



Hedonic Adaptation to Positive and Negative Experiences

Sonja Lyubomirsky

Abstract

Empirical and anecdotal evidence for hedonic adaptation suggests that the joys of loves and triumphs and the sorrows of losses and humiliations fade with time. If people's goals are to increase or maintain well-being, then their objectives will diverge depending on whether their fortunes have turned for the better (which necessitates slowing down or thwarting adaptation) or for the worse (which calls for activating and accelerating it). In this chapter, I first introduce the construct of hedonic adaptation and its attendant complexities. Next, I review empirical evidence on how people adapt to circumstantial changes, and conjecture why the adaptation rate differs in response to favorable versus unfavorable life changes. I then discuss the relevance of examining adaptation to questions of how to enhance happiness (in the positive domain) and to facilitate coping (in the negative domain). Finally, I present a new dynamic theoretical model (developed with Sheldon) of the processes and mechanisms underlying hedonic adaptation. Drawing from the positive psychological literature, I propose ways that people can fashion self-practiced positive activities in the service of managing stress and bolstering well-being.

Keywords: hedonic adaptation, happiness, subjective well-being, positive emotions, aspiration level, variety, surprise

“Man is a pliant animal, a being who gets accustomed to anything.”
– Fyodor Dostoyevsky

The thrill of victory and the agony of defeat abate with time. So do the pleasure of a new sports car, the despondency after a failed romance, the delight over a job offer, and the distress of a painful diagnosis. This phenomenon, known as hedonic adaptation, has become a hot topic lately among both psychologists and economists (e.g., Diener, Lucas, & Scollon, 2006; Easterlin, 2006; Frederick & Loewenstein, 1999; Kahneman & Thaler, 2006; Lucas, 2007a; Lyubomirsky, Sheldon, & Schkade, 2005; Wilson & Gilbert, 2007). It has been invoked to explain the relatively strong temporal stability of well-being (e.g., Costa, McCrae, & Zonderman, 1987) and why people tend to “recover” from both positive and negative life events (e.g., Suh, Diener,

& Fujita, 1996). People have been found to be notoriously bad at forecasting its effects (Wilson & Gilbert, 2003, 2005), and the possibility of its power has even cast a pall on optimistic predictions that everyone can become happier simply by changing his or her life for the better (Lyubomirsky, 2008; Lyubomirsky, Sheldon, et al., 2005).

Hedonic adaptation occurs in response to both positive and negative experiences. Not surprisingly, however, if individuals' overarching goals are to increase or maintain well-being, then their objectives will diverge depending on whether their fortunes have recently turned for the better or for the worse. The negative domain calls for activating and accelerating adaptation. The positive domain



1 necessitates slowing down or thwarting it. In this
 2 chapter, I first introduce the construct of hedonic
 3 adaptation and several complexities surrounding it.
 4 Next, I review empirical evidence on how people
 5 adapt to circumstantial changes, and speculate about
 6 why the rate and course of adaptation differ in
 7 response to favorable versus unfavorable life changes.
 8 I then discuss the relevance of examining adaptation
 9 to questions of both how to enhance happiness (in
 10 the positive domain) and to facilitate coping (in the
 11 negative domain). Finally, I present a new dynamic
 12 theoretical model of the processes and mechanisms
 13 underlying hedonic adaptation, and, drawing from
 14 the positive psychological literature, the means by
 15 which adaptation may be managed in the service
 16 of managing stress and bolstering well-being.

17 The Hedonic Adaptation to Positive and Negative
 18 Experiences (HAPNE) model, developed in collab-
 19 oration with Ken Sheldon, posits that adaptation
 20 proceeds via two separate paths, such that initial
 21 well-being gains or drops corresponding to a posi-
 22 tive or negative life change (e.g., relationship startup
 23 vs. breakup) are eroded over time. The first path
 24 specifies that the stream of positive or negative emo-
 25 tions resulting from the life change (e.g., joy or
 26 sadness) may lessen over time, reverting people’s
 27 happiness levels back to their baseline. The second,
 28 more counterintuitive path specifies that the stream
 29 of positive or negative events resulting from the
 30 change may shift people’s expectations about the
 31 positivity (or negativity) of their lives, such that
 32 the individual now takes for granted circumstances
 33 that used to produce happiness or is inured to cir-
 34 cumstances that used to produce unhappiness.

35 Notably, the HAPNE model has significant
 36 implications for strategies that people can use to
 37 intervene in the adaptation process, thereby facili-
 38 tating coping with stressors and making the most of
 39 triumphs. These implications are derived from three
 40 critical variables proposed by the model to affect the
 41 rate of adaptation. Specifically, people will adapt
 42 more slowly to a particular change in their lives if
 43 they attend to the historical contingency and tran-
 44 sience of the change, and if that change produces a
 45 stream of experiences that are variable and unex-
 46 pected. I draw from the literature in positive psy-
 47 chology, as well as empirical support from my own
 48 laboratory, to propose ways that people can exploit
 49 understanding of these factors to fashion self-prac-
 50 ticed positive activities that will ultimately help
 51 them increase well-being in the face of positive
 52 events and facilitate coping and resilience in the face
 53 of painful or traumatic ones.

The What, How, and Why of Hedonic Adaptation

54 Hedonic adaptation is the psychological process by
 55 which people become accustomed to a positive or
 56 negative stimulus, such that the emotional effects of
 57 that stimulus are attenuated over time (Frederick &
 58 Loewenstein, 1999; see also Helson, 1964; Parducci,
 59 1995). The “stimulus” can be a circumstance (new
 60 mansion in the hills), a single event (a pink slip), or a
 61 recurring event (thrice-weekly dialysis), and it must
 62 be constant or repeated for adaptation to occur. The
 63 homeowner will experience hedonic adaptation as
 64 long as her mansion remains unchanged, the worker
 65 as long as he is unemployed, and the kidney patient
 66 as long as disease progression is kept at bay. If the new
 67 mansion is renovated to include a tennis court, the
 68 employee is offered a new job 2 weeks from Monday,
 69 or the dialysis treatment is extended, a brand-new
 70 adaptation process will unfold.

71 A question that is yet unresolved concerns
 72 whether the stimulus to which one adapts must be
 73 an actual situation (e.g., the situation of driving a
 74 particular car or being in a particular marriage or
 75 experiencing a particular offense) or the *knowledge*
 76 or recognition of that situation (e.g., “I own a
 77 hybrid” or “I am married to an alcoholic” or “She
 78 fired me”). It is undoubtedly difficult, if not impos-
 79 sible, to disentangle these two aspects—for example,
 80 to separate being married (i.e., the complex stream
 81 of experiences that make up a marriage) from
 82 one’s identity and self-labeling as a married person,
 83 and researchers have yet to do so. Another unre-
 84 solved question is whether reductions in emotional
 85 responses over time represent evidence of true adap-
 86 tation or merely relabeling—that is, giving a differ-
 87 ent label to the same perception. As an illustration,
 88 both before and after moving away from her family,
 89 a woman may rate her overall life satisfaction as a
 90 6 on a 10-point scale. The second rating may indi-
 91 cate hedonic adaptation to the move (i.e., her origi-
 92 nal 6 initially dropped to a 4 but in due course
 93 rebounded back to 6), *or* it may reflect changes in
 94 her interpretation and use of the scale. For example,
 95 if her new reference group (her new-found col-
 96 leagues and neighbors) is less happy as a whole, then
 97 her new 6 may be a result of her implicitly rating
 98 her happiness (or unhappiness) against this group
 99 instead of the old, happier reference group.

100 Multiple mechanisms are presumed to underlie
 101 hedonic adaptation, including cognitive processes
 102 (e.g., attention, goals and values, perceptions, aspi-
 103 rations, explanations, and social and temporal com-
 104 parisons), behavioral efforts (e.g., avoiding particular
 105
 106

1 situations or seeking solace from friends), and phys- 52
 2 iological processes (such as opponent processes of 53
 3 emotion; Solomon, 1980). However, it is disputable 54
 4 whether hedonic adaptation must be passive and 55
 5 automatic (i.e., the person eventually adjusts to a 56
 6 disability without actively “doing” something about 57
 7 it or without any particular preference or intention)
 8 or whether active coping strategies (like intention-
 9 ally trying to find the silver lining in the disability or
 10 reprioritizing family over work) are part and parcel
 11 of the adaptation process (cf. Warr, Jackson, &
 12 Banks, 1988). Because people do not have an incen-
 13 tive to hasten adaptation to positive experience, this
 14 question appears to apply to hedonic adaptation
 15 only in the negative domain.

16 Theorists agree that hedonic adaptation is adap-
 17 tive (Frederick & Loewenstein, 1999; cf. Carver &
 18 Scheier, 1990; Frijda, 1988). If people’s emotional
 19 reactions did not weaken with time, they would not
 20 be able to discriminate between more and less sig-
 21 nificant stimuli (i.e., new events that offer new infor-
 22 mation) and less significant stimuli (i.e., past events
 23 that should fade into the background). This property
 24 is important for the emotional system to function
 25 efficiently, as people must have the capacity, first, to
 26 safeguard themselves from physiologically arousing
 27 (and potentially destructive) long-lasting and intense
 28 affective reactions; and, second, to retain sensitivity
 29 to the signal value of subsequent events (e.g., an
 30 opportunity for a new relationship or the danger of
 31 a snake underfoot). Indeed, in a world without
 32 hedonic adaptation, human beings would be over-
 33 whelmed by their emotions and lose the vital ability
 34 to be attuned to changes (rather than to absolute
 35 magnitudes) in stimuli or circumstances (Kahneman
 36 & Tversky, 1979). To quote a line from the film
 37 *Before Sunset* (2004), if passion did not fade, “we
 38 would end up doing nothing at all with our lives.”
 39 The same can be said for anger, anxiety, and grief.

40 **Previous Empirical Findings in the**
 41 **Negative and Positive Domains**

42 Empirical work on hedonic adaptation aims to deter-
 43 mine the effect of a particular stimulus, event, or cir-
 44 cumstance on the individual’s emotional response.
 45 Studies have used a variety of “hedonic” measures,
 46 including scales of life satisfaction, positive affect,
 47 negative affect, psychological adjustment, and single-
 48 item indicators of happiness. Although there is
 49 debate about whether different components of well-
 50 being (e.g., its cognitive and affective aspects) are
 51 unitary or, instead, show different trajectories over

time (e.g., Diener et al., 2006), I will assume that the
 well-being measures used in the research herein are
 reasonably well correlated (e.g., Busseri, Sadava, &
 Decourville, 2007; see Diener, 1994, for a review)
 and would likely produce similar results if inter-
 changed.

58 ***Negative experiences***

59 A growing body of research has explored the indica-
 60 tors and consequences of hedonic adaptation to
 61 negative circumstances and events. The first such
 62 studies used cross-sectional designs, yet nonetheless
 63 offered suggestive evidence that people adapt to
 64 some negative experiences but not to others. For
 65 example, 1 month to 1 year after becoming paralyzed,
 66 accident victims reported being significantly
 67 less happy than a control group (Brickman, Coates,
 68 & Janoff-Bulman, 1978); 16 months after the
 69 building of a new freeway, residents were still not
 70 adjusted to the noise (Weinstein, 1982); but 1 to
 71 60 months after surgery for breast cancer, the major-
 72 ity of patients reported that their lives had been
 73 altered for the better (Taylor, Lichtman, & Wood,
 74 1984). Without a pre-event baseline, however,
 75 researchers cannot determine whether and how
 76 much adaptation had actually taken place.

77 Prospective longitudinal studies, recently pio-
 78 neered by Lucas and his colleagues, are much more
 79 instructive. In a 19-year investigation of representa-
 80 tive German residents, Lucas (2007b) found that
 81 those who had experienced a government-certified
 82 disability during the course of the study showed a
 83 significant and sustained drop in their level of well-
 84 being from before to after the onset of disability,
 85 even after income and employment were controlled.
 86 Participants from the same data set who were fol-
 87 lowed up from 15 to 18 years reported significantly
 88 reduced well-being years after becoming unem-
 89 ployed (Lucas, Clark, Georgellis, & Diener, 2004),
 90 divorced (Lucas, 2005), and widowed (Lucas, Clark,
 91 Georgellis, & Diener, 2003). Notably, in all these
 92 studies, whether individuals had experienced dis-
 93 ability, unemployment, widowhood, or divorce (all
 94 extremely negative experiences in the domains of
 95 health, work, and interpersonal relationships), their
 96 levels of well-being took a “hit” from the event and,
 97 on average, never fully recovered.¹

98 ***Positive experiences***

99 Compared to the negative domain, the literature on
 100 hedonic adaptation to positive circumstances and
 101 events is relatively scarce, with only a small number

1 of published cross-sectional studies and even fewer
 2 longitudinal ones. Interestingly, every one of these
 3 investigations evidences fairly rapid and apparently
 4 complete adaptation to positive events. The most
 5 widely cited study is that of Brickman and his
 6 colleagues (1978), who reported that winners of
 7 \$50,000 to \$1,000,000 (in 1970s dollars) in the
 8 Illinois State Lottery were no happier from less
 9 than 1 month to 18 months after the news than
 10 those who had experienced no such windfall.
 11 Findings that increases in citizens' average incomes
 12 have not been accompanied by increases in average
 13 well-being—for example, that Americans' mean
 14 happiness scores shifted slightly from 7.5 (out of
 15 10) in 1940 to 7.2 in 1990, a time period when
 16 incomes more than tripled (Lane, 2000)—have also
 17 been interpreted to indicate the work of hedonic
 18 adaptation.

19 Much more persuasive research showed that
 20 German residents who had married sometime dur-
 21 ing the 15-year period of their prospective longitu-
 22 dinal investigation initially obtained a significant
 23 boost in their happiness levels, but reverted to their
 24 baseline after 2 years on average (Lucas et al., 2003;
 25 see also Lucas & Clark, 2006). Another relevant
 26 longitudinal study followed high-level managers
 27 for 5 years to track their job satisfaction before and
 28 after a voluntary job change (Boswell, Boudreau, &
 29 Tichy, 2005). Much like what was observed with
 30 marriage, the managers experienced a burst of satis-
 31 faction immediately after the move (labeled the
 32 *honeymoon* effect), but their satisfaction plummeted
 33 within a year (the so-called *hangover* effect, but
 34 actually evidence of adaptation). In contrast, man-
 35 agers who chose not to change jobs during the same
 36 time period showed relatively stable job satisfaction
 37 levels. Furthermore, evidence from my laboratory
 38 suggests that feelings of enhanced well-being—trig-
 39 gered by receiving positive, self-relevant feedback 5
 40 days in a row—dissipate in a near-linear fashion
 41 within 2 weeks (Boehm & Lyubomirsky, 2008). To
 42 my knowledge, although a few longitudinal studies
 43 have assessed satisfaction with a particular event
 44 (such as acquiring breast implants) for months or
 45 years after the procedure (e.g., Cash, Duel, &
 46 Perkins, 2002), no investigations other than the two
 47 described above have tracked well-being both before
 48 and after the significant positive circumstantial
 49 change occurred, and hardly any have compared the
 50 well-being trajectory of individuals who experienced
 51 major life events with that of matched controls who
 52 did not experience such events.

Why is hedonic adaptation faster to positive experiences?

53
 54
 55 Although researchers know a great deal more about
 56 hedonic adaptation than they did merely 10 years
 57 ago, the vast majority of theory and empirical work
 58 to date has addressed adaptation to *negative* circum-
 59 stances and events. Consequently, recent conclu-
 60 sions about the effects and processes underlying
 61 hedonic adaptation—for example, that it is often
 62 not complete (Diener et al., 2006; Lucas, 2007a)—
 63 apply primarily to negative experiences. Interestingly,
 64 the empirical research to date suggests that hedonic
 65 adaptation is faster, and more likely to be “com-
 66 plete,” in response to positive than negative experi-
 67 ences. I propose that the primary mechanism
 68 underlying this difference involves the robust find-
 69 ing that, in Baumeister and colleagues' eloquent
 70 words, “bad is stronger than good” (Baumeister,
 71 Bratslavsky, Finkenauer, & Vohs, 2001; see also
 72 Taylor, 1991). Numerous investigations offer evi-
 73 dence for an asymmetry in positive and negative
 74 experiences and in positive and negative emotions.
 75 To begin, many cognitive effects are weaker for
 76 positive than negative stimuli, including those
 77 illustrated by priming (Smith et al., 2006), Stroop
 78 (e.g., Pratto & John, 1991), memory (e.g., Bless,
 79 Hamilton, & Mackie, 1992; Ohira, Winton, &
 80 Oyama, 1997; Porter & Peace, 2007), and emotion
 81 detection (e.g., Oehman, Lundqvist, & Esteves,
 82 2001) tasks. For example, a series of studies using
 83 the emotional Stroop procedure showed that nega-
 84 tive words interfere with color naming (i.e., attract
 85 more attention) more than do positive words; that
 86 85% of participants exhibit this effect; and that
 87 negative words are twice as likely to be recalled
 88 (Pratto & John, 1991). Furthermore, people are
 89 relatively more likely to monitor negative feedback
 90 than positive feedback (e.g., Graziano, Brothen, &
 91 Berscheid, 1980), more likely to remember it (e.g.,
 92 Mischel, Ebbesen, & Zeiss, 1976), and more likely to
 93 be influenced by it (e.g., Coleman, Jussim, & Abraham,
 94 1987; Leary, Tambor, Terdal, & Downs, 1995).

