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Confession and Inhibition: The Beginnings of an Approach

Long before the Spanish conquered the new world, Indians of North and South America had elaborate confession rituals wherein tribe members disclosed their transgressions to others. Indeed, rituals of confession are currently prominent among most Eastern and Western religions.

A growing number of Americans pay millions of dollars to therapists and self-help groups so that they can divulge their secret views of the world.

A large percentage of people write about their very deepest thoughts and feelings in diaries or letters but do not disclose the personal sides of themselves to the close friends they see every day.

On airplanes, buses, and trains, people are likely to disclose intimate sides of themselves to individuals they have never met before.

Why do people throughout the world seek to tell their untold stories? Is there some kind of urge to confess? Is it healthy for us to divulge our deepest thoughts and feelings? Or, conversely, is it unhealthy *not* to disclose the private side of our life? I have been fascinated by questions such as these for quite a while. Beginning in the late 1970s, I embarked on a large research project in an attempt to get some answers.

The main discoveries of this project indicate that actively holding back or inhibiting our thoughts and feelings can be hard work. Over time, the work of inhibition gradually undermines the body's defenses. Like other stressors, inhibition can affect immune function, the action of the heart and vascular systems, and even the biochemical workings of the brain and nervous systems.

In short, excessive holding back of thoughts, feelings, and behaviors can place people at risk for both major and minor diseases.

Whereas inhibition is potentially harmful, confronting our deepest thoughts and feelings can have remarkable short- and long-term health benefits. Confession, whether by writing or talking, can neutralize many of the problems of inhibition. Further, writing or talking about upsetting things can influence our basic values, our daily thinking patterns, and our feelings about ourselves. In short, there appears to be something akin to an urge to confess. Not disclosing our thoughts and feelings can be unhealthy. Divulging them can be healthy.

Those are the most basic ideas of the book. But there is much more to the story. Before detailing the nature and implications of confession, let me explain how I got into this business. Several years ago, I became fascinated by three seemingly unrelated phenomena: the joy of talking, the nature of lie detection, and the role of self-understanding in affecting the mind-body link. Piecing together these observations laid the groundwork of an intriguing model of inhibition and confrontation.

I was originally trained as a social psychologist—someone who studies attitudes and social behaviors. After graduate school, I found myself teaching a class of three hundred freshmen about basic psychology at the University of Virginia. Because graduate training emphasizes research skills rather than teaching abilities, I quickly learned that class demonstrations were a wonderful way of hiding one's lack of knowledge about a topic. Further, if the demonstrations were set up right, I could actually conduct research and teach at the same time.

In one of the first class meetings, I split the students into small groups of people who didn't know one another. Once in their assigned groups, the students were told just to talk for fifteen minutes about anything they wanted. As you would expect, they talked about their hometowns, why they had come to college, what dormitory they lived in, friends they had in common, the weather, and related topics—the usual cocktail-party fare.

At the end of fifteen minutes, they all returned to their regular seats and estimated how much of the time every person in the group talked, how much they liked the group, and how much they learned from the group. Two rather surprising findings came from this and subsequent demonstrations. First, the more people

talked, the more they liked the group. Second, the more they talked, the more they claimed to have learned from the group. In other words, as a group member, the more you dominate the conversation, the more you claim you have learned about the others.

In general, we would rather talk than listen. Most of us find that communicating our thoughts is a supremely enjoyable learning experience.

Not long after this, I was introduced to the world of lie detection. Up to that time, I had been interested in how students felt when they talked about superficial topics to their classmates. I was now in a position to learn what happened physiologically to people in the real world when they talked about crimes they may or may not have committed.

There is something frighteningly magical about the idea of lie detection. Machines that can accurately read others' private thoughts have been the basis of dreams by police officers, poker players, and parents. A crude approximation of this magical lie detector is the polygraph—an instrument that continuously measures several physiological indicators such as heart rate, blood pressure, breathing rate, and perspiration on the hand.

In law enforcement, polygraph exams and related lie-detection methods assume that when suspects try to deceive their interrogators, their biological stress levels will increase relative to when they tell the truth. Although numerous studies indicate that polygraph techniques do much better than chance at catching truly guilty suspects, they are far from perfect.

Ironically, the real value of the polygraph is in bringing about confessions. A particularly skilled polygrapher uses a suspect's biological responses to various questions as an indicator of what topics provoke the most anxiety. Once the "hot" questions are isolated, the polygrapher may note, "Gee, I really believe what you have told me, but my machine shows a huge reaction when you answered that question. Why do you think this is happening?" In more cases than not, deceptive suspects try to rationalize their physiological responses. In so doing, they often contradict their earlier stories. Finally, the more they are confronted with these contradictions, the more likely they are to ultimately break down and confess to the crime.

Because of my interest in physiological responses to stressors, I was invited to give a series of talks to some of the top-level

polygraphers of the FBI, CIA, and other secret agencies with initials of which I had never heard. Fortunately, I spent several late evenings talking with the polygraphers about their job. As a group, these people were unusually bright and insightful. What most impressed me was a remarkably similar experience that many of the polygraphers reported in interrogating some of their suspects—something I call the polygraph confession effect.

A San Francisco-based polygrapher first alerted me to the polygraph confession effect in recounting an exam he had given to a forty-five-year-old bank vice-president who was a suspect in an embezzlement investigation. When initially run through the polygraph exam, the bank vice-president's heart rate, blood pressure, and other physiological levels were quite high. This is normal for both innocent and guilty people, because such an exam is almost always threatening. Nevertheless, the polygrapher suspected that the bank vice-president was lying or holding back information, because his physiological levels went even higher when the vice-president was asked about some of the details of the embezzlement. With repeated questions and prodding, the vice-president finally broke down and confessed to embezzling \$74,000 over a six-month period.

In line with standard procedures, after the bank vice-president had signed a written confession, he was then polygraphed again to be certain that his confession was itself not deceptive. When hooked up to the monitoring apparatus, his overall physiological levels were extremely low. His hands were no longer sweaty. His heart rate and blood pressure were extraordinarily low. His breathing was slow and relaxed.

You can appreciate the irony of this situation. This man had come into the polygrapher's office a free man, safe in the knowledge that polygraph evidence was not allowed in court. Nevertheless, he confessed. Now, his professional, financial, and personal lives were on the brink of ruin. He was virtually assured of a prison term. Despite these realities, he was relaxed and at ease with himself. Indeed, when a policeman came to handcuff and escort him to jail, he warmly shook the polygrapher's hand and thanked him for all he had done. This last December, the polygrapher received a chatty Christmas card written by the former bank vice-president with a federal penitentiary as the return address.

Even when the costs are high, the confession of actions that

violate our personal values can reduce anxiety and physiological stress. Whereas dominating the conversation in a group may be fun, revealing pent-up thoughts and feelings can be liberating. Even if they send you to prison.

There was a third phenomenon that had a significant impact on my interest in confession and health. It dealt with the nature of psychological insight and the mind-body link. I was probably drawn to the area of psychosomatics by virtue of having asthma as a child. I grew up in West Texas, a very dry and flat part of the world. During my adolescence, asthma attacks became a routine feature of the windy part of winter (as opposed to the windy parts of spring, summer, and fall). Clearly, I reasoned, pollen and dust that had blown in from New Mexico and Nevada were to blame.

In college, I never had any wheezing bouts except when I went home for the Christmas holidays. The pollen and dust again. During my last year in college, however, my parents came to visit me in Florida in late November. The day they arrived, I developed asthma. All of a sudden, the profound realization hit me that there was more to asthma than pollen. Conflicts with my parents were undoubtedly linked to my upper respiratory system. Interestingly, once I saw the parent-asthma connection, I never again wheezed. It was too embarrassing.

Asthma, wheezing, congestion, and other respiratory changes have long been known to be related to psychological conflict. In fact, two pioneers in psychosomatic medicine, Harold G. Wolff and Stewart Wolf, documented effects such as these in a book with the intriguing title *The Nose* (together and separately, they also published books entitled *Headache*, *The Colon*, and, of course, *The Stomach*). In landmark studies spanning two decades, Wolff, Wolf, and their collaborators developed the stress interview, whereby volunteers would be asked a series of psychologically threatening questions while, at the same time, relevant bodily changes were monitored.

