

FOCUS ON VOCABULARY AND LANGUAGE

Page 497: No one needs to tell you that feelings add *color* to your life . . . Without **emotions**, we would experience a very dull and uninteresting existence; we would have no feelings of intense happiness or excitement nor would we experience depression or sadness. Thus, emotions add a variety of interesting qualities (*color*) to our lives.

Page 497: *Nervous about an important encounter, we feel butterflies in our stomach. Anxious over speaking in public, we frequent the bathroom. Smoldering over a conflict with a family member, we get a splitting headache.* When we are apprehensive and fearful, we have internal sensations that may feel as though small flying insects (*butterflies*) are fluttering around in our stomach (*we feel butterflies in our stomach*). Likewise, the prospect of talking to a group of people (*speaking in public*) may create an urgent need to use the toilet (*frequent the bathroom*), and being quietly angry (*smoldering*) can give rise to a painful (*splitting*) headache.

Page 497: In an instant, the *arousal of terror* spilled into *ecstasy*. In this anecdote, when Myers finally located his lost child (*toddler*) in the store, his apprehension and fear (the *arousal of terror*) transformed into heightened and intense feelings of happiness (*ecstasy*), and he was overcome with positive emotions. This story illustrates the various components of emotion—physiological arousal, expressive behavior, and consciously experienced thoughts and feelings.

Theories of Emotion

Page 498: Common sense tells most of us that we cry because we are sad, *lash out* because we are angry, *tremble* because we are afraid. The **James-Lange theory** states that physiological arousal precedes the experience of emotion. Thus, first we cry, then we feel sad; first we strike someone (*lash out*), then we experience anger; first we shiver and shake (*tremble*), then we feel fear. In contrast, the **Cannon-Bard theory** proposes that physiological arousal and the experience of emotion occur at the same time, but separately; one does not cause the other.

Embodied Emotion

Page 502: The left frontal lobe's rich supply of dopamine receptors may help explain why a *peppy left hemisphere* predicts a *perky* personality. For some people, the left frontal lobe has more lively electrical activity (it is a *peppy left hemisphere*), compared to the right. These particular individuals tend to have more cheerful and happier dispositions (*perky personalities*).

Page 502: They reported increases in *weeping*, *lumps in the throat*, and getting *choked up* when *worshipping*, saying *good-bye*, or *watching a touching movie*. For emotions expressed mostly in body areas above the neck, people with high spinal cord injuries reported more intense reactions, such as crying (*weeping*), becoming inarticulate (*lumps in the throat*), and being overcome emotionally (*choked up*) when participating in religious ceremonies (*worshipping*), parting company (*saying good-bye*), or viewing a sentimental film (*watching a touching movie*). On the other hand, emotional intensity for most other feelings decreased substantially—especially if they involved body areas below the neck. This provides partial support for the James-Lange theory, which proposes that physical reactions are important in the experience of emotions.

Page 503: *Which is the chicken and which the egg?* The old riddle asks, "Which came first, the chicken or the egg?" Myers asks which comes first, our *cognitions* or our *emotions*? The **two-factor theory** suggests that physiological arousal has to be cognitively interpreted in order for one to experience different emotions. Stanley Schachter's research showed that the same arousal (*stirred-up state*) can be experienced as two very different emotional states (e.g.,

euphoria or irritation) depending on how we interpret and label it. Thus, *thinking* comes before *feeling*.

Page 503: . . . *testy* . . . This means to be ill-tempered or irritable. Those college men who were physiologically aroused, but who did not know the reason for their arousal, were affected by (“*caught*”) the apparent emotional state of the person they were with. They made different attributions about their aroused (*stirred-up*) state (e.g., “I’m happy” or “I’m feeling testy”) on the basis of whether the accomplice acted in a euphoric or irritated way.

Page 503: Is the *heart* always subject to the *mind*? Robert Zajonc proposed that some emotional states are not preceded by cognitions. The emotions (*heart*) are not determined by our thoughts (*mind*). We can have *some* feelings, at least, without thinking first. For example, if you received some disturbing (*unsettling*) news but then forgot about it, an agitated (*churned up*) feeling might persist. This feeling could make you feel upset (*feel bad*), even though you cannot think of the reason for it (*you can’t put your finger on it*). The negative feeling stays (*lingers*), but without a conscious label.

Page 504 (Box): The creators and users of the lie detector, or polygraph, have believed that our physical indicators of emotion can provide a *telltale equivalent of Pinocchio’s nose*. *Pinocchio* is a fictional character in a children’s story whose *nose* grows longer every time he tells a lie. The **polygraph**, or *lie detector*, does not detect lies; rather, it measures a number of physiological reactions, such as heart rate, blood pressure, and perspiration (*telltale signs*), which indicate a change in emotional state. Unlike *Pinocchio*, people display no reliable or valid indicators of whether they are lying or telling the truth.

