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CHAPTER 67

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VARIETY IS THE SPICE
OF HAPPINESS: THE
HEDONIC ADAPTATION
PREVENTION MODEL

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10 By now, it has become a bromide that the US constitution and culture are built on the pur-
11 suit of happiness (Myers, 1992). According to this political philosophy, government should
12 allow citizens to strive towards their own conception of happiness, and should assist them as
13 much as possible to reach this goal. In return, citizens ought to make the most of the oppor-
14 tunity, ultimately contributing to the common good of all. The enduring appeal of this
15 American ideal rests on the very plausible assumption that happiness is the fundamental
16 objective of all human effort and activity, in all cultures, whether people are aware of it or
17 not. By taking action, humans aim towards more positive conditions and feelings than they
18 currently experience, or towards more positive future feelings than they might otherwise
19 experience if they failed to act (Carver & Scheier, 1998). Accordingly, becoming happier is
20 not only a hugely popular topic on the self-help shelves, it is increasingly becoming a stated
21 policy goal of world governments, with the gross national happiness of the country (rather
22 than its gross domestic product) as the primary quantity to be maximized (Stiglitz, Sen, &
23 Fitoussi, 2009).

24 Given these developments, it is worth considering how, and how well, happiness can be
25 increased. Extensive data support the idea that gross *national* happiness can be increased (or
26 decreased) by factors such as national affluence (vs. poverty), peace (vs. war), democratic
27 government (vs. tyrannical government), trust (vs. widespread corruption), and societal
28 harmony (vs. ethnic conflict) (Diener, Diener, & Diener, 1995). Surprisingly, however, data
29 supporting the idea that *individual* happiness can be permanently increased are rather weak.
30 Indeed, there are reasons (discussed in the next section) to doubt that it is possible at all.
31 Accordingly, our research during the last decade has been dedicated to understanding how

1 much—and how—happiness can be maintained above an initial baseline. In other words,
2 what (if anything) can people do in their lives to become happier?

3 In this chapter, we first discuss the two conceptual models that have guided our research
4 on the possibility of sustained happiness increases at the individual level. Specifically, we
5 will review the empirical support for our “sustainable happiness” model (SHM). Then, we
6 will present and provide preliminary empirical support for our newer “hedonic adaptation
7 prevention” (HAP) model. Finally, we will present two sets of new data, which will show that
8 variety is not only the spice of life, but the spice of happiness as well.

9 THE DEBATABLE POTENTIALITY FOR SUSTAINED 10 GAINS IN HAPPINESS

11 Several facts and findings give rise to skepticism about the feasibility of achieving sustain-
12 able gains in happiness. First, there is the growing consensus that subjective well-being
13 (SWB) is strongly influenced by genetics, with a heritability of around 0.50 according to
14 twin studies (Diener, Suh, Lucas, & Smith, 1999). This behavioral genetics research suggests
15 that SWB may be characterized by a genetically-determined “set-point,” a stable feature of
16 temperament that appears to be immune to deliberate modification (Lykken & Tellegen,
17 1996; Tellegen et al., 1988). In other words, SWB may be the result of a homeostatic process
18 that resists deviations away from a pre-programmed baseline (Cummins, 2003).

19 The empirical literature on longitudinal SWB is the source of a second and related reason
20 for pessimism. In a 4-year panel study, Headey and Wearing (1989) found evidence for a
21 “dynamic equilibrium” for well-being, such that, although people might shift up or down
22 somewhat over time, in the long run they tend to end up where they began (see also Suh,
23 Diener, & Fujita, 1996). Lucas, Clark, Georgellis, and Diener (2003) analyzed large-*N* longi-
24 tudinal data and found that, although positive events such as marriage afford a temporary
25 boost in SWB, this boost is transient, typically fading within several years. These data also
26 suggest that the happiness generated by positive life changes can never be more than a
27 temporary “rush.”