The stress interview serves as a medical version of a lie-detector exam. For most people, there are a limited number of psychological issues that account for most psychosomatic problems. Current stress interviews, for example, routinely touch on issues of loss, rejection, sexuality, parental problems, uncontrollable trauma, and failure. Depending on the person's health problem, the interviewer might measure muscle tension in the neck (for tension-headache sufferers), blood pressure and heart rate (for hv-

pertensives), breathing rate or oxygen consumption (for those with respiratory problems or panic attacks), or one of a few dozen other biological indices.

As Wolff, Wolf, and a generation of psychosomatic researchers soon learned, different psychological conflicts are linked to specific changes in our bodies. One person's blood pressure may increase when he is forced to discuss the death of his parents, whereas another might respond to the same topic with the beginnings of a migraine headache. A third person may not show any biological changes to the death topic but may react selectively to issues surrounding sexuality.

That many, perhaps most, illnesses have a significant psychosomatic component is not surprising. More peculiar is that we rarely see the relationship between psychological events and illness in ourselves. When we do, however, the course of the illness often changes for the better.

Why are we blind to many of the psychological precursors to illness? One problem lies in our abilities to perceive cause-effect relationships. When we see something happen, we naturally look for something that preceded the event by no more than a few seconds or, at most, hours. If our car doesn't start because of a dead battery, we might blame the battery's demise on the cold weather or our failure to turn off the headlights. It makes no sense to think back to the way we drove the car two weeks ago. Our body is a different story. If we come down with a cold, it probably has nothing to do with last night's weather or what we had for breakfast. It could be that our immune system was compromised by the breakup of a significant relationship a week earlier.

Another reason for our myopia concerning the causal links between psychological issues and illness concerns denial. Virtually all of us have actively avoided thinking about unpleasant experiences. Some issues are so painful that we deceive ourselves into thinking that they don't exist. Sigmund Freud persuasively argued that we employ an arsenal of defense mechanisms, such as denial, compulsive behaviors, and even dwelling on physical symptoms, in order to screen out anxiety and psychological pain. Wheezing when around parents or headaches in sexually threatening situations can be safely attributed to purely physical causes (e.g., pollen or caffeine). Admitting to struggles concerning one's autonomy or sexuality will usually be avoided when less threatening alternative explanations exist.

Fortunately, once we become aware of the psychological causes of a recurring health problem such as headaches, back pain, or asthma, the problems often subside to some degree. There are several reasons for this. Once we see the psychological basis for a particular health problem, we can then use the health problem as a signal of distress. By focusing our energy on reducing the cause of the distress, we more quickly resolve the underlying psychological issues that we may not have known were issues in the first place. Another reason that seeing the cause-effect relationship is beneficial is that it makes the health problems more predictable and, hence, controllable. Perceptions of control and predictability over our world are essential to good psychological health.

One of my first experiences in discovering this sometimes invisible link between a psychological event and biological activity was with Warren, an extremely bright student who had been the valedictorian of his high school class. After performing quite well his first year and a half of college, he suddenly developed test anxiety. Midway in his fourth semester of college, he began to fail every test he took. He was soon placed on academic probation and later forced to withdraw from school. Over the next year, Warren saw a therapist who specialized in behavioral treatments. Several weeks of relaxation training and behavior modification failed to produce significant improvement.

A year later, Warren visited me and explained his predicament. He agreed to be interviewed about his life while I measured his heart rate. Not until years later did I learn that heart rate was not the most reliable psychological indicator for most people. Warren, fortunately, was an exception. During the first hour-long interview, it became clear that Warren's body was telling a different story from Warren's words.

As is shown in the table, Warren's heart rate increased dramatically whenever the topic of his parents' divorce was discussed. No other issues influenced heart rate to a comparable degree. Despite the fact that Warren claimed to be unaffected by his parents' divorce, it was a significant event. Indeed, he first learned that they had separated about a week before his developing test anxiety. In the two intervening years, he never saw the relationship between the divorce and his poor performance during exams. When confronted with his heart-rate data, Warren was flabbergasted. Over the next few days, he discussed his feelings of anger and

TOPIC	HEART RATE	WARREN'S COMMENTS
Girlfriend	77	Some disagreements about sexuality, but we are close.
College courses	71	Most have been interesting . . . tests have been another matter.
Failing exams	76	It's been hard on my ego. I can't explain it.
Parents	84	We were a close family until the divorce.
Parents' divorce	103	It was no big deal, really. They are a lot happier now.
The future	79	It scares me. I can't bear the thought of failing again.

despair over the divorce with me and, later, with his parents. Although he still harbors some of these feelings, his test anxiety disappeared.

We are often blind to the psychological causes and correlates of our health problems. Many illnesses and recurring health problems have a psychosomatic component. Awareness or insight into the psychological bases of illness can help in the healing process. If we are aware of the conflicts influencing our bodies, we can act to overcome those conflicts.

These were the beginning pieces of the puzzle. When we talk a great deal in a group, we claim that we enjoy it and learn from it. After confessing a crime, our minds and bodies appear to be relaxed. Once we understand the link between a psychological event and a recurring health problem, our health improves.

Each of these phenomena deals with the psychological state of holding back versus opening up. As my students and I began systematically to examine the holding back-opening up continuum, an organizing framework began to emerge. Although it is still evolving, it can be summarized as follows:

Inhibition is physical work. To actively inhibit one's thoughts, feelings, or behaviors requires physiological work. Active inhibition means that people must consciously restrain, hold back, or in some way exert effort to *not* think, feel, or behave.

Inhibition affects short-term biological changes and long-term health. In the short run, inhibition is reflected by immediate biological changes, such as increased perspiration as that measured on lie-detector tests. Over time, the work of inhibition serves as a cumulative stressor on the body, increasing the probability of illness and other stress-related physical and psychological problems. Active inhibition can be viewed as one of many general stressors that affect the mind and body. Obviously, the harder one must work at inhibiting, the greater the stress on the body.

Inhibition influences thinking abilities. Active inhibition is also associated with potentially deleterious changes in the ways we think. In holding back significant thoughts and feelings associated with an event, we typically do not think about the event in a broad and integrative way. By not talking about an inhibited event, for example, we usually do not translate the event into language. This prevents us from understanding and assimilating the event. Consequently, significant experiences that are inhibited are likely to surface in the forms of ruminations, dreams, and associated thought disturbances.

The opposite pole of active inhibition is confrontation. For lack of a better term, confrontation refers to individuals' actively thinking and/or talking about significant experiences as well as acknowledging their emotions. Psychologically confronting traumas overcomes the effects of inhibition both physiologically and cognitively.

Confrontation reduces the effects of inhibition. The act of opening up and confronting a trauma immediately reduces the physiological work of inhibition. During confrontation, the biological stress of inhibition is immediately reduced. Over time, if individuals continue to confront and thereby resolve the trauma, there will be a lowering of the overall stress level on the body.

Confrontation forces a rethinking of events. Confronting a trauma helps people understand and, ultimately, assimilate the event. By talking or writing about previously inhibited experi-

ences, individuals translate the event into language. Once it is language based, people can better understand the experience and ultimately put it behind them.

When first playing with these ideas, my students and I were exuberant. A number of potential experiments that could test and extend the framework popped into our minds. Despite similar theorizing by Aristotle, Freud, and several contemporary psychologists, many of my colleagues viewed the inhibition/confrontation approach as a bit extreme and even radical. Others viewed it with excitement. Given the polarized reception of the early work, I knew I was on to something.

After a boisterous meeting with colleagues where we debated the pros and cons of inhibition, I came home in a wonderful mood. I waltzed in the front door just as the phone began to ring. My brother, who is a graphic designer, called to ask what was new in my life. I excitedly told him about this new approach that I was playing with and its possible links to health, psychotherapy, religion, and, well, just about everything. Not swayed by my grandiosity, my brother asked about the specifics of the inhibition/confrontation framework. When I was finished, the phone was silent. "That's it?" my brother finally said. "What's the big deal? Everyone knows *that*."

