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9 Gratitude and Subjective Well-Being

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The test of all happiness is gratitude.
—G. K. Chesterton (1908/1986, p. 258)

In his struggle to understand the function of praise, C. S. Lewis wrote, “I think we delight to praise what we enjoy because the praise not merely expresses but completes the enjoyment; it is its appointed consummation. It is not out of compliment that lovers keep on telling one another how beautiful they are; the delight is incomplete until it is expressed” (1958, p. 95).

Lewis was not satisfied with the theory that the only function of praise is a return of social reinforcement. The passage just quoted indicates that he believed that the primary motive for praise was that it completes our enjoyment of the blessing. It is as if our enjoyment is incomplete unless some praise or gratitude is expressed to the source of our enjoyment. Here Lewis presented the provocative hypothesis that the expression of gratitude contributes in an important way to human happiness. Chesterton (1908/1986) went even further by suggesting that a genuine expression of gratitude is the test of an authentic happiness.

In my lab, my students and I have followed Lewis’s approach to gratitude. Rather than focusing on the social benefits of expressing gratitude (which appear to be clear in the literature; see McCullough, Kilpatrick, Emmons, & Larson, 2001; McCullough & Tsang, chap. 7, this volume), we have investigated the emotional benefits of grateful experience. Although we do

not deny the evolutionary and functional importance of gratitude to social life (Bonnie & de Waal, chap. 11, this volume; Komter, chap. 10, this volume; Trivers, 1971), our perspective has been to investigate the functional importance of gratitude to the enjoyment of life.

In his classic text *The Varieties of Religious Experience*, William James observed that "how to gain, how to keep, how to recover happiness is in fact for most men at all times the secret motive of all they do" (1902/1958, p. 76). That this is perhaps the most often quoted text by William James in the last 10 years attests to the growth and acceptance of the study of happiness and subjective well-being (SWB). Because compelling arguments for the importance of the study of SWB have been put forth and largely accepted by the psychological community (e.g., Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Myers, 1993; Myers & Diener, 1995; Veenhoven, 1988), I do not attempt to recapitulate the grounds for SWB research here. Suffice it to say that SWB is now an important research area in the social sciences, and if gratitude proves to be a significant predictor of happiness, this is a relationship that should not be taken lightly. Again to quote Chesterton, "Pessimism is at best an emotional half holiday; joy is the uproarious labour by which all things live" (1908/1986, p. 364). If indeed gratitude is an important component of "the uproarious labour by which all things live," this relationship deserves to be studied.

In this chapter I argue that gratitude is a significant component of SWB. I follow Diener's (1984) approach to SWB and use the terms *SWB* and *happiness* interchangeably. Diener emphasized three hallmarks of SWB (pp. 543–544). The first rather obvious but often overlooked factor of SWB is that it is subjective. One's own experience of one's happiness is what defines SWB. Second, Diener emphasizes that SWB is not merely the absence of negative factors (such as depression), but a positive measure of a construct. Third, the measurement of SWB should be global, that is, it should cover "all aspects of a person's life" (p. 544). Both happiness and gratitude may be studied as affective traits or affective states. Briefly, an affective state is one's immediate phenomenal experience of an emotion. Conversely, an affective trait describes one's tendency or disposition to experience a particular emotion (for a review of this distinction with regard to gratitude, see McCullough, Emmons, & Tsang, 2002; McCullough et al., 2001). Thus, a person high in the affective trait of gratitude might not experience grateful feelings at any given moment but will be more likely to experience gratitude in response to benefits than most (i.e., he or she will be predisposed to grateful feelings). In this chapter I first describe research that has investigated the relationship between SWB and gratitude as an affective trait. Second, I review the few studies that have attempted to experimentally manipulate the states

of gratitude and SWB. I then propose some mechanisms that might explain the relationship between gratitude and SWB, and conclude with a discussion of future research issues and considerations.

SWB AND THE GRATEFUL TRAIT

One of the most surprising results of the first 30 years of SWB research has been how poorly demographic variables have predicted happiness. Variables such as age, intelligence, gender, and material well-being have predicted such a small proportion of the variance of SWB that reviewers have concluded that demographics are largely irrelevant to the SWB issue (DeNeve, 1999, p. 142; for additional reviews see Diener, 1984; Diener et al., 1999; Myers, 1993; Myers, 2000a; Myers & Diener, 1995). However, personality variables have fared much better as predictors of SWB (e.g., DeNeve, 1999; DeNeve & Cooper, 1998). To date, the research has largely affirmed the verse penned by William Cowper: "Happiness depends, as Nature shows, / Less on exterior things than most suppose" (as cited in Tripp, 1970, p. 276).

If personality traits such as extraversion are the best predictors of SWB, might the affective trait of gratitude be an important personality predictor of happiness? To anticipate my forthcoming review, several studies support the idea that the disposition of gratitude is a reliable predictor of SWB.

To my knowledge, two dispositional gratitude measures have been developed. Probably the better developed of the two is the Gratitude Questionnaire (GQ-6), a fairly short measure that appears to have good psychometric properties (McCullough, Emmons, & Tsang, 2002). In my lab we have developed the Gratitude, Resentment, and Appreciation Test (GRAT), which also appears to have adequate psychometric properties (Watkins, Porter, & Curtis, 1996; Watkins, Porter, & Miller, 1997). Both of these measures have been found to have reliable associations with various SWB measures. For example, the GQ-6 and the GRAT are both positively correlated with the Satisfaction With Life Scale (SWLS), one of the most frequently used measures of SWB (Diener, Emmons, Larsen, & Griffin, 1985; Pavot & Diener, 1993). In two studies, McCullough and colleagues (2002) found a strong positive association between the GQ-6 and the SWLS ($r = .53$). In two studies, my students and I (Watkins, Grim, & Hailu, 1999; Watkins et al., 1997) found that the GRAT had a similar relationship with the SWLS ($r = .49$, $r = .50$). Thus, the more grateful individuals report themselves to be, the more they express satisfaction with their lives.

