

and, therefore, may also limit freely-chosen, intentional action. In some ways, automatic behaviors operate like the genetic happiness set-point because they represent potential barriers to change. This may be a significant issue when automatic behaviors are not personally expressive or desirable (e.g., bad habits or a short temper). In such cases, self-change would first seem to require conscious recognition that past behaviors have been controlled by factors of which one was largely unaware. This recognition would then need to be followed by ongoing attention and efforts to exert conscious control over the behavior. A mindful state focused on the here-and-now opens the possibility that we can consciously override automatic behaviors that might occur if we lapse into a state of mindlessness. (For a review of supporting evidence, see Brown & Ryan, 2004; also see a recent study by Chatzisarantis & Hagger, 2007.) Mindfulness is a potential avenue to greater autonomy because it expands our awareness of choices by disengaging us from reflexive thought patterns and habitual/automatic responses. And, when more options are on the table, we are more likely to make freely-chosen, personally expressive decisions that enhance our well-being.

MINDFULNESS AS PRESENT-CENTERED AWARENESS AND ATTENTION

Weston (1999) describes consciousness as the interrelation of awareness and attention. *Awareness* describes all the things that are presently on our minds. Awareness involves continual monitoring of the internal and external environment. At any given moment, we may be conscious of our immediate circumstances and activities (external) and a rich array of associated thoughts, feelings, and experiences (internal). *Attention* focuses our conscious awareness on a more limited set of experiences. Take vision as an example. We may be conscious of events occurring in both our peripheral vision (awareness) and at the focal point of our visual field (attention). We can be aware of things without responding to them or having them as the center of our attention. Awareness and attention are intimately connected such that “. . . attention continually pulls ‘figures’ out of the ‘ground’ of awareness, holding them focally for varying lengths of time” (Brown & Ryan, 2003, p. 822).

As Brown and Ryan (2003) note, a central feature of mindfulness is an open and receptive, present-centered attention and awareness that is pre-reflexive and non-judgmental. **Mindfulness** means

focusing on the here-and-now, rather than ruminating about the past, or entertaining anxieties and wishful thinking about the future. This means living *in* the present—not *for* the present. Mindfulness does not mean living for the moment without regard for the future. In this respect, mindfulness is similar to the present-centered awareness and activity-focused attention described by Csikszentmihalyi as “flow experience” (Csikszentmihalyi, 1990; Chapter 3). Secondly, while mindfulness may be a vehicle for self-analysis, it is oriented toward simply observing, rather than evaluating the self. In this regard, increasing mindfulness is analogous to increasing the sensitivity of a radar system that is not programmed to look for anything in particular. More objects are “seen,” but what is seen is not constrained or biased by attention to some objects and not others. A radar operator can decide what is and what is not worth paying attention to. But the main advantage is the ability to “see” more of what is actually out there. It is this “seeing more” that makes mindfulness a potential antidote for the blunted awareness stemming from hectic lives, defensiveness in self-examination of faults, and unexamined cultural assumptions about how we should live. Instead of relying on habitual reactions and ways of thinking that fit current reality into pre-established boxes, mindfulness provides an opening for understanding “the way things *are*” before we judge, analyze, and evaluate.

This may seem like some idealized state of omnipotent knowing, but all of us have had times of great clarity and epiphany when we finally see what is really going on and what is really important. For many people such epiphanies result from dramatic events that force a rethinking of assumptions about the self and life. Death, loss, and tragedy, as we saw in Chapter 4, lead many people to see themselves and life more clearly. Before considering mindfulness meditation as a gentler and more gradual approach to many of these same ends, we will review some recent studies related to posttraumatic growth (PTG) and the changes in life values that may result from confrontations with death.

Focus on Research: Getting to Life's Bottom Line

Recall (from Chapter 4) the naturalistic studies showing that many people confronting life-threatening events report positive life benefits from such experiences (see Tedeschi, Park, & Calhoun, 1998,

for a review). These events can include divorce, sexual assault, bone marrow transplants, cancer, heart attacks, HIV infection, house fires, and loss of a loved one. Researchers have also studied the aftermath of near-death experiences among people who were close to dying or who had been declared clinically dead. The pattern of positive growth that sometimes emerges following such crises involves a general shift from extrinsic values toward more intrinsic life values. People become less concerned about materialistic issues such as money, possessions, appearances, getting ahead and social status, and more focused on personal relationships, compassion for others, and transcendent meanings and purposes in life. Wealth and success often seem shallow and meaningless after a tragedy or a close brush with death. Many people also report increased feelings of autonomy, self-reliance, resilience, and a greater appreciation and zest for life. In short, confronting tragedy seems to shake up people's priorities so that the most important things in life—the bottom lines, so to speak—become much clearer. As you may have noticed, many of these new priorities and self-perceptions are in line with the life orientations of happy and healthy people identified by positive psychology research.

When posttraumatic growth (PTG) is discussed in your first author's positive psychology class, students reliably raise two questions. First, how long do the positive changes following tragedy last? Are they long-term, or is it back to life as usual fairly quickly? Secondly, students ask whether these changes can be achieved without confronting actual tragedy or threats to life and limb. Does it take tragedy to shake us out of our take-life-for-granted complacency and make us more mindful of what is important in life? Can we experience PTG vicariously, through imaginative thinking (e.g., of our own death)? Or does it require the real thing? Several recent studies suggest that the PTG changes may be relatively long-term and that PTG *can* be engendered through imagined experiences.