He is right on a certain level. We do know that talking about our problems can be good for us. But we also know that we should put on a happy face and look at everything in a positive light. We also know that whining and complaining about our problems will get us nowhere. In other words, in these days of self-help popular psychology, there are often contradictory common sense views that explain everything. As our research journey into the inhibition/confrontation world began, my colleagues and I quickly learned that some common sense ideas were truer than others—indeed, some were completely false. In the remainder of this book, I would like to share with you some of the insights of this journey.

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Inhibition as a Health Threat

We are living in the age of inhibition. The 1960s and early 1970s were the years of letting go, doing your own thing in your own time, rolling with the flow, and being cool. Now, it's no smoking, no alcohol, no drugs, no casual sex, no fattening foods, no fun. We have learned to feel good by jogging, eating brown and tasteless foods, and going to bed early. One of the few remaining thrills available to us is looking down our noses at people who can't inhibit their urges as well as we can. The new self-righteousness has arrived.

Inhibiting thoughts, feelings, and behaviors has always been a part of life. Two-year-olds learn to inhibit their bowels and bladders the same way adolescents usually control their urges to rape and pillage. Many of our truly natural behaviors, such as sex and aggression, according to Freud, must be controlled for the good of society. Inhibition, then, is the Scotch tape of civilization.

Animal and human researchers have suggested that there are two types of inhibition: active and passive. Active inhibition is effortful and requires our mental attention not to do something. When we first go on a diet, we must actively inhibit our impulses to eat or even to think about eating rich food. Passive inhibition occurs automatically, without conscious effort. After successfully restricting our eating for several months, we may be able to see someone eat a large bowl of ice cream without even thinking about wanting some ourselves. Through practice, then, the initially difficult job of active inhibition evolves into a more passive form of inhibition.

A fascinating real-world example of the distinction between active and passive inhibition has been suggested by Stanley Schach-

ter, a particularly clever researcher at Columbia University. Schachter was perplexed by a paradox concerning people who attempted to stop smoking or lose weight. It is well established that only about 10-30 percent of people in smoking-cessation or weight-loss programs are still "cured" one year after participating in their respective programs. Consequently, some therapists and researchers claim that smoking and overeating are almost impossible to control permanently. However, in interviewing his friends and colleagues, Schachter learned that the majority who had ever tried to stop smoking or lose weight had successfully done so.

Drawing on interviews and over two decades of research that he conducted in this area, Schachter suggested that the key to controlling unwanted behaviors might be practice. Indeed, the average person who has successfully quit smoking for several years reports having tried to stop a number of times. Stopping smoking is initially a form of active inhibition. It is often painful and associated with various withdrawal symptoms. With time and practice, it becomes progressively easier to stop smoking or lose weight without thinking about it or exerting much effort.

It is no wonder, then, why single smoking cessation or weight-loss programs appear to be only marginally successful. Schachter's work indicates that the more times a person goes through programs such as these, the more likely that they will eventually succeed. Extending this work to your own life, if you have tried and failed to stop smoking, drinking, overeating, or indulging in some other unwanted behavior, simply try to stop again. The more times you stop, the easier it becomes. With practice, you move from the hard work of active inhibition to the minimal effort involved in passive inhibition.

For anyone interested in studying problems associated with active inhibition, the logical place to start is among people concerned with dieting and weight loss. The majority of adults worry about their weight and often go to extreme measures to inhibit their eating. In the late 1970s, I intended to begin to study inhibition by surveying people to get an idea of the ways they dieted and the relative effectiveness of their weight-loss techniques. Before the project started, however, my plans changed after some discussions with my students.

It was 1979 and one of my students was complaining about her roommate, who was eating tremendous quantities of food each night and then vomiting what she had eaten. I told this story to

a group of my researchers with the air of you'll-never-believe-this. Over the next week, at least half of my research team spoke privately with me and admitted that they, too, binged and purged food on a regular basis. Here was a phenomenon that I had never heard of that was apparently affecting a respectable number of college students. Who were these people and why were they doing it?

Fortunately, Billy Barrios, a clinical psychologist with an interest in behavior disorders, had an office across the hall. Barrios and I, along with a group of students, decided to examine this eating disorder. The first step was designing a massive questionnaire that asked people about their childhood, eating history, friends, stressors, body image, and general health. Because our preliminary surveys indicated that the disorder was overwhelmingly reported by women, we elected to gear the massive questionnaire to women only.

The questionnaire was completed by over seven hundred college women in psychology courses at the University of Virginia and the University of Mississippi. Overall, about 10 percent of the respondents purged their food as a dieting method, whereas another 40 percent were classified as normal dieters in that they simply counted calories and restricted what they ate. Our findings about the eating disorder—which soon became known as bulimia—were interesting in ways that we had not expected. Basically, people who are bulimics are similar to dieters who are not bulimics. Bulimics and normal dieters have similar childhoods, body images, food preferences, and just about everything else. The main difference is that bulimics have tried several different diets, all of them unsuccessful. Bulimia, in our view, was an extreme form of dieting.

Oddly, the bulimics' major problems were not dieting per se. Instead, their cycle of eating and purging food was forcing these women to adopt secret lives. Indeed, in individual interviews with over two dozen bulimics, virtually every one spontaneously noted the inordinate amount of time and effort required to conceal her eating habits from her close-friends and family. They all were living a lie and hated it. In fact, one of the first women I interviewed tearfully explained how she had stopped spending time with her friends. Her eating and purging were important issues that she couldn't explain to them. Now, because she was lonely, all she did was eat.

At the time, Barrios and I were also puzzled that almost all of our bulimics were sick a great deal of the time. In fact, they went to physicians for a variety of illnesses almost twice as often as the average student. At the time, we idly speculated that repeated vomiting increased health problems by causing dehydration, which in turn resulted in problems with the cardiovascular and immune systems. In retrospect, this may have accounted for some of the women's health problems. Another contributing factor, however, appears to have been the forces of active inhibition.

Most of the women we had been studying felt they could not tell anyone about their eating habits. They were actively holding back a major secret from everyone they knew. The forces of inhibition were contributing to the women's stressful lives.

TRAUMATIC SEXUAL EXPERIENCES IN CHILDHOOD

My research career investigating eating disorders was short-lived. Although I had seen the processes of inhibition, I didn't know it. Ironically, the importance of the bulimia project had very little to do with eating. Late one night while designing the bulimia questionnaire, Pam Grace, one of the research-team members, suggested that we include an item on traumatic sexual experiences in childhood. There was no particular reason for the question—it just sounded interesting. So toward the end of the twelve-page questionnaire, we threw in a question that very few researchers ever ask:

Prior to the age of 17, did you have a traumatic sexual experience (e.g., rape, being molested)?

Yes _____ No _____

Much to our surprise, about 10 percent of the college women answered in the affirmative. As a rule, the women who reported traumatic sexual experiences in childhood did not differ from others in terms of age, social class, race, or even number of close friends. Indeed, bulimics were no more likely to have had a sexual trauma than women who were not bulimics. The most striking finding from the survey, however, was that those who reported a sexual trauma evidenced more health problems than any other group we had ever seen.

The very day that I was pondering the results of the sexual trauma question, I received a phone call from Carin Rubenstein, then an editor of *Psychology Today* magazine. She was in the process of writing a general health questionnaire to be completed by *Psychology Today* readers. Did I have any ideas for questions to be put on her survey? Funny that she should ask.

The health questionnaire appeared in the May 1982 issue of the magazine. Over 24,000 people returned the completed survey, which, of course, included a question about sexual trauma. Although the respondents mirrored the readership of the magazine (mean age 35; 68 percent females; median income \$25,000), we had to be very careful in interpreting the results, since it is unclear what kind of people elected to voluntarily complete and mail in the survey. Even with these caveats in mind, the results were riveting.

