. But the trend is toward a professional universe in which institutional imperatives can leave medical staff oblivious to the vulnerabilities of patients, or feeling too pressed to do anything about them. With the hard realities of a medical system increasingly timed by accountants, things seem to be getting worse.

Beyond the humanitarian argument for physicians to offer care along with cure, there are other compelling reasons to consider the psychological and social reality of patients as being within the medical realm rather than separate from it. By now a scientific case can be made that there is a margin of *medical* effectiveness, both in prevention and treatment, that can be gained by treating people’s emotional state along with their medical condition. Not in every case or every condition, of course. But

looking at data from hundreds and hundreds of cases, there is on average enough increment of medical benefit to suggest that an *emotional* intervention should be a standard part of medical care for the range of serious disease.

Historically, medicine in modern society has defined its mission in terms of curing *disease*—the medical disorder—while overlooking *illness*—the patient’s experience of disease. Patients, by going along with this view of their problem, join a quiet conspiracy to ignore how they are reacting emotionally to their medical problems—or to dismiss those reactions as irrelevant to the course of the problem itself. That attitude is reinforced by a medical model that dismisses entirely the idea that mind influences body in any consequential way.

Yet there is an equally unproductive ideology in the other direction: the notion that people can cure themselves of even the most pernicious disease simply by making themselves happy or thinking positive thoughts, or that they are somehow to blame for having gotten sick in the first place. The result of this attitude-will-cure-all rhetoric has been to create widespread confusion and misunderstanding about the extent to which illness can be affected by the mind, and, perhaps worse, sometimes to make people feel guilty for having a disease, as though it were a sign of some moral lapse or spiritual unworthiness.

The truth lies somewhere between these extremes. By sorting through the scientific data, my aim is to clarify the contradictions and replace the nonsense with a clearer understanding of the degree to which our emotions—and emotional intelligence—play a part in health and disease.

THE BODY’S MIND: HOW EMOTIONS MATTER FOR HEALTH

In 1974 a finding in a laboratory at the School of Medicine and Dentistry, University of Rochester, rewrote biology’s map of the body: Robert Ader, a psychologist, discovered that the immune system, like the brain, could learn. His result was a shock; the prevailing wisdom in medicine had been that only the brain and central nervous system could respond to experience by changing how they behaved. Ader’s finding led to the investigation of what are turning out to be myriad ways the central nervous system and the immune system communicate—biological pathways that make the mind, the emotions, and the body not separate, but intimately entwined.

In his experiment white rats had been given a medication that artificially suppressed the quantity of disease-fighting T cells circulating in their blood. Each time they received the medication, they ate it along with saccharin-laced water. But Ader discovered that giving the rats the saccharin-flavored water alone, without the suppressive medication, still resulted in a lowering of the T- cell count—to the point that some of the rats were getting sick and dying. Their immune system had learned to suppress T cells in response to the fla-vored water. That just should not have happened, according to the best scientific understanding at the time.

The immune system is the “body’s brain,” as neuroscientist Francisco Va-rela, at Paris’s École Polytechnique, puts it, defining the body’s own sense of self—of what belongs within it and what does not.¹ Immune cells travel in the bloodstream throughout the entire body, contacting virtually every other cell. Those cells they recognize, they leave alone; those they fail to recognize, they attack. The attack either defends us against viruses, bacteria, and cancer or, if the immune cells misidentify some of the body’s own cells, creates an autoimmune disease such as allergy or lupus. Until the day Ader made his serendipitous discovery, every anatomist, every physician, and every biologist believed that the brain (along with its extensions throughout the body via the central nervous system) and the immune system were separate entities, neither able to influence the operation of the other. There was no pathway that could connect the brain centers monitoring what the rat tasted with the areas of bone marrow that manufacture T cells. Or so it had been thought for a century.

Over the years since then, Ader’s modest discovery has forced a new look at the links between the immune system and the central nervous system. The field that studies this, psychoneuroimmunology, or PNI, is now a leading-edge medical science. Its very name acknowledges the links: *psycho*, or “mind”; *neuro*, for the neuroendocrine system (which subsumes the nervous system and hormone systems); and *immunology*, for the immune system.

A network of researchers is finding that the chemical messengers that operate most extensively in both brain and immune system are those that are most dense in neural areas that regulate emotion.² Some of the strongest evidence for a direct physical pathway allowing emotions to impact the immune system has come from David Felten, a colleague of Ader's. Felten began by noting that emotions have a powerful effect on the autonomic nervous system, which regulates everything from how much insulin is secreted to blood-pressure levels. Felten, working with his wife, Suzanne, and other colleagues, then detected a meeting point where the autonomic nervous system directly talks to lymphocytes and macrophages, cells of the immune system.³

In electron-microscope studies, they found synapselike contacts where the nerve terminals of the autonomic system have endings that directly abut these immune cells. This physical contact point allows the nerve cells to release neurotransmitters to regulate the immune cells; indeed, they signal back and forth. The finding is revolutionary. No one had suspected that immune cells could be targets of messages from the nerves.

