

Appreciation: Individual Differences in Finding Value and Meaning as a Unique Predictor of Subjective Well-Being

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ABSTRACT Adler (2002; Adler & Fagley, 2001) argued that being appreciative facilitates and enhances feelings of well-being and life satisfaction, as well as feelings of connection to what we have, to what we experience, and to life itself. In addition, expressing appreciation to others is believed to build social bonds. Although appreciation is viewed as a disposition, it is also viewed as something people can learn over time, making it an especially valuable construct to measure. Appreciating something (e.g. an event, a person, a behavior, an object) involves noticing and acknowledging its value and meaning and feeling a positive emotional connection to it. We defined eight aspects of appreciation and developed scales to measure them: a focus on what one has ("Have" Focus), Awe, Ritual, Present Moment, Self/Social Comparison, Gratitude, Loss/Adversity, Interpersonal. Scores on the subscales may be totaled to yield a score representing one's overall degree of appreciation (or level of appreciativeness) (coefficient alpha = .94). We also developed an 18-item short form (coefficient alpha = .91) that correlates .95 with scores on the long form. The scales correlated in predicted ways with measures of life satisfaction, positive affect, and negative affect. More importantly, appreciation was significantly related to life satisfaction and positive affect, even after the effects of optimism, spirituality, and emotional self-awareness had been statistically controlled.

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Some people seem to cherish each new day, notice acts of kindness, acknowledge the sacrifices of others, and be thankful for every privilege or positive aspect of their lives. Yet others fail to notice or appreciate the positive aspects of their lives and the sacrifices of others on their behalf. They take for granted much of what they experience, encounter, or rely upon, and they may exhibit a sense of entitlement. Do these radically different approaches to life make a difference in the quality or the subjective experience of one's life? Does being appreciative rather than unappreciative affect our life satisfaction and happiness? We argue that appreciation is a disposition that plays an important role in psychological well-being and the building and maintenance of social bonds.

The field of psychology has focused a great deal of time and energy working to conceptualize, understand, and alleviate psychological suffering, dysfunction, and psychopathology. However, the absence of psychopathology does not necessarily lead one to a life of satisfaction, fulfillment, and psychological well-being. A few pioneers have studied human strengths such as coping strategies (e.g., Folkman & Lazarus, 1980; Lazarus & Folkman, 1984), hardiness (e.g., Kobasa, 1979), and resourcefulness (e.g., Rosenbaum, 1990; Rosenbaum & Palmon, 1984). Building on this work, positive psychology is a recent movement in the field of psychology that explicitly encourages research on the strengths, virtues, and nurturing capacities that enable individuals and communities to thrive and flourish (Seligman and Csikszentmihalyi, 2000). The development of several constructs such as hope, optimism, intrinsic motivation, and emotional intelligence has paved the way for us better to understand some of the human traits and competencies that are associated with life satisfaction and happiness. We believe that the construct of appreciation will also prove to be useful in understanding individual differences in subjective well-being (SWB).

After beginning this research, we became aware of a growing number of popular books in the inspirational or self-help fields touting the virtues of gratitude and appreciation (see, e.g., Beattie, 1999; Breathnach, 1996; Ryan, 1999). These authors urge people to keep gratitude journals, appreciate their relatives, friends, and teachers, reflect on their blessings, and express their gratitude to others. Although their recommendations may be good ones, there is, at this point, scant research evidence to support the claims made for the benefits of being appreciative.

Although some research has been conducted on the concept of gratitude (e.g., Barker, 1995; Dickson, 1996; Emmons & Crumpler, 2000; Peterson, 1987), which is viewed here as a component of appreciation, a literature search revealed no prior qualitative or quantitative studies published in the scientific literature on the construct of appreciation. Yet the concept of appreciation, which seems to have been considered more seriously in the spiritual and religious domains (e.g., Kornfield, 1993; Watts, 1968), possesses many of the cognitive and emotional elements that seem important for understanding how one comes to experience life satisfaction and happiness. Emmons and Crumpler (2000) characterized the research area regarding gratitude as “a relatively uncharted area of psychological inquiry.” The construct of appreciation is even less well developed.

Recently, Schneider (2001), in one of the few explicit mentions of appreciation in the scholarly literature, argued that appreciation promotes positive affect, more satisfying relationships, and improved coping with stress. Adler (2002; Adler & Fagley, 2001) theorized that being appreciative facilitates and enhances subjective well-being. In addition, he argued that expressing appreciation to others builds social bonds. Researching appreciation to examine these claims will depend on having a reliable and valid measure of it.

The purpose of the current research was to develop a quantitative measure of the disposition of appreciation and to present initial evidence of its reliability and validity. This is viewed as a first step in a program of research examining the relationship between being appreciative and a number of factors including the quality of social bonds, intrinsic motivation, and subjective well-being.