Overall, 22 percent of the women and 10 percent of the men reported having experienced a sexual trauma prior to the age of seventeen. These rates correspond with those found in recent national polls on the topic. Although the sexual-trauma respondents were similar to the others in terms of age, close friends, social class, and related factors, they were much more unhealthy. Even though the reported sexual trauma had occurred almost twenty years earlier, it was associated with large increases in ulcers, infections, heart problems, and virtually every other health category. In fact, those who had had a traumatic sexual experience as a child had been hospitalized 1.7 days in the previous year—almost twice the rate reported by others.

On the original questionnaire, respondents were asked to include their name and telephone number for possible future telephone interviews. Rubenstein called fifteen people who had claimed to have had a sexual trauma. In her article, she writes:

One woman was raped at 16; another was a victim of incest at 8; yet another had been fondled at the age of 5 by a man selling ponies. A 51-year-old woman from Los Angeles told me that she had been raped, at 5, by her neighbor, who was a friend of the family . . . "I never told anyone about it. You're the first," she said. Later on, not making the connection, she remarked, "I've always had health problems with organs in that area . . . since I was 5." (p. 34)

Every person with whom Rubenstein talked reported an experience that all of us would agree was traumatic. In addition, the majority had not discussed this traumatic event with anyone when it had occurred. If they eventually did discuss their trauma, it was not until several months or years later.

Reading these accounts and examining the questionnaire results certainly leads to the conclusion that traumatic sexual experiences in childhood are permanently damaging. What makes sexual traumas so devastating?

Almost a century ago, Freud shocked his contemporaries by claiming that conflicts surrounding sexuality were prime determinants of personality development and, depending on the person, mental disorders. When sexual urges were blocked by society, Freud argued, people experienced tremendous anxiety and conflict. Neuroses served as defenses against such conflict. Many of Freud's students, such as Alfred Adler and Karen Horney, were highly critical of Freud's emphasis on sexuality. Other motives, such as the need to be superior or to be loved by others, were more important in their eyes. These and more recent critics of Freud suggest that a variety of traumas can affect psychological state.

Based on the results of surveys, it is clear that childhood sexual traumas influence long-term health. However, changes in health following the traumas may not reflect sexuality *per se*. Rather, traumas may be insidious because people cannot talk about them. Trauma victims must actively inhibit their wanting to discuss these intensely important personal experiences with others.

Consider the case of Laura, a thirty-five-year-old lawyer. Laura's parents divorced when she was ten. Two years after the divorce, her mother remarried. Six months after the marriage, Laura's stepfather began to drink heavily. Late one night, Laura awoke to find her drunken stepfather fondling her breasts. Although she slapped him and demanded that he leave, he made light of the situation. This continued off and on until Laura was fifteen, at which time she left home to live with her aunt. Not until she developed uterine cancer at age twenty-four did she admit this experience to anyone.

Laura recounted the agony of those two years:

I had always been close to my mother. The divorce had nearly killed her and she was so happy with Jock [the stepfather]. If she had known what Jock was doing

to me, it would have broken her heart. I wanted to tell her so much. Do you know what it is like to be in a family like that? I'd get up in the morning and Jock and my mother would come down together. He would smile and be friendly, like nothing had happened. I hated his guts but could never tell anyone why. Every morning, every evening, every time I saw that bastard, I felt sick to my stomach. I guess it's not surprising that I developed an ulcer before my 15th birthday.

Looking back on it all, the very worst thing was that I couldn't talk to my mother anymore. I had to keep a wall between us. If I wasn't careful, the wall might crumble and I'd tell her everything. The same was true of my friends. I'd go out with my girlfriends and we would all giggle about boys and dating. Their giggles were real, mine weren't. If they had known what was happening in my bedroom they would have died.

Laura is an open, honest, and resilient woman who has been happily married for twelve years. In her own mind, the trauma she experienced was not devastating because it was sexual. Rather, her anguish arose from her desperate need to talk to anyone about it—especially her mother—and the impossibility of her ever doing so. This constant holding back undoubtedly contributed to her health problems.

About the same time I interviewed Laura, I talked in detail with a twenty-three-year-old carpenter named Jimmy. His story was similar to Laura's, except that his stepfather had physically abused him starting when he was fourteen and continuing about three years. Like Laura, he refused to tell his mother for fear of tearing the family apart. During the abusive periods, Jimmy experienced intense migraine headaches. At age seventeen, Jimmy attempted suicide and was hospitalized. During treatment, he disclosed the abuse to a counselor, who notified the state authorities. In the months following the disclosure, the entire family entered therapy. Jimmy can now talk openly about his three years of abuse even though he remains extremely ambivalent about his stepfather.

The cases of Laura and Jimmy suggest that any kind of trauma may result in long-term health problems if the victim cannot talk about it. Fortunately, two of my students, Joan Susman and Claudia Hoover, helped me explore this idea in more detail. In 1985,

one of Dallas's progressive companies, the Zale Corporation, agreed to let us pass out questionnaires to its employees in the home office. Over two hundred people completed in-depth surveys that assessed childhood traumas, comparable recent adulthood traumas, physical health scales, and other measures.

The primary childhood and adult traumas that we examined were death of family member, sexual trauma, physical abuse, and a general "other trauma" category. For the childhood traumas we included divorce or separation of parents, whereas for the adult traumas we added divorce or separation of the respondents themselves. For each trauma, people rated the degree to which the event was traumatic and the degree to which they had confided in others about it.

Several fascinating effects emerged. First, those with the most health problems had experienced at least one childhood trauma that they had not confided. Of the two hundred respondents, the sixty-five people with an undisclosed childhood trauma were more likely to have been diagnosed with virtually every major and minor health problem that we asked about: cancer, high blood pressure, ulcers, flu, headaches, even earaches. Oddly, it made no difference what the particular trauma had been. The only distinguishing feature was that the trauma had not been talked about to others. A sexual trauma that was not confided was no worse than a death in the family that was not discussed.

There was a catch, however. Some childhood traumas are more likely to be disclosed than others. Across all of our respondents, people are less likely to talk about parental divorce, sexual trauma, and violence than the death of a family member. Death appears to be "socially acceptable" and, thus, something that a child can talk about with others. These findings square with other large-scale projects indicating that a parent's leaving home because of divorce is more emotionally damaging to the children than a parent's death.

Finally, we were able to evaluate the relative impact of different traumas on current health. Overall, childhood traumas influence adults' health to a greater degree than traumatic experiences that have occurred in the last three years. In fact, these effects are true when equating our groups for age, education, number of close friends, and gender. Translation: Early childhood traumas that are not disclosed may be bad for your health as an adult.

I don't mean to be an alarmist. All of us had upsetting experiences as children, some of which we didn't disclose to others. Further, we are all going to get sick and die. To assume that most of the early events in our lives will be the cause of our demise is a gross exaggeration. It is important, though, to keep some perspective in evaluating all of this research. Some people have had horrible events in their lives that they constantly think and dream about. They are living with these traumas or experiences even though their closest friends may not know about them. It is these people, I think, who are at greatest risk for health problems.

RECENT ADULTHOOD TRAUMAS: THE DEATH OF A SPOUSE

One problem in evaluating the health risks of childhood traumas is that we have to rely on people's recollections of events. In looking back at our own childhood, it is easy to see how we may have distorted events in our minds. Also, we must ask why someone would choose to inhibit an upsetting experience rather than confide it to someone. These are legitimate problems in attempting to understand the long-term effects of inhibition. One solution is to study a group of adults who have all recently suffered a comparable trauma.

After completing the first surveys on childhood traumas, I moved from Virginia to Dallas with my family. At an informal reception right after arriving in town, I met Robin O'Heeron, a woman who had returned to college after working in the real world. Although presenting a charming exterior, Robin was still grieving the sudden death of her husband six months earlier. Given her interest in psychology and my curiosity about traumatic experiences, we had the ingredients for a wonderful friendship.

In our discussions, it was clear that the sudden and unexpected death of a spouse was devastating. Not only do the survivors have to deal with the loss of their closest friend, but they are deprived of the very person to whom they would normally confide. During this time, I kept thinking about the childhood-trauma findings. Sometimes children were free to talk about upsetting experiences like the death of a parent because the event was socially acceptable. However, if the discussion of the trauma was somehow threat-

ening to the children or to others, they usually were inhibited. Wouldn't this also be true of adults whose spouses had died in an acceptable versus unacceptable way?