To test how important these nerve endings were in the workings of the immune system, Felten went a step further. In experiments with animals he removed some nerves from lymph nodes and spleen—where immune cells are stored or made—and then used viruses to challenge the immune system. The result: a huge drop in immune response to the virus. His conclusion is that without those nerve endings the immune system simply does not respond as it should to the challenge of an invading virus or bacterium. In short, the nervous system not only connects to the immune system, but is essential for proper immune function.

Another key pathway linking emotions and the immune system is via the influence of the hormones released under stress. The catecholamines (epinephrine and norepinephrine—otherwise known as adrenaline and noradrenaline), cortisol and prolactin, and the natural opiates beta-endorphin and enkephalin are all released during stress arousal. Each has a strong impact on immune cells. While the relationships are complex, the main influence is that while these hormones surge through the body, the immune cells are hampered in their function: stress suppresses immune resistance, at least temporarily, presumably in a conservation of energy that puts a priority on the more immediate emergency, which is more pressing for survival. But if stress is constant and intense, that suppression may become long-lasting.⁴

Microbiologists and other scientists are finding more and more such connections between the brain and the cardiovascular and immune systems—having first had to accept the once-radical notion that they exist at all.⁵

TOXIC EMOTIONS: THE CLINICAL DATA

Despite such evidence, many or most physicians are still skeptical that emotions matter clinically. One reason is that while many studies have found stress and negative emotions to weaken the effectiveness of various immune cells, it is not always clear that the range of these changes is great enough to make a *medical* difference.

Even so, an increasing number of physicians acknowledge the place of emotions in medicine. For instance, Dr. Camran Nezhat, an eminent gynecological laparoscopic surgeon at Stanford University, says, “If someone scheduled for surgery tells me she’s panicked that day and does not want to go through with it, I cancel the surgery.” Nezhat explains, “Every surgeon knows that people who are extremely scared do terribly in surgery. They bleed too much, they have more infections and complications. They have a harder time recovering. It’s much better if they are calm.”

The reason is straightforward: panic and anxiety hike blood pressure, and veins distended by pressure bleed more profusely when cut by the surgeon’s knife. Excess bleeding is one of the most troublesome surgical complications, one that can sometimes lead to death.

Beyond such medical anecdotes, evidence for the *clinical* importance of emotions has been mounting steadily. Perhaps the most compelling data on the medical significance of emotion come from a mass analysis combining results from 101 smaller studies into a single larger one of several thousand men and women. The study confirms that perturbing emotions are bad for health—to a

degree.⁶ People who experienced chronic anxiety, long periods of sadness and pessimism, unremitting tension or incessant hostility, relentless cynicism or suspiciousness, were found to have *double* the risk of disease—including asthma, arthritis, headaches, peptic ulcers, and heart disease (each representative of major, broad categories of disease). This order of magnitude makes distressing emotions as toxic a risk factor as, say, smoking or high cholesterol are for heart disease—in other words, a major threat to health.

To be sure, this is a broad statistical link, and by no means indicates that everyone who has such chronic feelings will thus more easily fall prey to a disease. But the evidence for a potent role for emotion in disease is far more extensive than this one study of studies indicates. Taking a more detailed look at the data for specific emotions, especially the big three—anger, anxiety, and depression—makes clearer some specific ways that feelings have medical significance, even if the biological mechanisms by which such emotions have their effect are yet to be fully understood.⁷

When Anger Is Suicidal

A while back, the man said, a bump on the side of his car led to a fruitless and frustrating journey. After endless insurance company red tape and auto body shops that did more damage, he still owed \$800. And it wasn't even his fault. He was so fed up that whenever he got into the car he was overcome with disgust. He finally sold the car in frustration. Years later the memories still made the man livid with outrage.

This bitter memory was brought to mind purposely, as part of a study of anger in heart patients at Stanford University Medical School. All the patients in the study had, like this embittered man, suffered a first heart attack, and the question was whether anger might have a significant impact of some kind on their heart function. The effect was striking: while the patients recounted incidents that made them mad, the pumping efficiency of their hearts dropped by five percentage points.⁸ Some of the patients showed a drop in pumping efficiency of 7 percent or greater—a range that cardiologists regard as a sign of a myocardial ischemia, a dangerous drop in blood flow to the heart itself.

The drop in pumping efficiency was not seen with other distressing feelings, such as anxiety, nor during physical exertion; anger seems to be the one emotion that does most harm to the heart. While recalling the upsetting incident, the patients said they were only about half as mad as they had been while it was happening, suggesting that their hearts would have been even more greatly hampered during an actual angry encounter.

This finding is part of a larger network of evidence emerging from dozens of studies pointing to the power of anger to damage the heart.⁹ The old idea has not held up that a hurried, high-pressure Type-A personality is at great risk from heart disease, but from that failed theory has emerged a new finding: it is hostility that puts people at risk.