28 Yet a third reason for pessimism arises from literature suggesting that people have a
29 powerful capacity to adapt to change—not just to sensory and perceptual changes, but to
30 changes that have positive or negative emotional implications. Most famously, Brickman,
31 Coates, and Janoff-Bulman’s (1978) findings suggest that lottery winners may adapt to their
32 newfound financial status, falling back to their prior emotional baseline over time. On the
33 negative event side, Taylor, Lichtman, and Wood (1984) found evidence for complete adap-
34 tation to the adverse effects of breast cancer, 5 years after surgery. This general tendency to
35 adapt to emotion-relevant change, such that one always winds up back where one started,
36 has been termed “the hedonic treadmill” (Brickman & Campbell, 1971; Frederick &
37 Loewenstein, 1999). The hedonic treadmill is without a doubt an adaptive feature of human
38 nature, which helps people recover from the slings and arrows of negative experience.
39 However, the hedonic treadmill is also a significant impediment to happiness seekers,
40 because it implies that such seeking is doomed to failure in the end. Rather than try to
41 become happier than they are, perhaps people should instead try to become content with
42 what they have?

1 THE SUSTAINABLE HAPPINESS MODEL

2 Our early work regarding these questions focused on the SHM (Lyubomirsky, Sheldon, &
 3 Schkade, 2005; Sheldon & Lyubomirsky, 2004, 2006), which divides the possible influences
 4 on SWB into three broad categories: genetics, circumstances, and activities (see Fig. 67.1).
 5 Genetics represents the “set-point,” the temperamental and psychobiological characteristics
 6 with which one is born, which account for about 50% of the variance in SWB and will have a
 7 strong and lasting influence. Circumstances represent a person’s demographic profile (gen-
 8 der, ethnicity, income, physical appearance, health status), as well as the influence of non-
 9 psychological variables such as a person’s possessions, geographic location, and immediate
 10 surroundings. Circumstances account for about 10% of the variance in SWB, a surprisingly
 11 small figure that we believe is due to the essentially static nature of circumstances. The rest
 12 of the variance, according to the SHM, is accounted for by what people *do*—that is, the *inten-*
 13 *tional activities* that they undertake within their daily lives, for good or ill, and with varying
 14 degrees of pleasure and success. Of course, “activities” is a very broad category that can over-
 15 lap with “circumstances,” because many circumstances arise through activity, and because
 16 circumstances provide opportunities for differing kinds and amounts of activity. Still, the
 17 SHM focuses on the activities category as the best potential route for sustainably increasing
 18 one’s SWB, because ongoing activities are dynamic and changeable, meaning that activity
 19 effects are best positioned to resist erosion by hedonic adaptation. One need not always do
 20 an activity at the same time of day, in the same place, in the same way, and with the same
 21 goals and purposes. Also, one can pursue an activity as an active process of exploration and
 22 discovery, continuously encountering pleasing new features and insights in the context of
 23 that activity. If being involved and engaged in life will not do it, then nothing will.

24 An emerging research literature has been building evidence for the SHM by examining
 25 the efficacy of various types and categories of activity for changing SWB. These include nat-
 26 uralistic longitudinal studies of personal goal pursuits (Sheldon & Cooper, 2008; Sheldon &
 27 Elliot, 1999; Sheldon & Kasser, 1998); longitudinal experimental studies of the effects of

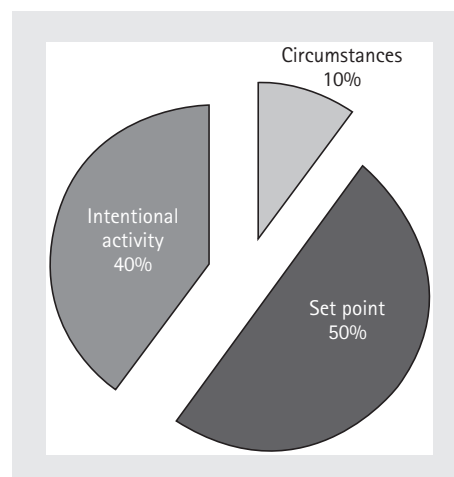


FIG. 67.1 Sustainable happiness model.