These relationships compare favorably with other personality variables that have consistently been found to correlate with the SWLS. Figure 9.1

demonstrates this graphically by comparing the association of dispositional gratitude with the SWLS with typical relationships demonstrated by other variables. This figure shows that the affective trait of gratitude may need to be taken as a serious player as researchers are investigating personality components of SWB.

Although the SWLS is one of the most commonly used measures of SWB, the authors of this instrument did not intend for it to measure all aspects of SWB. As such, it is primarily tapping the cognitive component of SWB, because individuals are required to make satisfaction judgments about their lives as a whole (Diener et al., 1985; Pavot & Diener, 1993). We must look to other measures to evaluate the contribution of gratitude to the affective component of SWB. McCullough et al. (2002) performed perhaps the most direct test of this relationship when they compared the GQ-6 to the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). The GQ-6 showed a reliable positive relationship with this measure ($r = .50$). Similarly, we (Watkins et al., 1999) have found the GRAT to have a strong relationship with the Fordyce happiness measure (Fordyce, 1988). Here the GRAT was correlated with the average happiness rating at .49. We (Watkins et al., 1997) also found the GRAT to be associated with elation ($r = .47$) as measured by the Semantic Differential Feeling and Mood Scale (Lorr & Wunderlich, 1988). Furthermore, both the GQ-6 and the GRAT have been shown to be positively associated with positive affectivity ($r = .31$ and $r = .36$, respectively; McCullough et al., 2002; Watkins et al., 1997), as measured by the Positive and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988). All of these associations were reliable and provide considerable support for the notion that the grateful disposition is also related to the more affective component of SWB. Summarizing the self-report data, two independently developed dispositional gratitude measures have shown very similar positive relationships with various measures of positive emotion and SWB.

Because of the subjective nature of SWB, this area will probably always rely on self-report measures. However, some researchers (e.g., Diener et al., 1999) have also urged the use of non-self-report measures of happiness. For example, Diener et al. (1999) suggested using recall measures as an indirect measure of SWB to compliment findings from self-report measures. Following this lead (see also Seidlitz & Diener, 1993; Seidlitz, Wyer, & Diener, 1997), my students and I compared recall of emotional events with level of dispositional gratitude (Watkins et al., 1999). In this study, participants were asked to recall positive and negative events from their past for 3 minutes each. We created a positive memory bias measure by subtracting the number of negative events from the number of positive events recalled. This constituted our intentional recall variable. As expected, we found that grateful in-

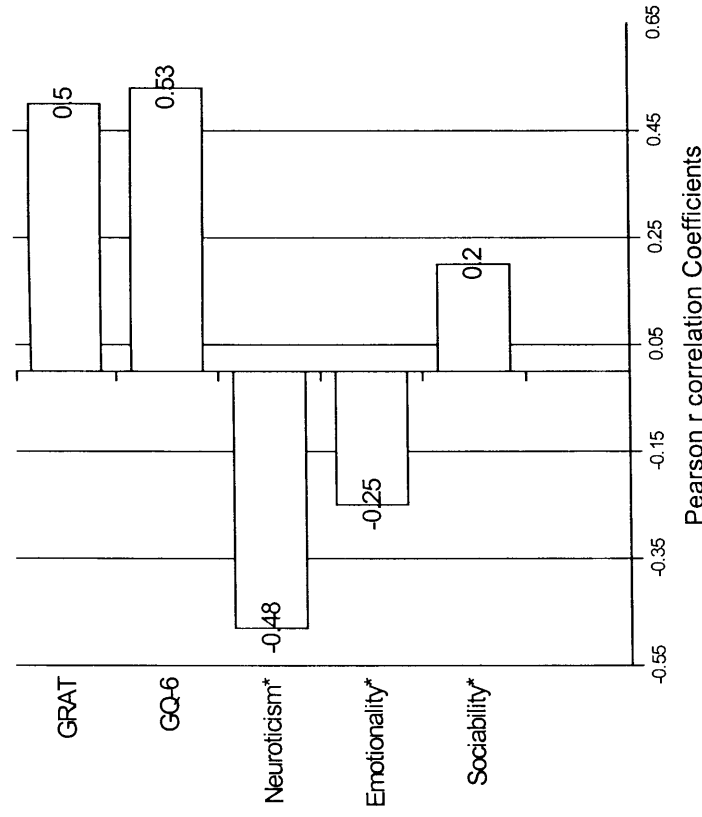


Figure 9.1. Comparison of correlations of gratitude and other personality variables with the Satisfaction With Life Scale.

dividuals were more likely to have a positive memory bias. Because many studies have shown that depression is inversely related to positive memory bias (e.g., Grimm & Watkins, 1998; Watkins, Mathews, Williamson, & Fuller, 1992; for a review, see Blaney, 1986), in a second study we sought to determine if the grateful disposition contributed to positive memory bias independently from depression. Indeed we found that after controlling for depression, the GRAT still reliably predicted positive memory bias (Watkins et al., 1999).

In addition to this relationship with intentional memory bias, we also found that gratitude was positively associated with an intrusive memory bias (Watkins et al., 1999). While completing the recall trials, we asked our participants to check a box at the bottom of the page if a life event of the opposite valence of that which they were trying to recall came to mind. For example, if while attempting to recollect positive events from one's life a negative event came to mind, one would check a box indicating the occurrence of an intrusive memory. As with intentional memory, we found that grateful individuals were more likely to have a positive intrusive memory bias ($r = .32$

and .22 in the two studies). These studies provided two indirect measures of SWB, both of which we found to be related to our trait measure of gratitude.

Another indirect measure of positive affect that has been used is pleasantness ratings of neutral words (Isen & Shaker, 1982; Kuykendall, Keating, & Wagaman, 1988). In a study (Woodward, 2000) recently completed in my lab, the GRAT was found to be positively related to pleasantness ratings of neutral words. This approach circumvents problems associated with self-presentation biases and thus provides important indirect data supporting the hypothesis that the disposition of gratitude is related to happiness.