Much of the data on hostility has come from research by Dr. Redford Williams at Duke University.¹⁰ For example, Williams found that those physicians who had had the highest scores on a test of hostility while still in medical school were seven times as likely to have died by the age of fifty as were those with low hostility scores—being prone to anger was a stronger predictor of dying young than were other risk factors such as smoking, high blood pressure, and high cholesterol. And findings by a colleague, Dr. John Barefoot at the University of North Carolina, show that in heart patients undergoing angiography, in which a tube is inserted into the coronary artery to measure lesions, scores on a test of hostility correlate with the extent and severity of coronary artery disease.

Of course, no one is saying that anger alone causes coronary artery disease; it is one of several interacting factors. As Peter Kaufman, acting chief of the Behavioral Medicine Branch of the National Heart, Lung, and Blood Institute, explained to me, “We can’t yet sort out whether anger and hostility play a causal role in the early development of coronary artery disease, or whether it intensifies the problem once heart disease has begun, or both. But take a twenty-year-old who repeatedly gets angry. Each episode of anger adds an additional stress to the heart by increasing his heart rate and blood pressure. When that is repeated over and over again, it can do damage,” especially because the turbulence of blood flowing through the coronary artery with each heartbeat “can cause microtears in the vessel, where plaque develops. If your heart rate is faster and blood pressure is higher because

you're habitually angry, then over thirty years that may lead to a faster buildup of plaque, and so lead to coronary artery disease."¹¹

Once heart disease develops, the mechanisms triggered by anger affect the very efficiency of the heart as a pump, as was shown in the study of angry memories in heart patients. The net effect is to make anger particularly lethal in those who already have heart disease. For instance, a Stanford University Medical School study of 1,012 men and women who suffered from a first heart attack and then were followed for up to eight years showed that those men who were most aggressive and hostile at the outset suffered the highest rate of second heart attacks.¹² There were similar results in a Yale School of Medicine study of 929 men who had survived heart attacks and were tracked for up to ten years.¹³ Those who had been rated as easily roused to anger were three times more likely to die of cardiac arrest than those who were more even-tempered. If they also had high cholesterol levels, the added risk from anger was five times higher.

The Yale researchers point out that it may not be anger alone that heightens the risk of death from heart disease, but rather intense negative emotionality of any kind that regularly sends surges of stress hormones through the body. But overall, the strongest scientific links between emotions and heart disease are to anger: a Harvard Medical School study asked more than fifteen hundred men and women who had suffered heart attacks to describe their emotional state in the hours before the attack. Being angry more than doubled the risk of cardiac arrest in people who already had heart disease; the heightened risk lasted for about two hours after the anger was aroused.¹⁴

These findings do not mean that people should try to suppress anger when it is appropriate. Indeed, there is evidence that trying to completely suppress such feelings in the heat of the moment actually results in magnifying the body's agitation and may raise blood pressure.¹⁵ On the other hand, as we saw in Chapter 5, the net effect of ventilating anger every time it is felt is simply to feed it, making it a more likely response to any annoying situation. Williams resolves this paradox by concluding that whether anger is expressed or not is less important than whether it is chronic. An occasional display of hostility is not dangerous to health; the problem arises when hostility becomes so constant as to define an antagonistic personal style—one marked by repeated feelings of mistrust and cynicism and the propensity to snide comments and put-downs, as well as more obvious bouts of temper and rage.¹⁶

The hopeful news is that chronic anger need not be a death sentence: hostility is a habit that can change. One group of heart-attack patients at Stanford University Medical School was enrolled in a program designed to help them soften the attitudes that gave them a short temper. This anger-control training resulted in a second-heart-attack rate 44 percent lower than for those who had not tried to change their hostility.¹⁷ A program designed by Williams has had similar beneficial results.¹⁸ Like the Stanford program, it teaches basic elements of emotional intelligence, particularly mindfulness of anger as it begins to stir, the ability to regulate it once it has begun, and empathy. Patients are asked to jot down cynical or hostile thoughts as they notice them. If the thoughts persist, they try to short-circuit them by saying (or thinking), "Stop!" And they are encouraged to purposely substitute reasonable thoughts for cynical, mistrustful ones during trying situations—for instance, if an elevator is delayed, to search for a benign reason rather than harbor anger against some imagined thoughtless person who may be responsible for the delay. For frustrating encounters, they learn the ability to see things from the other person's perspective—empathy is a balm for anger.

As Williams told me, "The antidote to hostility is to develop a more trusting heart. All it takes is the right motivation. When people see that their hostility can lead to an early grave, they are ready to try."

Stress: Anxiety Out of Proportion and Out of Place

I just feel anxious and tense all the time. It all started in high school. I was a straight- A student, and I worried constantly about my grades, whether the other kids and the teachers liked me, being prompt for classes—things like that. There was a lot of pressure from my parents to do well in school and to be a good role model. . . . I guess I just caved in to all that pressure, because my stomach problems began in my sophomore year of high school. Since that time, I've had to be

really careful about drinking caffeine and eating spicy meals. I notice that when I'm feeling worried or tense my stomach will flare up, and since I'm usually worried about something, I'm always nauseous.¹⁹

Anxiety—the distress evoked by life's pressures—is perhaps the emotion with the greatest weight of scientific evidence connecting it to the onset of sickness and course of recovery. When anxiety helps us prepare to deal with some danger (a presumed utility in evolution), then it has served us well. But in modern life anxiety is more often out of proportion and out of place—distress comes in the face of situations that we must live with or that are conjured by the mind, not real dangers we need to confront. Repeated bouts of anxiety signal high levels of stress. The woman whose constant worrying primes her gastrointestinal trouble is a textbook example of how anxiety and stress exacerbate medical problems.