1 being asked to adopt new self-chosen life-activities (Sheldon & Lyubomirsky, 2007, 2009);
 2 and intervention studies of the effects of engaging in various happiness-relevant exercises
 3 such as expressing gratitude (Emmons & McCullough, 2003; Froh, Sefick, & Emmons, 2008;
 4 Lyubomirsky et al., 2005; Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011; Seligman,
 5 Steen, Park, & Peterson, 2005), contemplating best possible selves (Burton & King, 2008;
 6 Lyubomirsky et al., 2009), committing acts of kindness (Dunn, Aknin, & Norton, 2008;
 7 Lyubomirsky et al., 2005; Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006),
 8 working on using personal strengths (Seligman et al., 2005), replaying one's happiest days
 9 (Lyubomirsky, Sousa, & Dickerhoof, 2006), and pausing to appreciate, savor, or be mindful
 10 of the good things in one's life (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008; Seligman
 11 et al., 2005). All of these activities have been shown to have the potential to boost mood or
 12 well-being and in many cases to maintain that increased level at a follow-up assessment
 13 period. In contrast, participants enjoined to engage in various control or comparison condi-
 14 tions (listing daily life events, making mere circumstantial changes, or pursuing materialis-
 15 tic or self-oriented goals) typically do not reap benefits, or reap benefits that are not as large
 16 or as long-lasting. A recent meta-analysis of 49 studies (total $N = 4235$) revealed that such
 17 positive interventions are indeed effective for enhancing well-being, with a medium-sized
 18 effect (mean $r = 0.29$; Sin & Lyubomirsky, 2009).

19 One instructive way to illustrate the propositions of the SHM, and to organize its findings
 20 thus far, is via a within-subject regression equation or growth curve model in which SWB at
 21 time t is influenced by three major classes of factors: genetic/temperamental, circumstan-
 22 tial/demographic, and activity/motivational. The genetic set point defines the intercept or
 23 expected value, all other factors being equal. This factor's effects are theorized to be fixed
 24 and stable over time, and might be modeled with the trait measures of neuroticism, extra-
 25 version, or negative affectivity. Circumstances (positive or negative) have the potential to
 26 contribute positively or negatively to SWB at time t , but these effects are relatively small, and
 27 tend to erode over time (as shown by Sheldon & Lyubomirsky, 2009). Thus, one might
 28 include a "time elapsed since change" by change-type (activities vs. circumstances) interac-
 29 tion in the regression equation. New activities have a larger potential to continue contribut-
 30 ing to SWB over time, because they can provide dynamically varying experiences that
 31 continue to elevate people's SWB over time (Sheldon & Lyubomirsky, 2007). In other words,
 32 a positive new activity, when kept fresh and interesting, can engender experiences that keep
 33 a person happier over a longer period than the person's genetics alone would indicate.

34 This within-subject regression approach well illustrates an important assumption of the
 35 SHM—that instead of a set "point" for SWB, people actually have a set "range." Thus,
 36 although a particular person may have limited potential for joy and ebullience and more of a
 37 tendency towards gloom and pessimism compared to others, that person might still at least
 38 achieve a chronic state of guarded contentment, which is better than chronic dejection and
 39 fear. Everyone has a characteristic range of possible SWB states, and thus the goal becomes
 40 to find ways to stay in the top end of one's own possible range (vs. regress back to one's own
 41 mean). The other terms in the model, beyond genetics, determine whether, and for how
 42 long, an individual can do this.

43 The foregoing material on "keeping things fresh and interesting" illustrates an important
 44 moderator of activity effects, according to the SHM—namely, *variety*. The happy newlyweds
 45 who settle down to domestic sameness and taken-for-grantedness, the proud new car
 46 owner who stops driving to fun places, and the formerly curious piano player who succumbs

1 to the rote routines of practice and procedure will all return back to their initial baselines.
 2 Notably, the original SHM postulated that the longevity of activity effects on happiness likely
 3 depend on many other moderators besides variety, such as how diligently or successfully
 4 one performs the activity (Lyubomirsky et al., 2009; Sheldon & Lyubomirsky, 2006), how
 5 well the chosen activity fits one’s personality and interests (Lyubomirsky, 2008), and whether
 6 the activity is intrinsic or extrinsic in content (Sheldon Gunz, Nichols, & Ferguson, 2010).
 7 However, it is fair to say that variety was construed in that model as the most important
 8 moderator of all, because of its crucial potential role in curtailing hedonic adaptation. Even
 9 so, this prediction has received little empirical attention to date. The primary purpose of this
 10 chapter is to redress this gap.

THE HEDONIC ADAPTATION PREVENTION MODEL

13 First, however, we will discuss our newer HAP model, which grants a prominent role to
 14 variety and the processes by which variety can help to thwart hedonic adaptation. Fig. 67.2
 15 depicts the entire HAP model, which is in essence a longitudinal expansion of the SHM.