Another way to skirt the well-known problems with self-report measures is to use informants. McCullough et al. (2002) showed that friends and relatives ratings of participants' level of gratefulness reliably correlated with the participants' own reports of their SWB. Thus, self-report and non-self-report data converge to support the idea that grateful people tend to be happy people.

SWB AND THE GRATEFUL STATE

Although the relationships between the grateful trait and SWB appear to be strong, this research suffers from the same limitations as most SWB research to date. As Diener et al. (1999) correctly note, most SWB research is correlational in nature, as are the studies I have just reviewed to this point relating the grateful trait to happiness. Although it is difficult to see how the grateful disposition could be manipulated in the lab, the correlational nature of the studies reviewed earlier prevents making any causal determinations. The gratitude trait and SWB relationship could be due to gratitude causing happiness in some way, but it could also be that gratitude is something of an epiphenomenal result of being happy. Thus, as Diener and colleagues (1999) have encouraged, experimental studies looking into the relationship between gratitude and SWB need to be conducted.

In the context of attempting to show the benefits of an attitude of dependence, G. K. Chesterton stated that "gratitude produced the most purely joyful moments that have been known to man" (1924/1990, p. 78). Is there any truth to the claim that moments of gratitude are accompanied by happiness? Survey data indicates that most people think so. In a Gallup poll (Gallup Survey Results On "Gratitude," 1998), 95% of respondents said that expressing gratitude made them feel at least *somewhat happy*. In fact, over fifty percent of those in this survey said that expressing gratitude made them feel *extremely happy*. Mayer, Salovey, Gombert-Kaufman, and Blainey (1991), presented converging evidence that gratitude is a positive affective state. They found that the adjectives *grateful* and *thankful* both

loaded on their pleasantness dimension. Furthermore, recent analyses from our lab (Woodward, 2000) have shown that with experimental manipulations of mood, positive affect and gratitude tend to covary. So people commonly associate grateful states with happy states, but does being grateful actually *cause* an improvement of mood? Several preliminary studies suggest that it does.

In my lab, we have conducted several studies attempting to manipulate gratitude to investigate the causal influence of gratitude on mood. Woodward (2000, Study 1) found that she could manipulate gratitude by having individuals focus on things they were thankful for versus anticipated benefits that in fact were not received. Early in fall quarter, students were randomly assigned to one of two conditions. Students either listed activities they were able to do over the summer that they were thankful for, or they listed things they had wanted to do but were unable to. We then asked students to tell us how grateful they were for their summer on a Likert-type scale. Indeed, students in the thankful condition reported more gratitude than those in the envy condition. More important, students in the grateful condition reported less negative affect following the intervention than did students in the envy condition (as measured by the negative affect scale of the PANAS; Watson et al., 1988).

However, in a conceptual replication we failed to find this effect again (Woodward, 2000, Study 2). In this study, early winter quarter, we asked some students to recall gifts received over the holidays that they were thankful for. Another group listed gifts they would have liked to receive but didn't. We found that this manipulation did not affect reported gratitude for the holiday break, and likewise mood was not reliably different between the two groups. There are several explanations that may be offered as to why this manipulation failed. As McCullough et al. (2001) have shown in their review, a number of studies suggest that if a benefit is expected then one tends not to respond with as much gratitude. Because most people expect to receive gifts over the December holidays, they also may not experience much gratitude in response to those gifts. A second possibility is that people tend to be more grateful for experiences and relationships than they do for material blessings. Because we asked our participants to recall material blessings received in Study 2, this may have mitigated any grateful response.

In a study recently completed (Stone & Watkins, 2001), preliminary analyses have shown that subjects in grateful experimental conditions displayed more mood improvement than those in a comparison condition. Participants were randomly assigned to one of four conditions. In the control condition students were asked to write about the layout of their living rooms. The remaining participants were randomly assigned to one of three gratitude conditions. Some participants were simply asked to think about someone

they were grateful for, others were asked to write about someone they were grateful to, and finally a group of students was asked to write a letter of gratitude to someone they felt grateful to. All participants were administered the PANAS both before and after the experimental manipulation. Results showed that the students in the grateful conditions reliably displayed a greater increase in positive affect.

A variety of emotional benefits resulting from a simple practice of gratitude have been demonstrated (Emmons & McCullough, 2003). In Emmons and McCullough's first study, students were randomly assigned to one of three conditions. Participants either wrote about five things they were grateful for in the past week (gratitude condition), five hassles from the day (hassles condition), or five events or circumstances that affected them in the last week (events condition). Participants completed these exercises along with a variety of other measures for 10 weeks. What I find particularly interesting about this study is that Emmons and McCullough included two global appraisal measures in the students' weekly monitoring. One appraisal tapped participants' feelings "about their life as a whole during the week" (Emmons & McCullough, p. 380), and a second question asked them about their global expectations for the coming week. As in our studies (Stone & Watkins, 2001; Woodward, 2000), students in the gratitude condition reported being more grateful than those in the hassles condition. Results from the two global well-being measures are more important for our purposes. Participants in the grateful condition felt better about their lives as a whole and were more optimistic about the future than students in both of the other comparison conditions. In addition, those in the grateful condition reported fewer health complaints and even said that they spent more time exercising than control participants did. Thus, a simple weekly intervention showed significant emotional and health benefits.

In their second study, Emmons and McCullough (2003) increased the gratitude intervention to a daily practice over a 2-week period. As in their first study, participants were randomly assigned to one of three conditions. The gratitude and hassles conditions were identical to the first study, but the events condition was changed to a downward social comparison manipulation. In this condition, participants were encouraged to "think about ways in which you are better off than others" (Emmons & McCullough, p. 381). Emmons and McCullough added this condition to control for possible demand characteristics. I found this to be an intriguing comparison condition that could be developed for future gratitude research. However, some research has shown that situations in which we feel that "it could have been worse"—that we could have or should have been worse off—often produce a response of gratitude (e.g., Teigen, 1997). This comparison condition may have inadvertently produced some gratitude responses, thus mitigating any differences

seen between the gratitude condition and this comparison condition. Even so, the gratitude condition showed an impressive array of benefits. Although the health benefits from the first Emmons and McCullough study were not evident in this study, participants in the grateful condition felt more joyful, enthusiastic, interested, attentive, energetic, excited, determined, and strong than those in the hassles condition. Again the gratitude manipulation showed a significant effect on the positive affect factor as compared with the hassles condition, but no reliable impact on negative affectivity. In addition, there was some evidence that this daily intervention showed a stronger effect than the weekly practice of the first study.