In a 1993 review in the *Archives of Internal Medicine* of extensive research on the stress-disease link, Yale psychologist Bruce McEwen noted a broad spectrum of effects: compromising immune function to the point that it can speed the metastasis of cancer; increasing vulnerability to viral infections; exacerbating plaque formation leading to atherosclerosis and blood clotting leading to myocardial infarction; accelerating the onset of Type I diabetes and the course of Type II diabetes; and worsening or triggering an asthma attack.²⁰ Stress can also lead to ulceration of the gastrointestinal tract, triggering symptoms in ulcerative colitis and in inflammatory bowel disease. The brain itself is susceptible to the long-term effects of sustained stress, including damage to the hippocampus, and so to memory. In general, says McEwen, “evidence is mounting that the nervous system is subject to ‘wear and tear’ as a result of stressful experiences.”²¹

Particularly compelling evidence for the medical impact from distress has come from studies with infectious diseases such as colds, the flu, and herpes. We are continually exposed to such viruses, but ordinarily our immune system fights them off—except that under emotional stress those defenses more often fail. In experiments in which the robustness of the immune system has been assayed directly, stress and anxiety have been found to weaken it, but in most such results it is unclear whether the range of immune weakening is of clinical significance—that is, great enough to open the way to disease.²² For that reason stronger scientific links of stress and anxiety to medical vulnerability come from prospective studies: those that start with healthy people and monitor first a heightening of distress followed by a weakening of the immune system and the onset of illness.

In one of the most scientifically compelling studies, Sheldon Cohen, a psychologist at Carnegie-Mellon University, working with scientists at a specialized colds research unit in Sheffield, England, carefully assessed how much stress people were feeling in their lives, and then systematically exposed them to a cold virus. Not everyone so exposed actually comes down with a cold; a robust immune system can—and constantly does—resist the cold virus. Cohen found that the more stress in their lives, the more likely people were to catch cold. Among those with little stress, 27 percent came down with a cold after being exposed to the virus; among those with the most stressful lives, 47 percent got the cold—direct evidence that stress itself weakens the immune system.²³ (While this may be one of those scientific results that con-firms what everyone has observed or suspected all along, it is considered a landmark finding because of its scientific rigor.)

Likewise, married couples who for three months kept daily checklists of hassles and upsetting events such as marital fights showed a strong pattern: three or four days after an especially intense batch of upsets, they came down with a cold or upper-respiratory infection. That lag period is precisely the incubation time for many common cold viruses, suggesting that being exposed while they were most worried and upset made them especially vulnerable.²⁴

The same stress-infection pattern holds for the herpes virus—both the type that causes cold sores on the lip and the type that causes genital lesions. Once people have been exposed to the herpes virus, it stays latent in the body, flaring up from time to time. The activity of the herpes virus can be tracked by levels of antibodies to it in the blood. Using this measure, reactivation of the herpes virus has been found in medical students undergoing year-end exams, in recently separated women, and among people under constant pressure from caring for a family member with Alzheimer's disease.²⁵

The toll of anxiety is not just that it lowers the immune response; other research is showing adverse effects on the cardiovascular system. While chronic hostility and repeated episodes of anger seem to

put men at greatest risk for heart disease, the more deadly emotion in women may be anxiety and fear. In research at Stanford University School of Medicine with more than a thousand men and women who had suffered a first heart attack, those women who went on to suffer a second heart attack were marked by high levels of fearfulness and anxiety. In many cases the fearfulness took the form of crippling phobias: after their first heart attack the patients stopped driving, quit their jobs, or avoided going out.²⁶

The insidious physical effects of mental stress and anxiety—the kind produced by high-pressure jobs, or high-pressure lives such as that of a single mother juggling day care and a job—are being pinpointed at an anatomically fine-grained level. For example, Stephen Manuck, a University of Pittsburgh psychologist, put thirty volunteers through a rigorous, anxiety-riddled ordeal in a laboratory while he monitored the men's blood, assaying a substance secreted by blood platelets called adenosine triphosphate, or ATP, which can trigger blood-vessel changes that may lead to heart attacks and strokes. While the volunteers were under the intense stress, their ATP levels rose sharply, as did their heart rate and blood pressure.