Defining Appreciation

Adler (2002; Adler & Fagley, 2001) defined appreciation as acknowledging the value and meaning of something—an event, a person, a behavior, an object—and feeling a positive emotional connection to it. Experiences of appreciation enhance positive mood and feelings of connection to the appreciated stimulus and/or to the nature of existence (i.e., as in a feeling of awe or wonder). Building on the overall definition of appreciation, we defined eight aspects of appreciation: focusing on what we have (“Have” Focus), Awe, Ritual, Present Moment, Self/Social Comparison, Gratitude, Loss/Adversity, Interpersonal.

Appreciation is believed to have both state and trait qualities (similar to anxiety or anger). We believe that there are individual differences in people's tendency to experience appreciation. Some people are naturally more appreciative than others; that is, appreciation (or the tendency to be appreciative) is a disposition. We also believe that most people can and do have experiences of appreciation at some time or other. Therefore, even a person who, by disposition, tends to be unappreciative can have a moment of appreciation. This would be a "state" of appreciation.

The eight aspects of appreciation

"Have" Focus. The first aspect of appreciation represents a focus on what we have rather than on what we lack. "Have" Focus is noticing, acknowledging, and feeling good about (i.e., appreciating) what we have in our lives. "What we have" refers to anything we experience as "being with us" or "connected to us" in some meaningful way. For example, we have our degree of health, our community of friends and family, our beliefs and values, our connection with nature, our mind, our privileges, our material possessions, our way of being, our connection with God/spirituality, etc. The list of "what we have" is not confined to tangible possessions.

Awe. The awe aspect of appreciation refers to feeling a deep emotional, spiritual, or transcendental connection to something. Awe represents an emotional connection to the specialness of an experience. It is seeing and feeling the spark of brilliance, beauty, grandeur, and value of something such as a sunset, a newborn child, or Niagara Falls. Awe is often a direct affective manifestation of appreciation, as indicated by a sudden feeling that comes over us—being "swept away" by our emotions, for example. We may be speechless in these moments, unable to find words that capture the appreciative state.

Ritual. The ritual aspect of appreciation represents performing acts that foster and promote appreciation. Whether we use ceremonial acts from spiritual and religious teachings or we create our own personal routines, rituals can cultivate an awareness and consciousness of appreciation. Rituals help us to stop and take notice of the things around us: awaking each morning and giving thanks for another day, taking a morning stroll to appreciate nature, recognizing

our safety when arriving to a new destination, acknowledging at bedtime at least one thing we appreciated that day, etc.

Present moment. The present moment aspect of appreciation is feeling positively about the things around you while you are experiencing them. Appreciating the present moment grounds one in the positive aspects of the “here and now” and in the appreciative experience, allowing the individual to be with both the feeling and the experience. The present-moment aspect of appreciation is an attuned awareness of, and connection to, our surroundings and their positive qualities. As Myers (1992) observed, “The essence of happiness is pausing to savor the gift of our present moments” (p. 203). Focusing on the present moment keeps us in tune with our cognitive and emotional states in a manner similar to a state of mindful meditation, which keeps our attention focused on our moment-to-moment experiences and sensations (Kabat-Zinn, 1990).

Self/social comparison. The self/social comparison aspect of appreciation is feeling positively about (appreciating) things in reaction to downward self- or social comparisons. I may appreciate my current job because it is so much better than my previous job (self-comparison), or because it is better than my friend’s job (social comparison). A common aspect of human judgment is that stimuli are not evaluated in isolation but are evaluated relative to a reference point. When the reference point is low, then the current situation may be more likely to be appreciated. Wheeler and Miyake (1992) found that downward social comparison increased subjective well-being, whereas upward comparison decreased it. A large body of theory and research has been developed to address when and to whom one compares oneself and the effect of such comparisons (see e.g., Suls & Wheeler, 2000; Suls & Wills, 1991).

Gratitude. The gratitude aspect of appreciation refers to noticing and acknowledging a benefit that has been received, whether from another person or a deity, and feeling thankful for the efforts, sacrifices, and actions of an “other.” Emmons and Crumpler (2000) stated that “gratitude is a relational virtue that involves strong feelings of appreciation toward significant others” (p. 58). The “significant other” can be a person, a God, or any other material or spiritual entity. Gratitude is a positive emotional reaction to a

benefactor for something good that has been bestowed upon us. It involves first acknowledging this unique relationship and then remaining open to the vulnerability of having needs that are met by something outside of oneself (McWilliams & Lependorf, 1990). Although Emmons and Crumpler (2000) discussed gratitude as having a relation to indebtedness by saying “to be genuinely grateful is to feel indebted for a debt that can never be repaid” (p. 58), McCullough, Kilpatrick, Emmons, and Larson (2001) argued that gratitude is conceptually distinct from indebtedness, based on its having the opposite affective tone. People experience indebtedness as a negative, unpleasant state, whereas gratitude is a pleasant state.