In a third study, Emmons and McCullough (2003) replicated these effects in adults with neuromuscular diseases. Patients were randomly assigned to a gratitude condition or to a true control condition in which the subjects simply filled out daily experience rating forms. Like those in the previous studies, the gratitude group showed significantly more positive affect and satisfaction with life, but they also showed less negative affect than the control group. Not only did patients in the grateful condition show an advantage in positive affect and life satisfaction in self-reports, but also in the reports of significant others. These studies and those from our lab support the contention that gratitude has a causative influence on subjective well-being.

A CYCLE OF VIRTUE?

In this chapter I have reviewed evidence pointing to a strong relationship between gratitude and happiness. Several studies have shown that grateful people tend to be happy people. I have also reviewed preliminary experimental studies supporting the theory that a practice of gratitude actually increases various positive emotional states. If gratitude, both as state and trait, contributes to happiness, what mechanisms might be involved? Why might gratitude contribute to happiness? In this section I offer some theoretical suggestions regarding the contribution of gratitude to SWB.

One mechanism for the contribution of gratitude to happiness might involve the additional emotional advantages one gains from a benefit when it is perceived to be a gift, that is, a favor that has been given to one for one's benefit. Speaking of the joy that moments of gratitude bring, Chesterton remarked, "All goods look better when they look like gifts" (1924/1990, p. 78). If one perceives a benefit to be gift, is one indeed more likely to enjoy the benefit? Perceiving a positive experience as a gift may be a form of cognitive amplification that enhances positive affect (Diener, Colvin, Pavot, & Allman, 1991). Although to my knowledge there are no data that speak directly to this issue, various studies have shown that if one thinks a benefit was given in-

tionally for one's benefit, one is more likely to experience gratitude (for a review see McCullough et al., 2001). Presumably, those who are dispositionally grateful should be more likely to perceive benefits as gifts. If good things really are better when perceived as gifts, this could be one way that gratitude directly contributes to states of happiness.

C. S. Lewis (1958) argued that our delight with someone else is "incomplete until it is expressed" (p. 95). Like Chesterton, Lewis argued that our enjoyment of something will be somewhat restrained unless we are allowed to express our appreciation for the benefit. The implication is that gratitude should increase our enjoyment of a blessing. It is as if one action readiness mode of enjoyment is gratitude. Following Lewis, just as it is difficult to resist running when one is afraid, it should be more difficult (if not somewhat aversive) to suppress one's appreciation for a benefit received. As Lewis summarized Aristotle in another passage, "Aristotle has taught us that delight is the 'bloom' on an unimpeded activity" (1963, p. 115). Thus, the "unimpeded activity" of expressing gratitude for a benefit may increase our delight in the good. Following Fredrickson's theory of positive emotions (1998, chap. 8, this volume), we would not expect the thought/action readiness of the enjoyment of a gift to be as specific as that of fear. Thus, although fear may prepare us for flight, enjoyment of benefits may prepare us for a much wider variety of thoughts and activities that may be characterized as expressions of gratitude. Future research could test these ideas, but if Lewis and Chesterton are right, gratitude may have direct emotional benefits that contribute to SWB.

One of the most frequent questions coming from experts of SWB seems to be, If we are so rich, why aren't we happy? (Csikszentmihalyi, 1999). As I touched on earlier, generally speaking, SWB research has shown that happiness can't be bought. In the midst of our increasingly abundant culture, people don't seem to be getting any happier, and some have argued that in fact the misery index is rising (in terms of variables such as depression and suicide rate; e.g., Csikszentmihalyi, 1999; Myers, 2000b). One reason that increases in material blessings do not increase happiness is related to the principle of adaptation (Csikszentmihalyi, 1999; Myers, 2000b). Research from a number of different areas in psychology has shown how humans have an amazing ability to adapt to their ongoing circumstances. In the context of emotion theory, Frijda (1988) referred to this as the "law of habituation". Briefly, this law states that, over time, we tend to get used to our current level of satisfaction. For example, a major league baseball player may not be happy (and perhaps may even feel deprived) with his \$500,000-per-year salary, because this has been his salary for the past 5 years, and other teammates are making much more. Frijda believes, however, that one need not be a slave to the law

of habituation. He suggested that "Adaptation to satisfaction can be counteracted by constantly being aware of how fortunate one's condition is" (Frijda, 1988, p. 354). This is exactly what a practice of gratitude should accomplish, consistently reminding one of how good their life really is. Therefore another route from gratitude to happiness might be by counteracting the law of habituation (see similar arguments in Emmons & McCullough, 2003).

A third mechanism whereby gratitude contributes to happiness might be by directing attention away from upward social comparisons that lead to feelings of deprivation. McCullough et al. (2002) argue that focusing on blessings one is grateful for directs attention away from making comparisons with others who have more. A number of studies have shown that upward social comparisons lead to less positive affect and more unpleasant feelings such as depression and feelings of deprivation (e.g., Botta, 1999; Cattarin, Thompson, Thomas, & Williams, 2000; Hagerty, 2000; Hennigan et al., 1982). In their study of dispositional gratitude, McCullough et al. (2002) found that gratitude was inversely related to dispositional envy. When an individual is grateful for the greenness of his or her own lawn, he or she is not likely to be looking at the greener grass on the other side of the fence. I should note that the converse likely holds as well; if one's attention is consistently devoted to things one does not have, one will be unlikely to focus on appreciating the blessings one does have. It seems that a fruitful approach for future research would be to investigate how one's disposition of gratitude generally affects one's social comparisons. For example, if given the opportunity, will grateful individuals be less likely to engage in upward social comparisons than those less grateful? Alternatively, in the context of upward comparisons, are grateful people less likely to be affected emotionally (cf. Lyubomirsky & Ross, 1997)?