Dying in an automobile accident is socially acceptable; dying by suicide is not. If a person's death was beyond his or her control, we can express our sorrow openly, without any hint of embarrassment. Usually, when someone commits suicide, we speak in hushed tones. Robin and I pondered the meaning of this distinction. Based on my earlier findings, I would predict that spouses of suicide victims would be the least likely to talk about the death and, in the year following the death, should have the most health problems. If a person's spouse died in an "acceptable" way, such as in a car accident, the survivor would be free to disclose the event to others.

You may be thinking, What a ghoulish series of issues. Not entirely. The broader question that Robin and I were dealing with concerned coping with trauma. Is there a "best way" of coping with an unimaginably horrible trauma? Robin was still trying to cope with her husband's death. What were her survivor peers doing?

With the help of the coroner's office, we sent questionnaires to all of the surviving spouses of suicide and car-accident victims of the previous year, 1982, in Dallas. Because there are so many issues surrounding sudden violent death, we restricted our potential respondents along several dimensions: the spouse who had died must have been between twenty-five and forty-five years of age, a native English speaker, and a married Dallas resident. In addition, the victim had to have died within twenty-four hours of the suicide attempt or car accident and, in the case of an accident, no other family member was injured or killed. Overall, nineteen of the thirty-one people who received our mailing returned their questionnaire. For surveys such as this, a 61 percent response rate is considered quite good.

One of the basic assumptions behind this project was that spouses of suicide victims would exhibit more health problems in the year following the death than spouses of accidental deaths. After all, we reasoned, spouses of suicides would be inhibited from talking about the death compared to spouses of automobile accidents.

We were wrong. Spouses of suicides were slightly healthier than spouses of accidental deaths. As Aldous Huxley noted, this

appeared to be a case of the slaying of a beautiful hypothesis by an ugly fact.

Actually, as we inspected the surveys more closely, we had been both wrong and right at the same time. In the grand scheme of things, it didn't matter how people's spouses died. The most important dimension was whether they talked about the death. Overall, then, the more that people talked to others about the death of their spouse, the fewer health problems they reported having. Not talking with others about their spouse's death was clearly a health risk.

Ironically, the number of close friends that our respondents had was only weakly related to reported illnesses. In fact, some of those who were the sickest in the year after the death never talked about the death even though they had several very close friends. To get a better idea of the respondents' experiences, we asked them what they would recommend to others who had faced the sudden death of their spouse. By and large, those who were the healthiest emphasized the value of talking and acknowledging the pain. A thirty-seven-year old woman whose husband had committed suicide wrote:

I attended a grief-recovery program that helped. Being able to realize that all of the emotions you are feeling are real and it's OK to hurt and feel the pain helped a lot.

The support of true friends and being able to have someone listen and hurt with you was a great outlet for the pain.

An exceptionally healthy forty-one-year-old female sales manager whose husband was killed when a teenager ran a red light:

Let family and friends support you. Seek counseling. Stay close to God. Look forward to life and the opportunities that it may bring.

A thirty-year-old account executive reported talking with others a great deal about the suicide of his wife:

It helps to try and look for a complete understanding of what happened and why. Also, move on to new things. Do not stagnate.

In contrast with these healthy responses, those people who reported the most illnesses in the year following their spouse's death had adopted one of two strategies. The first was to move forward and try not to think about the spouse or the death.

A thirty-four-year-old woman in advertising developed migraine headaches, insomnia, and recurring stomach problems following her husband's death. She tried to deal with it by avoiding the topic altogether:

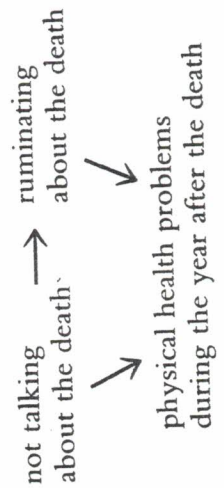
Find something to keep occupied with, but not just the usual everyday humdrum life. Be with people and don't bring them down.

Similarly, a forty-seven-year-old computer programmer who now has an ulcer and weight difficulties:

Strenuous exercise. Stay mentally occupied. Stay socially active. Develop new interests. Don't allow yourself to cry. Accept the fact that your life is not the same.

In addition to these obsessive pretend-it-didn't-happen approaches, three people admitted that they have not been able to deal with their spouses' deaths. They were desperate and lonely. As one widower with several major and minor health problems noted, "I don't know what to recommend, as I am having a hard time of it. The loss of my wife, having to take care of my boys, the pressure at work . . . I cannot say."

Some other findings emerged from this project that surprised us. First, those who didn't talk about the death often obsessed or ruminated about it. That is, people who talked about their spouse's death tended not to think about the death as much as those who inhibited talking. Second, ruminating about the death was correlated with poor physical health. In other words, three factors were closely linked:



A related finding concerned prayer. The more people prayed about their deceased spouse, the healthier they were. Prayer, in fact, worked the same way as talking to friends about the death. It is easy to see why this is true: Prayer is a form of disclosure or confiding.

Within a year of their spouses' death, three of the seven men were married. Only one of the twelve women had remarried and she had since separated. These statistics square with national trends: Following the death of a spouse, men usually remarry within two years, compared to almost five years for women. Nevertheless, we and others find that men are significantly less happy and healthy than are women after a spouse's death.

There are several reasons for the disparity in marital status and happiness among men. Active inhibition is undoubtedly a culprit. As one recently remarried widower explained to me:

I'm in a terrible bind. I'm still torn up about my first wife's death. I can't really talk to Clara [new wife] about it. She tries to be understanding, but I know she doesn't want to hear about another woman that I loved. So I pretend and Clara pretends that my first wife and her accident didn't really happen.

A final note. It is interesting to speculate why spouses of suicide fared slightly better than those of accidental deaths. One reason is that a suicide is more predictable and, in a sense, understandable than a random accidental death. In most cases, the husbands and wives of the suicide knew their spouse was depressed and could find some meaning in the action. Not so the accident victims' spouses. After an unexpected car accident, the surviving spouses were faced with the realization that the world was more unpredictable and dangerous than they ever imagined. Faced with a powerful feeling of no control over life's events, many of the surviving spouses' fundamental beliefs about justice and predictability in the world were shaken.

Ironically, every major city in the country has support groups or some form of institutionalized aid for families of suicides. If your spouse commits suicide, you will receive at least one letter and phone call by a state agency or private foundation to help you cope with the tragedy. If your spouse dies in an accident or from most diseases, though, you are on your own. Virtually no official

groups exist for people whose spouses die in a socially acceptable manner.

I have tried to convey some of the evidence that suggests active inhibition is associated with health problems. Rather than list the major findings from dozens of experiments, I simply want you to be aware that there is good reason to believe that not talking about childhood and adulthood traumas can be risky.

The interpretation of questionnaire results, by the way, is not a hundred percent reliable. One issue that worries survey researchers—myself included—concerns cause-effect relationships. The problem is that questionnaire studies can rarely pin down whether inhibition causes illness or if illness causes inhibition, or if illness and inhibition are jointly caused by something else. We can be certain, however, that illness and not talking about upsetting experiences often go together.

An example of the interpretation problem is that people who are sickly may not be able to talk with others about their problems, fearing that no one wants to be around a sick person. Or maybe the sick person doesn't have the strength to talk. In any case, our questionnaire results would indicate that not talking and illness go together—but they don't indicate what caused what. Clearly, another approach is necessary to prove the potential health damage of inhibition.

3

Becoming Healthier Through Writing

Barbara, a friend of the family, called me at 7:00 A.M. on a Sunday morning distraught about the previous evening. After a late dinner with friends, she got into her car and, after locking the doors, heard the voice of a strange man from the backseat. Holding a knife, he ordered her to drive to a particular city park where, he said, he intended to rape her. As Barbara drove to the park, she started to accelerate. Between sobs, she lied that she had cancer and would soon be dying. Speeding up to 70 MPH on the deserted city streets, she noted that she might as well kill them both. As she approached a busy intersection, Barbara warned the man that if he wanted to live, he had better jump out while he could. He jumped from the car as she slowed to make a turn.