Page 504 (Box) . . . *a white lie* . . . When we tell a rather harmless or benign falsehood (*a white lie*), we are failing to reveal the truth about something relatively trivial. The polygraph can detect the physiological arousal that results from falsely answering control questions; this level of arousal is compared to reactions to the critical questions. Myers makes it clear that inferring guilt or innocence on the basis of these comparisons is fraught with problems. The innocent are more often labeled guilty than the guilty innocent.

Page 505: This makes it easier for our feelings to *hijack* our thinking than for our thinking to *rule* our feelings . . . Some neural pathways go from the ear or eye via the thalamus to the amygdala, an emotional control center. These pathways detour around (*bypass*) the cortical areas involved in thinking. This makes it possible to have extremely rapid (*greased-lightning*) emotional responses before cognitive factors become involved. Thus, our feelings can take over (*hijack*) our thinking, instead of our thinking controlling (*ruling*) our emotions.

Page 507: Automatic emotion and conscious thinking together *weave the fabric of our minds*. Just as a person working on a loom can create cloth by interlacing threads of material (can *weave the fabric*), our automatic emotion and conscious thinking work together to create or construct our mental experiences (to *weave the fabric of our minds*).

Expressed Emotion

Page 508: Most of us are good enough at *reading* nonverbal cues to decipher the emotions in an old *silent film*. We communicate our feelings with words (*verbally*) and through body language (*nonverbally*). Without hearing a single word, as in a movie with no soundtrack (a *silent film*), we can discern much about someone’s emotional state by observing (*reading*) his or her bodily actions and facial expressions. As Myers notes, when we look at a large group of faces, a single angry face will be extremely noticeable (*it will “pop out”*) and detected more quickly than a single happy face.

Page 511: . . . *slapstick comedy* . . . The humor in *slapstick comedy* is derived from fast physical actions and obvious jokes rather than language and verbal nuances. Women are more likely than men to express their feelings and identify with others (have *empathy*) while watching a

variety of videotapes, such as those that are sad, happy (e.g., a *slapstick comedy*), or frightening.

Page 511: Ditto for anger, and to a lesser extent the other basic expressions. There is a great deal of consistency across cultures in the interpretation of different emotional expressions. In tests, people the world over could reliably tell which face expressed happiness; this result was found over and over again (*ditto*), and similar results were found for other fundamental expressions (e.g., anger and fear).

Page 512: A sneer, for example, retains elements of an animal baring its teeth in a *snarl*. Darwin believed that all humans have inherited the ability to express emotions through very similar facial expressions. Thus, a person's scornful or contemptuous grimace (*sneer*) shares many aspects of the fierce growl with teeth showing (*a snarl*) typical of dogs and other animals. Emotional expressions are one form of social communication.

Page 513: Fake a big grin. Now scowl. Can you feel the "smile therapy" difference? Clearly, our mood affects how we look, but Myers is inviting you to test the idea that your facial expression can affect your mood. First, make a large, false smile (*fake a big grin*). Next, wrinkle or furrow your brow, frown and look sullen (*scowl*). Subjects in numerous experiments felt different emotions under each condition. Smile and inside you feel happy, scowl and you may see the world as more miserable than it is.

Experienced Emotion

Page 516: Fear can be poisonous. To be very afraid is an adaptive emotion—it prepares our bodies for *fight or flight*, it creates cohesion in groups, it can protect us from harm, and it can constrain us from behaving badly. On the other hand, fear can obsess us, keep us awake at night, and keep us constantly worried. Thus, it can also be a destructive and toxic reaction (a *poisonous* emotion).

Page 517: But our Stone Age fears leave us unprepared for high-tech dangers . . . Because of our evolutionary past, we seem to be biologically inclined to learn some fears more quickly and easily than others. Fear of heights, snakes, or spiders is easier to condition than fear of furniture, appliances, cars, or electricity. Fears that were *adaptive* in the past (*Stone Age fears*) are not necessarily beneficial in today's technological era.

Page 518: Popular books and articles on aggression at times advise that even releasing angry feelings as *hostile outbursts* can be better than *internalizing them*. One theory suggests that expressing your anger openly (having *hostile outbursts* or "*venting your anger*") will provide some form of emotional release (**catharsis**), which is better than not expressing your feelings (keeping feelings *pent-up*) and holding your anger inside (*internalizing it*). Under certain circumstances, expressing anger may provide temporary relief (an *afterglow*), but evidence also suggests that expressing your anger can increase or magnify (*breed more of*) that anger.