On a related note, might gratitude assist in delaying gratification? If grateful individuals are more satisfied with the blessings they have, it seems reasonable that they will not have an excessive desire for things they do not have and perhaps cannot afford. I propose that grateful individuals should be more able to delay gratification. This ability might lead grateful individuals to be more able to save resources until they can obtain benefits without falling into debt. Conversely, less grateful individuals who are dissatisfied with their current blessings should be less willing to wait for benefits in life (such as a new car or home, for example), thus mortgaging their future, which it seems would lead to a more unhappy life. Past research has shown that depression is associated with a decreased ability to delay gratification (e.g., Wertheim & Schwarz, 1983), and positive affect inductions have been shown to increase children's ability to delay reward (Fry, 1975; Schwarz & Pollack, 1977; Yates, Lippett, & Yates, 1981). Thus, it seems reasonable to propose that the emo-

tional benefits of gratitude might assist one in waiting for rewards, and this in turn might provide for increased SWB. Again, these proposals could be fruitful avenues for future research.

Another potential mechanism for the gratitude-happiness connection might be that the practice of gratitude serves as an effective coping mechanism (cf. Emmons & McCullough, 2003). If he or she tends to view life as a gift, the grateful person may be able to find benefits even in unpleasant circumstances. For example, many believe that good character is developed through times of difficult life circumstances. Also, grateful persons may be more able to appreciate how difficult situations have reoriented their perspective to reveal what is really important in their lives. If a grateful attitude promotes better coping with stressful circumstances, this should promote long-term SWB. Results from several studies have suggested that gratitude is a common response to stressful situations (e.g., Coffman, 1996; Ventura, 1982; Ventura & Boss, 1983). In a recent study (Watkins, Christianson, Lawrence, & Whitney, 2001), we found that the disposition of gratitude was positively related to two measures of emotional intelligence. Although the GRAT was related to all three scales of emotional intelligence of the Trait Meta-Mood Scale (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), the strongest association was with the mood repair scale. This evidence supports the idea that gratitude may give one a helpful perspective on life that assists in mood repair following a stressful event.

Recent evidence from Masingale et al. (2001)—a study from the lab of my colleague Russell Kolts—lends more support to the supposition that gratitude may be an effective coping mechanism for dealing with stressful events. In a study investigating posttraumatic stress disorder (PTSD) symptoms in student survivors of trauma, Masingale et al. found that gratitude predicted the level of PTSD symptoms in trauma survivors. Grateful individuals were found to have significantly lower PTSD symptoms than less grateful individuals on two different PTSD scales. Although a prospective analysis would provide stronger evidence for the causal aspects of gratitude for dealing with trauma, this study provides promising evidence that gratitude may be an adaptive way for dealing with difficult life circumstances.

Results from our memory bias studies referred to earlier (Watkins et al., 1999) appear to coincide with this evidence. After recalling positive and negative events, participants rated the emotional impact of the events for the time when the event occurred (*then*) and how recalling the event affected them now (*now*). We used a Likert scale varying from *unpleasant to pleasant emotional impact*. We found that although *then* ratings of negative events did not differ between grateful and less grateful individuals, grateful individuals rated the *now* impact as significantly more positive than did less grateful individuals. Thus, time appeared to have more of a healing effect on unpleasant

memories for grateful participants. This result supports the idea that a grateful approach to negative life events might help reframe memories of unpleasant events so that they have less aversive emotional impact.

Based on recent results from depression research in mood-congruent memory (Grimm, 2000; Grimm & Watkins, 1998), I have come to the conclusion that accessibility of negative memories is not as important to the maintenance of depression as is the emotional impact of these memories (cf. Teasdale, 1983). I believe the finding that gratitude might help reframe memories of negative events is important to viewing how gratitude might be an adaptive coping response and in turn might be an important component of SWB. One way grateful individuals might reframe unpleasant life events is through the “redemptive sequences” described by McAdams and Bauer in chapter 5 of this volume, whereby bad things turn good (see also McAdams, Reynolds, Lewis, Patten, & Bowman, 2001). McAdams et al. (2001) have shown that individuals whose life stories are characterized by redemptive sequences tend to be more satisfied with their lives. Furthermore, their research has suggested that redemptive life sequences are more predictive of SWB than the emotional tone of all life events related from one’s life story. In other words, redemptive stories were more predictive of SWB than was simply the positivity of one’s life events. It may be that gratitude promotes the construction of redemptive life sequences because individuals who approach life with an attitude that all of life is a gift will be more likely to find good in bad life circumstances.

A fifth mechanism whereby gratitude might promote SWB is through the accessibility and recollection of pleasant life events. In the depression literature, some have argued that the more negativistic memory bias of depressed individuals might serve to maintain their disorder. For example, Teasdale (1983) has argued that a number of studies support the conclusion that depressed individuals are more likely to recall negative memories. This conclusion is supported by evidence from autobiographical memory tasks (e.g., Grimm & Watkins, 1998; Teasdale & Fogarty, 1979), and from studies using valenced word lists (e.g., Watkins et al., 1992). This mood-congruent memory bias appears to be robust in explicit memory (for a review, see Blaney, 1986) and to be somewhat less consistent in implicit memory (for a review see Watkins, 2002). Teasdale (1983) has argued that because depressed individuals are more likely to recollect unpleasant experiences, this should directly affect their current mood state. In addition, remembering negative life events should activate associations to other aversive memories, thereby increasing the likelihood that these experiences will come to mind and again have an aversive impact on current affect. Furthermore, Teasdale has argued that the tendency to recall more negative experiences should decrease depressive persons’ outcome expectancy for mood-repair activities, thereby

decreasing their likelihood of engaging in these coping behaviors. In all of these ways, Teasdale has argued that mood-congruent memory should promote the maintenance of depression. Whereas Teasdale has emphasized the recollection of negative memories, it could be argued that it is the lack of accessibility of positive memories that is more important in depression. For example, in our explicit memory research, depressed individuals have not typically recalled more negative information than nondepressed controls. Rather, it has been that controls tend to recall many more positive memories than their depressed counterparts (Grimm & Watkins, 1998; Watkins et al., 1992).