95 Negative information has also been found to be
 96 stronger (i.e., weighted more heavily) than positive
 97 information in first impressions (e.g., Peeters &
 98 Czapinski, 1990; Skowronski & Carlston, 1989),
 99 nonverbal messages (e.g., Frodi, Lamb, Leavitt, &
 100 Donovan, 1978), interpersonal interactions (e.g.,
 101 Gottman & Krokoff, 1989), and evaluative categor-
 102 ization (Ito, Larsen, Smith, & Cacioppo, 1999).
 103 Finally and perhaps most important, daily diary stud-
 104 ies have shown that the impact of everyday negative

1 events is more powerful and longer-lasting than that
2 of positive events (e.g., Lawton, DeVoe, & Parmelee,
3 1995; Nezlek & Gable, 2001; Sheldon, Ryan, &
4 Reis, 1996; see also Oishi, Diener, Choi, Kim-
5 Prieto, & Choi, 2007). For example, after a bad day,
6 students reported lower well-being the following
7 day, but, after a good day, their positive well-being
8 did not carry over (Sheldon et al., 1996).

9 An intriguing line of research that may also shed
10 light on the “bad is stronger than good” phenome-
11 non is exploring the *positivity* (good-to-bad) ratios
12 that distinguish flourishing individuals, couples,
13 and groups; such ratios generally range from 3-to-1
14 to 5-to-1 (Fredrickson, 2009; Fredrickson & Losada,
15 2005). For example, happily married couples are
16 characterized by ratios of approximately 5-to-1 in
17 their verbal and emotional expressions to each other,
18 as compared to very unhappy couples (who display
19 ratios of less than 1-to-1; Gottman, 1994). Tellingly,
20 the exact same optimal good-to-bad ratios (5-to-1)
21 characterize the verbal utterances of profitable and
22 productive versus less profitable and productive
23 business teams (Losada, 1999). Additional evidence
24 comes from daily diary studies. In an 8-day study,
25 healthy community-residing men aged 35 to 55
26 exhibited a ratio of 2.7 good daily events to 1 bad
27 one (David, Green, Martin, & Suls, 1997; see also
28 Nezlek & Gable, 2001), and comparable ratios
29 (ranging from 2.1 to 3.4) were found for flourishing
30 undergraduates in a 28-day study (Fredrickson &
31 Losada, 2005). Although it is premature to con-
32 clude that negative experiences are three times as
33 bad as positive experiences, these findings at a mini-
34 mum suggest that the “punch” of one bad emotion,
35 utterance, or event can match or outdo that of
36 three or more good ones. My speculation is that if
37 bad were *not* stronger than good, then healthy,
38 happy, or flourishing individuals would show ratios
39 closer to 1:1.

40 In sum, although much of the evidence is indi-
41 rect, it highlights the predominance of negative
42 over positive experience. In this way, the positive–
43 negative asymmetry data support the possibility
44 that people are made much more unhappy by a
45 negative event than they are made happy by an
46 equivalent positive event, the same pattern indi-
47 cated by prospect theory’s value function (Kahneman
48 & Tversky, 1984) and referred by others as the neg-
49 ativity bias (Ito & Cacioppo, 2005; Rozin &
50 Royzman, 2001; see also Strahilevitz & Loewenstein,
51 1998).

52 Recently, in a new model of hedonic adaptation
53 (AREA), Wilson and Gilbert (2008) proposed that

54 people engage in the sequential process of attend-
55 ing, reacting, explaining, and ultimately adapting to
56 events. Their model is consistent with the hypothe-
57 sis that adaptation is easier and more rapid in
58 response to pleasant stimuli, and the breakdown of
59 hedonic adaptation into three antecedent processes
60 makes it clear how. First, people are less likely to
61 attend to positive rather than negative events.
62 Second, they have weaker emotional reactions to
63 positive events. And finally, it is less difficult and less
64 time-consuming to explain or make sense of posi-
65 tive than negative events. For these three reasons,
66 people are more likely to hedonically adapt to
67 positive experiences (see also Frijda, 1988). The
68 three asymmetries—in attention, reaction, and
69 explanation—are supported by ample evidence (see
70 Baumeister et al., 2001, for an excellent review) and
71 consistent with functional approaches to emotion
72 (Clore, 1994; Frijda, 1994; Tooby & Cosmides,
73 1990). In other words, positive affect signals to
74 individuals that things are going well and that they
75 may continue engaging with their environment.
76 Negative affect, by contrast, warns people of poten-
77 tial danger or unpleasantness in the environment to
78 which they must respond (e.g., attack, flee, conserve
79 resources, expel). Because survival is arguably much
80 more dependent on urgent attention to potential
81 dangers than on passing up opportunities for
82 positive experiences, it is thereby more adaptive for
83 “bad to be stronger than good” (Baumeister et al.,
84 2001).

85 That hedonic adaptation to positive circum-
86 stances and events is relatively rapid and complete
87 leads to the intriguing hypothesis that such adapta-
88 tion may be a formidable barrier to raising
89 happiness. That hedonic adaptation to negative cir-
90 cumstances and events is relatively slow and cur-
91 tailed raises the concern that such adaptation may
92 critically interfere with successful coping. These two
93 ideas—which I discuss in turn below—underscore
94 the importance of studying hedonic adaptation in
95 order to enhance researchers’ understanding of how
96 people can optimize well-being and manage stress
97 and adversity.

Hedonic Adaptation to Positive Events 98

99 “Happy thou art not, for what thou hast not, still
100 thou striv’st to get, and what thou hast, forget’st.”
101 – William Shakespeare (1564/1616)

102 Although the desire for happiness has existed since
103 antiquity, its pursuit is more vigorous than ever in
104 today’s society, both in Western nations like the

1 United States and increasingly around the globe
 2 (Diener, 2000; Diener, Suh, Smith, & Shao, 1995;
 3 Freedman, 1978; Triandis, Bontempo, Leung, &
 4 Hui, 1990). Moreover, well-being appears to be a
 5 worthwhile goal, because happiness not only “feels”
 6 good, but also has tangible benefits for individuals,
 7 as well as for their friends, families, and commu-
 8 nities, and even society at large. Specifically, happi-
 9 ness and positive emotions have been found to
 10 be associated with and to promote numerous suc-
 11 cessful life outcomes, including superior physical
 12 and mental health, enhanced creativity and pro-
 13 ductivity, higher income, more prosocial behavior,
 14 and stronger interpersonal relationships (see
 15 Lyubomirsky, King, & Diener, 2005, for a meta-
 16 analysis). Furthermore, positive emotions (feelings
 17 like joy, contentment, serenity, interest, vitality, and
 18 pride), which are the very hallmark of happiness
 19 (Diener, Sandvik, & Pavot, 1991; Urry et al., 2004),
 20 are also advantageous during the process of recov-
 21 ery from negative experiences (Fredrickson, 2001;
 22 Fredrickson & Cohn, 2008).

23 Is it possible to enhance and sustain happiness?
 24 In other words, how can an individual preserve
 25 well-being in the face of stressful or traumatic life
 26 events and maintain boosts in well-being following
 27 positive ones? For the average person not beset by
 28 poverty or trauma, one of the biggest challenges to
 29 striving to maintain and increase happiness is
 30 undoubtedly the magnitude of his or her genetically
 31 determined happiness “set point” (or temperament;
 32 Lykken & Tellegen, 1996; Lyubomirsky, Sheldon,
 33 et al., 2005). Behavioral genetic studies show that
 34 about 50% of the variance in people’s levels of well-
 35 being can be accounted for by genes (e.g., Braungart,
 36 Plomin, DeFries, & Fulker, 1992; Tellegen et al.,
 37 1988; see also Hamer, 1996; Williams & Thompson,
 38 1993). This set point or baseline may partially
 39 explain why happiness is remarkably cross-situa-
 40 tionally consistent (e.g., Diener & Larsen, 1984)
 41 and stable over time (Costa et al., 1987; Headey &
 42 Wearing, 1989), despite notable life changes. For
 43 example, fully 76% of Fujita and Diener’s (2005)
 44 longitudinal sample followed from 1984 to 2000
 45 did not show a significant change in their baseline
 46 well-being from the first 5 years of their study to the
 47 last 5 years. Furthermore, a 2-year longitudinal
 48 study found that significant life events, such as
 49 being accepted into graduate school, becoming an
 50 uncle, experiencing the death of a close friend,
 51 having financial problems, and getting promoted,
 52 influenced well-being for 3 to 6 months and no
 53 longer (Suh et al., 1996). These studies suggest that

trying to increase happiness is an effort that is 54
 doomed from the start, as people cannot help but 55
 return to their set point, or baseline, over time. 56

To address this pessimistic hypothesis, Sheldon, 57
 Schkade, and I developed a model that identified 58
 the most important determinants of the chronic 59
 happiness level as (1) the set point (accounting for 60
 about 50% of the observed variance in well-being), 61
 (2) life circumstances (accounting for about 10%), 62
 and (3) intentional activity (accounting for the 63
 remaining 40%). Accordingly, we argued that the 64
 assumption of a fixed, genetically determined set 65
 point does not logically lead to the conclusion that 66
 well-being cannot be changed, as even the existence 67
 of the set point leaves much “room” for improve- 68
 ment, as well as for resilience (Lyubomirsky, Sheldon, 69
 et al., 2005; Sheldon & Lyubomirsky, 2004). 70
 Specifically, up to 40% of the individual differ- 71
 ences in happiness appear to be determined by what 72
 people *do*. In other words, our model suggests that, 73
 with intentional efforts, people can both preserve 74
 happiness and become sustainably happier. The 75
 individual’s goals and happiness-supportive activi- 76
 ties must differ, however, depending on whether 77
 his or her circumstances are changing for the better 78
 or for the worse. I first discuss the mechanisms 79
 underlying hedonic adaptation to positive events— 80
 and implications for how to bolster happiness and 81
 manage coping—and then the mechanisms and 82
 implications of adaptation to negative events. 83

***Hedonic adaptation as a barrier to 84
 sustainable well-being 85***

As noted earlier, I propose that relatively rapid and 86
 complete hedonic adaptation to positive events and 87
 to improvements in life circumstances is one of the 88
 biggest obstacles to raising and sustaining happi- 89
 ness. This obstacle, it is worth noting, may conceiv- 90
 ably relate to or interact with the set point or 91
 temperament; indeed, the rate of adaptation may 92
 itself be genetically determined (Lykken, 2000; 93
 Lykken, Iacono, Haroian, McGue, & Bouchard, 94
 1988). The bottom line, however, is that if an indi- 95
 vidual adapts to all things positive, then no matter 96
 what thrilling, meaningful, and wonderful experi- 97
 ences await her, these experiences will not make her 98
 any happier, but, instead, may drive her to acquire 99
 ever more new and thrilling things and risk placing 100
 herself squarely on a futile and desperate hedonic 101
 treadmill (Brickman & Campbell, 1971). The good 102
 news, however, is that people appear to vary in their 103
 rates of hedonic adaptation in both positive and 104
 negative domains, and that a sizeable proportion 105



1 become reliably happier over time. The chief reason,
2 I submit, is that people have the capacity to control
3 the speed and extent of adaptation via intentional,
4 effortful activities.

5 Consequently, I argue that one of the secrets to
6 achieving increased and sustainable well-being lies
7 in strategies that prevent, slow down, or impede the
8 positive adaptation process. That such practices
9 can be successful is suggested, albeit speculatively,
10 by three types of data—the first showing that peo-
11 ple’s happiness can lastingly improve, the second
12 indicating that people vary in how well and how
13 rapidly they adapt to positive events, and the third
14 demonstrating that specific adaptation-thwarting
15 activities can bolster happiness.

16 PEOPLE’S HAPPINESS CAN IMPROVE

17 The fact is that happiness can and does change over
18 time. For example, a 22-year study that followed
19 approximately 2,000 healthy veterans found that
20 life satisfaction increased over these men’s lives,
21 crested at age 65, and did not start significantly
22 declining until age 75 (Mroczek & Spiro, 2005).
23 A positive correlation between age and well-being
24 measures has also been found in a 23-year longitu-
25 dinal study of four generations of families (Charles,
26 Reynolds, & Gatz, 2001) and in a cross-sectional
27 study of adults aged 17 to 82 (Sheldon & Kasser,
28 2001). In the 1984–2000 longitudinal study described
29 earlier by Fujita and Diener (2005), although 76%
30 of the respondents remained unchanged in their
31 well-being, 24% reported significant shifts (though,
32 unfortunately, most of these were for the worse, not
33 for the better). Lucas (2007c) contends that stabil-
34 ity estimates for well-being bottom out at around
35 .30 and .40, pointing up the possibility of real
36 change. Although these data are merely suggestive,
37 they intimate the possibility that true changes in
38 well-being may be related to people’s capacity to
39 resist adaptation.

40 PEOPLE VARY IN ADAPTATION RATES

41 As several theorists have noted (e.g., Diener et al.,
42 2006; Lucas, 2007a), longitudinal studies of hedo-
43 nic adaptation reveal variability in the extent to
44 which people’s happiness changes (and/or returns to
45 baseline) following important life events. For just
46 two examples, in the 15-year investigation of marit-
47 al transitions, some individuals got much happier
48 after getting married and then stayed happier, while
49 others’ well-being began dropping even before their
50 wedding day (see Figure 2 in Lucas et al., 2003).
51 Furthermore, whereas some widows’ and widowers’

happiness plummeted (and never recovered) after
their spouses’ deaths, others actually became hap-
pier and remained that way (see Figure 4 in the
same paper). The mechanisms underlying this vari-
ability are undoubtedly complex, random, or depen-
dent on people’s unique situations; for example,
some of the “happy widows” may have experienced
terrific caregiving responsibilities and experienced a
natural sense of relief when their spouses passed
away. However, I suggest that these mechanisms are
also coherent and systematic across individuals.
Specifically, I propose that the primary source of
individual differences in rates of adaptation (and in
capacity to experience positive shifts in happiness
over time) involves differences in *intentional efforts*
that people can undertake in order to slow down
adaptation to positive events and speed up adapta-
tion to (i.e., cope with) negative ones. With the
HAPNE model, I hope to elucidate these common
processes and effects.

Hedonic Adaptation to Negative Events

“Life is not always what one wants it to be, but to
make the best of it as it is, is the only way of being
happy.”

– Jennie Jerome Churchill

No life is without stress, adversity, or crisis. The pos-
sibilities are endless: deaths of loved ones, illnesses,
accidents, victimizations, natural disasters, abusive
relationships, financial crises, stigmatizations, di-
vorces, and job losses. Close to half of U.S. adults
will experience one severe traumatic event during
their lifetimes (Ozer & Weiss, 2004), and almost
everyone will occasionally endure moderate to
severe daily stress. In the wake of such challenges,
many become depressed, anxious, or confused. They
may find it difficult to concentrate on the daily tasks
of living, and they may not be able to sleep or eat or
function well. Some have such intense and long-
lasting reactions to a trauma that they are unable to
return to their previous (“normal”) selves for many
months or even years. Indeed, as revealed by the lit-
erature on hedonic adaptation, over time, people
adapt to some negative experiences completely
but show protracted or only partial adaptation to
others.