16 The temporal model begins on the left, at Time 1 (T1), by positing that some kind of
 17 “positive change” has occurred in a person’s life, resulting in an initial boost in mood or
 18 well-being. The model ends on the right at a Time 3 (or any subsequent) measurement
 19 of well-being, asking the question, “How can the initial boost be maintained at a later time?”
 20 The boxes and arrows in between the start and end points present our theorizing on how
 21 hedonic adaptation may be prevented, such that the initial boost is, in fact, maintained.
 22 We define “well-being” (WB) as global self-reports of happiness, satisfaction, and mood
 23 (as the measures are often interchangeable; Diener et al., 1999), and we define a “positive

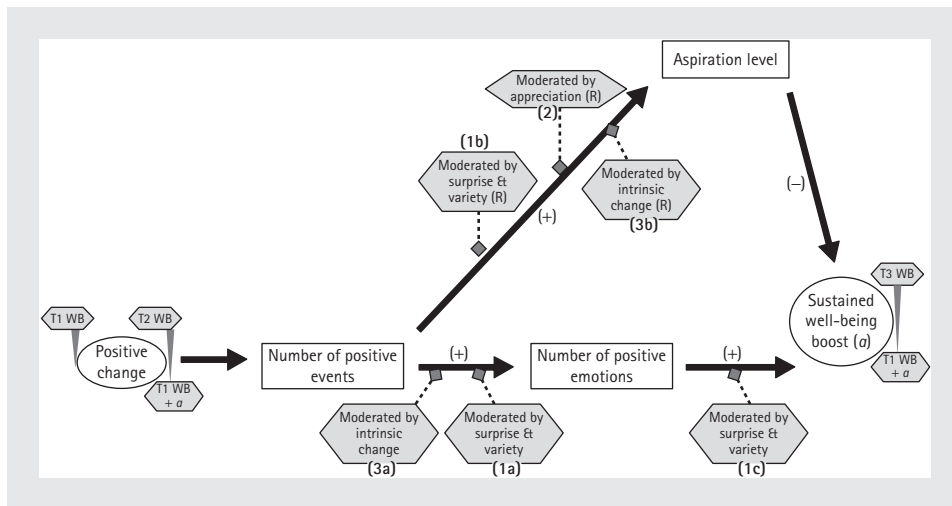


FIG. 67.2 Hedonic adaptation prevention model. WB, well-being.

1 change” as a noticeable and measurable alteration in one’s life circumstances or one’s life
 2 activities that has a measurable effect on well-being before and after the change. It is also
 3 worth noting that in principle the HAP model should apply to understanding adaptation to
 4 *negative* events, such that an initial blow (e.g., getting laid off) that reduces well-being and
 5 mood loses its negative impact over time. This application of the model, however, goes
 6 beyond the scope of this chapter (however, see Lyubomirsky (2011), for a detailed account of
 7 this extension). Still, we note that adaptation is often less complete to profoundly negative
 8 events (e.g., disability, divorce; Lucas, 2005, 2007; Lucas et al., 2003) than to seemingly
 9 equally profound positive events (e.g., marriage, receiving tenure). That is, more people go
 10 down and then stay down than those who go up and then stay up, suggesting that, in a sense,
 11 “bad is stronger than good” (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). This makes
 12 our research agenda of finding ways to keep people in the upper end of their own set range
 13 even more difficult and challenging (Lyubomirsky, 2011).

14 The second step of the HAP model states that those undergoing a noticeable positive
 15 change at Time 1 will tend to experience a larger number of subsequent positive events com-
 16 pared to those who do not undergo a positive change. For example, a person who buys a
 17 beautiful work of art begins enjoying pleasurable experiences of looking at and savoring the
 18 art, and a person who starts playing in a band begins having pleasurable episodes of making
 19 music and sharing it with others. As these examples illustrate, the positive events deriving
 20 from positive changes can be actual life experiences and real-world outcomes resulting from
 21 one’s actions in the new domain, or they can be internal “thought-events” in which one
 22 notices, appreciates, thinks about, or savors the original positive change. Doubtless, positive
 23 changes vary in both the quantity and quality of the positive events they produce, and the
 24 difference between different types of change has itself been a prominent topic for research
 25 inquiry (i.e., does gratitude generate longer-lasting happiness boosts than savoring?; do
 26 intrinsic or need-satisfying goals work better than extrinsic or non-satisfying goals?; e.g.,
 27 Seligman et al., 2005; Sheldon & Lyubomirsky, 2009; Sheldon et al., 2010).