The story doesn't end there. Barbara was understandably upset by the event and, because of her anxiety, wanted the name of a therapist. Because medication might have been warranted, I suggested she call a psychiatrist we both knew. When she met with him, he recommended that she tell her story to everyone she met. The more she told the story, he claimed, the quicker her anxiety symptoms would disappear.

Why, I asked myself, did talking about a trauma help cure the trauma? Every therapist I talked with at the time knew intuitively that it was sound advice. But no one could say exactly why.

Apparently, talking about a trauma is a natural human response. When this response is blocked or inhibited, stress and illness result. Beyond the potential dangers of long-term inhibition, there is something positive about confronting upsetting experiences. Barbara needed more than the release of inhibition. She

needed to come to terms with her terrifying experience. Talking, according to the therapists, was a good way to do this.

The benefits of talking about a trauma, then, go beyond overcoming inhibition. What is it about talking that is so helpful? Usually, when someone talks about a trauma, another person listens. In the case of Barbara, her listeners told her that she was fast thinking, competent, and brave. When she explained that she was still upset, we assured her that her feelings were normal and that we were available to help her in any way. In other cases, talking about a trauma can result in other benefits such as advice, attention, sympathy, financial assistance, and a way of excusing the individuals from carrying out their normal responsibilities.

Although these social benefits can be valuable, there is much more to be gained from talking about upsetting experiences. Specifically, the act of talking can change the ways we think and feel about traumatic events and about ourselves.

WHAT TALKING ACHIEVES: CATHARSIS OR INSIGHT

Most therapists agree that talking about an upsetting experience is psychologically beneficial. The agreement ends there. Some think that talking about a trauma is primarily valuable in achieving catharsis by getting the person to express pent-up emotions. Others believe that talking helps the client attain insight into the causes and cures of the difficulties with the trauma.

In the late 1800s, the young Austrian physician Sigmund Freud began to piece together an overarching theory of personality that pointed to the reasons why confronting a trauma was beneficial. Many of Freud's early ideas stemmed from a technique pioneered by another physician, Joseph Breuer, called the talking cure.

In his medical practice, Breuer found that hypnosis was effective in treating people suffering from symptoms such as paralysis, blindness, or deafness that had no apparent physical basis. His most important patient was a twenty-one-year-old woman, referred to as Anna O., who suffered from a variety of problems ranging from a refusal to drink liquids to partial paralysis on the right side of her body. During his sessions with Anna O., Breuer required her to talk, while hypnotized, about her early experiences with each of her symptoms. For example, one day she talked about

her feelings of anger and disgust in seeing a dog drink water from a glass. Immediately after venting her feelings about this episode, Anna O. overcame her refusal to drink liquids. According to Breuer, talking about the causes of symptoms in some way cured them.

Freud was fascinated by Breuer's reports. Although he, too, experimented with hypnosis, Freud learned that he could get comparable results without hypnosis by having his own patients merely talk about their deepest feelings and thoughts while in a relaxed state. Working together, Freud and Breuer believed that the value of the talking cure lay in its ability to release pent-up feelings that the person was holding back. The two men reasoned that the release of these pent-up feelings, or catharsis, discharged psychic tension in the same way that removing the lid from a pot of boiling water slows the boiling.

Although Freud eventually downplayed the importance of the cathartic method, many of his followers continue to extol its benefits. Unfortunately, the definition of catharsis has evolved to mean the mere venting of emotion rather than the linking of thoughts and feelings. Today, many of the more "fringy" schools of thought argue that the venting of emotion by screaming, crying, laughing, or other means can permanently improve psychological and physical health.

Other, more moderate approaches suggest that it is important that individuals freely express their emotions. Actively holding back feelings can be stressful. In addition, admitting our emotions to ourselves and others serves an important communicative function. If I am angry because of an underhanded comment by a friend, for example, it is important that I recognize my feelings so that I can direct my actions in an acceptable way. I can also let my friend know how I feel so that he or she can gauge the intended impact of the comment on me.

Most current therapists believe that it is valuable for individuals to achieve some understanding of the causes and consequences of the traumatic experiences that affect them. By talking about upsetting events, people achieve insight into the events and learn more about themselves. With this knowledge, people can put the traumas behind them. The exact nature of how this process works is explained differently from therapist to therapist.

Can people attain insight through talking per se? Many directive therapists, who have been strongly influenced by Freud

and his followers, believe that talking helps achieve insight through the comments of the therapist. You tell me your problems and I'll help you figure out what is really going on. Once the underlying emotionally charged difficulties have been isolated, we will do what we can to clear them up. Other more nondirective therapies, such as Carl Rogers's client-centered therapy, suggest that by your telling me what is bothering you, you will be able to figure out your own problems and solutions. My role as therapist, in this case, will be as a sounding board that is accepting and trustworthy no matter what you say.

I don't want to parody these clinical techniques unfairly because they have been found to be effective in the treatment of most psychological disorders. Attaining insight into our own thoughts and feelings must be valuable. After all, if I know why I feel depressed in one kind of situation or nauseated in another, I can take steps to master or avoid those situations. Further, I can try to change myself so I won't react the way I do or, if I cannot change, my reactions will at least be predictable.

All things being equal, talking about upsetting things to others promotes emotional expression and insight. To what degree, though, do we need other people for catharsis or insight to occur? Is talking to others about our deepest thoughts and feelings necessary for psychological and physical health? In other words, is talking necessary for the talking cure to cure?

My own experiences a few years earlier hinted that talking was not the only way to achieve insight. My wife and I had married right out of college and, three years later, were questioning many of the basic assumptions of our relationship. This dark period of our life was horrible. Until that time, I had never been severely depressed. But now, on awakening every morning, the first thing I felt was an overwhelming pressure on my heart—I had to face one more day of hell.

Like many people who had never faced a major upheaval, I didn't know how to cope with a massive depression. I stopped eating, began drinking more alcohol and smoking. Because I was embarrassed by what I considered an emotional weakness, I avoided friends. Even though I was a graduate student in psychology, I foolishly refused to visit a therapist.

After about a month of emotional isolation, I started writing about my deepest thoughts and feelings. I remember being drawn

to the typewriter each afternoon for about a week, where I would spend anywhere from ten minutes to an hour pounding on the keys. I initially wrote about our marriage, but soon turned to my feelings about my parents, sexuality, career, and even death. Each day after writing, I felt fatigued and yet freer. By the end of the week, I noticed my depression lifting. For the first time in years—perhaps ever—I had a sense of meaning and direction. I fundamentally understood my deep love for my wife and the degree to which I needed her.

It wasn't until eight years later that I looked back on that period in an attempt to understand why writing had been so helpful for me. Being a rather private, even inhibited person, writing helped me let go and address a number of personal issues that I was too proud to admit to anyone. Although I hadn't talked with anyone, I had disclosed some of my deepest feelings. If my experience was any indication, writing about upsetting issues must work in ways similar to talking about them.

In late 1983, a number of ideas were coming together. My questionnaire projects indicated that talking about traumas was linked to fewer health problems. My own experiences suggested that writing about upsetting events was psychologically and, perhaps, physically beneficial. These observations demanded that some kind of experiment be run wherein a group of people were required to "confess" so that we could trace any changes in their health.

WRITING AS ILLNESS PREVENTION

In September 1983, Sandra Beall, a beginning graduate student, marched into my office the first day of classes and announced that she was ready to begin work on her master's thesis. Although most students didn't think about a thesis project until their second year of training, she wanted to start immediately. Whereas I was interested in the relation between writing and health, Sandy was curious about the possible psychological benefits of emotional venting.

After much discussion, we agreed on an experiment that addressed our interests: We would get a group of volunteers to write about either traumatic experiences or about superficial topics. In addition, we would have the participants who wrote about traumas

write about them from one of three perspectives: 1) just vent their emotions during the writing sessions; 2) just write about the facts surrounding their traumas; or 3) write about the facts and vent their emotions dealing with their traumas. With our volunteers' permission, we would evaluate their health by collecting the number of illness visits each person made to the student health center in the months following the experiment compared with the months preceding the study.