To preserve well-being and foster emotional
adjustment, an important objective of individuals
facing aversive, threatening, or traumatic situations
is to endure and prevail in such a way that they are
able to return to their previous “selves,” before the
event occurred. In other words, the goal is to speed



1 up adaptation. A large literature has accumulated
 2 on the strategies and processes underlying coping—
 3 that is, on how people manage stressful demands, or
 4 what they do to alleviate the hurt, distress, or suffer-
 5 ing caused by a negative event or situation (e.g.,
 6 Carver, 2007; Compas, Connor-Smith, Saltzman,
 7 Thomsen, & Wadsworth, 2001; Lazarus, 2000;
 8 Skinner, Edge, Altman, & Sherwood, 2003).
 9 Although coping is one general label one might affix
 10 on how people can act to hasten adaptation in the
 11 negative domain, this chapter focuses on strategies
 12 rooted in positive psychology—that is, positive
 13 activities that people can engage in that generate
 14 positive thoughts, positive emotions, and positive
 15 events, as opposed to practices that simply regulate
 16 negative states. I argue that lessons learned from
 17 how people can avert adaptation to positive experi-
 18 ences can be applied to how people can accelerate
 19 adaptation to negative ones.

20 **How can People Shape Adaptation to**
 21 **Positive and Negative Experiences?**
 22 **Adaptation-Forestalling and Adaptation-**
 23 **Accelerating Mechanisms**

24 As highlighted by the HAPNE model, described
 25 below, adaptation-thwarting and adaptation-has-
 26 tening processes share a number of properties that
 27 help them retain their potency and efficacy. Notably,
 28 it appears that the same mechanisms will thwart
 29 adaptation to positive and negative circumstances,
 30 which suggests that people should seek to learn how
 31 to activate or maximize these mechanisms in the
 32 positive domain and how to block or minimize
 33 them in the negative domain. One key adaptation-
 34 thwarting property is attention—that is, once we
 35 stop paying attention to a life change (e.g., stop
 36 appreciating it if positive or stop ruminating on it if
 37 negative), we have adapted. Furthermore, the types
 38 of both pleasant and unpleasant experiences that are
 39 best able to maintain attention are those that are
 40 (a) varied and dynamic and (b) novel and surpris-
 41 ing. Although some of these properties undoubtedly
 42 interact with one another, I describe them separately
 43 in the three sections that follow. It is also worth
 44 noting that adaptation-forestalling (and adaptation-
 45 accelerating) activities and processes can be engaged
 46 in effortfully and intentionally, or automatically and
 47 habitually.

48 ***Attention enticing***

49 William James once made a remarkable and rather
 50 radical proposition: “My experience is what I agree
 51 to attend to.” Indeed, what people pay attention to

52 *is* their experience; it *is* their life. What grabs atten- 52
 53 tion? That which people chew on, remember, emo- 53
 54 tionally react to, and factor into their judgments 54
 55 and decisions. If a thing, attribute, person, or idea 55
 56 fails to capture attention, one can be said to have 56
 57 adapted to it. When an individual suddenly obtains 57
 58 more disposable income than she ever had before, 58
 59 the shift in financial status is captivating and novel. 59
 60 She cannot help but be aware of all the extra money 60
 61 she has to spend and may think about it constantly. 61
 62 Importantly, she recognizes (1) that she has not 62
 63 always had this added income and (2) that the sur- 63
 64 plus may not endure forever. With time, however, 64
 65 the change in income will cease to be novel or sur- 65
 66 prising and other conquests, failures, uplifts, and 66
 67 hassles will elicit emotional reactions, drawing 67
 68 attention away from the financial change and 68
 69 thereby compelling it to fade into the psychological 69
 70 background (cf. Kahneman & Thaler, 2006). 70
 71 Similarly, after an individual unexpectedly loses a 71
 72 large proportion of his life savings in a Ponzi scheme, 72
 73 he will have recurrent and intrusive thoughts, mem- 73
 74 ories, and worries related to the financial setback. In 74
 75 due time, however, these ruminations, and their 75
 76 associated negative emotions, will slowly recede. 76
 77 However, any object that continues to captivate 77
 78 attention—that is, any object of which people are 78
 79 continually aware or that frequently and perhaps 79
 80 even unintentionally pops into their minds—will 80
 81 be less prone to hedonic adaptation. For example, 81
 82 owners of luxury sedans are no happier during car 82
 83 trips than owners of compact two-door coupes, 83
 84 *unless* their cars’ attributes are on their minds while 84
 85 driving (Schwarz, Kahneman, & Xu, in press); and 85
 86 people who continue to be aware of a positive activ- 86
 87 ity change in their lives are less likely to adapt to it 87
 88 (Sheldon, & Lyubomirsky, in press). Similarly, indi- 88
 89 viduals who have lost loved ones experience bouts 89
 90 of sadness each time their attention is drawn to the 90
 91 loss (Bonnano & Keltner, 1997). Thus, adaptation- 91
 92 forestalling activities and processes have this very 92
 93 attention-grabbing capability. 93

94 ***Dynamic and varied***

95 In his widely quoted classic book, *The Joyless* 95
 96 *Economy*, Scitovsky (1976) argued that focusing on 96
 97 “comforts” (read: circumstantial changes) is joyless, 97
 98 because individuals eventually adapt to them. 98
 99 Instead, people should spend their money on joyful 99
 100 things, which yield continual fascination, challenge, 100
 101 and fulfillment, like the “pleasures” of meeting good 101
 102 friends or backpacking through a gorgeous land- 102
 103 scape (cf. Van Boven, 2005). The so-called pleasures 103

1 Scitovsky described, which deliver partial and inter-
2 mittent (rather than continuous) satisfaction, are
3 parallel to the intentional activities that I propose
4 people can engage in to thwart or slow down adap-
5 tation in the positive domain. What such activities
6 have in common is that they are dynamic and
7 episodic—that is, variable and intermittent—and
8 thereby share the critical attribute of supplying
9 changeable and dynamic experiences. After all,
10 when it comes to their activities, people do not per-
11 sist in doing only one thing and doing it the same
12 way each time. Of course, as applied to negative life
13 changes, precisely those ones that give rise to varied
14 and intermittent negative events (such as the diag-
15 nosis of a chronic illness yielding a series of blows,
16 fears, and hassles) will be those to which people will
17 find it hardest to adapt.

18 To address this attribute of adaptation-thwarting
19 strategies and processes in the positive domain,
20 Sheldon and I have conducted four longitudinal
21 field studies, three correlational (Sheldon &
22 Lyubomirsky, 2006a) and one experimental (Sheldon
23 & Lyubomirsky, in press). This work was motivated
24 by the argument that circumstantial changes are
25 particularly prone to adaptation, because they are
26 generally one-time improvements that represent rela-
27 tively static “facts” about one’s life (e.g., “I live in
28 Beverly Hills,” “I am married to my second husband,”
29 “I was promoted”). Building on the notion that
30 hedonic adaptation occurs in response to constant
31 stimuli, we hypothesized that increasing and sustain-
32 ing happiness must involve partaking in dynamic
33 *activities*, which entail persistent effort and engage-
34 ment in an intentional, self-directed process. Such
35 efforts have the property that they can be varied and
36 episodic and can produce a fluid and diverse set of
37 positive experiences, opportunities, and possibilities.
38 Consequently, positive changes in such activities
39 should presumably produce bigger and more sus-
40 tained increases in well-being relative to positive
41 changes in life circumstances.

42 Supporting this argument, Sheldon and I found
43 that undergraduates reported that positive changes
44 in their dynamic activities (e.g., deciding to study
45 harder, learning a new language, cultivating a friend-
46 ship, or trying to climb the world’s highest peaks)
47 were more “variable” and that they were less likely
48 to become “accustomed” to them, relative to posi-
49 tive changes in their circumstances (e.g., acquiring a
50 better dorm room or more financial aid; Sheldon &
51 Lyubomirsky, 2006a; Study 1). Furthermore, two
52 longitudinal studies showed that both changes
53 in activities *and* changes in circumstances made

participants happier 6 weeks after the start of a 54
study, but only changes in activities continued to 55
make them happier 12 weeks later (Studies 2 and 3). 56
By the 12th week, students appeared to have already 57
adapted emotionally to improvements in their cir- 58
cumstances, but not to their intentional activities. 59
This result was replicated in a 6-week-long study in 60
which people were prompted to make dynamic and 61
variable changes versus static, one-time changes in 62
their lives (Sheldon & Lyubomirsky, in press). 63
Interestingly, among participants who took up a 64
new dynamic activity, the effects on well-being were 65
strongest for those who reported that the change 66
added variety to their lives *and* who reported remain- 67
ing aware of the change—that is, the two factors 68
interacted to predict the most sustained change. 69
These findings are consistent with Van Boven’s 70
(2005) argument that people are made happier by 71
obtaining experiences rather than possessions. 72

73 As these earlier studies suggest, experiences that
74 are variable and dynamic can serve to inhibit adap-
75 tation, a conclusion that applies to both the positive
76 and negative domain. With respect to positive
77 events, the dynamic and varied nature of activity
78 suggests that its impact can be maximized by attend-
79 ing to its timing—that is, an optimal frequency of
80 engagement that permits the activity to remain
81 novel, consequential, and positive. Indeed, studies
82 from my laboratory have shown that how frequently
83 and close together an individual commits acts of
84 kindness (five acts in a single day vs. spread across
85 the week) and “counts his blessings” (once vs. three
86 times per week) determines the extent to which his
87 happiness is boosted over time (Lyubomirsky,
88 Sheldon, et al., 2005). Analogous recommendations
89 can be made with respect to negative events. For
90 example, a schedule of medical treatments can be
91 devised in such a way that the individual becomes
92 accustomed and “jaded” to its frequency.

93 Adaptation-forestalling activities not only can be
94 timed in optimal ways; they can be varied—mixed
95 up, spiced up—in optimal ways as well that permit
96 a positive experience to remain fresh, meaningful,
97 and pleasant. Recall that, by definition, adaptation
98 occurs only in response to constant or repeated
99 stimuli, not to changing and dynamic ones. Variety,
100 in both thoughts and behaviors, appears to be
101 innately stimulating and rewarding (Berlyne, 1970;
102 Pronin & Jacobs, 2008; Rolls et al., 1981; see
103 Ebstein, Novick, Umansky, Priel, & Osher, 1996;
104 Sahara et al., 2001, for links to dopamine activity),
105 probably because it generates an inflow of diverse
106 positive experiences. It is not surprising, then, that

1 people seek variety in their behavior (e.g., Ratner,
2 Kahn, & Kahneman, 1999) and habituate more
3 slowly to pleasurable stimuli that vary (Leventhal,
4 Martin, Seals, Tapia, & Rehm, 2007). An activity
5 that is practiced with variety (or a life change that
6 naturally yields variety) is more likely to remain
7 rewarding and meaningful over time and thus less
8 prone to hedonic adaptation.

9 Indirect evidence for this hypothesis comes from
10 a 10-week intervention that found that individuals
11 who performed different acts of kindness every week
12 (e.g., did an extra household chore, sent e-cards to
13 family members, gave their pet a special treat, or
14 made breakfast for their partners) displayed an
15 upward trajectory for happiness during the inter-
16 vention and 4 weeks after, relative to those who per-
17 formed similar acts of kindness each week (e.g.,
18 making breakfast for someone again and again;
19 Boehm, Lyubomirsky, & Sheldon, 2008). By anal-
20 ogy, if the goal is to accelerate adaptation to negative
21 events, then one needs to find ways to reduce variety
22 and promote repetition. Accordingly, unpleasant
23 dinners, dental procedures, or project deadlines are
24 more easily endured when they are predictable and
25 unvarying.

26 *Novel and surprising*

27 A beautiful and plush new sofa can provide the
28 buyer with hours of satisfaction. The comfort of its
29 fabric and the colors of its design supply a burst of
30 pleasure at first use, but the novelty wears off and
31 the sofa retains few, if any, more surprises for the
32 person occupying it. The same cannot as readily be
33 said about a new friend, lover, or career. As described
34 above, relationships, work, and many activities
35 have the property that they yield novel and often
36 surprising experiences and opportunities, which are
37 likely to capture people's attention and trigger fre-
38 quent memories and thoughts (Wilson, Centerbar,
39 Kermer, & Gilbert, 2005; Wilson & Gilbert, 2008).
40 One's partner may reveal a side of him one never
41 knew; an unforeseen career path may be suggested
42 by a colleague; new wealth can pay for new adven-
43 tures; and an act of kindness or a shared gratitude
44 may prompt an unexpected change in one's identity.
45 Accordingly, the activities that will be most effective
46 in reducing adaptation are those that generate novel
47 and unexpected (and hence varied) moments, which
48 are likely to engender relatively strong emotional
49 reactions (Ortony, Clore, & Collins, 1988). To wit,
50 when it comes to positive experiences, it is challeng-
51 ing to maintain surprise and novelty, and, hence,
52 one must muster effort to inject it or be open to it

when possible, or to choose activities that have the
potential to yield relatively more frequent novel
moments (e.g., new travels, hobbies, or relation-
ships vs. new possessions or routines). By contrast,
when it comes to negative experiences, one will seek
to tone down surprises and attempt to inject repeti-
tion and even "boredom."

Notably, surprising events often prompt a search
for understanding ("why did this happen?"), and
the emotional punch of surprising events may
diminish when understanding is reached. Wilson
and Gilbert's 2008 AREA model (attend, react,
explain, adapt) illustrates that surprise and under-
standing are in a sense two poles of the same con-
tinuum; to be surprised is to face what is not
expected or not yet understood. Indeed, Wilson and
Gilbert proposed that "lack of understanding" is a
general principle that accounts for the adaptation-
thwarting effects of many other properties of
events—not only surprise but also variety, novelty,
and certainty.

Stream of emotions and events

As it concerns the positive domain, all of the fea-
tures of adaptation-forestalling strategies described
above appear to have the consequence of yielding
(or preserving) a persistent stream of positive events,
thoughts, and emotions. Such efforts as viewing
one's future in an optimistic light, becoming a more
generous person, reading all the classics, or starting
a new fitness regimen all have the property of pro-
viding varied and novel experiences, which invite
one's attention, savoring, and appreciation. Hence,
after a positive change, they are most likely to pro-
duce a sustainable boost in one's happiness, keeping
one in the upper portion of one's set range of happi-
ness potential.

With respect to the negative domain, however,
those stressors, setbacks, and traumas that entice
attention and rumination, and that continue to vary
and surprise, are precisely the ones likely to generate
an inflow of *negative* emotions, thoughts, and
events. Accordingly, if individuals suffer declines in
well-being after such upheavals, the stream of nega-
tive events will help sustain those declines, keeping
them in the lower part of their happiness set range.

Hedonic Adaptation to Positive and Negative Events (HAPNE) Model

In a nutshell, people generally adapt, and do so
rather quickly, to most positive changes in their
circumstances—to an apartment with a view, a face-
lift, recovery from illness, a new job, a 15% higher

1 salary, a bigger house, and even getting married.
 2 People also adapt, though less rapidly and less com-
 3 pletely, to many negative circumstantial changes
 4 and events, including chronic diseases, widowhood,
 5 ends to relationships, layoffs, and moves from larger
 6 homes to smaller ones. What is the process underly-
 7 ing this adaptation, and how can people intervene
 8 in it, such that they can forestall it in the case of
 9 positive events (Fig. 11.1) and speed it up in the
 10 case of negative ones (Fig. 11.2)? In other words,
 11 what we should do more of for positive events (to
 12 maintain well-being gains) is what we should do less
 13 of for negative events (to prevent maintaining well-
 14 being drops). Sheldon's and my HAPNE model was
 15 developed to address these questions.

16 *How do people adapt?*

17 Imagine first a hypothetical individual who has
 18 experienced a discrete *positive change*, like moving
 19 into a nice new house, finding a new love, starting a
 20 new hobby, buying a work of art, or having plastic
 21 surgery. According to the model, the life change,
 22 when large enough, triggers a boost in well-being
 23 (WB; labeled $+a$) and produces a stream of (more or

24 less discrete) *positive events*.² This process is displayed
 25 in Figure 11.1.

26 Next imagine a hypothetical individual who
 27 has experienced a *negative change*, like downsizing
 28 to an apartment after foreclosure, suffering a
 29 breakup, totaling the car, or gaining weight. In an
 30 analogous process (shown in Fig. 11.2), that change
 31 triggers a drop in WB (labeled $-a$) and generates a
 32 stream of *negative events*.

33 In line with my earlier theoretical articles
 34 (Lyubomirsky, Sheldon, et al., 2005; Sheldon &
 35 Lyubomirsky, 2007), I define WB in terms of both
 36 cognitive and emotional components—namely, as
 37 high life satisfaction and positive affect, and low
 38 negative affect (Diener, Suh, Lucas, & Smith, 1999).
 39 My primary question is, how do people ultimately
 40 adapt to the positive or negative change? In other
 41 words, what precise mechanisms erode the positive
 42 boost ($+a$) or negative decrement ($-a$), prompting it
 43 to revert to zero, and thus returning the person to
 44 her original levels of happiness or well-being (back
 45 to $T1 WB$)?