Page 519: If stressed managers find they can drain off some of their tension by berating an employee . . . Myers notes that, if a supervisor severely and angrily scolds (*berates*) a worker, this act can increase or amplify the supervisor's hostile emotions. But Myers further points out that the act may also be reinforcing because it releases some of the frustration (*it drains off some of their tension*). Consequently, the next time these feelings arise, the more likely it is that the hostile behavior will be repeated (*he or she may be more likely to explode*).

Page 521: . . . down-in-the-dumps days . . . Intense emotions, such as feeling very happy or feeling very sad, tend to return to relatively normal levels over time (*they tend to balance*). For example, when the student with cancer found out that his treatment had been effective, he was extremely happy (*elated*). Over the next month, his emotions returned to their previous level—but with fewer days of feeling sad or depressed (*fewer down-in-the-dumps days*).

Page 523: This finding *lobs a bombshell at modern materialism* . . . The contemporary tendency to accumulate wealth and possessions (*modern materialism*) in prosperous, industrialized countries has not resulted in greater happiness. This finding challenges and destroys (*lobs a bombshell at*) the myth that riches (*affluence*) bring happiness and social well-being.

Page 525 (Close-Up): *Off your duffs, couch potatoes*. This Close-Up, *How to be Happier*, lists a number of research-based suggestions for elevating mood and for creating more contentment and fulfillment with life. One recommendation is to become more physically active (*join the "movement" movement*). A vast amount of research shows very clearly the benefits of regular aerobic exercise in terms of better overall health, higher levels of energy, and lower levels of anxiety and depression. Myers advises sedentary people (*couch potatoes*) to get out of the sitting position (*get off your duffs*) and start exercising regularly.

Stress and Health

Page 527: *Debt piles up. Deadlines loom . . . you're already overbooked. Smoldering over a roommate or family conflict . . . running to the bathroom . . . your mood turns sour . . .* Starting college or university brings many changes and can be very stressful. Some students owe more and more money (*debts pile up*), are nervous as due dates for papers and projects approach (when *deadlines loom*), have taken on too many commitments (*are overbooked*), and may feel anger and resentment over a dispute (*smolder over a conflict*). In addition, because of nervousness, students may feel the need to urinate more frequently (*run to the bathroom*). These and other daily hassles (e.g., being *stuck in traffic* or *late for work or class*) can make a person very unhappy (their *mood turns sour*). Such cumulative stress can result in physical ailments, increased risk of serious illness, or even death.

Page 528: *Stress is a slippery concept*. The term **stress** is often used to describe a *stimulus* (a threatening or challenging event) or a *response* (fear or anxiety). Most psychologists refer to the former as a *stressor*, the latter as a *stress reaction*, and use the word *stress* to refer to the entire process of evaluating and dealing with threatening events. Thus, *stress* is not a simple or easily understood construct (*it is a slippery concept*).

Page 530: Your heart rate *zooms*. According to Selye's **general adaptation syndrome** (GAS), there are three phases in our response to stress: *alarm reaction*, *resistance*, and *exhaustion*. During the first phase, the sympathetic nervous system responds rapidly; your heart rate quickly increases (*zooms*), blood is directed to the muscles, and you experience the weakness associated with being startled. You are now ready to fight or cope with the *stressor* (the *resistance phase*); if the situation is not resolved soon, you will experience *exhaustion* (the third phase).

Page 530: . . . *uprooting* . . . Refugees and others who are forcibly made to leave their homes (*they are uprooted*) have increased rates of depression, anxiety, psychological disorders, and other stress symptoms. In most instances, the health impairments come from long-term exposure to stress.

Page 531: Experiencing *a cluster of crises* puts one even more at risk. Important and significant changes in our lives are other types of life-event stressors that increase the probability of health problems. If a number of these events occur close together (*a cluster of crises*), people become more vulnerable to disease.

Page 531: *Daily Hassles*. Small, routine, annoying events as well as the little things that go wrong day by day (*daily hassles*) can have a cumulative effect on health and well-being. Some people can handle these *daily hassles* (*they shrug them off*), while others are severely distressed (are "*driven up the wall*") by these inconveniences. Continual daily hassles can accumulate (*add up*) and have adverse effects (*take a toll*) on our health and well-being.

Page 532: Moreover, not one of the “pure” Type Bs—the most *mellow* and *laid-back* of their group—had suffered a *heart attack*. Researchers have identified two personality types. **Type As** are reactive (*easily angered*), competitive, verbally aggressive, highly motivated, always rushed, and lacking in patience. **Type Bs** are less easily angered (*mellow*), are easy-going (*laid-back*), patient, understanding, and noncompetitive. The most prototypical (“pure”) Type Bs were the least likely to be afflicted by **coronary heart disease** (*heart attacks*).