Understandably, health risks seem greatest for those whose jobs are high in “strain”: having high-pressure performance demands while having little or no control over how to get the job done (a predicament that gives bus drivers, for instance, a high rate of hypertension). For example, in a study of 569 patients with colorectal cancer and a matched comparison group, those who said that in the previous ten years they had experienced severe on-the-job aggravation were five and a half times more likely to have developed the cancer compared to those with no such stress in their lives.²⁷

Because the medical toll of distress is so broad, relaxation techniques—which directly counter the physiological arousal of stress—are being used clinically to ease the symptoms of a wide variety of chronic illnesses. These include cardiovascular disease, some types of diabetes, arthritis, asthma, gastrointestinal disorders, and chronic pain, to name a few. To the degree any symptoms are worsened by stress and emotional distress, helping patients become more relaxed and able to handle their turbulent feelings can often offer some reprieve.²⁸

The Medical Costs of Depression

She had been diagnosed with metastatic breast cancer, a return and spread of the malignancy several years after what she had thought was successful surgery for the disease. Her doctor could no longer talk of a cure, and the chemotherapy, at best, might offer just a few more months of life. Understandably, she was depressed—so much so that whenever she went to her oncologist, she found herself at some point bursting out into tears. Her oncologist's response each time: asking her to leave the office immediately.

Apart from the hurtfulness of the oncologist's coldness, did it matter medically that he would not deal with his patient's constant sadness? By the time a disease has become so virulent, it would be unlikely that any emotion would have an appreciable effect on its progress. While the woman's depression most certainly dimmed the quality of her final months, the medical evidence that melancholy might affect the course of cancer is as yet mixed.²⁹ But cancer aside, a smattering of studies suggest a role for depression in many other medical conditions, especially in worsening a sickness once it has begun. The evidence is mounting that for patients with serious disease who are depressed, it would pay medically to treat their depression too.

One complication in treating depression in medical patients is that its symptoms, including loss of appetite and lethargy, are easily mistaken for signs of other diseases, particularly by physicians with little training in psychiatric diagnosis. That inability to diagnose depression may itself add to the problem, since it means that a patient's depression—like that of the weepy breast-cancer patient—goes unnoticed and untreated. And that failure to diagnose and treat may add to the risk of death in severe disease.

For instance, of 100 patients who received bone marrow transplants, 12 of the 13 who had been depressed died within the first year of the transplant, while 34 of the remaining 87 were still alive two

years later.³⁰ And in patients with chronic kidney failure who were receiving dialysis, those who were diagnosed with major depression were most likely to die within the following two years; depression was a stronger predictor of death than any medical sign.³¹ Here the route connecting emotion to medical status was not biological but attitudinal: The depressed patients were much worse about complying with their medical regimens—cheating on their diets, for example, which put them at higher risk.

Heart disease too seems to be exacerbated by depression. In a study of 2,832 middle-aged men and women tracked for twelve years, those who felt a sense of nagging despair and hopelessness had a heightened rate of death from heart disease.³² And for the 3 percent or so who were most severely depressed, the death rate from heart disease, compared to the rate for those with no feelings of depression, was four times greater.

Depression seems to pose a particularly grave medical risk for heart attack survivors.³³ In a study of patients in a Montreal hospital who were discharged after being treated for a first heart attack, depressed patients had a sharply higher risk of dying within the following six months. Among the one in eight patients who were seriously depressed, the death rate was five times higher than for others with comparable disease—an effect as great as that of major medical risks for cardiac death, such as left ventricular dysfunction or a history of previous heart attacks. Among the possible mechanisms that might explain why depression so greatly increases the odds of a later heart attack are its effects on heart rate variability, increasing the risk of fatal arrhythmias.

Depression has also been found to complicate recovery from hip fracture. In a study of elderly women with hip fracture, several thousand were given psychiatric evaluations on their admission to the hospital. Those who were depressed on admission stayed an average of eight days longer than those with comparable injury but no depression, and were only a third as likely ever to walk again. But depressed women who had psychiatric help for their depression along with other medical care needed less physical therapy to walk again and had fewer rehospitalizations over the three months after their return home from the hospital.

Likewise, in a study of patients whose condition was so dire that they were among the top 10 percent of those using medical services—often because of having multiple illnesses, such as both heart disease and diabetes—about one in six had serious depression. When these patients were treated for the problem, the number of days per year that they were disabled dropped from 79 to 51 for those who had major depression, and from 62 days per year to just 18 in those who had been treated for mild depression.³⁴

THE MEDICAL BENEFITS OF POSITIVE FEELINGS

The cumulative evidence for adverse medical effects from anger, anxiety, and depression, then, is compelling. Both anger and anxiety, when chronic, can make people more susceptible to a range of disease. And while depression may not make people more vulnerable to becoming ill, it does seem to impede medical recovery and heighten the risk of death, especially with more frail patients with severe conditions.

But if chronic emotional distress in its many forms is toxic, the opposite range of emotion can be tonic—to a degree. This by no means says that positive emotion is curative, or that laughter or happiness alone will turn the course of a serious disease. The edge positive emotions offer seems subtle, but, by using studies with large numbers of people, can be teased out of the mass of complex variables that affect the course of disease.