46 With respect to both the positive and nega-
 47 tive domains, Sheldon and I propose two paths to

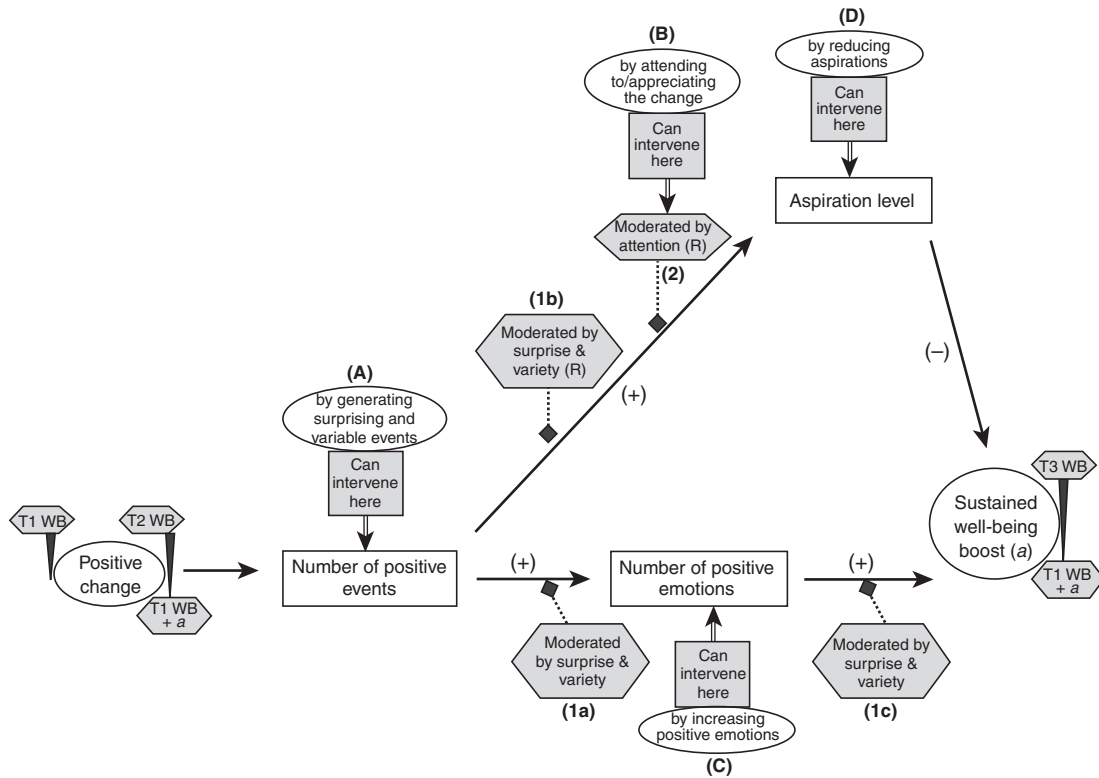


Fig. 11.1 Hedonic Adaptation to Positive and Negative Events (HAPNE) Model: The positive domain.

1 adaptation, though, of course, the positive path
 2 will unfold more rapidly than the negative. The
 3 first, bottom-up route is through declines in the
 4 number or frequency of experienced emotions (see
 5 the bottom path in Fig. 11.1, *number of positive*
 6 *emotions*, and in Fig. 11.2, *number of negative*
 7 *emotions*). That is, the emotions that the individual will
 8 initially derive from the change will become less and
 9 less frequent over time and may cease altogether.
 10 For example, one may experience many positive
 11 events after buying a Prius, but those occasions will
 12 become less and less numerous, and the positive
 13 emotions (excitement, happiness, pride, relief at the
 14 reduced gas bill, etc.) will recur less and less over
 15 time. Similarly, experiences of negative emotions
 16 after losing a beloved pet (pain, sadness, longing)
 17 will become more and more sporadic over time.

18 However, I also argue that it is possible to adapt
 19 even when one *continues* to enjoy positive events
 20 and positive emotions as a result of positive life
 21 changes, or when negative events and negative emo-
 22 tions persist following negative life changes. So,
 23 after losing weight, a person's social life might *con-*
 24 *tinue* to be improved and regularly yield her positive
 25 episodes and emotions, but she'll begin to feel that

26 those experiences are simply part of her new life, 26
 27 becoming her new norm or standard, and she will 27
 28 desire even more. For an extreme example, after 28
 29 *Thriller* became the biggest-selling album of all time, 29
 30 Michael Jackson reportedly declared wanting his 30
 31 next album to sell twice as much. Notably, the 31
 32 reverse may happen after gaining weight. In other 32
 33 words, the person's aspiration level regarding the 33
 34 expected quality of her life has now shifted either 34
 35 higher or lower (see the top path, *aspiration level*, in 35
 36 both figures).

37 The idea of an aspiration-level path to adapta- 37
 38 tion, especially in the positive domain, is very simi- 38
 39 lar to Kahneman's (1999) notion of the operation of 39
 40 a "satisfaction treadmill" or "aspiration treadmill," 40
 41 which arises when the standard with which experi- 41
 42 ences are judged is itself changed. Kahneman sug- 42
 43 gested that people can essentially adapt to their new 43
 44 level of positive experience and thus *require* that 44
 45 new level simply to maintain their baseline happi- 45
 46 ness. Changes in aspiration level can provide a top- 46
 47 down route to changes in global well-being, by 47
 48 shifting how ongoing positive (or negative) experi- 48
 49 ences are framed and contextualized. Notably, then, 49
 50 the HAPNE model incorporates both bottom-up

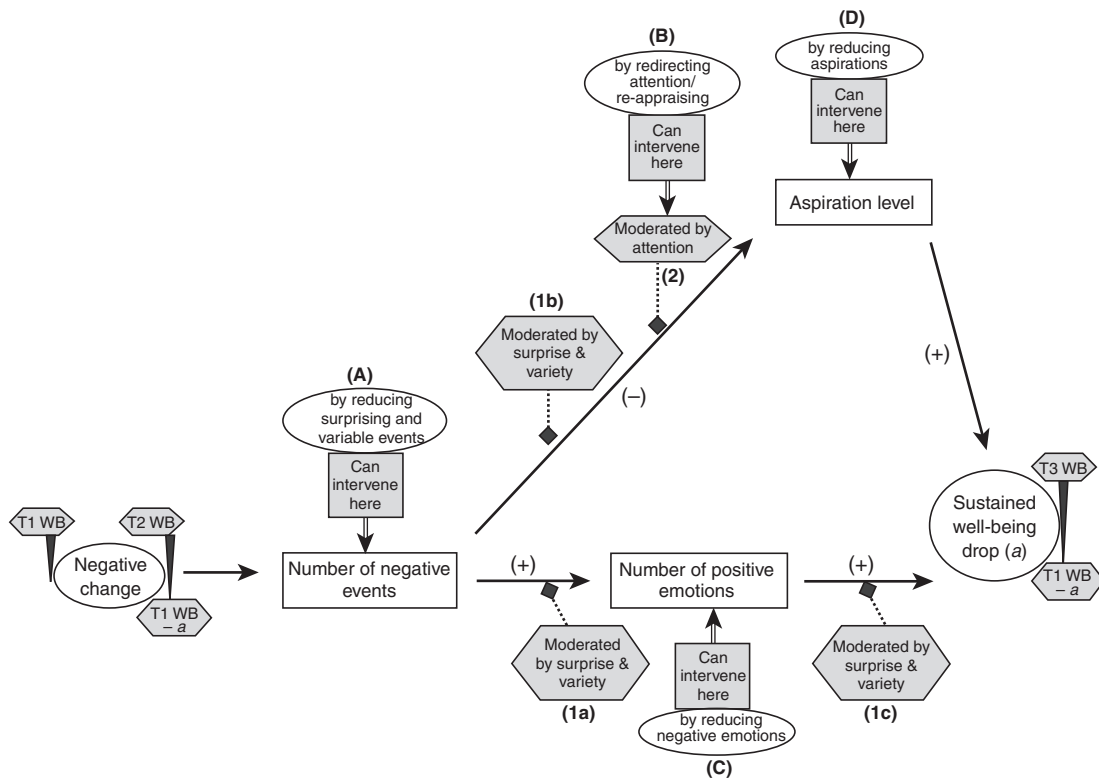


Fig. 11.2 Hedonic Adaptation to Positive and Negative Events (HAPNE) Model: The negative domain.

1 (via the accumulation of small positive or negative
2 experiences) and top-down (via changes in stan-
3 dards or expectations) influences on well-being
4 (Diener, 1984).

5 *How do people forestall or hasten* 6 *adaptation?*

7 Now I turn to the implications of the model for
8 how to thwart or slow down hedonic adaptation
9 after positive life changes and to accelerate it after
10 negative ones. Figures 11.1 and 11.2 also highlight
11 several important variables (shown in numbered
12 hexagons) that Sheldon and I propose moderate
13 these two paths towards adaptation, such that they
14 help forestall or expedite it.

15 The first set of moderators suggest that, in the
16 case of positive changes, the more *variable and sur-*
17 *prising* one's positive events (see Fig. 11.1), the more
18 likely they'll produce frequent positive emotions
19 (see moderator *1a*) and the less likely they'll raise
20 one's aspiration level (see moderator *1b*; *R = reverse*).
21 Analogously, in the case of *negative* changes (see
22 Fig. 11.2), the more *variable and surprising* one's
23 negative events, the more likely they'll produce fre-
24 quent negative emotions (again see moderator *1a*)
25 and the less likely they'll lower one's aspiration level
26 (again see moderator *1b*; *R = reverse*). In addition,
27 the more *variable and surprising* one's positive or
28 negative emotions, the more likely they will main-
29 tain well-being gains or drops (see moderator *1c* in
30 both figures). These predictions, as discussed above,
31 are supported by research on the consequences of
32 variety (e.g., Boehm et al., 2008; Leventhal et al.,
33 2007) and surprise (e.g., Wilson & Gilbert, 2008).
34 It should be noted that although variety and sur-
35 prise can be distinguished theoretically (e.g., experi-
36 ences can be varied but not surprising), they often
37 co-occur.

38 To consider an example in the positive domain,
39 after purchasing a work of art, the events that the
40 owner experiences regarding that object (e.g., friends
41 admiring it, relishing it in his home, having ideas
42 for where to place it) may eventually become fairly
43 expected and similar to one another over time. As a
44 result, he will become used to the positive events,
45 deriving fewer and fewer positive emotions from
46 them; at the same time, his aspirations will increase,
47 such that he will desire an even greater number of
48 such positive events. This is a perilous combination
49 for sustained happiness. A parallel process will occur
50 in response to negative changes, such as financial
51 setbacks. The individual's emotional reactions will
52 become more predictable over time, leading her to

53 become accustomed to the negative events (e.g., bill
54 payments missed, inability to buy her child a toy),
55 which would thereby trigger fewer and less intense
56 negative emotions over time, while simultaneously
57 lowering her desires regarding the positivity of her
58 life. In contrast to the positive domain, this may be
59 a desirable outcome, if one's objective is to revert to
60 earlier levels of well-being.

61 As a second moderator, the HAPNE model spec-
62 ifies that continued *attention* to the life change—
63 purchase of new house versus foreclosure, new
64 weight loss versus weight gain—can forestall rising
65 aspirations in the case of positive events or forestall
66 declining aspirations in the case of negative ones
67 (and thus thwart adaptation in both cases) (e.g.,
68 Kahneman & Thaler, 2006; Lyubomirsky et al.,
69 2008). As discussed earlier, by recognizing that the
70 change producing a person's inflow of positive or
71 negative experiences may never have come to pass
72 and that its future is uncertain, the person keeps
73 the change "fresh" in her mind. As long as those
74 experiences remain feeling "new," aspirations will be
75 maintained; the moment they get "old," one starts
76 getting used to them and/or taking them for granted
77 and aspirations rise. As discussed earlier, attention
78 to positive changes is also likely to trigger gratitude
79 or appreciation, and attention to negative changes is
80 likely to trigger negatively biased ruminations.
81 To extend my earlier examples, appreciation of how
82 his life experiences have improved after the art pur-
83 chase (cf. Wilson, & Ross, 2001)—e.g., that this
84 improvement is neither inevitable nor permanent—
85 will prevent a person from taking for granted the
86 positive events associated with the art and from
87 desiring even more. Similarly, maintaining aware-
88 ness of how her life has worsened after an income
89 plunge will prevent a person from becoming inured
90 to the negative events following that event (see
91 moderator 2).

92 The remainder of the HAPNE model (see ovals
93 A, B, C, and D in both figures) suggests ways that
94 individuals can consciously and deliberately *inter-*
95 *vene* in (i.e., slow down or avert vs. speed up or acti-
96 vate) adaptation to life changes. Because people
97 essentially hold opposite goals depending on
98 whether they are confronting good or bad experi-
99 ences, the first way to intervene in the adaptation
100 process is to actively try to generate—or be open
101 to—unexpected and variable experiences following
102 a positive life change and to actively try to reduce
103 unexpected and variable experiences following a
104 negative life change (see *A*). For example, one might
105 deliberately plan to do different things in one's new

1 house or with one's new iPhone or with one's new
 2 spouse, or to try new opportunities and activities
 3 after losing weight or beginning a new hobby.
 4 Supportive evidence for such positive strategies
 5 comes from research showing that couples who
 6 engage together in novel and arousing activities
 7 (Aron, Norman, Aron, McKenna, & Heyman, 2000;
 8 Reissman, Aron, & Bergen, 1993) show greater
 9 improvements in the quality of their relationships.

10 By contrast, after gaining weight or losing the
 11 ability to engage in a favorite hobby, the goal is to
 12 curtail the variety of activities and experiences asso-
 13 ciated with the unfortunate turn of events—for
 14 example, by avoiding situations that evoke painful
 15 feelings, such as visiting hobby Web sites, trying on
 16 clothes that no longer fit, or spending time with
 17 people who evoke unfavorable comparisons. When
 18 such experiences are repeated over and over, how-
 19 ever, the individual's negative emotional response
 20 to them is likely to weaken over time, which helps
 21 promote adaptation.

22 Second, one can intentionally try to maintain
 23 attention and awareness of one's positive change
 24 (e.g., new job, car, hobby, facelift) and the daily
 25 positive events it yields (e.g., learning a new skill
 26 at work) (see *B* in Fig. 11.1). Positive attention *per*
 27 *se* is associated with increased well-being and
 28 reduced adaptation (Schwarz et al., in press; Sheldon
 29 & Lyubomirsky, 2007). Also, as described earlier,
 30 studies that have induced people to appreciate and
 31 express gratitude for the things and people in their
 32 lives have revealed significant benefits for well-being
 33 (Emmons & McCullough, 2003; Lyubomirsky,
 34 Dickerhoof, Boehm, & Sheldon, 2008; Lyubomirsky,
 35 Sheldon, et al., 2005; Seligman et al., 2005). The
 36 act of attention is aimed at maintaining one's aware-
 37 ness that (1) one has good things in one's life that
 38 were not always there and (2) those good things
 39 may not continue. Indeed, Koo, Algoe, Wilson, and
 40 Gilbert (2008) found that mentally subtracting
 41 positive events led to bigger improvements in mood
 42 than simply reviewing them. Of course, if one's
 43 attempts at attention lead one to consider *negative*
 44 implications (e.g., "What if it's taken away?" "Are
 45 my friends jealous?") or to explain or understand
 46 the change (Wilson & Gilbert, 2008), this would
 47 likely be problematic.

48 A parallel recommendation applies to ways to
 49 intervene with respect to attention to *negative*
 50 changes. After one is forced to trade in a luxurious
 51 car for a junker, one can deliberately try *not* to rumi-
 52 nate about the downgrade (see *B* in Fig. 11.2) and
 53 *not* to mentally subtract them (Koo et al., 2008).