Loss/Adversity. The loss/adversity aspect of appreciation is having positive feelings about something in response to one’s own perceived losses or experiences of adversity. Experiences of adversity and loss tend to raise our awareness of having taken things for granted. Experiences of perceived loss or adversity often trigger thoughts such as “Wow, I didn’t realize how good I had it. I won’t make that mistake again (of taking my good circumstances for granted).” Appreciative people use their experiences of loss or adversity to remind themselves to appreciate the positive aspects of their lives as they occur. Affleck and Tennen (1996) described a similar concept, “benefit-reminding,” as reminding oneself about the benefits that one has experienced as a result of loss or adversity as a way of coping with the challenge. We are arguing that, in addition to reminding oneself about beneficial consequences, experiences of loss or adversity can remind one of the other positive aspects of one’s life, leading to feelings of appreciation for that which one has not lost.

Interpersonal. The interpersonal aspect of appreciation is noticing, acknowledging, and feeling positively toward (appreciating) the people in our lives. It includes appreciating being cared about, being supported, having someone to talk to, and being understood by someone. It is valuing the contribution that our relationships with others make to our lives and our well-being.

The Model of Appreciation

Adler (2002; Adler & Fagley, 2001) presented a model of appreciation that characterized direct manifestations of appreciation as

primarily affect, cognitions, and/or behaviors. In addition, two pathways to appreciation were described: triggers and strategies. Triggers are events that spontaneously and unintentionally evoke appreciation in someone. For example, seeing someone whose house was destroyed by a tornado may elicit a feeling of thankfulness that one's own house was spared. Strategies, on the other hand, are intentionally employed by people in order to promote and foster an attitude of appreciation. For example, people might intentionally pause to give thanks for their food before they eat.

Some of the eight aspects represent direct manifestations of appreciation (i.e., affect, cognition, behavior). For example, awe is an affective manifestation of appreciation, an emotional response. Other aspects represent pathways to appreciation (i.e., triggers and strategies). For example, loss/adversity may represent a trigger, as when an illness makes us appreciate our usual good health, or it may represent a strategy, as when we intentionally use experiences of loss as cues to "count our blessings."

The Nomological Net

Adler (2002; Adler & Fagley, 2001) developed a framework describing the nomological net of constructs related to appreciation. Although he discussed a number of constructs in this framework, he posited three facilitative competencies and dispositional factors—optimism, spirituality, and emotional self-awareness—that contribute to appreciation and interact dynamically with it to affect one's motivation, social connectedness, and SWB. We will focus on these facilitative variables and on appreciation's relation to SWB. The framework also indicated that appreciation makes direct contributions to positive affect and life satisfaction, the emotional and cognitive aspects of SWB, respectively, over and above optimism, spirituality, and emotional self-awareness. Little relation was expected with negative affect.

METHOD

Study 1: The Pilot Study

The first phase of the research consisted of a qualitative study (i.e., Adler & Fagley, 2001) of the phenomenology of appreciation in which 37 undergraduates responded to open-ended questions about the construct.

Their responses were content analyzed. One of the goals was to obtain concrete examples of appreciated stimuli and circumstances that elicit appreciation. Results indicated that people appreciate their “friends and family,” “favors and help given by others,” “their health,” “financial security,” and “opportunities.” The situations or circumstances that participants indicated caused or encouraged them to feel appreciative were receiving “favors or help,” engaging in “self or social comparison,” experiencing “adversity and loss,” personal “accomplishments,” and “positive events.” The findings enriched our view of appreciation and provided concrete examples that were useful in generating the initial item pool for the Appreciation Inventory.

Study 2: Scale Development and Initial Construct Validation

The Appreciation Inventory

This measure was developed to assess the degree to which one is appreciative. Based on the data gleaned from the pilot study, the researchers’ experience, and the model of appreciation, a pool of 81 items was developed. The items cover a range of content areas including interpersonal, spiritual/religious, basic needs, material objects, health, personal characteristics, and achievements that were prominent in the pilot data. For example, one of the items developed to represent the interpersonal category was, “I let others know how important they are to me.” An item from the health category was, “I am very thankful for my degree of physical health.” Although we started writing items in many content areas, further fine-tuning of our conceptualization of appreciation led to our defining the eight aspects of appreciation that were presented earlier. These aspects are not focused solely on content areas (such as basic needs or health) but instead represent distinct aspects of appreciation. For example, one may appreciate that one has a healthy body (health) or that one has enough food to eat (basic needs), but both represent a focus on appreciating what one has, the “Have” Focus aspect of appreciation.

Along with content categories, another influence on item development was the type of pathway leading to appreciative experiences, as suggested by the results of the pilot study and the model. An example of a trigger item from the awe aspect of appreciation is, “When I see natural beauty like Niagara Falls, I feel like a child who is awestruck.” A strategy item from the self/social comparison aspect is, “I reflect on the worst times in my life to help me realize how fortunate I am now.”

In addition to having items tapping varied topics and aspects of appreciation, the instrument consisted of two item types: frequency (25 items) and attitude (56 items). The frequency items used a 7-point rating

scale assessing the frequency of a behavior in which “1 = More than once a day” and “7 = Never.” However, in future applications of the scale, in order to reduce the number of items that require reverse scoring, we recommend that the scale be reoriented so that “7 = More than once a day,” “6 = About once a day,” “5 = About once a week,” “4 = About once a month,” “3 = About once a year” “2 = A few times in my life,” and “1 = Never.” An example of a frequency item is, “I perform rituals (e.g. pray or ‘say grace before a meal’) that remind me to be appreciative.”