The Price of Pessimism—and Advantages of Optimism

As with depression, there are medical costs to pessimism—and corresponding benefits from optimism. For example, 122 men who had their first heart attack were evaluated on their degree of optimism or pessimism. Eight years later, of the 25 most pessimistic men, 21 had died; of the 25 most optimistic, just 6 had died. Their mental outlook proved a better predictor of survival than any medical risk factor,

including the amount of damage to the heart in the first attack, artery blockage, cholesterol level, or blood pressure. And in other research, patients going into artery bypass surgery who were more optimistic had a much faster recovery and fewer medical complications during and after surgery than did more pessimistic patients.³⁵

Like its near cousin optimism, hope has healing power. People who have a great deal of hopefulness are, understandably, better able to bear up under trying circumstances, including medical difficulties. In a study of people paralyzed from spinal injuries, those who had more hope were able to gain greater levels of physical mobility compared to other patients with similar degrees of injury, but who felt less hopeful. Hope is especially telling in paralysis from spinal injury, since this medical tragedy typically involves a man who is paralyzed in his twenties by an accident and will remain so for the rest of his life. How he reacts emotionally will have broad consequences for the degree to which he will make the efforts that might bring him greater physical and social functioning.³⁶

Just why an optimistic or pessimistic outlook should have health consequences is open to any of several explanations. One theory proposes that pessimism leads to depression, which in turn interferes with the resistance of the immune system to tumors and infection—an unproven speculation at present. Or it may be that pessimists neglect themselves—some studies have found that pessimists smoke and drink more, and exercise less, than optimists, and are generally much more careless about their health habits. Or it may one day turn out that the physiology of hopefulness is itself somehow helpful biologically to the body's fight against disease.

With a Little Help From My Friends: The Medical Value of Relationships

Add the sounds of silence to the list of emotional risks to health—and close emotional ties to the list of protective factors. Studies done over two decades involving more than thirty-seven thousand people show that social isolation—the sense that you have nobody with whom you can share your private feelings or have close contact—doubles the chances of sickness or death.³⁷ Isolation itself, a 1987 report in *Science* concluded, “is as significant to mortality rates as smoking, high blood pressure, high cholesterol, obesity, and lack of physical exercise.” Indeed, smoking increases mortality risk by a factor of just 1.6, while social isolation does so by a factor of 2.0, making it a greater health risk.³⁸

Isolation is harder on men than on women. Isolated men were two to three times more likely to die as were men with close social ties; for isolated women, the risk was one and a half times greater than for more socially connected women. The difference between men and women in the impact of isolation may be because women's relationships tend to be emotionally closer than men's; a few strands of such social ties for a woman may be more comforting than the same small number of friendships for a man.

Of course, solitude is not the same as isolation; many people who live on their own or see few friends are content and healthy. Rather, it is the subjective sense of being cut off from people and having no one to turn to that is the medical risk. This finding is ominous in light of the increasing isolation bred by solitary TV-watching and the falling away of social habits such as clubs and visits in modern urban societies, and suggests an added value to self-help groups such as Alcoholics Anonymous as surrogate communities.

The power of isolation as a mortality risk factor—and the healing power of close ties—can be seen in the study of one hundred bone marrow transplant patients.³⁹ Among patients who felt they had strong emotional support from their spouse, family, or friends, 54 percent survived the transplants after two years, versus just 20 percent among those who reported little such support. Similarly, elderly people who suffer heart attacks, but have two or more people in their lives they can rely on for emotional support, are more than twice as likely to survive longer than a year after an attack than are those people with no such support.⁴⁰

Perhaps the most telling testimony to the healing potency of emotional ties is a Swedish study published in 1993.⁴¹ All the men living in the Swedish city of Göteborg who were born in 1933 were offered a free medical exam; seven years later the 752 men who had come for the exam were contacted again. Of these, 41 had died in the intervening years.

Men who had originally reported being under intense emotional stress had a death rate three times greater than those who said their lives were calm and placid. The emotional distress was due to events

such as serious financial trouble, feeling insecure at work or being forced out of a job, being the object of a legal action, or going through a divorce. Having had three or more of these troubles within the year before the exam was a stronger predictor of dying within the ensuing seven years than were medical indicators such as high blood pressure, high concentrations of blood triglycerides, or high serum cholesterol levels.

Yet among men who said they had a dependable web of intimacy—a wife, close friends, and the like—*there was no relationship whatever* between high stress levels and death rate. Having people to turn to and talk with, people who could offer solace, help, and suggestions, protected them from the deadly impact of life's rigors and trauma.

The quality of relationships as well as their sheer number seems key to buffering stress. Negative relationships take their own toll. Marital arguments, for example, have a negative impact on the immune system.⁴² One study of college roommates found that the more they disliked each other, the more susceptible they were to colds and the flu, and the more frequently they went to doctors. John Cacioppo, the Ohio State University psychologist who did the roommate study, told me, "It's the most important relationships in your life, the people you see day in and day out, that seem to be crucial for your health. And the more significant the relationship is in your life, the more it matters for your health."⁴³

The Healing Power of Emotional Support

In *The Merry Adventures of Robin Hood*, Robin advises a young follower: "Tell us thy troubles and speak freely. A flow of words doth ever ease the heart of sorrows; it is like opening the waste where the mill dam is overfull." This bit of folk wisdom has great merit; unburdening a troubled heart appears to be good medicine. The scientific corroboration of Robin's advice comes from James Pennebaker, a Southern Methodist University psychologist, who has shown in a series of experiments that getting people to talk about the thoughts that trouble them most has a beneficial medical effect.⁴⁴ His method is remarkably simple: he asks people to write, for fifteen to twenty minutes a day over five or so days, about, for example, "the most traumatic experience of your entire life," or some pressing worry of the moment. What people write can be kept entirely to themselves if they like.