Research suggests that this goal can be accomplished 54
 through distractions—namely, cognitions and 55
 behaviors that help divert one's attention away from 56
 the negative life change and turn it to pleasant or 57
 benign thoughts and activities that are absorbing 58
 and engaging (Nolen-Hoeksema, 1991, 2004; 59
 Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008; 60
 cf. Csikszentmihalyi, 1990). This can essentially be 61
 achieved via any activity that turns attention away 62
 from the negative change, and from its associated 63
 negative emotions and negative events—for exam- 64
 ple, concentrating on a project at work, going for a 65
 hike or bike ride, or seeing a film with friends. 66

67 The third way to intervene in the adaptation pro-
 68 cess is to directly increase the number of positive
 69 emotions that one experiences in response to a
 70 positive life change and to decrease the number of
 71 negative emotions that one experiences in response
 72 to an adverse one (see *C* in both figures). A multi-
 73 tude of strategies can be used to accomplish this,
 74 with recommendations found in literatures on
 75 positive mood inductions (e.g., Coan & Allen,
 76 2007; Gerrards-Hesse, Spies, & Hesse, 1994), posi-
 77 tive activity interventions (e.g., Fredrickson, 2009;
 78 Lyubomirsky, 2008; Seligman et al., 2005), and
 79 cognitive-behavioral therapy (e.g., Hollon, Haman,
 & Brown, 2002). 80

81 Finally, an individual can take steps to reduce his
 82 or her aspirations regarding a positive change and to
 83 keep them low after a negative change (see *D* in
 84 both figures). In Aristotle's words, "Bring your
 85 desires down to your present means. Increase them
 86 only when your increased means permit." This may
 87 be the most challenging way to thwart adaptation,
 88 necessitating the full arsenal of psychological tools
 89 at the individual's disposal, including most of the
 90 recommendations described above. For example, a
 91 person who has just obtained a hefty raise might
 92 remind himself of what life was like before
 93 (Lieberman, Boehm, Lyubomirsky, & Ross, in press)
 94 and limit his spending habits to match earlier pat-
 95 terns; and a person who has recently been fur-
 96 loughed might resign herself to the loss of income
 97 and instead focus on productive ways to use her
 98 new-found extra time. Because my goal is to describe
 99 the process by which well-being boosts and drops
 100 can be sustained, the question of whether reduced
 101 aspirations are adaptive in the long term with respect
 102 to future performance and goal success will be set
 103 aside as falling outside the scope of this chapter.
 104 However, following the logic of Heath, Larrick, and
 105 Wu (1999), I speculate that people may seek to
 106 regulate their aspirations dynamically and optimally

1 to fit their idiosyncratic goals and situations—for
 2 example, by raising aspirations immediately before
 3 attempting to realize a goal (i.e., feeling confident
 4 that one will win a tournament) but downgrading
 5 them *after* the tournament is over (thereby feeling
 6 satisfied with whatever one’s performance).

7 **Intervening in the Adaptation Process:** 8 **Empirical Evidence Regarding Positive** 9 **Activities**

10 A primary assumption of this chapter is that people
 11 can control the extent and speed of their hedonic
 12 adaptation and thus, by developing and practicing
 13 the relevant skills, they can both surmount one
 14 of the biggest challenges to increasing happiness (in
 15 the positive domain) and foster coping and resil-
 16 ience (in the negative domain). How precisely one
 17 can go about doing so comes in part from the small
 18 but growing work on “happiness interventions,”
 19 which is showing that effortful strategies and prac-
 20 tices can instill new ways of thinking and behaving
 21 and thereby preserve well-being in the context of
 22 stress and trauma, and produce potentially lasting
 23 increases in well-being in their absence. Although
 24 dozens, even hundreds, of such strategies arguably
 25 exist (see Lyubomirsky, 2008, for a review), only a
 26 few will be described here for purposes of illustra-
 27 tion. It is worth noting that what all the strategies
 28 have in common is that, first, they direct the indi-
 29 vidual’s attention to positive aspects and away from
 30 negative aspects of experiences; second, they keep
 31 positive experiences “fresh” (i.e., dynamic, varied,
 32 novel, or surprising); and, third, they produce (or
 33 preserve) a stream of positive emotions, positive
 34 thoughts, and positive events, thereby serving as a
 35 foil to negative states (Fredrickson & Levenson,
 36 1998; Fredrickson, Mancuso, Branigan, & Tugade,
 37 2000). Feelings of joy, satisfaction, interest, serenity,
 38 or pride can help people view their lives with a larger
 39 perspective and provide a “psychological time-out”
 40 in the midst of stress or hardship, thus lessening the
 41 sting of any particular unpleasant experience. Thus,
 42 even brief or minor positive emotions, positive
 43 thoughts, and positive events marshaled in the face
 44 of adversity can build resilience by helping people
 45 bounce back from stressful experiences (Fredrickson,
 46 2001; Keltner & Bonnano, 1997; Ong, Bergeman,
 47 Bisconti, & Wallace, 2006).

48 ***Gratitude, savoring, and positive thinking***

49 **POSITIVE DOMAIN**

50 I begin with a discussion of the cultivation of grati-
 51 tude, because it is a strategy that essentially involves

appreciative attention—namely, a particular *kind* 52
 of attention, albeit a positive kind. Appreciative 53
 attention—in the form of gratefulness, as well as 54
 “savoring” (Bryant & Veroff, 2006), in which one 55
 consciously attends to an activity’s enjoyment 56
 potential—is believed to impede adaptation to posi- 57
 tive circumstances and events both directly *and* 58
 indirectly. Expressing gratitude involves noticing 59
 and reappreciating the good things in one’s life, 60
 both concrete and abstract – a comfortable house, a 61
 kind friend, strong arms, a thrilling European vaca- 62
 tion, the exquisiteness of a Caravaggio painting – 63
 and re-evaluating them as gifts or “blessings.” The 64
 concomitants and consequences of grateful think- 65
 ing appear to include bolstered resources for coping 66
 with adversity, enhanced self-worth, reduced mate- 67
 rialism, fortified social bonds, and the countervail- 68
 ing of negative feelings like envy, bitterness, avarice, 69
 and irritation (Emmons, 2007). 70

The practice of gratitude may *directly* forestall 71
 adaptation by prompting people to extract the max- 72
 imum possible enjoyment and satisfaction from 73
 their life circumstances, thereby helping them to 74
 relish these things and keep them from being taken 75
 for granted. Indeed, to appreciate a positive life 76
 change is to recognize that it may never have occurred 77
 (cf. Koo et al., 2008) and that it can be taken away. 78
 The genuine expression of gratitude may achieve this 79
 in large part because it helps combat two important 80
 mechanisms underlying hedonic adaptation— 81
 namely, escalating expectations and social compar- 82
 isons (Layard, 2005). The joy of moving to a tonier 83
 address subsides after the person becomes “spoiled” 84
 by the view, garden, pool, and famous neighbors, 85
 desiring an even better location, and after she begins 86
 to notice that everyone else on the block drives an 87
 even more expensive car and throws fancier parties. 88
 Pausing to appreciate the positives in one’s life—to 89
 focus on what one has today, as opposed to what 90
 other people have or what one could potentially 91
 have—is a step toward inhibiting or reducing the 92
 impact of the rising aspirations and upward compar- 93
 isons that result from positive circumstantial 94
 changes (cf. Tversky, & Griffin, 1991). Other ways 95
 to accomplish this are by savoring the here-and-now 96
 and by maintaining a positive and optimistic per- 97
 spective. When a person relishes his garden, men- 98
 tally transports himself to his happiest day, luxuriates 99
 in the sound of his new speakers, or truly lives in 100
 the present moment, he is not taking his daily 101
 life for granted. When an individual perceives the 102
 silver lining in her situation (“I don’t have the big- 103
 gest house in the neighborhood, but it’s just right 104

1 for me”), she is not becoming jaded to the house’s
2 pleasures.

3 A number of experiments from my laboratory, as
4 well as those of others, have demonstrated that the
5 regular practices of gratitude, optimism, and savor-
6 ing, performed over the course of anywhere from
7 1 to 12 consecutive weeks, bring about significant
8 increases in well-being. For example, the inten-
9 tional and effortful expression of gratitude, whether
10 through “counting one’s blessings” once a week
11 (Emmons & McCullough, 2003; Lyubomirsky,
12 Sheldon, et al., 2005) or penning gratitude letters to
13 individuals who have been kind and meaningful
14 (Lyubomirsky et al., 2008; Seligman, Steen, Park,
15 & Peterson, 2005), has been shown to produce
16 increases in happiness for as long as 9 months rela-
17 tive to control groups. Furthermore, experiments
18 that have prompted individuals to express optimis-
19 tic thinking by visualizing the realization of their
20 very best hopes and dreams have demonstrated sub-
21 sequent increases in physical health (King, 2001),
22 happiness (Lyubomirsky et al., 2008), and positive
23 affect (Sheldon & Lyubomirsky, 2006b). Although
24 a much less studied topic, effortful attempts at
25 savoring the present and the past have also been
26 shown to boost feelings of well-being (Bryant,
27 Smart, & King, 2005; Seligman, Rashid, & Parks,
28 2006). These studies do not provide direct evidence
29 for the efficacy of gratitude, optimism, savoring, or
30 any happiness-enhancing strategy for that matter in
31 foiling adaptation to positive aspects of a person’s
32 life. Nevertheless, to date, they offer the only avail-
33 able data consistent with the notion that such activ-
34 ities may defy positive adaptation.

35 NEGATIVE DOMAIN

36 As discussed above, growing research supports the
37 power of positive thinking, especially in the form of
38 gratitude and savoring, to direct attention to posi-
39 tive life changes and prevent the individual from
40 taking them for granted. However, the empirical
41 evidence also underscores that the very same strate-
42 gies can help people cope with stress and trauma
43 and deter negative emotions. In other words, the
44 capacity to appreciate one’s life circumstances may be
45 an adaptive coping method by which the individual
46 is able to positively reinterpret stressful or aversive
47 life experiences (Fredrickson, Tugade, Waugh, &
48 Larkin, 2003). For example, traumatic memories
49 are less likely to come to the surface, and are less
50 intense when they do, in individuals who are regu-
51 larly grateful (Watkins, Grimm, & Kolts, 2004).
52 Interestingly, many people instinctively express

gratitude when confronted with adversity. For
example, Fredrickson and colleagues (2003) found
that in the days immediately after the 9/11 terrorist
attacks on the United States, gratitude was found to
be the second most commonly experienced emo-
tion (after sympathy).

In sum, practicing gratefulness, savoring, and
optimism during adversity can help people adjust,
move on, and perhaps begin anew. For example,
positive thinking appears to be incompatible with
negative emotions and may actually diminish or
inhibit such feelings as anger, bitterness, and greed
(McCullough, Emmons, & Tsang, 2002). Further-
more, those individuals who tend to savor and remi-
niscise about the past—for example, summing up
happy times, rekindling joy from happy memo-
ries—are best able to buffer stress (Bryant, 2003).
Finally, research on optimism suggests that optimis-
tic thinking prompts people to engage in active and
effective coping (Nes & Segerstrom, 2006; Scheier,
Weintraub, & Carver, 1986). Indeed, optimists
routinely maintain relatively high levels of well-being
and mental health during times of stress: Optimistic
women are less likely to become depressed subse-
quent to childbirth than women who are less
optimistic, and optimistic college freshmen are less
likely to experience distress 3 months after enrolling
in college (see Scheier & Carver, 1993).

53 *Stop making sense*

54 POSITIVE DOMAIN

55 Wilson and Gilbert (2005, 2008) have proposed
56 that attempts to understand and make sense of
57 positive experiences facilitate hedonic adaptation
58 by transforming such experiences from something
59 novel, attention-grabbing, emotion-eliciting, and
60 extraordinary to something pallid, predictable, and
61 ordinary. The implication of their model is that
62 people should not try to think too much about and
63 make sense of their successes, windfalls, and love
64 affairs. In other words, one should savor but not
65 explain. For example, in three studies, the partici-
66 pants’ pleasure was prolonged when they remained
67 uncertain about the source of an unexpected act
68 of kindness (Wilson et al., 2005). Another implica-
69 tion of their model is that one strategy to inhibit
70 adaptation to a positive experience is to keep
71 reminding oneself *not* to think about the experi-
72 ence, as this practice would likely produce the ironic
73 (but desired) consequence of the positive event pop-
74 ping back into consciousness and doing so often
75 (Wegner, 1994). Future studies to test these ideas
76 will be instructive.

1 **NEGATIVE DOMAIN**

2 Interestingly, the opposite recommendation applies
 3 to the domain of negative events, as research sug-
 4 gests that it is actually valuable to systematically
 5 analyze and come to terms with stresses, traumas,
 6 and hurt feelings—for example, by writing “expres-
 7 sively” about them (e.g., Lyubomirsky, Sousa,
 8 & Dickerhoof, 2006; Pennebaker, 1997). As
 9 Pennebaker and his colleagues have persuasively
 10 shown, writing is inherently a structured process
 11 that forces a person to organize and integrate her
 12 thoughts, to reflect on what causes what, to create a
 13 coherent narrative about herself, and to consider
 14 systematic, step-by-step solutions (e.g., Pennebaker,
 15 Mayne, & Francis, 1997; Pennebaker & Seagal,
 16 1999). Thus, writing is an effective strategy when
 17 one needs to cope with negative experiences because
 18 it appears to reduce how often and how intensely a
 19 person experiences intrusive thoughts about them,
 20 by helping her make sense of them, find meaning in
 21 them, and get past them. (In contrast, one does not
 22 aim to “get past” positive experiences.)

23 A large and still growing literature in this area
 24 reveals that such “expressive writing” about past
 25 negative or traumatic events has many beneficial
 26 consequences. For example, compared with control
 27 groups, people who spend 3 days exploring their
 28 deepest thoughts and feelings in a journal about
 29 ordeals or traumas make fewer visits to a doctor in
 30 the months following the writing sessions, show
 31 stronger immune function, report less depression
 32 and distress, obtain higher grades, and are more
 33 likely to find new jobs after unemployment (see
 34 Frattaroli, 2006; Pennebaker, 1997, for reviews).

35 *Investing in relationships,*
 36 *practicing kindness*

37 **POSITIVE DOMAIN**

38 Efforts to be a helpful and charitable person may
 39 deliver a cascade of personal and social consequences
 40—for example, insights into oneself, appreciation of
 41 one’s own good fortune, new or strengthened rela-
 42 tionships, a distraction from troubles, and more com-
 43 passionate views of one’s community (Lyubomirsky,
 44 2008). Each of these consequences has the potential
 45 to bring about sustained positive experiences, thereby
 46 impeding hedonic adaptation to day-to-day exist-
 47 tence. After all, when any event or circumstance or
 48 person stops generating positive or meaningful expe-
 49 riences, then one can be said to have adapted to it.

50 Two studies have shown that simply asking
 51 people to practice acts of kindness for several weeks
 52 produces increases in well-being, as long as those

53 acts are committed with optimal timing (e.g., not
 54 too infrequently; Lyubomirsky, Sheldon, et al.,
 55 2005) and optimal variety (e.g., consistently bestow-
 56 ing different kindnesses rather than the same ones
 57 from week to week; Boehm et al., 2008). These
 58 findings are not surprising, given that philanthropy
 59 has been shown to stimulate two areas of the brain
 60 associated with pleasure, euphoria, trust, and coop-
 61 eration (Moll et al., 2006).

62 Notably, the activity of trying to commit acts
 63 of kindness is closely related to that of nurturing
 64 interpersonal relationships, as both build social
 65 bonds and bolster self-efficacy and self-esteem. Most
 66 would agree that one does not adapt as swiftly (if at
 67 all) to other people as to objects or possessions.
 68 Apparently, money can’t buy love, and most of what
 69 it can buy is prone to hedonic adaptation. Cultivating
 70 interpersonal relationships appears to be a reliable
 71 way to inhibit adaptation by working to create a
 72 stream of positive and varied experiences. Easterlin
 73 (2005) has shown, for example, that relative to
 74 aspirations for material goods, people’s desires for
 75 happy marriages and children do not decline as they
 76 successfully attain them. Undoubtedly there is
 77 something special and unique about relationships,
 78 and actively strengthening, nourishing, and enjoy-
 79 ing them may ward off adaptation. To take marriage
 80 as an example, whereas the average person may
 81 derive just a 2-year boost in happiness after getting
 82 married (Lucas et al., 2003), the person who *acts*
 83 within the marriage to improve and cherish it may
 84 cause that boost to last significantly longer. The
 85 effect of marriage doesn’t “wear off” for him or her.
 86 My speculation is that those respondents in the
 87 German marriage study who showed essentially no
 88 hedonic adaptation 5 years into their marriages were
 89 the ones who were intentionally and effortfully
 90 working towards keeping their relationships fresh,
 91 vibrant, meaningful, and loving.³

92 Many theorists, armchair psychologists, and
 93 authors of marriage manuals have considered the
 94 ways that intimate relationships and friendships can
 95 be buttressed and strengthened. These techniques
 96 include making time to just be together and talk,
 97 communicating (i.e., truly listening and conveying
 98 admiration, appreciation, and affection), managing
 99 conflict, being supportive and loyal, and sharing
 100 an inner life, such as dreams, rituals, and responsi-
 101 bilities (Gottman & Silver, 1999; McGinnis, 1979;
 102 cf. Lyubomirsky, 2008). As just one illustration,
 103 research suggests that flourishing relationships are
 104 distinguished not by how the partners respond to
 105 each other’s disappointments, losses, and reversals

1 but how they react to *good* news. The closest, most
 2 intimate, and most trusting relationships have
 3 been found to be those in which the couple responds
 4 “actively and constructively”—that is, with interest
 5 and delight—to each other’s windfalls and successes
 6 (Gable, Reis, Asher, & Impett, 2004). Appreciating,
 7 validating, and “capitalizing” on a partner’s good
 8 news thus appears to be an effective strategy to
 9 bolster the relationship and thereby to intensify the
 10 pleasure and satisfaction one obtains from it—
 11 in short, to preclude hedonic adaptation. One study
 12 showed that people who strove to show genuine
 13 enthusiasm, support, and understanding of their
 14 partner’s good news, however small—and did so
 15 three times a day over a week—became happier and
 16 less depressed (Schueller, 2006).