28 Moving to the next step, the HAP model specifies two major routes extending away from
 29 the positive events and toward final well-being. (We will ignore the many potential modera-
 30 tors in the model, returning to them later.) The “emotions” route (at the bottom) specifies
 31 that positive events produce positive emotional experiences, to varying degrees. In turn, the
 32 number of positive emotions impacts global judgments of well-being made at Time 3 or
 33 beyond. In this view, Time 3 happiness is higher (controlling for Time 1 and Time 2
 34 happiness)—that is, the initial boost has been maintained—to the extent that there have
 35 been more discrete positive emotions experienced between Time 2 and Time 3. This lower
 36 route relies on a “bottom-up” conception of well-being (Diener, 1984), in which global
 37 happiness judgments are influenced by the number of salient positive experiences that come
 38 to mind as one makes the judgments. Someone who can recall many “warm glows” from
 39 recent experience will tend to rate him or herself as happier than someone who cannot recall
 40 many such experiences.

41 As a case in point, consider a couple who is nearing completion of an exciting renovation
 42 and addition to their home. Are they happier than they were 6 months ago, before construc-
 43 tion began? Yes—the positive change (finally starting construction) produced many positive
 44 events, as each new facet of the house came into being, and as each subsequent set of engag-
 45 ing decisions arose. These events produced a quantity and variety of positive emotions (aes-
 46 thetic pleasure, as their initial design choices came to life; closeness, as they collaborated on

1 each new decision; pride, as they showed the evolving house to their friends). When they
 2 rate their happiness now, these memories, as well as the pleasure of living in the nearly fin-
 3 ished product, elevate their reported happiness levels. However, if the couple had had fewer
 4 positive events (and perhaps more arguments!) due to conflicting aesthetic preferences, or
 5 had experienced fewer positive emotions (or more negative ones) due to the stress of living in
 6 a house under construction, then these facts would predict a less sustained boost at Time 3.

7 Note that hedonic adaptation processes could operate in this lower part of the model by
 8 reducing the number of positive events derived from the positive change (e.g., one no longer
 9 notices one's new car and forgets to take it for pleasurable drives) or by reducing the number
 10 of positive emotions derived from events (e.g., even while driving the car on a winding
 11 mountain road, one takes it for granted and no longer feels the same excitement and pride).
 12 Thus, the key to preventing adaptation and maintaining boosts, according to this part of the
 13 model, is to keep up the number of positive events and emotions. The car owner should
 14 make time in his schedule to drive and enjoy the car, perhaps taking it to automobile shows
 15 at which he and other owners of that model can meet and exchange ideas. In this way, adap-
 16 tation to the car can be forestalled.

17 Now let us consider the top route in the model, the "aspirations" route. This part of the
 18 model explains the erosion of initial well-being gains in terms of cognitive processes that
 19 ensue from the initial positive change and its associated positive events. Thus, the upper
 20 route tackles hedonic adaptation at the level of judgmental processes and expectations.
 21 According to the model, the more positive events there are, the more one's expectations and
 22 aspirations regarding further positive events are increased (represented in the figure by the
 23 path from positive events to aspirations). In other words, when things are going well, one
 24 starts to take them for granted and starts assuming that they will always be there—perhaps
 25 even coming to feel entitled to the new positive situation, rather than appreciative of it. The
 26 new, more positive regime becomes the new status quo, making one susceptible to wanting
 27 (or craving) and expecting (or demanding) even more. Finally, the negatively-signed path
 28 from aspirations to Time 3 SWB indicates that the more one's aspirations and expectancies
 29 increase, the less the resulting Time 3 well-being. In other words, those who come to expect
 30 and feel that they deserve a greater quantity of positive events, and perhaps demand even
 31 more, derive less pleasure from those events, reducing their happiness. This process has
 32 been referred to as the "satisfaction treadmill" (Kahneman, 1999), and represents a top-
 33 down effect on well-being—one's standards and basis for judging one's global well-being
 34 have changed, resulting in a reduction in that estimate.