The attitude items used a 7-point Likert rating scale ranging from “1 = Strongly agree” to “7 = Strongly disagree” to assess participants’ beliefs, values, and attitudes in the domain of appreciation. But, as with the frequency scale, we recommend that future applications of the appreciation scale reorient the Likert scale such that “7 = Strongly agree” and “1 = Strongly disagree.” An example of an attitude item is, “It is important to appreciate things such as health, family, and friends.” Sixty-seven items were initially oriented such that low scores indicated higher appreciation and 14 were worded in the opposite direction such that high scores indicated higher appreciation. An example of the latter is “I rely on other people in many ways without really recognizing it.” When the appreciation inventory was scored, however, the 67 items were reverse scored so that higher scores indicated higher appreciation. In the future, if the scale anchors are changed to those we recommend (i.e., 1 = “Never” or “Strongly Disagree,” rather than “More than once a day” or “Strongly Agree”), then only a few items will need to be reverse scored. All of the 25 frequency items were presented together in one section, and all of the 56 attitude items were presented together in another section so as to reduce confusion.

Other instruments

Life satisfaction. The Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure the cognitive component of SWB, life satisfaction. It consists of five Likert-scale items rated “strongly disagree” (1) to “strongly agree” (7) and assesses individuals’ judgment of the quality of their lives. A typical item: “In most ways, my life is close to my ideal.” Total scores can range from 5 to 35, with high scores indicating greater life satisfaction. According to Diener et al. (1985), the alpha reliability for the SWLS is .87 and test-retest reliability after 2 months is .82. Coefficient alpha of the SWLS for this study was .87 (see Table 1).

Positive and negative affect. The Positive and Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988) was used to measure the affective components of SWB, one’s emotional well-being. This 20-item

Table 1
Descriptive Statistics and Reliability for the IVs and DVs

Scale	Mean	SD	Coefficient Alpha
Appreciation Scale (57)	302.87	38.94	.94
Appreciation Scale (18)	91.79	16.48	.91
Self-awareness	77.51	10.08	.89
Optimism	19.76	4.51	.83
Spirituality	18.91	6.77	.92
Life Satisfaction	21.37	7.22	.87
Positive Affect	34.21	6.61	.86
Negative Affect	23.94	6.68	.83

Note. *N* ranged from 414–420 due to missing data on some measures.

measure has two 10-item subscales for assessing positive and negative affective states. Respondents use a 5-point rating scale (from “very slightly or not at all” to “extremely”) to indicate the extent to which they “generally feel this way” for various adjectives such as “inspired,” “excited,” “ashamed,” and “afraid.” Scores on each of the two scales can range from 10 to 50, with a high score indicating stronger affect for the scale content. Watson et al. (1988) reported alpha reliabilities of .88 and .87 for the positive and negative scales respectively. Based on the current sample of participants, coefficient alphas for positive and negative affect were .86 and .83, respectively.

Emotional self-awareness. The Affect Orientation Scale (Booth-Butterfield & Booth-Butterfield, 1990) was used to measure one’s emotional self-awareness. This measure assesses the degree to which individuals recognize their own emotions and use that information to guide their behavior. This measure consists of 20 Likert-scale items such as “I use my feelings to determine what I should do in situations” and “I learn a lot about myself on the basis of my feelings,” that are rated from 1 (strongly disagree) to 5 (strongly agree). Seven items are reverse scored. Scores can range from 20 to 100, with high scores indicating greater emotional self-awareness. According to Booth-Butterfield and Booth-Butterfield (1990), the alpha reliability for the 20-item scale is .86, and it appears to have “acceptable” convergent and discriminant validity. Coefficient alpha based on the current sample of participants was .89.

Dispositional optimism. The Life Orientation Test-Revised (LOT-R) (Scheier, Carver, & Bridges, 1994) was used to measure dispositional

optimism. This measure consists of 10 Likert Scale items that are rated 1 (strongly disagree) to 5 (strongly agree) such as "In uncertain times, I usually expect the best." Four of the items are filler, so only six items are scored, and three of these are reverse scored. The scoring of Scheier et al.'s (1994) Life Orientation Test-Revised was modified in this study, as items were scored 1–5 rather than the original 0–4. Therefore, scores can range from 6 to 30, with a high score indicating greater optimism. According to Scheier et al. (1994), Cronbach's alpha for the LOT-R is .78; its test–retest reliability after 28 months is .79. For the current study, coefficient alpha was .83.