The net effect of this confessional is striking: enhanced immune function, significant drops in health-center visits in the following six months, fewer days missed from work, and even improved liver enzyme function. Moreover, those whose writing showed most evidence of turbulent feelings had the greatest improvements in their immune function. A specific pattern emerged as the "healthiest" way to ventilate troubling feelings: at first expressing a high level of sadness, anxiety, anger—whatever troubling feelings the topic brought up; then, over the course of the next several days weaving a narrative, finding some meaning in the trauma or travail.

That process, of course, seems akin to what happens when people explore such troubles in psychotherapy. Indeed, Pennebaker's findings suggest one reason why other studies show medical patients given psychotherapy in addition to surgery or medical treatment often fare better *medically* than do those who receive medical treatment alone.⁴⁵

Perhaps the most powerful demonstration of the clinical power of emotional support was in groups at Stanford University Medical School for women with advanced metastatic breast cancer. After an initial treatment, often including surgery, these women's cancer had returned and was spreading through their bodies. It was only a matter of time, clinically speaking, until the spreading cancer killed them. Dr. David Spiegel, who conducted the study, was himself stunned by the findings, as was the medical community: women with advanced breast cancer who went to weekly meetings with others survived *twice as long* as did women with the same disease who faced it on their own.⁴⁶

All the women received standard medical care; the only difference was that some also went to the groups, where they were able to unburden themselves with others who understood what they faced and were willing to listen to their fears, their pain, and their anger. Often this was the only place where the women could be open about these emotions, because other people in their lives dreaded talking with them about the cancer and their imminent death. Women who attended the groups lived for thirty-seven additional months, on average, while those with the disease who did not go to the groups died, on

average, in nineteen months—a gain in life expectancy for such patients beyond the reach of any medication or other medical treatment. As Dr. Jimmie Holland, the chief psychiatric oncologist at Sloan-Kettering Memorial Hospital, a cancer treatment center in New York City, put it to me, “Every cancer patient should be in a group like this.” Indeed, if it had been a new drug that produced the extended life expectancy, pharmaceutical companies would be battling to produce it.

BRINGING EMOTIONAL INTELLIGENCE TO MEDICAL CARE

The day a routine checkup spotted some blood in my urine, my doctor sent me for a diagnostic test in which I was injected with a radioactive dye. I lay on a table while an overhead X-ray machine took successive images of the dye’s progression through my kidneys and bladder. I had company for the test: a close friend, a physician himself, happened to be visiting for a few days and offered to come to the hospital with me. He sat in the room while the X-ray machine, on an automated track, rotated for new camera angles, whirled and clicked; rotated, whirled, clicked.

The test took an hour and a half. At the very end a kidney specialist hurried into the room, quickly introduced himself, and disappeared to scan the X-rays. He didn’t return to tell me what they showed.

As we were leaving the exam room my friend and I passed the nephrologist. Feeling shaken and somewhat dazed by the test, I did not have the presence of mind to ask the one question that had been on my mind all morning. But my companion, the physician, did: “Doctor,” he said, “my friend’s father died of bladder cancer. He’s anxious to know if you saw any signs of cancer in the X-rays.”

“No abnormalities,” was the curt reply as the nephrologist hurried on to his next appointment.

My inability to ask the single question I cared about most is repeated a thousand times each day in hospitals and clinics everywhere. A study of patients in physicians’ waiting rooms found that each had an average of three or more questions in mind to ask the physician they were about to see. But when the patients left the physician’s office, an average of only one and a half of those questions had been answered.⁴⁷ This finding speaks to one of the many ways patients’ emotional needs are unmet by today’s medicine. Unanswered questions feed uncertainty, fear, catastrophizing. And they lead patients to balk at going along with treatment regimes they don’t fully understand.

There are many ways medicine can expand its view of health to include the emotional realities of illness. For one, patients could routinely be offered fuller information essential to the decisions they must make about their own medical care; some services now offer any caller a state-of-the-art computer search of the medical literature on what ails them, so that patients can be more equal partners with their physicians in making informed decisions.⁴⁸ Another approach is programs that, in a few minutes’ time, teach patients to be effective questioners with their physicians, so that when they have three questions in mind as they wait for the doctor, they will come out of the office with three answers.⁴⁹

Moments when patients face surgery or invasive and painful tests are fraught with anxiety—and are a prime opportunity to deal with the emotional dimension. Some hospitals have developed presurgery instruction for patients that help them assuage their fears and handle their discomforts—for example, by teaching patients relaxation techniques, answering their questions well in advance of surgery, and telling them several days ahead of surgery precisely what they are likely to experience during their recovery. The result: patients recover from surgery an average of two to three days sooner.⁵⁰