Williams, Watts, McLeod, and Mathews (1988, 1996) explained this cognitive bias in depression by arguing that the depressed condition is associated with mood-congruent elaboration. Elaboration refers to the creation of new associations between representations in memory, and the activation of old associations. Williams and colleagues proposed that depressed individuals are more likely to conceptually elaborate negative information, which promotes better learning of mood-congruent information. Additionally, the tendency for depressives to elaborate negative information should enhance mood-congruent retrieval by providing more associative links to negative memory representations. Although this approach appears to be one of the best accounts of information processing biases in depression, one could argue that it is not so much the elaboration of negative information that characterizes depression as it is the failure to show enhanced elaboration of positive information.

Although it is probably inappropriate to see depression as simply the converse of happiness, most depressed individuals show a low satisfaction with life. Thus, an important aspect of happiness may be the accessibility of positive memories (Seiditz & Diener, 1993). I propose that gratitude should enhance the retrievability of positive experiences by increasing elaboration of positive information. I submit that this enhanced elaboration should take place both at encoding and retrieval. A more grateful person should be more likely to notice positive aspects in his or her life and thus enhance the encoding of these experiences into memory. Second, if at encoding an individual experiences gratitude in response to a benefit, this by definition should increase the conceptual elaboration of the event representation. Elaborating the event at encoding increases the number of completed retrieval routes to this representation and thereby increases the retrievability of the event (Graf & Mandler, 1984). Third, I submit that grateful individuals should be more likely to recall past benefits from their life and to experience gratitude in response to these blessings. In other words, grateful individuals should be more likely to count their blessings. The very act of recalling positive life events should increase their accessibil-

ity. Furthermore, the experience of gratitude in response to these recollections should provide more cognitive elaboration of these positive experiences, thereby increasing their retrievability. Earlier, I described the life events recall study (Watkins, Christianson, Lawrence, & Whitney, 2001) in which we showed that the grateful trait predicts a positive recall bias, after controlling for depression. This result lends some support to the proposition that gratitude increases the elaboration of positive information.

The increased availability of positive life experiences should provide memorial evidence for judgments of SWB, as well as fodder for increased positive affect. Furthermore, it seems that the ability to recall blessings from one's past would assist attempts to cope with unpleasant situations and emotions (Rusting & Dehart, 2000). For example, if in response to a perceived failure, such as a poor test grade, one is able to recall many past compliments and blessings received from others, it seems that this failure would be more tolerable.

Because gratitude is best classified as a positive affect, perhaps these predictions about gratitude's enhancing the elaboration of positive information are not unique. After all, the work of Alice Isen and colleagues has repeatedly shown how positive affect inductions increase the availability of positive information in memory (e.g., Isen, Shalke, Clark, & Karp, 1978; for a review see Ashby, Isen, & Turken, 1999). However, here I make the strong prediction that both a grateful disposition and a practice of gratitude should enhance elaboration of positive information beyond that of mere positive affect. I submit that if an individual receives a benefit, that person will be more likely to recall that benefit if he or she feels grateful in response to the event than if he or she feels merely pleased about the event.

In this and in other areas of gratitude research, I believe it is important to embark on the difficult task of dissociating the effects of gratitude from positive affectivity generally. If the cognitive and affective effects of gratitude are identical to other positive emotions, the construct of gratitude may not contain any unique explanatory power. However, it is important to point out that it is not necessary to demonstrate that gratitude has unique effects above and beyond any previous effects shown to be the result of positive affect inductions. It is only necessary to demonstrate the unique emotional and cognitive effects of gratitude in comparison with positive affect that does *not* involve gratitude. In much of the existing positive affect research, it is not possible to determine if gratitude was involved in the affect inductions. For example, perhaps the most common and reliable positive affect induction procedure used by Isen and colleagues has been the administration of an unexpected gift (Ashby et al., 1999). As McCullough and colleagues (2001) have shown in their review of the gratitude literature, receiving a gift and receiving a gift beyond one's social expectations have both been shown to be

conditions in which gratitude responses are likely. Thus, it seems likely that grateful emotion was involved in some of the past research using positive affect inductions. The challenge for future gratitude research is to develop gratitude inductions that clearly contrast with positive affect inductions devoid of gratitude. I believe that Emmons and McCullough (2003) have made an important first step in this direction by attempting to compare a gratitude manipulation with a pride manipulation.

It is also possible that gratitude increases happiness by increasing the actual number of benefits in a person's life. In particular, gratitude could increase happiness by enhancing a person's social benefits. SWB has been shown to be related to the quality of one's friendships in life (Diener et al., 1999; Myers, 2000a), and I propose that gratitude is also related to the quality of one's social contacts. Although I am not aware of any evidence that directly supports this proposed mechanism, a few experimental studies offer indirect support. Several studies have shown that expressing gratitude increases the likelihood of receiving future benefits (Carey, Clicque, Leighton, & Milton, 1976; Crano & Sivacek, 1982; Maheux, Legault, & Lambert, 1989; McGovern, Ditzian, & Taylor, 1975; Rind & Bordia, 1995). In addition, research has shown that individuals failing to show gratitude are not well liked (e.g., McGovern et al., 1975), and by implication grateful individuals should be more likable. However, there is evidence to suggest that when individuals think that someone is expressing gratitude only to garner more benefits, that person is less likely to receive those benefits (Carey et al., 1976). I submit that the expression of gratitude in Lewis's terms—as a completion of one's enjoyment of a benefit—is more likely to be perceived by others as a genuine expression of gratitude, and thus is more likely to garner social benefits. A paradox of gratitude is that, although gratitude results in social benefits, if one expresses gratitude in order to receive these benefits, one is not as likely to realize these rewards. However, in general the evidence supports the proposal that the expression of gratitude often results in social reward, and this may be another reason that gratitude supports long-term SWB.