In most college psychology courses around the country, students are given the option of participating in experiments for course credit or money. At Southern Methodist University, where this study was conducted, students were recruited from introductory psychology classes for credit. Since this was the first study of its kind, we warned the participants that they might be asked to write about deeply personal topics. Further, everyone was told on each day of the study that he or she could withdraw anytime and receive full credit. Of the forty-six students who participated, none withdrew. In fact, only two people missed one of the four writing days.

Each person came to the lab separately, where he or she met Sandy. During the initial meeting, Sandy told the volunteers that they would write continuously for fifteen minutes each day on four consecutive days while alone in a small cubicle in the psychology building. Because it was important that everything was anonymous and confidential, the participants were asked to put a code number rather than their name on their questionnaires and essays. In fact, they were told that if they desired, they could keep their essays rather than turn them in to us. After answering any questions, Sandy randomly assigned them to one of the four writing conditions. Random assignment means that each volunteer had an equal chance of writing on each of the four topics. This is an important dimension to an experiment because it helps control many potential biases.

Those assigned to write about their thoughts and feelings about a trauma were told the following:

Once you are escorted into the writing cubicle and the door is closed, I want you to write continuously about the most upsetting or traumatic experience of your entire life. Don't worry about grammar, spelling, or sentence structure. In your writing, I want you to discuss your

deepest thoughts and feelings about the experience. You can write about anything you want. But whatever you choose, it should be something that has affected you very deeply. Ideally, it should be about something you have not talked with others in detail. It is critical, however, that you let yourself go and touch those deepest emotions and thoughts that you have. In other words, write about what happened and how you felt about it, and how you feel about it now. Finally, you can write on different traumas during each session or the same one over the entire study. Your choice of trauma for each session is entirely up to you.

People who had been assigned to write only about their emotions surrounding the traumas were given the same general instructions except they were specifically instructed not to directly mention the trauma itself. Rather they were to write how they felt at the time and how they felt now. Volunteers who were asked to focus on the facts were simply to describe their traumas in detail without referring to their emotions.

Finally, a comparison or control group of volunteers was asked to write about superficial or irrelevant topics during each session. For example, Sandy had those participants describe in detail such things as their dorm room or the shoes they were wearing. The purpose of the control group was to evaluate what effect writing in an experiment *per se* had on health changes.

All the students, then, wrote for fifteen minutes a day for four consecutive days. After the writing on the final day of the study, Sandy and I talked to all the participants at great length about their experiences and feelings about the experiment. Finally, four months after the study, the participants all completed questionnaires that measured their long-term feelings about the experiment.

For the students, the immediate impact of the study was far more powerful than we had ever imagined. Several of the students cried while writing about traumas. Many reported dreaming or continually thinking about their writing topics over the four days of the study. Most telling, however, were the writing samples themselves. Essay after essay revealed people's deepest feelings and most intimate sides. Many of the stories depicted profound human tragedies.

One student recounted how his father took him into the backyard on a hot summer night and coolly announced his plans to divorce and move to another town. Although the student was only nine years old at the time, he vividly remembers his father's voice, "Son, the problem with me and your mother was having kids in the first place. Things haven't been the same since you and your sister's birth."

On all four days of the experiment, one woman detailed how, at age ten, her mother asked her to pick up her toys because her grandmother was visiting that evening. She didn't pick up her toys. That night, her grandmother arrived, slipped on one of the toys, and broke her hip. The grandmother died a week later during hip surgery. Now, eight years later, the woman still blames herself every day.

Another woman described being seduced by her grandfather when she was thirteen. She depicts the terrible conflict she experienced. On one hand she admitted the physical pleasure of his touching her and the love she felt for her grandfather. On the other, she suffered with the knowledge that this was wrong, that he was betraying her trust.

Other essays disclosed the torture of a woman not able to tell her parents about her being gay, a young man's feelings of loss about the death of his dog, or the anger of three different people about their parents' divorces. Family abuse, alcoholism, suicide attempts, and public humiliation were also frequent topics.

Sandy and I were both stunned and depressed by the stories. That our college students had experienced so many horrors and, at the same time, had so readily revealed them to us was remarkable. The grim irony is that by and large, these were eighteen-year-old kids attending an upper-middle-class college with above-average high school grade-point averages and college-board scores. These are the people who are portrayed as growing up in the bubble of financial security and suburban tranquility. What must it portend for those brought up in more hostile environments?

For a researcher, there is nothing as exciting and nerve-racking as collecting data. In a large project such as this one, there were two major types of information to examine. We were primarily interested in changes in physical health over the school year. We also wanted to know how our experiment had influenced our volunteers' moods. Because people had completed checklists after

each day's writing, we could evaluate changes in mood as soon as the writing phase of the study was completed.

Sandy believed in the value of venting emotions. In line with current views of catharsis, she thought that writing about negative things should bring about an emotional release that should result in feelings of relief and contentment. I was uncommitted. As it turned out, writing about horrible things made people feel horrible immediately after writing. Our volunteers felt much worse after writing about traumas than after writing about superficial topics. These effects were most pronounced for those who were asked to delve into their emotions while writing about traumas.

You can imagine our anxiety over the next few months. In analyzing the mood findings, it appeared that all we had succeeded in doing was inventing a new way to make people depressed. Almost six months later, the student health center was able to provide the number of illness visits that each student had made in the two and a half months before and five and a half months after the experiment. Within twenty minutes of receiving the health-center information, we had our answer.

People who wrote about their deepest thoughts and feelings surrounding a trauma evidenced an impressive drop in illness visits after the study compared with the other groups. In the months before the experiment, everyone in all the groups went to the health center for illness at the same rate. After the experiment, however, the average person who wrote about his or her deepest thoughts and feelings went less than 0.5 times—a 50 percent drop in the monthly visitation rate. People who wrote just about their emotions surrounding a trauma, just about the facts of a trauma, or about superficial topics averaged visiting the health center almost 1.5 times per person.

Fortunately, our volunteers had completed additional questionnaires four months after the experiment. Virtually everything they said corroborated the health-center findings. Writing about their deepest thoughts and feelings about traumas resulted in improved moods, more positive outlook, and greater physical health.

I'll never forget the initial thrill of finding that writing about traumas affected physical health. But the thrill was tempered with a little anxiety. For every question that the experiment had answered, a dozen more questions appeared. Perhaps the most basic issue that haunted me concerned the trustworthiness of these findings. Were the effects real? Does writing about traumas really affect

physical health? Perhaps we had just affected people's decisions to visit the student health center. Or even worse, maybe the findings were simply due to chance. Every now and then, for example, you can toss a coin and come up with heads ten times in a row. In theory, research experiments can work the same way. Being rather impatient, I had to know if I was dealing with something real. And I wanted to know as quickly as possible.

EXPLORING THE IMMUNE SYSTEM: WRITING ABOUT TRAUMAS IS BETTER THAN WE THOUGHT

The medical and science writer for the *Dallas Morning News*, Rita Rubin, had heard a rumor that we had found that writing about upsetting experiences was good for your health. She had recently moved from Ohio, where she had followed an up-and-coming research team that was investigating the links between psychological stress and immune-system function. Rita was the first to suggest that I contact them and, perhaps, join forces.

The research team was Janice K. Kiecolt-Glaser, a clinical psychologist, and her husband Ronald Glaser, an immunologist, both with the Ohio State University College of Medicine. Together, they were blazing a trail by showing that overwhelming experiences such as divorce, major exams in college, and even strong feelings of loneliness adversely affected immune function. Their most recent finding was that relaxation therapy among the elderly could improve the action of the immune system. The work by Jan and Ron was groundbreaking because it relied on precise state-of-the-art techniques to measure the action of t-lymphocytes, natural killer cells, and other immune markers in the blood. Further, unlike most researchers in immunology, Jan and Ron were sophisticated about psychology.