17 **NEGATIVE DOMAIN**

18 Practicing kindness and thoughtfulness towards
 19 others can also counteract the negative thoughts
 20 and negative emotions sustained in the wake of
 21 adverse life changes. As suggested above, doing
 22 kindness leads people to view others from a more
 23 positive and more charitable perspective and engen-
 24 ders a heightened sense of interdependence and
 25 cooperation in their neighborhoods and communi-
 26 ties. Being generous and thoughtful often relieves
 27 guilt or discomfort over others’ ordeals and troubles
 28 and triggers appreciation for one’s own good for-
 29 tune. In other words, assisting others makes people
 30 feel advantaged (and grateful) by comparison (e.g.,
 31 “I’m thankful that my life is comfortable”). Indeed,
 32 providing help or consolation to other people can
 33 deliver a welcome distraction from one’s own miser-
 34 ies and ruminations, as it shifts the focus from one-
 35 self onto somebody else. Surveys of volunteers, for
 36 example, show that volunteering is associated with
 37 an alleviation of depressive symptoms and increases
 38 in feelings of happiness, self-regard, mastery, and
 39 control (Piliavin, 2003).

40 Finally, and perhaps most important, commit-
 41 ting acts of kindness can satisfy a basic human need
 42 for human connection and thereby galvanize a cas-
 43 cade of positive social consequences. An individual
 44 who delivers help and comfort to other people will
 45 experience shows of liking, smiles, appreciation,
 46 gratitude, and valued friendship in return. Evidence
 47 for this dynamic was obtained in one of my labora-
 48 tory’s “kindness interventions” (Boehm et al., 2008).
 49 Participants were assessed not only on how helpful
 50 they were and how much their happiness increased
 51 over 10 weeks but also on the extent to which they
 52 perceived gratitude in those they helped. The results

showed that this “perceived gratitude” significantly
 mediated the relationship between helping and
 increased well-being. In other words, a chief reason
 that being kind to others made the participants
 happier is that it led them to recognize how much
 the recipients appreciated their kind acts. It is not
 surprising, then, that their generosity today may
 lead the recipients to reciprocate in the givers’ time
 of need tomorrow (Trivers, 1971).

53 *Pursuing important and intrinsic*
 54 *personal goals*

55 **POSITIVE DOMAIN**

56 All the adaptation-forestalling activities described
 57 above could be, in some sense, lumped under the
 58 umbrella of working toward significant life goals—
 59 that is, one could conceivably have as one’s goal to
 60 “be a more helpful person” or to “keep experiences
 61 fresh.” In contrast, I wish to distinguish this particu-
 62 lar category by focusing on the typical and familiar
 63 life goals that the majority of people seem to share
 64 (Kaiser & Ozer, 1997). Indeed, committed goal
 65 pursuit is a vital strategy in and of itself, because it
 66 involves the infinite variety of projects, schemes,
 67 plans, tasks, endeavors, ventures, missions, and
 68 ambitions, both large and small, that people can
 69 undertake in their daily lives. Although the *achieve-*
 70 *ment* of goals can potentially lead to adaptation,
 71 escalating expectations, and even letdown, if people
 72 “enjoy the struggle along the way” (Csikszentmihalyi,
 73 1990, p. 10), they will derive pleasure and satisfac-
 74 tion by simply pursuing or working on the goal.
 75 They will ideally stretch their skills, discover novel
 76 opportunities, grow, strive, learn, and become more
 77 competent and expert. They will attain a sense of
 78 purpose in their lives, feelings of efficacy over their
 79 progress, and mastery over their time, and, perhaps
 80 most important, they will likely frequently engage
 81 with others. Although a person can become adapted
 82 to the knowledge that she has attained a particular
 83 goal or subgoal, she may avoid adaptation in several
 84 ways—by savoring the accomplished goal, by con-
 85 tinually moving on from accomplished goals to new
 86 ones, and, instead of focusing too much on the
 87 finish line in the first place, by focusing on carrying
 88 out the multiple steps necessary to make progress.

89 Numerous studies have shown that people who
 90 strive to realize important goals are happier, espe-
 91 cially when such goals are intrinsic (e.g., Kasser &
 92 Ryan, 1996), realistic (e.g., McGregor & Little,
 93 1998), culturally valued (e.g., Cantor & Sanderson,
 94 1999), self-determined (e.g., Sheldon & Elliot, 1999),
 95 and harmonious (e.g., Emmons & King, 1988). 104

1 For example, students who pursue and attain self-
 2 generated personal goals over the course of a semester
 3 are happier at the end of the semester, in part
 4 because they accumulate positive daily experiences
 5 along the way (see Sheldon, 2002, for a review).
 6 Notably, the pursuit of goals also helps individuals
 7 satisfy their basic human needs for autonomy, com-
 8 petence, and relatedness (Deci & Ryan, 2000) and
 9 thereby increase their well-being (e.g., Reis, Sheldon,
 10 Ryan, Gable, & Roscoe, 2000; Sheldon & Elliot,
 11 1999; Sheldon, Elliot, Kim, & Kasser, 2001).

12 **NEGATIVE DOMAIN**

13 How does goal pursuit help people manage stress
 14 and negative emotions in the wake of negative life
 15 changes? For many of the same reasons that it fos-
 16 ters well-being during the good times. First, com-
 17 mitted goal pursuit offers people a sense of purpose
 18 and a feeling of control over their lives (Cantor,
 19 1990)—both invaluable resources during efforts to
 20 cope. Whether the valued activity is becoming an
 21 inventor or raising a child, it gives the individual
 22 something to work for and to look forward to.
 23 Second, possessing meaningful goals bolsters peo-
 24 ple’s self-efficacy and self-worth. Indeed, the accom-
 25 plishment of every step (on the way to the bigger
 26 goal) is yet another opportunity for an emotional
 27 and ego boost. Third, goal pursuit imparts structure
 28 and meaning to people’s daily lives, creating obliga-
 29 tions, deadlines, and timetables, as well as opportu-
 30 nities for mastering new skills and for interacting
 31 with others. Finally, although it may be challenging
 32 to continue striving toward significant life goals
 33 during times of stress or crisis, research suggests that
 34 commitment to goals during such times may help
 35 people cope more effectively with problems. Of
 36 course, sometimes traumatic or negative situations
 37 may require giving up goals that are no longer ten-
 38 able. A grave injury or severe financial crisis may
 39 lead people to reconsider whether they should sur-
 40 render their dream of becoming a dancer or obtain-
 41 ing a law degree. Sustained well-being requires that
 42 people bring themselves to substitute new goals for
 43 old ones.

44 **Future Directions**

45 I have argued that one can become happier by
 46 thwarting hedonic adaptation to positive life
 47 changes, but cannot one also become happier *in spite*
 48 *of* such adaptation? To be sure, a person could conceivably
 49 be fortunate or exceptional enough to have
 50 one wonderful circumstance thrust upon him after
 51 another; a person could somehow—psychologically

or biologically—be “predisposed” not to adapt to
 52 positive experience or to adapt relatively swiftly to
 53 negative experiences; and a person could conceivably
 54 develop the capacity to require less and less
 55 positive emotion to experience the same levels of sat-
 56 isfaction as before (Kahneman, 1999). These exam-
 57 ples illuminate how difficult it is to posit ways that
 58 sustained increases in happiness can be achieved
 59 without the need to actively combat adaptation (in
 60 the positive domain) or to actively speed up adapta-
 61 tion (in the negative domain). Future studies that
 62 follow people’s experiences and reactions over long
 63 periods of time may be able to identify some of
 64 these ways, as well as to describe potential individual
 65 differences—and their sources—in adaptation rates. 66

This chapter has focused primarily on activities
 67 and strategies that are desirable and adaptive when
 68 the person’s aim is to intervene in hedonic adapta-
 69 tion to positive and negative events. The choice to
 70 focus here on intentional behaviors (rather than
 71 life events) was not arbitrary, as people have a fair
 72 amount of control over their behavior, and thus, are
 73 potentially able to heed specific happiness-enhanc-
 74 ing recommendations arising from the literature on
 75 hedonic adaptation. However, people can also control
 76 to some degree the life changes that take place
 77 (cf. Diener, Suh, Lucas, & Smith, 1999; Headey &
 78 Wearing, 1989; Scarr & McCartney, 1983). Thus,
 79 an area ripe for future research concerns the ques-
 80 tion of what kinds of life changes generate more
 81 positive events and emotions than others, thus buff-
 82 ering negative states and cumulating to enhanced
 83 global well-being. A potential target of investigation
 84 are positive events based on *intrinsic* (rather than
 85 *extrinsic*) life changes. Kasser and colleagues (Kasser
 86 & Ryan, 1993; Kasser, 2002; Sheldon & Kasser,
 87 2008) have shown that intrinsic values and goals
 88 (community, growth, intimacy) produce greater
 89 well-being than do extrinsic ones (popularity,
 90 wealth, physical attractiveness), because the former
 91 better satisfy innate psychological needs (Deci &
 92 Ryan, 2000; Niemiec, Ryan, & Deci, in press). 93

Directly pertaining to the HAPNE model, future
 94 studies could test whether the *type* of life change
 95 that occurs (intrinsic vs. extrinsic) moderates the
 96 effects of downstream positive events on both expe-
 97 rienced emotions and rising aspiration levels. 98
 Concerning positive emotions, research suggests that
 99 positive extrinsic events deriving from a particular
 100 life change (e.g., getting a compliment on one’s new
 101 car) do not deliver as much happiness as positive
 102 intrinsic events (e.g., serving as a Big Brother; Dunn,
 103 Aknin, & Norton, 2008; Kasser, 2002). Thus, positive 104

1 events based on intrinsic life changes should pro-
 2 duce more actual positive emotions, and be better
 3 able to neutralize negative emotions, compared to
 4 positive events based on extrinsic changes. Con-
 5 cerning aspirations, extrinsic experiences do not
 6 satisfy basic needs and instead are likely to lead to
 7 ever-increasing desires for psychologically unfulfill-
 8 ing objects (Myers, 2000), much like an addiction
 9 (Koob & Le Moal, 2001). In contrast, building
 10 close interactions or seeking novel self-discoveries
 11 activates feelings of satisfaction and contentment,
 12 which are more likely to be appreciated and less
 13 likely to be taken for granted.

14 Another question raised by the work described
 15 in this chapter concerns the role of possible indi-
 16 vidual differences or cultural factors. For example,
 17 do individualists benefit more from experiencing
 18 such emotions as enthusiasm and pride (as opposed
 19 to serenity and contentment) than collectivists?
 20 And, do those with more stable lives or who are
 21 higher in sensation-seeking benefit more from vari-
 22 ety and surprise? One possibility is that although a
 23 person with a chaotic life might in some ways prefer
 24 predictability and familiarity (and, indeed, some
 25 amount of familiarity mixed in with novelty may be
 26 optimal in general [Bell, 1913; Berlyne, 1971]),
 27 when she does experience a positive change, that
 28 change should have longer-lasting effects when it
 29 conforms to the tenets of the HAPNE model.
 30 Conversely, if a stressed person is being dragged
 31 down by too many negative events, the model
 32 should reveal how he might more quickly adapt to
 33 those events, such that he is more receptive to posi-
 34 tive life changes that he might subsequently experi-
 35 ence or even seek out.

36 As this chapter makes clear, relatively little is
 37 still known about adaptation in the positive domain.
 38 Future prospective, longitudinal, and experi-
 39 mental studies, with appropriate control groups,
 40 would further inform researchers about the
 41 mechanisms—cognitive, behavioral, motivational,
 42 and physiological—by which positive adaptation
 43 operates. For example, people's emotional responses
 44 in advance of, during, and following a naturally
 45 occurring positive event (e.g., upgrading to a bigger
 46 home, getting engaged, winning an Oscar) or an
 47 induced positive event (e.g., learning that they are
 48 destined to succeed professionally or that they have
 49 won \$100 or that they were selected for a date by an
 50 attractive peer) could be followed across time and
 51 compared to responses of those who did not experi-
 52 ence the same event. Furthermore, experimental
 53 intervention studies that prompt people to directly

resist or slow down adaptation to positive experi- 54
 ences (whether induced or naturalistic) could seek 55
 to establish the efficacy of this process, as well the 56
 moderators and mediators that underlie it. Ideally, a 57
 variety of measures should be used in such investi- 58
 gations, including global scales of happiness and 59
 satisfaction, "objective" assessments of daily and 60
 momentary affect (e.g., Csikszentmihalyi & Larson, 61
 1987; Kahneman, Krueger, Schkade, Schwarz, & 62
 Stone, 2004), and behavioral indicators (e.g., mental 63
 and physical health care utilization, peer reports, 64
 and Duchenne smiles; Harker & Keltner, 2001; 65
 Sandvik, Diener, & Seidlitz, 1993), as well as physi- 66
 ological and neural ones (e.g., asymmetric frontal 67
 function; Urry et al., 2004). 68

Conclusion 69

The sports car manufacturer Porsche has a print ad 70
 showing a Boxster speeding down a rural highway. 71
 The caption says, "Every time you drive it, it puts a 72
 smile on your face. How much is that worth?" Not 73
 much, according to a great deal of research, because 74
 the bursts of pleasure one may reap from powering 75
 up the car are destined to last even less long than 76
 from a non-material circumstantial change, like 77
 moving cross-country or beginning a new job. One 78
 might be tempted to conclude that sustained happi- 79
 ness cannot be bought with Porsches or any other 80
 material possessions. I actually believe that that 81
 conclusion is wrong. Hedonic adaptation *can* be 82
 resisted, even to material objects, but only with con- 83
 scious, active efforts. If the Porsche owner strives to 84
 overcome his auto-ennui by appreciating his enor- 85
 mously good fortune, if he uses his sports car as a 86
 vehicle for pleasurable renewable experiences and 87
 for strengthening relationships (e.g., road tripping 88
 with friends, loaning to a family member), if he 89
 puts effort into savoring the stereo system and the 90
 speed (e.g., reveling in the wind in his face, luxuriat- 91
 ing in the music), he will continue to derive happi- 92
 ness from his purchase. 93

The good news is that the same processes that 94
 make it easy to adapt to material gains also make it 95
 easy to adapt to material losses. In due course, the 96
 individual's attention is captured less and less by the 97
 contrast between the old and new standard of living, 98
 and unpleasant experiences become more and more 99
 rare. Accordingly, when it comes to managing the 100
 slings and arrows of life's misfortunes (when one's 101
 aim is to speed up rather than inhibit adaptation), 102
 similar strategies are likely to be effective—namely, 103
 appreciating what one has rather than yearning 104
 for what one would like to have, searching for 105

1 opportunities to generate positive experiences, cul-
2 tivating a sense of connection with others, building
3 competence and expertise, and looking outside of
4 oneself to contribute to others.

5 If swift hedonic adaptation to positive experi-
6 ences and slow-going adaptation to negative ones
7 are the enemies of lasting happiness, then self-deter-
8 mined, dynamic, and attention-capturing positive
9 activities are the weapons to surmount it. Such
10 activities can serve as part of a broader strategy to
11 accelerate adaptation when things go awry, but they
12 can also serve to *act on* static circumstances (like the
13 Boxster, an ocean view, or one's good health) in
14 order to preclude adaptation to those circumstances
15 and forestall adaptation to one's job, marriage,
16 friends, and leisure, and to daily life in general.