Spirituality. The Spirituality Scale (based on Chatters, Levin, & Taylor, 1992) was used to measure one's spirituality. This measure consists of five items rated on a 1 to 6 scale with anchors that vary depending on the question. For instance, two of the items measure the frequency (1 = daily to 6 = never) of spiritual and/or religious behaviors, such as "Do you engage in religious or spiritual services or activities?" Two other items measure one's own sense of religiosity and spirituality: "Would you describe yourself as: '1 = very religious' to '6 = not religious at all.'" The final item asks, "How much comfort do you find in religion or spirituality in times of suffering and distress?" and is rated 1 ("a great deal of comfort") to 6 ("no comfort at all"). Scores on this measure can range from 5 to 30, with a low total score indicating high religiosity/spirituality. This measure of spirituality was modified from its original form to assess "spirituality" as well as "religiosity." Coefficient alpha of the Spirituality Scale for this study was .92.

Demographic information. Data were collected regarding participants' college major, sex, ethnic background, age, and religious affiliation.

Participants

Four hundred twenty undergraduate students (267 women, 151 men, and two who did not report their sex) from a large state university in the Northeast participated in the study. Ages ranged from 17 to 52 years old with a mean of 21 ($SD = 3.6$). The ethnicity, majors, and religious affiliations of the participants are reported in Table 2.

Procedure

Questionnaires containing the Appreciation Inventory, the Satisfaction with Life Scale, the Positive and Negative Affect Scale, the Affect Orientation Scale, the Life Orientation Test, the Spirituality Scale, and the

Table 2
Demographic Data for the Participants in Study 2 in Percentages

Ethnicity (<i>N</i> = 417)		College Major (<i>N</i> = 420)		Religious Affiliation (<i>N</i> = 420)	
	%		%		%
White	59	Psychology	46	Christian	65
Asian	17	Business/Law	16	None/Atheist	18
Latino/Latina	9	Other Humanities	15	Jewish	9
Other	8	Biological Sciences	10	Hindu/Buddhist	5
African American	7	Computer Sci./ Engineering	6	Muslim	2
Undecided	5	New Age	1	Other	2

demographic questions were distributed in seven classes. Students completed the questionnaires anonymously. This took about 20–30 minutes.

RESULTS

Data from participants who omitted more than one item on the Appreciation Inventory were excluded from the data set. For the four participants who omitted only one item, an average score for that individual on the scale on which the item was missing (i.e. frequency or attitude), was substituted. As indicated earlier, items were scored such that high scores indicated high appreciation.

Measures of Appreciation

The Appreciation Subscales: Measuring the Eight Aspects of Appreciation

Scales comprised of items intended to measure each of the eight aspects of appreciation were created. Item analyses were performed for each of the subscales to eliminate items that, when deleted, caused an increase in coefficient alpha. Table 3 reports the number of items, coefficient alpha, means, and standard deviations for the final subscales.

Table 4 reports the correlations among the subscales. Correlations ranged from .35 between interpersonal and self/social comparison to a high of .77 between awe and present moment. The 57 items comprising the eight appreciation subscales are presented in Table 5.

Table 3
Descriptive Statistics and Reliability for the Aspects of
Appreciation Subscales: HARPSGLI

Subscale	No. of Items	Mean	SD	Coefficient Alpha
“Have” Focus	10	53.11	8.38	.83
Awe	6	28.70	6.19	.74
Ritual	6	27.16	7.94	.84
Present Moment	7	36.68	6.45	.77
Self/Social Comparison	5	20.36	6.00	.62
Gratitudes	10	63.32	6.03	.76
Loss/Adversity	8	39.33	7.81	.73
Interpersonal	5	26.29	4.58	.78

Note. *N* = 420.

Appreciation Scale: Long and Short Forms

A score representing one’s general level of appreciativeness can be obtained in two ways. First, one can total all of the appreciation subscales to obtain an overall appreciation score. The mean was 302.13, with a standard deviation of 38.94 (see Table 1). Theoretically, scores could range from 57 to 399, although in this sample, they ranged from 163 to 386. Coefficient alpha for the 57-item

Table 4
Appreciation Subscales Intercorrelation Matrix, With
Subscale Reliabilities

	H	A	R	P	S	G	L	I
“Have” Focus	.83							
Awe	.67	.74						
Ritual	.63	.46	.84					
Present Moment	.67	.77	.43	.77				
Self/Social Comparison	.48	.46	.42	.41	.62			
Gratitude	.50	.42	.40	.46	.35	.76		
Loss/Adversity	.65	.50	.51	.54	.49	.47	.73	
Interpersonal	.60	.58	.38	.58	.35	.42	.39	.78

Note. Coefficient alpha for each subscale is given in bold on the diagonal. *N* = 420.