35 Returning to the "renovated house" example, suppose that the couple, now that they are
 36 ensconced in their redesigned house, begin to take for granted the spacious new bedroom
 37 and balcony, the vaulting 2-story entrance foyer, and the remodeled kitchen; in other words,
 38 they stop noticing or thinking about the positive changes, so that they fade into the back-
 39 ground as they move on with their lives. Or worse, suppose they begin to look around at
 40 other houses in their new price category, recognizing desirable features in these houses they
 41 do not have, and feeling envy or greed as a result. Perhaps they begin to feel that their house
 42 does not match up well to this new level of standard, and begin aspiring to even further
 43 changes or an even better home. Such processes could undermine the initial happiness
 44 boost, working to return the couple to their initial baseline.

45 Notably, then, the HAP model recognizes the paradoxical effects of positive changes in
 46 life—that they can produce positive events that boost one's happiness, but at the same time,

1 these events can change one's standards and expectations, working against one's happiness.
 2 Of course, neither pathway is certain or inevitable, and this is where the rest of the model
 3 comes in.

4 As can be seen in Fig. 67.2, we specify several moderators that are expected to affect the
 5 strength of various relations within the model. These moderators include the nature or con-
 6 tent of the initial change (e.g., intrinsic vs. extrinsic, activity vs. circumstance, gratitude vs.
 7 neutral activity); the extent to which resultant positive events are surprising, novel, or unex-
 8 pected; and the extent to which one continues to appreciate the original change, and recog-
 9 nize that it could easily "change back." Most important for this chapter's purposes, one of
 10 these key moderators is *variety*—the extent to which the positive events and positive emo-
 11 tions resulting from the change vary in their content, similarity, timing, and diversity. By
 12 definition, adaptation occurs only in response to constant or repeated stimuli, not to dynam-
 13 ically varying ones (Frederick & Loewenstein, 1999; see also Helson, 1964; Parducci, 1995).
 14 Variety, in both thoughts and behaviors, appears to be innately stimulating and rewarding
 15 (Berlyne, 1970; Pronin & E. Jacobs, 2008; Rolls, Rolls, Rowe, & Sweeney, 1981; see Ebstein
 16 et al., 1996; Suhara et al., 2001, for links to dopamine activity). Thus, variety appears as a
 17 moderator in three different places within the model (moderating the positive events to
 18 aspiration level link, the number of positive events to positive emotions link, and the num-
 19 ber of positive emotions to sustained well-being link), endowing it with a special role for
 20 reducing hedonic adaptation and increasing the durability of happiness changes.

21 Despite its likely central relevance for understanding how to sustainably boost happiness,
 22 the construct of variety has received surprisingly little empirical attention in the literature.
 23 Thus, in the remainder of this chapter, we will describe the previously unpublished results
 24 from two longitudinal studies that support variety's important role in thwarting adaptation
 25 and thereby in prolonging well-being. These two studies—one correlational and one experi-
 26 mental—do not permit testing of the entire temporal sequence laid out in the HAP model,
 27 but they do permit testing of the key hypothesis that variety plays a moderating role in the
 28 process by which positive experiences bring about sustained well-being.

29 STUDY 1: RATED VARIETY PREDICTS 30 MAINTAINED WELL-BEING

31 For the first study, we recruited 134 introductory psychology students at the University of
 32 Missouri, USA, 38 men and 96 women (mostly Caucasian), who signed up online for a
 33 three-part investigation. Initially, participants attended small-group laboratory sessions in
 34 which they were told the following: "We are studying positive mood, and the factors that
 35 sustain it. We will assess your mood and happiness now and later in the semester, to see how
 36 they change." After completing the Positive and Negative Activation Scale (PANAS; Watson,
 37 Clark, & Tellegen, 1988), each participant was asked to attempt something "which might
 38 influence your mood." Seventy students were randomly assigned to identify a goal or activ-
 39 ity change they could make in the next 2 weeks (i.e., "You might join a rewarding new group,
 40 club, or sports team, decide on a major or career direction which makes it clear how to focus
 41 your life, or take on some other important new project in your life"), and the remaining 64

1 were assigned to identify a circumstance they could change (i.e., “You might buy yourself
2 something you need or want; arrange to get an on-campus parking permit, or drop a course
3 that you were really going to have trouble with”). Research assistants examined each partici-
4 pant’s listed change to make sure it fit the assigned category. Example activity changes listed
5 included “Get involved in my sorority’s rush committee,” “Join an intramural basketball
6 team,” and “Introduce myself to all my professors”; example circumstance changes listed
7 included “Get my old roommate to finish moving his stuff out,” “Drop Physical Chemistry,”
8 and “Pay off my parking tickets.”