Page 532: But *after the honeymoon period*, in which the finding seemed definitive and revolutionary, other researchers began asking: Is the finding reliable? The discovery of the relationship between personality type (A or B) and health and well-being aroused much interest. However, once the initial excitement abated (*after the honeymoon period*), other investigators started more detailed research and asked questions about the specific mechanisms involved in personality type and risk of disease.

Page 532: Type A individuals are more often “*combat ready*.” Research has shown that Type As are physiologically more reactive and ready to fight (*combat ready*) than Type Bs. When stressed, their sympathetic nervous systems operate to increase the levels of cholesterol and fat in the blood; in addition, their negative (*toxic*) emotions, especially anger and depression, make them more coronary-prone.

Page 534: Your immune system is not a *headless horseman*. The immune system does not operate as an autonomous system independent of other systems (*a headless horseman*). Instead, it works in close harmony with various brain systems and with the endocrine system, which secretes hormones. All these interact and affect each other in a very complex way.

Page 536: One danger in *hyping* reports on attitudes and cancer is that some patients may then blame themselves for their illness . . . One problem with overstating (*hyping*) the relationship between attitudes and cancer is that some cancer victims may feel that they have somehow caused their sickness. The biological factors involved in the disease cannot easily be mitigated (*derailed*) by believing good health is due to a healthy character (the “*wellness macho*”). Nor is it appropriate to blame (*lay a guilt trip on*) those who develop the illness. As Myers notes, we should be aware of the fine distinction (*thin line*) that separates science from desperately hopeful beliefs (*wishful thinking*).

Promoting Health

Page 540: . . . “*laughter is the best medicine*.” This old saying proposes that mirthful humor may be good for our health. Some research has shown the beneficial effects of laughter, which appears to act as a block or buffer against stress-induced problems. Those who have a good sense of humor and can find something funny in stressful life events tend to be healthier and may live longer (*those who laugh, last*). (Note that this final phrase is a twist on the saying “*Those who laugh last, laugh longest*” or “*Getting the last laugh*.”)

Page 540: . . . *heartaches* . . . *Heartaches* is a term that refers to persistent mental anguish or suffering, usually resulting from the loss of a loved one or from disappointment in love. Myers points out that while close relationships and family tend to contribute to our well-being and contentment, they also can be the cause of much misery, strain, and strife (*heartaches*).

Page 542: The *cold fact* is that the effect of social ties is *nothing to sneeze at*. Myers is being humorous here. The expression “that is nothing to sneeze at” indicates that something (the object, event, accomplishment, etc.) is not minor or insignificant—and, of course, people with colds tend to sneeze a lot. In research on resistance to cold viruses, the finding that healthy volunteers who had the most social ties were less likely to catch a cold and produced less mucus (the *cold fact*) is not an insignificant result (is *nothing to sneeze at*). In

addition, research shows that social support calms the cardiovascular system, lowering blood pressure and stress hormones.

Page 542: Talking about our troubles can be “*open heart therapy.*” Research has shown that those with close, supportive friends and family tend to have fewer health problems and live longer. One reason for this may be that trusting relationships provide the opportunity to talk about our problems and feelings. Just as “open-heart surgery” can save lives, having someone to talk to can be a form of “*open heart therapy.*”

Page 543: Many of them had, quite literally, *run away from their troubles.* Many research studies have shown the beneficial effect of aerobic exercise on depression and anxiety. In one study, women who took up jogging (*running*) showed a substantial reduction in depression. As Myers humorously puts it, they had, in reality, *run away from their troubles.*

Page 544 (caption): The mood boost. Regular exercise increases longevity and cardiovascular fitness, reduces anxiety and depression, and enhances positive emotional states (*boosts our moods*). So, the popular trend toward being more physically active has many benefits, including building a stronger body and increasing our enthusiasm for life (*boosting the spirit*).

Page 545: After a decade of study, however, researchers decided the initial claims for biofeedback were *overblown and oversold.* **Biofeedback** became very popular in the 1970s, and the reports of its effectiveness for all kinds of problems led to much excitement. By the mid-1980s, however, when researchers took the time to evaluate the research findings objectively, it became clear that these assertions were exaggerated (*overblown*) and falsely promoted (*oversold*). Simple relaxation, without the use of costly equipment, is just as beneficial.

Page 547 (Margin note): And then there are the mystics who seek to use the mind’s power to enable *novocaine-free cavity repair.* Their aim: to *transcend dental medication.* This joke uses a play on words to create humor. The idea is that mystics and others who practice meditation (notably “transcendental meditation”) believe that, with the power of the mind, people can have their bad teeth fixed without the use of an anesthetic (*novocaine-free cavity repair*). Thus, the patients would be able to overcome the need for dental medication (*transcend dental medication*) through the use of “transcendental meditation.”