By a wonderful coincidence, Jan and I were invited to a small conference in New Orleans soon after Rita Rubin's introduction. The first night of the conference, before we had finished our first can of Dixie beer, Jan and I had outlined an experiment to see if writing about traumas could directly affect the action of the immune system. Three months later, the study was under way.

The experiment was similar to the first confession study. Fifty students wrote for twenty minutes a day for four consecutive days about one of two topics. Half wrote about their deepest thoughts

and feelings concerning a trauma. The remaining twenty-five students were expected to write about superficial topics. Unlike in the first confession study, however, the students consented to have their blood drawn the day before writing, after the last writing session, and again six weeks later.

The week of running the study was frenzied. I had a staff of almost a dozen people helping me with the experiment in Dallas. As before, the experimental volunteers poured out their hearts in their writing. The tragedies they disclosed were comparable to those in the first experiment. Instances of rape, child abuse, suicide attempts, death, and intense family conflict were common. Again, those who wrote about traumas reported feeling sadder and more upset each day relative to those who wrote about superficial topics.

Collecting the blood and measuring immune function was a novel experience that added to the frenzy. As soon as the blood was drawn, we'd pack it and drive like hell to get to the airport so we wouldn't miss the last plane for Columbus, Ohio. Once the blood samples arrived, the people in the immunology lab would work around the clock, in an assembly-line manner. The procedure involved separating the blood cells and placing a predetermined number of white cells in small dishes. Each dish contained differing amounts of various foreign substances, called mitogens. The dishes were then incubated for two days to allow the white blood cells time to divide and proliferate in the presence of the mitogens.

The logic of this procedure is fascinating. In the body, there are a number of different kinds of white cells, or lymphocytes, that control immune function. T-lymphocytes, for example, can stimulate other lymphocytes to make antibodies. Antibodies, along with parts of the body's defense system, can retard and kill bacteria and viruses foreign to the body. The immune measures that we used mimicked this bodily process in the dishes. Just as viruses and bacteria can stimulate the proliferation of t-lymphocytes in the body, the mitogens did the same in the laboratory dishes. If the lymphocytes divide at a fast rate in response to the mitogens, we can infer that at least part of the immune system is working quickly and efficiently.

So what did we find? People who wrote about their deepest thoughts and feelings surrounding traumatic experiences evidenced heightened immune function compared with those who wrote about superficial topics. Although this effect was most pro-

nounced after the last day of writing, it tended to persist six weeks after the study. In addition, health-center visits for illness dropped for the people who wrote about traumas compared to those who wrote on the trivial topics.

There was another important finding as well. Every day, after writing, we asked people who had written about traumas to respond to the questionnaire item "To what degree did you write about something that you have previously held back from telling others?" As you can see, the question was intended to get at people's previous attempts at inhibition. That is, the more they had held back, the more they had inhibited talking about the topic. Overall, we found that those who showed the greatest improvement in immune function were the same ones who had held back in telling others about the things they had written. In other words, those who had been silently living with their upsetting experiences benefited the most from writing.

We had now completed two experiments that showed similar things. Taken together, the studies indicated that writing about traumatic experiences was beneficial depending on how people wrote about them. All indications suggested that the effects were not due to simple catharsis or the venting of pent-up emotions. Indeed, the first confession study demonstrated that writing only about emotions surrounding a trauma did not produce long-term health benefits. Further, both experiments indicated that writing about feelings associated with traumatic experiences was painful. Virtually no one felt excited, on top of the world, or even mildly cheerful immediately after writing about the worst experiences of his or her life.

In the surveys that we sent out several months after the experiments, we asked people to describe in their own words what long-term effects, if any, the writing experiment had on them. Everyone who wrote about traumas described the study in positive terms. More important, approximately 80 percent explained the value of the study in terms of insight. Rather than explaining that it felt good to get negative emotions off their chests, the respondents noted how they understood themselves better. Some examples:

It helped me think about what I felt during those times.
I never realized how it affected me before.

I had to think and resolve past experiences. . . . One result of the experiment is peace of mind, and a method to relieve emotional experiences. To have to write emotions and feelings helped me understand how I felt and why.

Although I have not talked with anyone about what I wrote, I was finally able to deal with it, work through the pain instead of trying to block it out. Now it doesn't hurt to think about it.

The observations of these people, and everyone else who participated in these studies, are almost breathtaking. They are telling us that our thought processes can heal.

These studies were just the beginning of a research project that has been expanding in several directions. Several variations of the writing experiments have now been conducted by us and by researchers in other laboratories. I now trust the effects that we have gotten. In each study that has been conducted, we have discovered some limits to the writing technique as well as methods that boost its effectiveness. I will explore the meaning and applications of many of these findings throughout the book.

In the meantime, I want to share with you some of the main points about the writing method that I have found to be related to health. Keep in mind that I am speaking as a researcher and not a therapist. My recommendations about confronting upsetting events are based on experiments, occasional case studies, and my own experiences. It is very possible that your writing about your own traumas or upsetting feelings may not be helpful. If this happens, you should be your own researcher. Experiment with different topics and approaches. Something may work for you in resolving your own conflicts that may not work for anyone else. With these warnings in mind, here are some questions commonly asked about the writing method.

What should your writing topic be? It is not necessary to write about the most traumatic experience of your life. It is more important to focus on the issues that you are currently living with. If you find yourself thinking or dreaming about an event or experience too much of the time, writing about it can help resolve it in your mind. By the same token, if there has been something

you would like to tell others but you can't for fear of embarrassment or punishment, express it on paper.

Whatever your topic, it is critical to explore both the objective experience (i.e., what happened) and your feelings about it. Really let go and write about your very deepest emotions. *What* do you feel about it and *why* do you feel that way.

Write continuously. Don't worry about grammar, spelling, or sentence structure. If you run out of things to say or reach a mental block, just repeat what you have already written.

When and where should you write? Write whenever you want or whenever you feel you need to. I am not convinced that writing about significant experiences needs to be done that frequently. Although many people write every day in diaries, most of the entries do not grapple with fundamental psychological issues. Also be attentive to too much writing. Don't use writing as a substitute for action or as some other type of avoidance strategy. Moderation in all things includes transcribing your thoughts and feelings.

Where you write depends on your circumstances. Our studies suggest that the more unique the setting, the better. Try to find a room where you will not be interrupted or bothered by unwanted sounds, sights, or smells.

What should you do with what you have written? Anonymity is important in our experiments. In many cases, it is wise to keep what you have written to yourself. You might even destroy it when you're finished (although many people find this hard to do). Planning to show your writing to someone can affect your mind-set while writing. For example, if you would secretly like your lover to read your deepest thoughts and feelings, you will orient your writing to your lover rather than to yourself. From a health perspective, you will be better off making yourself the audience. In that way, you don't have to rationalize or justify yourself to suit the perspective of another person.

What if you hate to write—is there a substitute? We have conducted several studies comparing writing with talking into a tape recorder. Among college students, writing appears to be slightly more efficient in getting people to let go and divulge their thoughts and feelings. This probably reflects, in part, the fact that college students are practiced at writing. Some of the people I

work with who are not in school find writing to be quite aversive. For these people, I recommend their talking about their deepest thoughts and feelings into a tape recorder. As with writing, I urge them to talk continuously for fifteen minutes a day.

Whether writing or talking is a more comfortable medium for you, remember that letting go and disclosing intimate parts of yourself may take some practice. If you have never written or talked about your thoughts and feelings, you may find doing so particularly awkward at first. If so, just relax and practice. Write or talk continuously for a set amount of time. No one is evaluating you.

What can you expect to feel during and after writing? As we have found in all of our studies, you may feel sad or depressed immediately after writing. These negative feelings usually dissipate within an hour or so. In rare cases, they may last for a day or two. The overwhelming majority of our volunteers, however, report feelings of relief, happiness, and contentment soon after the writing studies are concluded.

Exploring your deepest thoughts and feelings is not a panacea. If you are coping with death, divorce, or other tragedy, you will not feel instantly better after writing. You should, however, have a better understanding of your feelings and emotions as well as the objective situation that you are in. In other words, writing should give you a little distance and perspective on your life.