9 After answering a filler questionnaire, participants completed the PANAS again, so we
10 could examine the effects of the initial positive event (i.e., designating a positive change to
11 make) on mood. Finally, approximately 2 weeks later, participants filled out an online survey
12 in which they again were asked to complete the PANAS. Additionally, they were asked, “Did
13 you actually make the change you said you would make? Please tell the truth – it is ok if you
14 didn’t (we expect that), we just need to know, for the purposes of our study.” The data below
15 concern only the 79 participants who responded “Yes” to this question. These students were
16 asked to rate the variety of their change (“To what extent is the change something that *varies*
17 *over time*, i.e., something that adds variety to your life?”), using a 1 (*not at all*) to 5 (*very*
18 *much*) scale. Activity change participants reported slightly more variety in their change than
19 circumstance change participants ($M_s = 3.10$ vs. 2.74), but this finding did not reach signifi-
20 cance, $t(77) = 1.54$, $p = 0.127$. Our results are collapsed across type of change (activity vs. cir-
21 cumstance), because this factor did not moderate the findings reported in this chapter; in
22 other words, variety had the same effect in both conditions.

23 For each of the three time points, we computed a single “affect balance” score by subtract-
24 ing negative affect from positive affect on the PANAS (Sheldon & Lyubomirsky, 2006).
25 Preliminary full-sample analyses of these data indicated that affect balance increased
26 between the beginning and the end of the first session (Time 1 to Time 2; $M_s = 1.42$ vs. 1.71 ,
27 $t(78) = 4.06$, $p < 0.01$), likely because participants were pleased to have made a commitment
28 to a positive change. This fulfills the HAP model’s assumption that there is an initial event
29 that raises initial well-being. However, no difference emerged between Time 1 affect balance
30 and Time 3 affect balance, 2 weeks later ($M_s = 1.42$ and 1.51 , *ns*), suggesting that the effects of
31 making the initial change, if any, had on average dissipated by Time 3.

32 Thus the question becomes, which participants, if any, maintained their gains in well-
33 being at Time 3? To address this question, we regressed Time 3 affect balance on Time 1
34 affect balance (so that positive change from Time 1 to Time 3 would be the focal quantity to
35 be predicted) and also the rated variety of the change at Time 3. This analysis revealed a sig-
36 nificant Time 1 affect balance effect (i.e., the test-retest coefficient; $\beta = 0.60$, $p < 0.01$). This
37 coefficient is substantial but also indicates some variability or inconsistency between Time 1
38 and Time 3. In fact, as expected, rated variety significantly predicted this variability ($\beta =$
39 0.19 , $p < 0.05$). This finding suggests that those who enacted their change (e.g., start walking
40 to work) with greater variety (e.g., walking a different route to work every day this week)
41 were more successful at maintaining their initial boost, consistent with a central proposition
42 of the HAP model (although we did not have the data to examine which of the two routes in
43 Fig. 67.2 were most affected).

44 At a second step of the equation, we entered Time 2 affect balance, and found a trend for
45 the variety effect ($\beta = 0.14$, $p = 0.10$), indicating that variety predicted enhanced affect bal-
46 ance controlling for both prior measures of well-being, a more rigorous standard implying

1 that variety nearly predicted increased well-being after Time 2, when well-being was already
 2 elevated. At a third step of the equation, we controlled for which type of life change was
 3 made (activities or circumstances), finding neither a significant main effect nor a significant
 4 interaction with variety. Thus, in these data, the *variety* of the assigned change was a more
 5 robust predictor of maintained change than the exact *type* of change.

6 In sum, Study 1 supplied initial evidence that the degree of variety associated with a posi-
 7 tive life change helps to maintain the longer-term effects of that change upon well-being.
 8 However, Study 1 was only correlational, and relied on participants' self-reports of variety
 9 rather than on a more objective means of varying how people experience a life change. To
 10 redress this shortcoming, for a second study, we collected experimental data with random
 11 assignment to further illuminate the role of variety.

12 STUDY 2: EXPERIMENTALLY ASSIGNED VARIETY 13 PREDICTS GAINS IN WELL-BEING

14 In the second study, 52 undergraduate students from an ethnically diverse campus of the
 15 University of California were invited to participate in a longitudinal investigation about
 16 "aspects of college students' lives over the course of a [school] quarter." Interested students
 17 attended an introductory laboratory session where they were asked to list numerous acts
 18 of kindness that they could feasibly perform in the future. Kind acts were described to par-
 19 ticipants as "acts that are not normally expected in your daily life (i.e., they are over and
 20 above what you typically do) and involve some sacrifice by you (e.g., in effort, energy, time,
 21 or money)."