Table 5
Items Comprising Eight Subscales of Appreciation: HARPSGLI

Item	Scale (No. of Items)
“Have” Focus (10)	
6	I am very thankful for my degree of physical health.
7	I count my blessings for what I have in this world.
15	I remind myself how fortunate I am to have the privileges and opportunities I have encountered in life.
17	I reflect on how fortunate I am to have basic things in life like food, clothing, and shelter.
22	I really notice and acknowledge the good things I get in life.
46	I am content with what I have.
54	It is important to appreciate things such as health, family, and friends.
55	Although I don't have everything I want, I am thankful for what I have.
63	I remind myself to think about the good things I have in my life.
65	I appreciate my degree of success in life so far.
Awe (6)	
2	I get caught up in the wonderment of life.
20	I have moments when I realize how fortunate I am to be alive.
25	I reflect on how lucky I am to be alive.
36	I feel that it is a miracle to be alive.
47	I feel a positive, emotional connection to nature.
61	When I see natural beauty like Niagara Falls, I feel like a child who is awestruck.
Ritual (6)	
24	I stop to give thanks for my food before I eat.
50	I give thanks for something at least once a day.
4	I do things to remind myself to be thankful.
21	I perform rituals (i.e. pray or “say grace before a meal”).
56	I use personal or religious rituals to remind myself to be thankful for things.
69	I believe it is important to remind myself to be thankful for things on a consistent basis (i.e. daily, weekly, or monthly).
Present Moment (7)	
8	I enjoy the little things around me like the trees, the wind, animals, sounds, light, etc.

(Continued)

Table 5 (Cont.)

Item	Scale (No. of Items)
72	I stop and enjoy my life as it is.
26	I notice things like the first flowers of spring.
67	I recognize and acknowledge the positive value and meaning of events in my life.
12	I remind myself to appreciate the things around me.
14	I place special, positive meaning into neutral activities like taking a walk, a shower, or a nap.
78	When I stop and notice the things around me I feel good and content.
Self/Social Comparison (5)	
9	I reflect on the worst times in my life to help me realize how fortunate I am now.
11	I think of people who are less fortunate than I am to help me feel more satisfied with my circumstances.
31	When I swerve to avoid a car accident, I feel relieved that I am ok.
51	When I drive by the scene of a car accident, it reminds me to feel thankful that I am safe.
76	When I see someone less fortunate than myself, I realize how lucky I am.
Gratitude (10)	
5	I say “please” and “thank you.”
30	I notice the sacrifices that my friends make for me.
32R	Food, clothing, and shelter are basic needs that I do not need to be grateful for because I am entitled to them.
37	I acknowledge when people go out of their way for me.
39	I say “please” and “thank you” to indicate my appreciation.
49	When a friend gives me a ride somewhere when he or she doesn’t have to, I really appreciate it.
59	I say “thank you” in a restaurant when people bring my food to express my appreciation for their help.
60	I am very fortunate for the opportunity to receive an education.
62	I value the sacrifices that my parents (or guardians) have made (and/ or make) for me.
71R	Anything that my parents (or guardians) have done for me can be attributed to their responsibility as parents (or guardians), and I do not need to be thankful because that was their job.

(Continued)

Table 5 (Cont.)

Item	Scale (No. of Items)
Loss/Adversity (8)	
79	I appreciate the things I have now, because I know that anything I have can be taken away from me at any given time.
40	When something bad happens to me, I think of worse situations I could be in to make myself feel better.
44	I use my own experiences of loss to help me pay more attention to what I have now.
70	If I were to lose something I cared about, I would focus on how lucky I was to have had it.
64	The thought of people close to me dying some day in the future makes me care more about them now.
29	Experiences of loss have taught me to value life.
74	The problems and challenges I face in my life help me to value the positive aspects of my life.
77	Thinking about dying reminds me to live every day to the fullest.
Interpersonal (5)	
1	I acknowledge to others how important they are to me.
16	I let others know how much I appreciate them.
10	I recognize the value of my time with friends.
23	I reflect on how important my friends are to me.
18	I remind myself to appreciate my family.

Note. The 18 items of the short form of the Appreciation Scale are indicated in bold. Items numbered 1–25 use the frequency rating scale; items 26–81 use the Likert rating scale. An “R” after the item number indicates it is reverse scored. Numbers in parentheses after the subscale name represent the number of items in the subscale.

measure is .94. If one were only interested in obtaining an overall score representing one's degree of appreciativeness, then a shorter measure might be desirable. We used the item analysis performed on the 57-item measure mentioned above to select items with item total correlations above .5. This produced an 18-item short form. Items comprising the short form are identified in bold in Table 5. Although, theoretically, scores on the short form could range from 18 to 126, in the current sample they ranged from 37 to 125, with a mean of 91.21 (see Table 1). Coefficient alpha for the 18-item

measure is .91. Scores on the long and short forms correlate significantly ($r = .95$).

Principal Components Analysis

As mentioned earlier, item total correlations were computed for all 81 items of the Appreciation Inventory. Five items with item total correlations of less than .10 were deemed poor items and were deleted from further consideration. The remaining 76 items were included in a Principal Components Analysis (PCA). Although 19 components had eigenvalues greater than one, we extracted 8 components because that was the number of aspects of appreciation posited a priori. The eight components accounted for a total of 44.13% of the variance, and an oblique rotation (oblimin) converged in 25 iterations. Component scales were created from items loading .3 or greater in the pattern matrix. The reliability and number of items of the eight component scales are given in Table 6. Their correlations with the a priori scales are reported in Table 7. Based on these correlations and inspection of the constituent items, the scales appear to represent: Loss, Gratitude, Appreciating Nature, Relishing Success, Focus on What One Has, Ritual, Intentional Reflection/Reminding, and Sense of Entitlement.