Finally I would like to suggest that gratitude might increase SWB through the prevention of depressive episodes. In several studies, we have found that depression appears to have a particularly strong inverse association with gratitude that exceeds relationships with other aversive states. In two studies, my colleagues and I (Watkins et al., 1997, 1999) have found that the GRAT is negatively related to depression as measured by the Beck Depression Inventory ($r = -.34, -.54, -.56$). However, it is well known that self-report questionnaires are inadequate measures of the clinical syndrome. Therefore, in another study (Woodward, Moua, & Watkins, 1998), we evaluated the gratitude status of individuals who were diagnosed with the use of a structured clinical interview. We found that clinically depressed individuals

showed significantly lower gratitude as measured by the GRAT (almost two standard deviations below our nondepressed controls). This could simply be a consequence of the negativistic biasing of depressed mood. But we also found that nondepressed individuals who had a significant history of depression had reliably lower GRAT scores than nondepressed individuals without a history of depression. This finding leads to the suggestion that a lack of gratitude may be a vulnerability factor for depression.

How might gratitude prevent depression? Many of the mechanisms I have suggested above should also contribute to the prevention of depression. If gratitude provides more focus on and enjoyment of benefits, this seems to contravene depression. To the extent that gratitude helps individuals direct their attention to blessings they have and away from things they lack, this should decrease the likelihood of depression. Stressful events appear to be important precursors of depressive episodes, so if gratitude proves to be an effective coping technique, this should also help to prevent depression. Also, in providing for increased access to positive memories, gratitude could help build more positive cognitions. Although depression treatment approaches have historically emphasized correcting negative thoughts, recently some have encouraged more emphasis on building positive thoughts (e.g., Ingram, Slater, Atkinson, & Scott, 1990; Ingram & Wisnicki, 1988; Lightsey, 1994). A practice of gratitude could help develop a more positive way of thinking about life events, and so assist in the prevention of depression (cf. Fredrickson, 2000). Various depression researchers have proposed that the lack of social rewards (or increased social punishment, or both) is important in the etiology and maintenance of depression. If a grateful disposition actually provides for a more enjoyable social life, this should also help to contravene depression. On a related note, I propose that gratitude may mitigate depression by directing one's attention away from oneself to others. Research has shown that depressed individuals engage in self-focus that exacerbates their dysphoria (for a review, see Ingram, 1990). I submit that a grateful disposition and practice should result in directing one's attention more to others and what they are providing for one, and away from maladaptive self-preoccupation. SWB appears to be determined not just by the frequency of positive emotional events, but also by the proportion of pleasant to unpleasant events (Diener et al., 1999). Gratitude may contribute to long-term SWB by preventing depressive episodes.

Surely there are proposals for mechanisms explaining how gratitude may increase SWB in addition to those I have suggested here. But one might also argue that happiness promotes gratitude. There are good reasons for suggesting this causal link. In evaluating the conditions that produce gratitude, the literature suggests that three perceptions on the part of the gift receiver increase his or her experience of gratitude. First, the receiver must acknowl-

edge the goodness of the gift. Research has shown that the more the receiver values the gift, the more likely he or she is to experience gratitude (e.g., Tesser, Gatewood, & Driver, 1968). Second, if the receiver acknowledges the goodness of the giver, he or she is more likely to feel grateful. Several studies have shown that if the receiver thinks the giver is providing a favor intentionally for his or her benefit, the receiver is more likely to experience gratitude (Graham, 1988; Tesser et al., 1968). Third, the receiver is more likely to feel grateful if he or she thinks that the gift is gratuitous. The more a gift goes beyond the receiver's social expectations, the more likely he or she will be to experience gratitude (e.g., Bar-Tal, Bar-Zohar, Greenberg, & Hermon, 1977; Hegtvedt, 1990).

Research from the positive affect literature suggests that the first two perceptions are more likely if one is happy. Several studies suggest that when positive affect is induced experimentally, people evaluate things more positively. For example, in the classic study by Isen and colleagues (1978), people evaluated their home appliances more positively if they had just been given an inexpensive gift (see also Isen & Shalker, 1982). This evidence suggests that if one is feeling good, one is more likely to recognize the goodness of benefits, thus promoting grateful responses. Second, when one is encouraged to feel better, research suggests that one evaluates others more positively (e.g., Isen, Niedenthal, & Cantor, 1992). If positive emotion encourages positive evaluations of others, this implies that happy people should be more likely to recognize the goodness of the giver in response to a gift. In other words, happy people should be more likely to acknowledge the good intentions of a giver. This too should promote grateful responding. Although the evidence for happiness promoting gratitude is somewhat indirect, future research could investigate more directly whether positive affect inductions result in increased evaluations of the goodness of gifts, increased acknowledgment of good intentions of givers, and in turn whether gratitude is more likely.

Does gratitude cause happiness, or does happiness cause gratitude? I propose that the answer to both questions is yes. Gratitude promotes happiness, but happiness probably increases the likelihood of gratitude as well. I propose that gratitude and happiness operate in a cycle of virtue similar to the "positive loop" suggested by Isen and colleagues (1978). Some authors have proposed that emotional disorders are characterized by vicious cycles (e.g., Teasdale, 1983). Here I propose that gratitude and happiness feed off each other in a more adaptive cycle. Figure 9.2 illustrates this proposal. Those who are more likely to respond with gratitude to life situations should be more happy generally because of enhanced enjoyment of life benefits, enhanced encoding and recollection of positive life events, and other possible