17 Notes

18 1 It is worth noting that all but one of Lucas and colleagues'
19 influential longitudinal studies have used the same 10-point life
20 satisfaction question from the German dataset—namely, “How
21 happy are you at present with your life as a whole?” This ques-
22 tion arguably calls respondents to reference the significant events
23 and circumstances that they are currently facing in their lives
24 when gauging their levels of satisfaction (cf. Kahneman et al.,
25 2004). As a result, responses to this question may reflect rela-
26 tively enhanced (rather than attenuated) effects of such events as
27 marriage, unemployment, and disability.

28 2 The HAPNE model makes a distinction between one large
29 event (or life change)—the seminal change—and the discrete
30 daily/weekly events—the downstream episodes—that it pro-
31 duces. Although this distinction can sometimes blur, researchers
32 typically study adaptation to discrete life changes or circumstan-
33 tial changes (e.g., changes in income, job status, health status,
34 relationships, and education), and that is what the model seeks
35 to examine as well.

36 3 Alternatively, it is possible that those individuals who did
37 not show adaptation to their married life may have simply been
38 more fortunate or skilled in their selections of superior or better-
39 matched spouses. The character and ubiquitousness of hedonic
40 adaptation, however, suggest that even the most positive circum-
41 stances, instigated by the luckiest and ablest persons, can come to
42 yield less and less pleasure and satisfaction over time.

43 References

- 44 Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D.
45 (2001). Bad is stronger than good. *Review of General*
46 *Psychology*, 5, 323–70.
47 Bell, C. (1913). *Art*. London: Putnam.
48 Berlyne, D. (1970). Novelty, complexity, and hedonic value.
49 *Perception and Psychophysics*, 8, 279–86.
50 Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York:
51 Appleton-Century-Crofts.
52 Bless, H., Hamilton, D. L., & Mackie, D. M. (1992). Mood
53 effects on the organization of person information. *European*
54 *Journal of Social Psychology*, 22, 497–509.
55 Boehm, J. K., & Lyubomirsky, S. (2008). *The course of hedonic*
56 *adaptation to a stream of positive events: Exploring moderators*
57 *and mediators*. Unpublished data, Department of Psychology,
58 University of California, Riverside.

- Boehm, J. K., Lyubomirsky, S., & Sheldon, K. M. (2008). 59
Spicing up kindness: The role of variety in the effects of practicing 60
kindness on improvements in mood, happiness, and self- 61
evaluations. Manuscript in preparation. 62
Bonnano, G. A., & Keltner, D. (1997). Facial expressions of 63
emotion and the course of conjugal bereavement. *Journal of* 64
Abnormal Psychology, 106, 126–37. 65
Boswell, W. R., Boudreau, J. W., & Tichy, J. (2005). The rela- 66
tionship between employee job change and job satisfac- 67
tion: The honeymoon-hangover effect. *Journal of Applied* 68
Psychology, 90, 882–92. 69
Braungart, J. M., Plomin, R., DeFries, J. C., & Fulker, D. W. 70
(1992). Genetic influence on tester rated infant tempera- 71
ment as assessed by Bayley's Infant Behavior Record: 72
Nonadoptive and adoptive siblings and twins. *Developmental* 73
Psychology, 28, 40–7. 74
Brickman, P., & Campbell, D. T. (1971). Hedonic relativism and 75
planning the good society. In M. H. Appley (Ed.), *Adaptation-* 76
level theory (pp. 287–302). New York: Academic Press. 77
Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery 78
winners and accident victims: Is happiness relative? *Journal of* 79
Personality and Social Psychology, 36, 917–27. 80
Bryant, F. B. (2003). Savoring Beliefs Inventory (SBI): A scale for 81
measuring beliefs about savoring. *Journal of Mental Health*, 82
12, 175–96. 83
Bryant, F. B., Smart, C. M., & King, S. P. (2005). Using the past 84
to enhance the present: Boosting happiness through positive 85
reminiscence. *Journal of Happiness Studies*, 6, 227–60. 86
Bryant, F. B., & Veroff, J. (2006). *Savoring: A new model of posi-* 87
tive experience. Nahwah, NJ: Erlbaum. 88
Busseri, M. A., Sadava, S. W., & Decourville, N. (2007). A hybrid 89
model for research on subjective well-being: Examining 90
common- and component-specific sources of variance in life 91
satisfaction, positive affect, and negative affect. *Social* 92
Indicators Research, 83, 413–45. 93
Cantor, N. (1990). From thought to behavior: “Having” and 94
“doing” in the study of personality and cognition. *American* 95
Psychologist, 45, 735–50. 96
Cantor, N., & Sanderson, C. A. (1999). Life task participation 97
and well-being: The importance of taking part in daily life. In 98
D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being:* 99
The foundations of hedonic psychology (pp. 230–43). New 100
York: Russell Sage Foundation. 101
Carver, C. S. (2007). Stress, coping, and health. In H. S. 102
Friedman & R. C. Silver (Eds.), *Foundations of health psychol-* 103
ogy (pp. 117–44). New York: Oxford University Press. 104
Carver, C. S., & Scheier, M. F. (1990). Origins and functions 105
of positive and negative affect: A control-process view. 106
Psychological Review, 97, 19–35. 107
Cash, T. F., Duel, L. A., & Perkins, L. L. (2002). Women's psy- 108
chosocial outcomes of breast augmentation with silicone gel- 109
filled implants: A 2-year prospective study. *Plastic and* 110
Reconstructive Surgery, 109, 2112–21. 111
Clore, G. L. (1994). Why emotions are felt. In P. Ekman, & 112
R. Davidson (Eds.), *The nature of emotion: Fundamental ques-* 113
tions (pp. 103–11). New York: Oxford University Press. 114
Coan, J. A., & Allen, J. J. B. (Eds.) (2007). *Handbook of emotion* 115
elicitation and assessment. Oxford: Oxford University Press. 116
Coleman, L. M., Jussim, L., & Abraham, J. (1987). Students' reac- 117
tions to teacher evaluations: The unique impact of negative 118
feedback. *Journal of Applied Social Psychology*, 17, 1051–70. 119
Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. 120
H., & Wadsworth, M. E. (2001). Coping with stress during 121

- 1 childhood and adolescence: Problems, progress, and potential
2 in theory and research. *Psychological Bulletin*, 127, 87–127.
- 3 Costa, P. T., McCrae, R. R., & Zonderman, A. B. (1987).
4 Environmental and dispositional influences on well-being:
5 Longitudinal follow-up of an American national sample.
6 *British Journal of Psychology*, 78, 299–306.
- 7 Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal
8 experience*. New York: Harper & Row.
- 9 Csikszentmihalyi, M., & Larson, R. (1987). Validity and reli-
10 ability of the experience-sampling method. *Journal of Nervous
11 and Mental Disease*, 175, 526–36.
- 12 David, J. P., Green, P. J., Martin, R., & Suls, J. (1997). Differential
13 roles of neuroticism, extraversion, and event desirability for
14 mood in daily life: An integrative model of top-down and
15 bottom-up influences. *Journal of Personality and Social
16 Psychology*, 73, 149–59.
- 17 Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of
18 goal pursuits: Human needs and the self-determination of
19 behavior. *Psychological Inquiry*, 4, 227–68.
- 20 Diener, E. (1994). Assessing subjective well-being: Progress and
21 opportunities. *Social Indicators Research*, 31, 103–57.
- 22 Diener, E., & Larsen, R. J. (1984). Temporal stability and cross-
23 situational consistency of affective, behavioral, and cognitive
24 responses. *Journal of Personality and Social Psychology*, 47,
25 871–83.
- 26 Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the
27 hedonic treadmill: Revising the adaptation theory of well-
28 being. *American Psychologist*, 61, 305–14.
- 29 Diener, E., Sandvik, E., & Pavot, W. (1991). Happiness is the
30 frequency, not the intensity, of positive versus negative affect.
31 In F. Strack, M. Argyle, & N. Schwarz (Eds.), *Subjective well-
32 being: An interdisciplinary perspective*. *International series in
33 experimental social psychology* (pp. 119–39). Oxford:
34 Pergamon Press.
- 35 Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999).
36 Subjective well-being: Three decades of progress. *Psychological
37 Bulletin*, 125, 276–302.
- 38 Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending
39 money on others promotes happiness. *Science*, 319, 1687–8.
- 40 Easterlin, R. A. (2005). A puzzle for adaptive theory. *Journal of
41 Economic Behavior and Organization*, 56, 513–21.
- 42 Easterlin, R. A. (2006). Life cycle happiness and its sources:
43 Intersections of psychology, economics, and demography.
44 *Journal of Economic Psychology*, 27, 463–82.
- 45 Ebstein, R. B., Novick, O., Umansky, R., Priel, B., & Osher, Y.
46 (1996). Dopamine D4 receptor (D4DR) exon III polymor-
47 phism associated with the human personality trait of novelty
48 seeking. *Nature Genetics*, 12, 78–80.
- 49 Emmons, R. A. (2007). *THANKS! How the new science of grati-
50 tude can make you happier*. New York: Houghton Mifflin
51 Company.
- 52 Emmons, R. A., & King, L. A. (1988). Conflict among personal
53 strivings: Immediate and long-term implications for psycho-
54 logical and physical well-being. *Journal of Personality and
55 Social Psychology*, 54, 1040–8.
- 56 Emmons, R. A., & McCullough, M. E. (2003). Counting bless-
57 ings versus burdens: An experimental investigation of grati-
58 tude and subjective well-being in daily life. *Journal of
59 Personality and Social Psychology*, 84, 377–89.
- 60 Frattaroli, J. (2006). Experimental disclosure and its moderators:
61 A meta-analysis. *Psychological Bulletin*, 132, 823–65.
- 62 Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In
63 D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being:
64 The foundations of hedonic psychology* (pp. 302–29). New
65 York: Russell Sage Foundation.
- 66 Fredrickson, B. L. (2001). The role of positive emotions in posi-
67 tive psychology: The broaden-and-build theory of positive
68 emotions. *American Psychologist*, 56, 218–26.
- 69 Fredrickson, B. L. (2009). *Positivity: Groundbreaking research
70 reveals how to embrace the hidden strength of positive emotions,
71 overcome negativity, and thrive*. New York: Crown Books.
- 72 Fredrickson, B. L., & Cohn, M. A. (2008). Positive emotions. In
73 M. Lewis, J. Haviland, & L. F. Barrett (Eds.), *Handbook of
74 emotions* (3rd ed.). New York: Guilford Press.
- 75 Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions
76 speed recovery from the cardiovascular sequelae of negative
77 emotions. *Cognition and Emotion*, 12, 191–220.
- 78 Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and
79 the complex dynamics of human flourishing. *American
80 Psychologist*, 60, 678–86.
- 81 Fredrickson, B. L., Mancuso, R. A., Branigan, C., & Tugade,
82 M. M. (2000). The undoing effect of positive emotions.
83 *Motivation and Emotion*, 24, 237–58.
- 84 Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R.
85 (2003). What good are positive emotions in crises? A pro-
86 spective study of resilience and emotions following the ter-
87 rorist attacks on the United States in September 11, 2001.
88 *Journal of Personality and Social Psychology*, 84, 365–76.
- 89 Frijda, N. H. (1988). The laws of emotion. *American Psychologist*,
90 43, 349–58.
- 91 Frijda, N. H. (1994). Emotions are functional, most of the time.
92 In P. Ekman & R. Davidson (Eds.), *The nature of emotion:
93 Fundamental questions* (pp. 112–22). New York: Oxford
94 University Press.
- 95 Frodi, L. M., Lamb, M. E., Leavitt, L. A., & Donovan, W. L.
96 (1978). Fathers’ and mothers’ responses to infants’ smiles and
97 cries. *Infant Behavior and Development*, 1, 187–98.
- 98 Fujita, F., & Diener, E. (2005). Life satisfaction set point:
99 Stability and change. *Journal of Personality and Social
100 Psychology*, 88, 158–64.
- 101 Gable, S. L., Reis, H. T., Asher, E. R., & Impett, E. A. (2004).
102 What do you do when things go right? The intrapersonal and
103 interpersonal benefits of sharing positive events. *Journal of
104 Personality and Social Psychology*, 87, 228–45.
- 105 Gerrards-Hesse, A., Spies, K., & Hesse, F. W. (1994).
106 Experimental inductions of emotional states and their
107 effectiveness: A review. *British Journal of Psychology*, 85,
108 55–78.
- 109 Gottman, J. M. (1994). *What predicts divorce? The relationship
110 between marital processes and marital outcomes*. Hillsdale, NJ:
111 Erlbaum.
- 112 Gottman, J. M., & Krokoff, L. J. (1989). Marital interaction and
113 satisfaction: A longitudinal view. *Journal of Consulting and
114 Clinical Psychology*, 57, 47–52.
- 115 Gottman, J. M., & Silver, N. (1999). *The seven principles for
116 making marriage work*. New York: Three Rivers Press.
- 117 Graziano, W. G., Brothen, T., & Berscheid, E. (1980). Attention,
118 attraction, and individual differences in reaction to criticism.
119 *Journal of Personality and Social Psychology*, 38, 193–202.
- 120 Hamer, D. H. (1996). The heritability of happiness. *Nature
121 Genetics*, 14, 125–6.
- 122 Harker, L., & Keltner, D. (2001). Expressions of positive
123 emotions in women’s college yearbook pictures and their
124 relationship to personality and life outcomes across adult-
125 hood. *Journal of Personality and Social Psychology*, 80,
126 112–24.