22 After participants listed possible kind acts to do, they were instructed to perform the kind
 23 acts during the next 10 weeks. Participants logged in to an online diary to report what kind
 24 acts they had completed each week. Examples of such acts include "Taking out the trash in
 25 my [shared] apartment," "Letting a friend borrow a book for class," "Cooking dinner for my
 26 roommates" and "Letting several cars merge in front of me on the freeway." Importantly,
 27 some students were randomly told to repeat the same kind acts each week for the duration
 28 of the study (low variety condition), whereas other students were told to vary the acts that
 29 they performed and not repeat them (high variety condition). We hypothesized that those
 30 participants who practiced kind acts in new and different ways each week (i.e., the high vari-
 31 ety condition) would derive more positive emotions from the activity and demonstrate
 32 enhanced well-being at the end of the 10-week intervention. By contrast, we hypothesized
 33 that those participants who practiced kind acts in routine, unvarying ways each week (i.e.,
 34 the low variety condition) would derive less and less added positive emotions from the activ-
 35 ity over time and thus demonstrate no change in well-being by the end of the 10-week inter-
 36 vention. In other words, people in the low variety condition were expected to adapt to
 37 practicing acts of kindness relatively quickly, whereas people in the high variety condition
 38 were expected to thwart adaptation by engaging in novel, changing activities.

39 We measured participants' happiness at baseline and immediately after the intervention
 40 period with the 4-item Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999). We
 41 then calculated change scores by subtracting baseline happiness from post-intervention
 42 happiness. Students in the high variety condition reported enhanced happiness following

1 the intervention ($M = +0.03$, $SD = 0.75$) relative to students in the low variety condition who
 2 actually reported diminished happiness following the intervention ($M = -0.78$, $SD = 1.16$).
 3 These changes in well-being were significantly different for the high variety vs. low variety
 4 conditions, $t(50) = 3.00$, $p = 0.004$. This finding suggests that not only does implementing an
 5 intentional activity in new and unpredictable ways help bolster one's well-being, but that
 6 repeating an intentional activity without spontaneity and freshness may actually be detri-
 7 mental to well-being. It is also worth noting that it may appear that high variety participants
 8 did not actually become happier, and that instead, low variety participants became unhap-
 9 pier. However, this pattern of results needs to be understood in the context of the typical
 10 temporal trend for students to become unhappier over the course of an academic quarter,
 11 as the workload increases and initial optimism gives way to less rosy realities. Seen this way,
 12 the high variety participants were able to avoid the typical decline in SWB shown by stu-
 13 dents as found in previous longitudinal intervention studies (e.g., Lyubomirsky et al., 2005).

14 In sum, our second study found that those randomly assigned to engage in more varied
 15 kindness activities derive higher maintained well-being at the end of the intervention, com-
 16 pared to those assigned to engage in less varied activities. This is consistent with the HAP
 17 model and also with a saying from first-century BC writer Publilius Syrus, who observed,
 18 "No pleasure endures unseasoned by variety." Notably, the main finding from this experi-
 19 mental study extends the correlational conclusions of Study 1, and further suggests that
 20 attending to variety in one's actions may be a powerful happiness enhancing strategy.

21 In conclusion, the two studies we have reported here provide the first support for an
 22 important feature of both the SHM and HAP models—the notion that varying how one does
 23 a "positive" activity may be crucial in determining whether that activity continues to have
 24 enhancing effects on peoples' well-being. Again, a key assumption of the HAP model is that
 25 an ongoing stream of fresh positive events and positive emotions are necessary to maintain a
 26 person in the upper end of his or her "set range." Hedonic adaptation is a powerful counter-
 27 weight to this possibility, and in order to overcome it, one must continue to vary the positive
 28 experiences one has. We as researchers recognize this in our own lives; the thrill and satis-
 29 faction of conducting research is enhanced when we ask new questions, test new phenom-
 30 ena, and develop new theories. In this way, the potential "ho hum" of our work lives is
 31 forestalled, so that we can remain as excited about research as when we were graduate
 32 students. To return to the title of this chapter—variety is, indeed, the spice of happiness.

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