The two studies to be reviewed focused on an apparent contradiction between PTG (Chapter 4) research and terror management theory (Chapter 7). PTG research documents the change in life values that result from actual life-threatening events that bring people into acute awareness of their own mortality. Terror management theory and the work of Ernest Becker (*The Denial of Death*) argue

that death awareness causes an opposite, defensive reaction driven by the need to reduce the anxiety associated with thinking about one's own inevitable mortality. Rather than changing life priorities, terror management theory predicts that death awareness causes us to reaffirm our beliefs and our sense of self-worth, and to seek feelings of security in material possessions and the accumulation of wealth. Put another way, PTG research supports the role of death awareness in producing shifts toward more intrinsic values and toward an acceptance of death. Terror management theory predicts that awareness of death reinforces extrinsic and materialistic values in an attempt to deny the reality of death.

Attempts to reconcile these contradictory predictions have focused on the very different death awareness experiences studied by PTG researchers, as compared to terror management researchers. Terror management researchers use a manipulation called **mortality salience** to create awareness of death. This might involve brief exposure to death-related scenes (e.g., a funeral home) and words. A common procedure involves simply asking people to write down their thoughts, feelings, and emotions when thinking about their own death. In contrast, PTG researchers study people who have actually experienced tragic and life-threatening events that cannot be duplicated in laboratory studies. As researchers have noted, PTG is more concrete, more emotionally absorbing, and takes place over a much longer period of time, allowing a person to review his or her life through the lens of having nearly lost it (Cozzolino, Staples, Meyers, & Samboceti, 2004; Lykins, Segerstrom, Averill, Evans, & Kemeny, 2007). Studies by Cozzolino and colleagues (2004) and Lykins and associates (2007) have evaluated the importance of the severity of mortality threats, the duration of such threats, and the importance of life review in differentiating between PTG effects (i.e., shifts toward intrinsic values) and those predicted by terror management theory (i.e., affirmation of extrinsic values).

Lykins and her colleagues (2007) examined life value changes among California residents who experienced a major earthquake in 1994, and among college students who vicariously experienced, through media coverage, the 9/11 attacks on the World Trade Center in New York. Compared to appropriate control groups, people who directly or vicariously confronted events that were powerful reminders of their own mortality reported significant

shifts away from extrinsic goals (related to money, appearances, and social status), and toward more intrinsic goals (involving cultivating close relationships, giving to others, and engaging in personal growth). Consistent with predictions, both the intensity of the perceived threat to life and the duration of the threat were related to the degree of shift in values. In the earthquake study, those who were most acutely aware that they could have died showed the strongest shift toward intrinsic values. In the 9/11 investigation, shifts toward more intrinsic values were most evident several months after the attack. Lykken and her colleagues argue that time factors and threat intensity are important in PTG and help distinguish PTG effects from those predicted by terror management theory. That is, defensive responses to death occur when exposure to threat is low-intensity and short-term. PTG requires a significant perception of threat to survival and takes time to develop, as people think about the event and reevaluate their life priorities. People's initial response to life-threatening events may be defensive. However, over time, continuing mortality awareness may contribute to positive psychological growth.

Cozzolino and his colleagues (2004) created a vicarious **death reflection** manipulation that paralleled the essential features of near-death experiences. The positive growth effects of near-death experiences are thought to result from life review processes and from taking the perspective of others. Life review and perspective-taking are based on reports of people who have had near-death experiences. Such individuals say they intensely relived their lives and their interactions with significant others. Reliving life through one's own eyes and through the eyes of others is thought to be responsible for the changes in life priorities and self-conceptions associated with near-death experiences.

Participants in the death reflection condition were asked to read and imagine the following event actually happening to them (Cozzolino et al., 2004, p. 290, Appendix A):

Imagine that you are visiting a friend who lives on the 20th floor of an old, downtown apartment building. It's the middle of the night when you are suddenly awakened from a deep sleep by the sound of screams and the choking smell of smoke. You reach over to the

nightstand and turn on the light. You are shocked to find the room filling fast with thick clouds of smoke. You run to the door and reach for the handle. You pull back in pain as the intense heat of the knob scalds you violently. Grabbing a blanket off the bed and using it as protection, you manage to turn the handle and open the door. Almost immediately, a huge wave of flame and smoke pours into the room, knocking you back and literally off your feet. There is no way to leave the room. It is getting very hard to breathe and the heat from the flames is almost unbearable. Panicked, you scramble to the only window in the room and try to open it. As you struggle, you realize that the old window is virtually painted shut around all the edges. It doesn't budge. Your eyes are barely open now, filled with tears from the smoke. You try calling for help but the air to form the words is not here. You drop to the floor hoping to escape the rising smoke, but it is too late. The room is filled top to bottom with thick fumes and nearly entirely in flames. With your heart pounding, it suddenly hits you, as time seems to stand still, that you are literally moments away from dying. The inevitable unknown that was always waiting for you has finally arrived. Out of breath and weak, you shut your eyes and wait for the end.

After reading this death scenario, participants were asked to answer the following questions (Cozzolino et al., 2004, p. 281):

1. Please describe in detail the thoughts and emotions you felt while imagining the scenario.
2. If you did experience this event, how do you think you would handle the final moments?
3. Again imagining it did happen to you, describe the life you led up to that point.
4. How do you feel your family would react if it did happen to you?