- 1 Headey, B., & Wearing, A. (1989). Personality, life events, and
2 subjective well-being: Toward a dynamic equilibrium model.
3 *Journal of Personality and Social Psychology*, 57, 731–9.
- 4 Heath, C., Larrick, R. P., & Wu, G. (1999). Goals as reference
5 points. *Cognitive Psychology*, 38, 79–109.
- 6 Helson, H. (1964). Current trends and issues in adaptation-level
7 theory. *American Psychologist*, 19, 26–38.
- 8 Hollon, S. D., Haman, K. L., & Brown, L. L. (2002). Cognitive-
9 behavioral treatment of depression. In I. H. Gotlib, &
10 C. L. Hammen (Eds.), *Handbook of depression* (pp. 383–
11 403). New York: The Guilford Press.
- 12 Ito, T. A., & Cacioppo, J. T. (2005). Variations on a human uni-
13 versal: Individual differences in positivity offset and negativ-
14 ity bias. *Cognition & Emotion*, 19, 1–26.
- 15 Ito, T. A., Larsen, J. T., Smith, N. K., & Cacioppo, J. T. (1998).
16 Negative information weighs more heavily on the brain: The
17 negativity bias in evaluative categorizations. *Journal of*
18 *Personality and Social Psychology*, 75, 887–90.
- 19 Kahneman, D. (1999). Objective happiness. In D. Kahneman,
20 E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations*
21 *of hedonic psychology* (pp. 3–25). New York: Russell Sage
22 Foundation.
- 23 Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., &
24 Stone, A. A. (2004). A survey method for characterizing daily
25 life experience: The Day Reconstruction Method. *Science*,
26 306, 1776–80.
- 27 Kahneman, D., & Thaler, R. H. (2006). Anomalies: Utility max-
28 imization and experienced utility. *Journal of Economic*
29 *Perspectives*, 20, 221–34.
- 30 Kahneman, D., & Tversky, A. (1979). Prospect theory: An anal-
31 ysis of decision under risk. *Econometrica*, 47, 263–91.
- 32 Kahneman, D., & Tversky, A. (1984). Choices, values and
33 frames. *American Psychologist*, 39, 341–50.
- 34 Kaiser, R. T., & Ozer, D. J. (1997). Emotional stability and goal-
35 related stress. *Personality and Individual Differences*, 22, 371–9.
- 36 Kasser, T. (2002). *The high price of materialism*. Cambridge, MA:
37 MIT Press.
- 38 Kasser, T., & Ryan, R. M. (1993). A dark side of the American
39 dream: Correlates of financial success as a central life aspira-
40 tion. *Journal of Personality and Social Psychology*, 65, 410–22.
- 41 Kasser, T., & Ryan, R. M. (1996). Further examining the
42 American dream: Differential correlates of intrinsic and
43 extrinsic goals. *Personality and Social Psychology Bulletin*, 22,
44 280–7.
- 45 Keltner, D., & Bonnano, G. A. (1997). A study of laughter and
46 dissociation: Distinct correlates of laughter and smiling
47 during bereavement. *Journal of Personality and Social*
48 *Psychology*, 73, 687–702.
- 49 King, L. A. (2001). The health benefits of writing about life goals.
50 *Personality and Social Psychology Bulletin*, 27, 798–807.
- 51 Koo, M., Algoe, S. B., Wilson, T. D., & Gilbert, D. T. (2008).
52 It's a wonderful life: Mentally subtracting positive events
53 improves people's affective states, contrary to their affective
54 forecasts. *Journal of Personality and Social Psychology*, 95,
55 1217–24.
- 56 Koob, G. F., & Le Moal, M. (2001). Drug addiction, dysregula-
57 tion of reward, and allostasis. *Neuropsychopharmacology*, 24,
58 97–129.
- 59 Lane, E. (2000). *The loss of happiness in market democracies*. New
60 Haven, CT: Yale University Press.
- 61 Lawton, M. P., DeVoe, M. R., & Parmelee, P. (1995). Relationship
62 of events and affect in the daily life of an elderly population.
63 *Psychology and Aging*, 10, 469–77.
- Layard, R. (2005). *Happiness: Lessons from a new science*. New 64
York: Penguin Press. 65
- Lazarus, R. S. (2000). Toward better research on stress and 66
coping. *American Psychologist*, 55, 665–73. 67
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. 68
(1995). Self-esteem as an interpersonal monitor: The socio- 69
meter hypothesis. *Journal of Personality and Social Psychology*, 70
68, 518–30. 71
- Leventhal, A. M., Martin, R. L., Seals, R. W., Tapia, E., & Rehm, 72
L. P. (2007). Investigating the dynamics of affect: 73
Psychological mechanisms of affective habituation to plea- 74
surable stimuli. *Motivation and Emotion*, 31, 145–57. 75
- Lieberman, V., Boehm, J. K., Lyubomirsky, S., & Ross, L. (in 76
press). Happiness and memory: Affective significance of 77
endowment and contrast. *Emotion*. 78
- Linklater, R. (Producer/Director). (2004). *Before sunset* [Motion 79
Picture]. Burbank, CA: Warner Independent Pictures. 80
- Losada, M. (1999). The complex dynamics of high performance 81
teams. *Mathematical and Computer Modeling*, 30, 179–92. 82
- Lucas, R. E. (2007a). Adaptation and the set point model of sub- 83
jective well-being. *Current Directions in Psychological Science*, 84
16, 75–9. 85
- Lucas, R. E. (2007b). Long-term disability has lasting effects on 86
subjective well-being: Evidence from two nationally repre- 87
sentative longitudinal studies. *Journal of Personality and* 88
Social Psychology, 92, 717–30. 89
- Lucas, R. (2007c). Personality and subjective well-being. In 90
M. Eid & R. Larsen (Eds.), *The science of subjective well-being*.
New York: Guilford Press. 92
- Lucas, R. E. (2005). Time does not heal all wounds: A longitudi- 93
nal study of reaction and adaptation to divorce. *Psychological* 94
Science, 16, 945–50. 95
- Lucas, R. E., & Clark, A. E. (2006). Do people really adapt to 96
marriage? *Journal of Happiness Studies*, 7, 405–26. 97
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). 98
Reexamining adaptation and the set point model of happi- 99
ness: Reactions to changes in marital status. *Journal of* 100
Personality and Social Psychology, 84, 527–39. 101
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). 102
Unemployment alters the set point for life satisfaction. 103
Psychological Science, 15, 8–13. 104
- Lykken, D. (2000). *Happiness: The nature and nurture of joy and* 105
contentment. New York: St Martin's Press. 106
- Lykken, D., Iacono, W. G., Haroian, K., McGue, M., & 107
Bouchard, T. J., Jr. (1988). Habituation of the skin con- 108
ductance response to strong stimuli: A twin study. *Psychophys-* 109
iology, 25, 4–15. 110
- Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic 111
phenomenon. *Psychological Science*, 7, 186–9. 112
- Lyubomirsky, S. (2008). *The how of happiness: A scientific approach* 113
to getting the life you want. New York: Penguin Press. 114
- Lyubomirsky, S., Dickerhoof, R., Boehm, J. K., & Sheldon, K. 115
M. (2008). *Becoming happier takes both a will and a proper* 116
way: Two experimental longitudinal interventions to boost well- 117
being. Manuscript submitted for publication. 118
- Lyubomirsky, S., King, L. A., & Diener, E. (2005). The benefits 119
of frequent positive affect: Does happiness lead to success? 120
Psychological Bulletin, 131, 803–55. 121
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). 122
Pursuing happiness: The architecture of sustainable change. 123
Review of General Psychology, 9, 111–31. 124
- Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs 125
and benefits of writing, talking, and thinking about life's 126

- triumphs and defeats. *Journal of Personality and Social Psychology*, 90, 692–708.
- McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82, 112–27.
- McGinnis, A. L. (1979). *The friendship factor*. Minneapolis, MN: Augsburg.
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74, 494–512.
- Mischel, W., Ebbesen, E. B., & Zeiss, A. R. (1976). Determinants of selective memory about the self. *Journal of Consulting and Clinical Psychology*, 44, 92–103.
- Moll, J., Krueger, F., Zahn, R., Pardini, M., de Oliveira-Souza, R., & Grafman, J. (2006). Human fronto-mesolimbic networks guide decisions about charitable donation. *Proceedings of the National Academy of Sciences*, 103, 15623–8.
- Mroczek, D. K., & Spiro, A., III. (2005). Change in life satisfaction during adulthood: Findings from the Veterans Affairs Normative Aging Study. *Journal of Personality and Social Psychology*, 88, 189–202.
- Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist*, 55, 56–67.
- Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and Social Psychology Review*, 10, 235–51.
- Nezlek, J. B., & Gable, S. L. (2001). Depression as a moderator of relationships between positive daily events and day-to-day psychological adjustment. *Personality and Social Psychology Bulletin*, 27, 1692–704.
- Niemiec, C. P., Ryan, R. M., & Deci, E. L. (in press). The path taken: Consequences of attaining intrinsic and extrinsic aspirations in post-college life. *Journal of Research in Personality*.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, 100, 569–82.
- Nolen-Hoeksema, S. (2004). *Women who think too much*. New York: Henry Holt.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3, 400–24.
- Oehman, A., Lundqvist, D., & Esteves, F. (2001). The face in the crowd revisited: A threat advantage with schematic stimuli. *Journal of Personality and Social Psychology*, 80, 381–96.
- Ohira, H., Winton, W. M., & Oyama, M. (1997). Effects of stimulus valence on recognition memory and endogenous eyeblinks: Further evidence for positive-negative asymmetry. *Personality and Social Psychology Bulletin*, 24, 986–93.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, 91, 730–49.
- Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.
- Ozer, E., & Weiss, D. S. (2004). Who develops posttraumatic stress disorder? *Current Directions in Psychological Science*, 13, 169–72.
- Parducci, A. (1995). *Happiness, pleasure, and judgment: The contextual theory and its applications*. Mahwah, NJ: Erlbaum.
- Peeters, G., & Czapinski, J. (1990). Positive-negative asymmetry in evaluations: The distinction between affective and informational negativity effects. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 1, pp. 33–60). New York: Wiley.
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8, 162–6.
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology*, 72, 863–71.
- Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology*, 55, 1243–54.
- Piliavin, J. A. (2003). Doing well by doing good: Benefits for the benefactor. In C. L. M. Keyes, & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 227–47). Washington, DC: APA.
- Porter, S., & Peace, K. A. (2007). The scars of memory: A prospective, longitudinal investigation of the consistency of traumatic and positive emotional memories in adulthood. *Psychological Science*, 18, 435–41.
- Pratto, F., & John, O. P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61, 380–91.
- Ratner, R. K., Kahn, B. E., & Kahneman, D. (1999). Choosing less-preferred experiences for the sake of variety. *Journal of Consumer Research*, 26, 1–15.
- Reis, H. T., Sheldon, K. M., Ryan, R. M., Gable, S. L., & Roscoe, J. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26, 419–43.
- Rolls, B., Rowe, E., Rolls, E., Kingston, B., Megson, A., & Gunary, R. (1981). Variety in a meal enhances food intake in man. *Physiology and Behavior*, 26, 215–21.
- Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5, 296–320.
- Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, 61, 317–42.
- Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype→environment effects. *Child Development*, 54, 424–35.
- Scheier, M. F., & Carver, C. S. (1993). On the power of positive thinking: The benefits of being optimistic. *Current Directions in Psychological Science*, 2, 26–30.
- Scheier, M. F., Weintraub, J. K., & Carver, C. S. (1986). Coping with stress: Divergent strategies of optimists and pessimists. *Journal of Personality and Social Psychology*, 51, 1257–64.
- Schueller, S. M. (2006). *Personality fit and positive interventions. Is extraversion important?* Unpublished master's thesis, Department of Psychology, University of Pennsylvania.
- Schwarz, N., Kahneman, D., & Xu, J. (in press). Global and episodic reports of hedonic experience. In R. Belli, F. Stafford, & D. Alwin (Eds.), *Using calendar and diary methods in life events research*. Thousand Oaks, CA: Sage.
- Scitovsky, T. (1976). *The joyless economy: The psychology of human satisfaction*. New York: Oxford University Press.
- Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, 105, 131–42.
- Seligman, M. E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, 61, 774–88.
- Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410–21.

- 1 Shakespeare, W. (1564/1616). *The Oxford Shakespeare: The*
 2 *complete works of William Shakespeare*. London: Oxford
 3 University Press.
- 4 Sheldon, K. M. (2002). The self-concordance model of healthy
 5 goal-striving: When personal goals correctly represent the
 6 person. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-*
 7 *determination research* (pp. 65–86). Rochester, NY: University
 8 of Rochester Press.
- 9 Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need-
 10 satisfaction, and longitudinal well-being: The Self-Con-
 11 cordance Model. *Journal of Personality and Social Psychology*,
 12 76, 482–97.
- 13 Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What
 14 is satisfying about satisfying events? Testing 10 candidate
 15 psychological needs. *Journal of Personality and Social*
 16 *Psychology*, 80, 325–39.
- 17 Sheldon, K. M., & Lyubomirsky, S. (in press). Change your
 18 actions, not your circumstances: An experimental test of the
 19 Sustainable Happiness Model. In B. Radcliff & A. K. Dutt
 20 (Eds.), *Happiness, economics, and politics*. New York: Edward
 21 Elgar.
- 22 Sheldon, K. M., & Lyubomirsky, S. (2006a). Achieving sustain-
 23 able gains in happiness: Change your actions, not your cir-
 24 cumstances. *Journal of Happiness Studies*, 7, 55–86.
- 25 Sheldon, K. M., & Lyubomirsky, S. (2006b). How to increase
 26 and sustain positive emotion: The effects of expressing grati-
 27 tude and visualizing best possible selves. *Journal of Positive*
 28 *Psychology*, 1, 73–82.
- 29 Sheldon, K. M., & Lyubomirsky, S. (2007). Is it possible to
 30 become happier? (And, if so, how?). *Social and Personality*
 31 *Psychology Compass*, 1, 129–45.
- 32 Sheldon, K. M., & Kasser, T. (2008). Psychological threat and
 33 extrinsic goal pursuit. *Motivation and Emotion*, 32, 37–45.
- 34 Sheldon, K. M., Ryan, R., & Reis, H. T. (1996). What makes for
 35 a good day? Competence and autonomy in the day and in
 36 the person. *Personality and Social Psychology Bulletin*, 22,
 37 1270–9.
- 38 Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003).
 39 Searching for the structure of coping: A review and critique
 40 of category systems for classifying ways of coping *Psychological*
 41 *Bulletin*, 129, 216–69.
- 42 Smith, N. K., Larsen, J. T., Chartrand, R. L., Cacioppo, J. T.,
 43 Katafiaz, H. A., & Moran, K. E. (2006). Being bad isn't
 44 always good: Affective context moderates the attention bias
 45 toward negative information. *Journal of Personality and Social*
 46 *Psychology*, 90, 210–20.
- 47 Solomon, R. L. (1980). The opponent-process theory of acquired
 48 motivation. *American Psychologist*, 35, 691–712.
- 49 Strahilevitz, M., & Loewenstein, G. (1998). The effect of owner-
 50 ship history on the valuation of objects. *Journal of Consumer*
 51 *Research*, 25, 276–89.
- 52 Suh, E., Diener, E., & Fujita, F. (1996). Events and subjective
 53 well-being: Only recent events matter. *Journal of Personality*
 54 *and Social Psychology*, 70, 1091–102.
- 55 Suhara, T., Yasuno, F., Sudo, Y., Yamamoto, M., Inouc, M.,
 56 Okubo, Y., & Suzuki, K. (2001). Dopamine D2 receptor in
 57 the insular cortex and the personality trait of novelty seeking.
 58 *NeuroImage*, 13, 891–5.
- 59 Taylor, S. E. (1991). Asymmetrical effects of positive and nega-
 60 tive events: The mobilization–minimization hypothesis.
 61 *Psychological Bulletin*, 110, 67–85.
- Taylor, S. E., Lichtman, R. R., & Wood, J. V. (1984). Attributions, 62
 beliefs about control, and adjustment to breast cancer. 63
Journal of Personality and Social Psychology, 46, 489–502. 64
- Tellegen, A., Lykken, D. T., Bouchard, T. J., Wilcox, K. J., Segal, 65
 N. L., & Rich, S. (1988). Personality similarity in twins 66
 reared apart and together. *Journal of Personality and Social* 67
Psychology, 54, 1031–9. 68
- Tkach, C., & Lyubomirsky, S. (2007). *Spicing up kindness: The* 69
role of variety in the effects of practicing kindness on improve- 70
ments in mood, happiness, and self-evaluations. Unpublished 71
 manuscript, University of California, Riverside. 72
- Tom, S. M., Fox, C. R., Trepel, C., & Poldrack, R. A. (2007). 73
 The neural basis of loss aversion in decision-making under 74
 risk. *Science*, 315, 515–8. 75
- Tooby, J., & Cosmides, L. (1990). The past explains the present: 76
 Emotional adaptations and the structure of ancestral envi- 77
 ronments. *Ethology and Sociobiology*, 11, 375–424. 78
- Trivers, R. (1971). The evolution of reciprocal altruism. *Quarterly* 79
Review of Biology, 46, 35–57. 80
- Tversky, A., & Griffin, D. (1991). Endowment and contrast in 81
 judgments of well-being. In F. Strack, M. Argyle, & N. 82
 Schwarz (Eds.), *Subjective well-being: An interdisciplinary per-* 83
spective (pp. 101–18). Elmsford, NY: Pergamon Press. 84
- Urry, H. L., Nitschke, J. B., Dolski, I., Jackson, D. C., Dalton, 85
 K. M., Mueller, C. J., et al. (2004). Making a life worth 86
 living: Neural correlates of well-being. *Psychological Science*, 87
 15, 367–72. 88
- Van Boven, L. (2005). Experientialism, materialism, and the pur- 89
 suit of happiness. *Review of General Psychology*, 9, 132–42. 90
- Warr, P., Jackson, P., & Banks, M. H. (1988). Unemployment 91
 and mental health: Some British studies. *Journal of Social* 92
Issues, 44, 47–68. 93
- Watkins, P. C., Grimm, D. L., & Kolts, R. (2004). Counting 94
 your blessings: Positive memories among grateful persons. 95
Current Psychology: Developmental, Learning, Personality, 96
Social, 23, 52–67. 97
- Wegner, D. M. (1994). Ironic processes of mental control. 98
Psychological Review, 101, 34–52. 99
- Weinstein, N. D. (1982). Community noise problems: Evidence 100
 against adaptation. *Journal of Environmental Psychology*, 2, 101
 87–97. 102
- Williams, D. E., & Thompson, J. K. (1993). Biology and behav- 103
 ior: A set-point hypothesis of psychological functioning. 104
Behavior Modification, 17, 43–57. 105
- Wilson, T. D., Centerbar, D. B., Kermer, D. A., & Gilbert, D. T. 106
 (2005). The pleasures of uncertainty: Prolonging positive 107
 moods in ways people do not anticipate. *Journal of Personality* 108
and Social Psychology, 88, 5–21. 109
- Wilson, T. D., & Gilbert, D. T. (2003). Affective forecasting. 110
Advances in Experimental Social Psychology, 35, 345–411. 111
- Wilson, T. D., & Gilbert, D. T. (2005). Affective forecasting: 112
 Knowing what to want. *Current Directions in Psychological* 113
Science, 14, 131–4. 114
- Wilson, T. D., & Gilbert, D. T. (2008). Explaining away: A 115
 model of affective adaptation. *Perspectives on Psychological* 116
Science, 3, 370–86. 117