The results of the PCA provide support for our view that loss, gratitude, focusing on what one has, and ritual are distinct aspects of appreciation. Awe and Present Moment are represented, but as a

Table 6
Reliability and Number of Items of the Component Scales

Components	No. of Items	Coefficient Alpha
1 Loss	8	.73
2 Gratitude	12	.77
3 Appreciating Nature	6	.79
4 Relish Success	8	.70
5 “Have” Focus	6	.71
6 Ritual	6	.85
7 Intentional Reflect	14	.90
8 Entitlement	2	.39

Table 7
Correlations Between the Component Scale Scores and A Priori
Scale Scores

	A Priori Scales: Eight Aspects of Appreciation							
	H	A	R	P	S	G	L	I
Components								
1 Loss	.66	.50	.51	.54	.60	.51	.90	.38
2 Gratitude	.44	.38	.38	.39	.34	.90	.40	.35
3 Apprec. Nature	.43	.71	.25	.76	.27	.42	.34	.42
4 Relish Success	.44	.37	.36	.34	.63	.42	.47	.24
5 Have	.74	.47	.43	.57	.26	.49	.64	.43
6 Ritual	.66	.48	.98	.45	.41	.40	.51	.38
7 Reflect	.77	.79	.51	.74	.52	.41	.51	.84
8 Entitlement	.33	.24	.18	.28	.10	.29	.22	.24

Note. $N = 420$. The largest correlations for a component are underlined and in bold.

single component: Appreciating Nature. This is not surprising given that these two scales were correlated .77, which was the strongest interscale correlation observed (see Table 4). Future researchers may wish to combine these two scales.

The component we have labeled Intentional Reflection/Reminding contains all the Interpersonal Appreciation scale items plus three Awe items, three "Have" Focus items, two Present Moment items, and one Self/Social Comparison item. This suggests that interpersonal appreciation may be part of a broader component. Future research could explore this possibility. This component appears to represent one of the two pathways to appreciation described by Adler and Fagley (2001): strategies employed to promote appreciation.

Seven of the eight aspects of appreciation posited a priori received some degree of support from the PCA, although two aspects appear to represent only one distinct component. The eighth aspect, Self/Social Comparison, does not appear as a distinct component. Nevertheless, three of the five items from the Self/Social Comparison scale appear on the component scales derived from the PCA, and Component 4 (Relishing Success) has its strongest correlation of .63 with the Self/Social Comparison subscale. This suggests that a

portion of the Self/Social Comparison aspect of appreciation is represented in Component 4. Keeping the five Self/Social Comparison items together in a scale has the advantage of allowing examination of the relation of this strategy or behavior to SWB.

Examination of the correlations between the component scales and the scales representing the eight aspects of appreciation defined a priori highlights two interesting differences between the two sets of scales. One is that Component 4, which we have labeled Relishing Success, seems to be tapping something only partly assessed by any one of the scales representing the eight a priori aspects of appreciation. Correlations between scores on Component 4 and the a priori scales range from .24 to .63. Component 4 is represented to some degree by each of the a priori scales, and yet even Self/Social Comparison does not substantially capture the construct represented by Component 4. Inspection of the items comprising Component 4 indicates that most of the items involve a triggering event such as “when I get a positive report of my health” or “when I swerve to avoid a car accident.” So Component 4 appears to represent one of the pathways to appreciation described in the model offered by Adler and Fagley (2001): triggers to feel positively about one’s life or circumstances.

Another difference between the two sets of scales is that Component 8 is not represented in the eight a priori aspects of appreciation. It is composed of two negatively worded items that represent taking good things in our lives for granted. If these were the only negatively worded items in the component scales, then one could infer that Component 8 might represent a response bias or measurement artifact. However, six other negatively worded items are included in the component scales.

We believed that the PCA provided sufficient support for the eight theorized aspects of appreciation for their use in subsequent analyses in the current study. As the scales had good reliability, received some support from the PCA, and have conceptual meaning, we felt they should not be abandoned on the basis of one PCA from a single sample. Furthermore, analyses using the total of the component scales, rather than either the long or short form of the a priori scale, yielded similar results for the unique contribution of appreciation to SWB, over and above optimism, emotional self-awareness, and spirituality. This is not especially surprising given that 47 items appear in both the long-form and the component scales. Finally, the scale

based on the eighth component would need additional work before it could be used in research as it only comprised two items. Subsequent research, however, may benefit from using both the component scales and the theoretically based scales.

Evidence of Construct Validity

The two measures of appreciation demonstrated excellent reliability, so we examined the relationship between appreciation and some of the constructs from the nomological net. We proceeded directly to examining the relations in the nomological net because there were no measures of appreciation available against which to compare our measure. Thus, we examined correlations between appreciation and optimism, spirituality, self-awareness, life satisfaction, positive affect, and negative affect. We hypothesized that optimism, spirituality, and emotional self-awareness would correlate significantly with appreciation, as these were viewed as facilitative. We also hypothesized that appreciation would correlate significantly with life satisfaction and positive affect. Furthermore, we hypothesized that appreciation would make a significant unique contribution to SWB, over and above optimism, spirituality, and self-awareness.