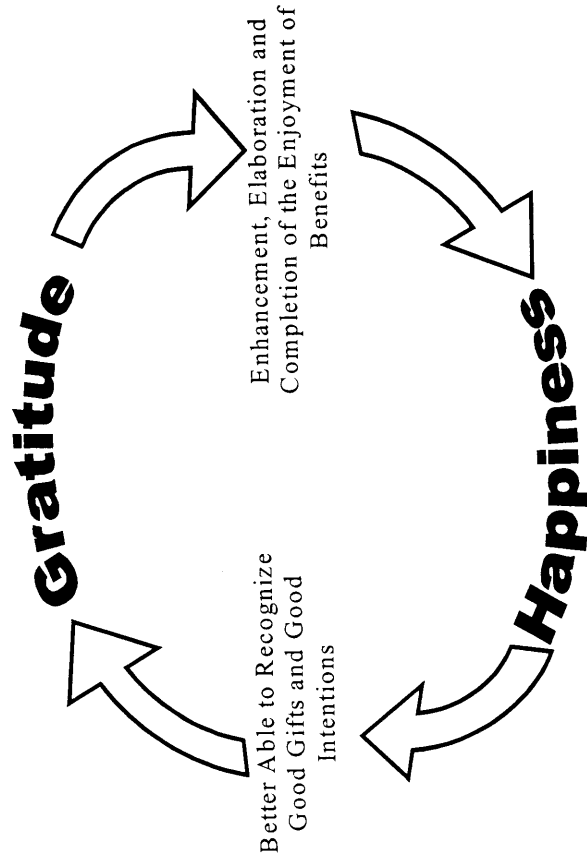


Figure 9.2. Adaptive cycle of gratitude and happiness.

mechanisms that I explored earlier. Positive affect research suggests that happiness enhances the likelihood that one will recognize and interpret life situations as good, and that happy people are more likely to acknowledge the good intentions of others in providing benefits to them. Existing gratitude research suggests that both of these conditions enhance the likelihood of grateful responses. I propose that gratitude promotes happiness, which in turn should promote more gratitude. Obviously, gratitude does not inevitably result in happiness, nor is gratitude the inevitable consequence of happiness. Many factors, including life events and individual differences, may interrupt or enhance this cycle. However, I submit that this cycle may provide a helpful model for understanding the relationship between gratitude and SWB, and I hope that it will energize future research.

ISSUES FOR FUTURE RESEARCH

In the previous theoretical discussion, a number of empirical issues are apparent. In this section I briefly review some additional research issues that I believe to be important for understanding the gratitude-SWB association. First, I believe there are several methodological advancements that would

greatly benefit this research. Much of the research reviewed in this chapter has relied on self-report measures. In this regard, the field could be advanced by using measures that are not so directly dependent on self-report. For example, memory and other cognitive measures utilized by cognitive science should prove useful. Another approach would be to compare grateful and less grateful individuals' emotional responses to ambiguous situations. Perhaps psychophysiological measurements would provide useful findings as well. Gratitude research could take advantage of the methodological advances in personality, cognitive, and emotion psychology to go beyond using self-report instruments.

Another important methodological advance would be the development of reliable techniques for inducing gratitude in the lab. In the preceding discussion on SWB and the grateful state, I reviewed several studies that offer suggestions as to how one might proceed in developing these manipulations. This methodological development is important, because to understand some of the ways in which gratitude actually causes changes in mood and cognition, we need to be able to reliably manipulate gratitude in the laboratory. A systematic research program that would identify reliable manipulation techniques should not only provide benefits for other researchers, but should also provide important data on theoretical issues about gratitude. For example, when our two gratitude manipulation studies are compared, it appears that the technique used by Stone and Watkins (2001) was more effective at manipulating gratitude and consequent affect than our earlier techniques that relied on a listing methodology (e.g., Woodward, 2000). Perhaps simply listing things one is thankful for is not as effective in eliciting gratitude as focusing on one significant thing one is thankful for. If future studies bear out this difference, not only does this provide researchers with valuable information about how to best manipulate gratitude in the lab, it also has theoretical implications.

A third empirical issue concerns whether the disposition of gratitude can be changed. Although the studies reviewed earlier suggest that one's grateful state can be manipulated in the lab, by definition the grateful trait should be much more difficult to change. In fact, we have found that scores on the GRAT are not significantly affected by reliable mood induction techniques (Moua, 1998). Not only should the grateful trait be difficult to manipulate in the lab, one could argue that even in more realistic long-term circumstances the grateful disposition is not likely to change. This question is important, because the grateful disposition may have more important consequences for SWB than a few grateful experiences. Implicit in some gratitude research programs is the assumption that by improving gratitude, one can improve one's happiness. However, if enhancing the grateful disposition is as

futile as attempting to increase height or change eye color (cf. Lykken & Tellegen, 1996), this goal seems fruitless. Although I propose that the grateful disposition (like other attitudes) is difficult to change, improving one's tendency to respond gratefully should not be impossible. Research that evaluates the question of whether one can change one's grateful disposition over the long run will have important implications for the value of gratitude research for long-term SWB.

Perhaps much of the future research on gratitude could be summed up by the question, How do grateful people think? Because the few emotion theories that deal with gratitude argue that this is a complex emotion (e.g., Lazarus & Lazarus, 1994; Ortony, Clore, & Collins, 1988; Weiner, Russell, & Lerman, 1978), cognitive variables are important to consider. How does a grateful person think about a benefit? In response to a stressful situation, how does a grateful person think about the circumstance? How do grateful people reflect on their past? Is there a difference between grateful memories and memories that are merely pleasant? Are grateful memories represented differently than more generic pleasant memories? The information-processing approach may prove valuable for investigating these questions, and the answers to these questions should provide useful information about how people can improve their grateful dispositions.

CONCLUSIONS

I began this chapter by suggesting that gratitude may directly contribute to emotional well-being. I have reviewed several studies that provide empirical support for this proposal; however, the relationship between gratitude and happiness is far from clear. I have suggested several causal mechanisms whereby gratitude may contribute to SWB. Future research could further investigate these possibilities. Although gratitude could be an important causal agent for states of happiness, it is also possible that gratitude is something of an epiphenomenon of happiness. A third possibility that I have proposed is that gratitude may contribute to happiness, and happiness in turn may make gratitude more likely, resulting in a cycle of virtue. Again, it is my hope that this model will provide direction for future gratitude and SWB research. Whatever the case, the initial evidence provides promising hints that gratitude may be an important component of SWB; indeed, grateful people do tend to be happy people. Perhaps future research will provide additional affirmation for C. S. Lewis's conclusion, "Except where intolerably adverse circumstances interfere, praise almost seems to be inner health made audible" (1958, p. 94).

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PART IV

Perspectives from Anthropology and Biology