Being a hospital patient can be a tremendously lonely, helpless experience. But some hospitals have begun to design rooms so that family members can stay with patients, cooking and caring for them as they would at home—a progressive step that, ironically, is routine throughout the Third World.⁵¹

Relaxation training can help patients deal with some of the distress their symptoms bring, as well as with the emotions that may be triggering or exacerbating their symptoms. An exemplary model is Jon Kabat-Zinn’s Stress Reduction Clinic at the University of Massachusetts Medical Center, which offers a ten-week course in mindfulness and yoga to patients; the emphasis is on being mindful of emotional episodes as they are happening, and on cultivating a daily practice that offers deep relaxation. Hospitals have made instructional tapes from the course available over patients’ television sets—a far better emotional diet for the bedridden than the usual fare, soap operas.⁵²

Relaxation and yoga are also at the core of the innovative program for treating heart disease developed by Dr. Dean Ornish.⁵³ After a year of this program, which included a low-fat diet, patients whose heart disease was severe enough to warrant a coronary bypass actually reversed the buildup of artery-clogging plaque. Ornish tells me that relaxation training is one of the most important parts of the program. Like Kabat-Zinn's, it takes advantage of what Dr. Herbert Benson calls the "relaxation response," the physiological opposite of the stress arousal that contributes to such a wide spectrum of medical problems.

Finally, there is the added medical value of an empathic physician or nurse, attuned to patients, able to listen and be heard. This means fostering "relationship-centered care," recognizing that the relationship between physician and patient is itself a factor of significance. Such relationships would be fostered more readily if medical education included some basic tools of emotional intelligence, especially self-awareness and the arts of empathy and listening.⁵⁴

TOWARD A MEDICINE THAT CARES

Such steps are a beginning. But for medicine to enlarge its vision to embrace the impact of emotions, two large implications of the scientific findings must be taken to heart:

1. *Helping people better manage their upsetting feelings—anger, anxiety, depression, pessimism, and loneliness—is a form of disease prevention.* Since the data show that the toxicity of these emotions, when chronic, is on a par with smoking cigarettes, helping people handle them better could potentially have a medical payoff as great as getting heavy smokers to quit. One way to do this that could have broad public-health effects would be to impart most basic emotional intelligence skills to children, so that they become lifelong habits. Another high-payoff preventive strategy would be to teach emotion management to people reaching retirement age, since emotional well-being is one factor that determines whether an older person declines rapidly or thrives. A third target group might be so-called at-risk populations—the very poor, single working mothers, residents of high-crime neighborhoods, and the like—who live under extraordinary pressure day in and day out, and so might do better medically with help in handling the emotional toll of these stresses.

2. *Many patients can benefit measurably when their psychological needs are attended to along with their purely medical ones.* While it is a step toward more humane care when a physician or nurse offers a distressed patient comfort and consolation, more can be done. But emotional care is an opportunity too often lost in the way medicine is practiced today; it is a blind spot for medicine. Despite mounting data on the medical usefulness of attending to emotional needs, as well as supporting evidence for connections between the brain's emotional center and the immune system, many physicians remain skeptical that their patients' emotions matter clinically, dismissing the evidence for this as trivial and anecdotal, as "fringe," or, worse, as the exaggerations of a self-promoting few.

Though more and more patients seek a more humane medicine, it is becoming endangered. Of course, there remain dedicated nurses and physicians who give their patients tender, sensitive care. But the changing culture of medicine itself, as it becomes more responsive to the imperatives of business, is making such care increasingly difficult to find.

On the other hand, there may be a business advantage to humane medicine: treating emotional distress in patients, early evidence suggests, can save money—especially to the extent that it prevents or delays the onset of sickness, or helps patients heal more quickly. In a study of elderly patients with hip fracture at Mt. Sinai School of Medicine in New York City and at Northwestern University, patients who received therapy for depression in addition to normal orthopedic care left the hospital an average of two days earlier; total savings for the hundred or so patients was \$97,361 in medical costs.⁵⁵

Such care also makes patients more satisfied with their physicians and medical treatment. In the emerging medical marketplace, where patients often have the option to choose between competing health plans, satisfaction levels will no doubt enter the equation of these very personal

decisions—souring experiences can lead patients to go elsewhere for care, while pleasing ones translate into loyalty.

Finally, medical ethics may demand such an approach. An editorial in the *Journal of the American Medical Association*, commenting on a report that depression increases fivefold the likelihood of dying after being treated for a heart attack, notes: “[T]he clear demonstration that psychological factors like depression and social isolation distinguish the coronary heart disease patients at highest risk means it would be unethical not to start trying to treat these factors.”⁵⁶

If the findings on emotions and health mean anything, it is that medical care that neglects how people *feel* as they battle a chronic or severe disease is no longer adequate. It is time for medicine to take more methodical advantage of the link between emotion and health. What is now the exception could—and should—be part of the mainstream, so that a more caring medicine is available to us all. At the least it would make medicine more humane. And, for some, it could speed the course of recovery. “Compassion,” as one patient put it in an open letter to his surgeon, “is not mere hand holding. It is good medicine.”⁵⁷