Although it might seem intuitive that high appreciation would be associated with low negative affect, our model actually predicted a limited or no association between appreciation and negative affect. Appreciation is defined as a “positive” cognitive and emotional experience, and a number of researchers have argued that positive affect is distinct and independent from negative affect (e.g., Diener & Emmons, 1984; Moriwaki, 1974; Watson, 2002; Watson & Tellegen, 1985). This view has been supported by a considerable amount of research. For example, Goldstein and Strube (1994) reported evidence of independence both between and within situations. Watson (2002) reviewed evidence regarding independence and concluded that there is little correlation between positive and negative affect. In the current sample, the correlation between positive and negative affect was $-.28$, which is significant given our sample size ($p < .001$) but not large in magnitude. Deiner and Emmons (1984) also argued that positive and negative affect are independent, particularly in relation to longer time intervals, when “how much a person feels of one [affect] is unrelated to how much he or she feels the other” (p. 1114). Appreciation represents one kind of positive affect

but does not assess negative affect, which is understood as an independent factor. Consequently, experiencing a greater number of positive affective states (such as appreciation) has little or no bearing on the likelihood of experiencing negative affective states. Thus, we predicted little or no relation between appreciation and negative affect.

Pearson Correlations

Pearson correlations between appreciation and optimism, spirituality, and self-awareness

As hypothesized, optimism, spirituality and emotional self-awareness correlated significantly with scores from both forms (short and long) of the Appreciation Scales (see Table 8). It is not surprising that the largest correlations were with spirituality (low scores indicate greater spirituality), which shared 20% of the variance with appreciation ($r = -.45, p < .001$), particularly given that the Ritual subscale, a subscale hypothesized to relate strongly with spirituality ($r = -.76, p < .01$), shares 52% of the variance with appreciation ($r = .72, p < .01$). Optimism had the second strongest correlation with appreciation ($r = .31, p < .001$), followed by emotional self-awareness

Table 8
Pearson Correlations Among the Appreciation Scales, Subjective Well-being, and the Facilitating Variables

	1	2	3	4	5	6	7
1. Appreciation (18)							
2. Appreciation (57)	.95***						
3. Life Satisfaction	.27***	.32***					
4. Positive Affect	.43***	.42***	.46***				
5. Negative Affect	-.10*	-.10*	-.43***	-.28***			
6. Optimism	.31***	.32***	.54***	.50***	-.48***		
7. Spirituality	-.45***	-.48***	-.05	-.14**	.10*	-.19***	
8. Emotional Self-awareness	.19***	.27***	.18***	.21***	.03	.17***	-.07

Note. Lower scores on the measure of spirituality indicate higher spirituality. *Ns* ranged from 414–420.

* $p < .05$. ** $p < .01$. *** $p < .001$.

($r = .19$, $p < .001$), indicating that those greater in appreciation tend to be more optimistic and emotionally self-aware.

Pearson correlations between appreciation and SWB

Both measures of appreciation also correlated significantly with life satisfaction and with positive affect; both p values $< .01$ (see Table 8). Scores on the short-form Appreciation Scale account for 7.3% of the variance in life satisfaction and 18.5% of the variance in positive affect. In addition, as hypothesized, the short and long forms of the Appreciation Scale correlated little with negative affect (both $r_s = -0.10$, $p < .05$), with a shared variance of 1% (see Table 8). Although appreciation was significantly correlated with negative affect, such that lower appreciation was associated with greater negative affect, the correlation was very small.

Pearson correlations between the appreciation subscales and SWB

Life satisfaction. All but the Self/Social Comparison subscale of appreciation correlated significantly with life satisfaction (see Table 9). All the correlations were positive, indicating that more appreciation is associated with greater life satisfaction. Some of the more interesting findings here involve the subscales of "Have" Focus and

Table 9
Pearson Correlations Between the Appreciation Subscales
and the DVs

Subscale	Life Satisfaction	Positive Affect	Negative Affect
"Have" Focus	.41**	.47**	-.20**
Awe	.21**	.33**	-.02
Ritual	.12*	.27**	-.08
Present Moment	.26**	.38**	-.12*
Self/Social Comp.	.04	.11*	.10*
Gratitude	.22**	.22**	-.03
Loss/Adversity	.35**	.38**	-.15**
Interpersonal	.23**	.28**	-.03

Note. $N = 418$ or 419 .

* $p < .05$. ** $p < .01$.

Loss/Adversity, which both correlated with life satisfaction to a much greater degree than the other subscales ($r = .41$ and $r = .35$, respectively, both $ps < .01$). Those who appreciate what they have in life and those who use their experiences of loss and adversity to foster appreciation are more inclined to be satisfied with their lives. This makes conceptual sense, as the “Have” Focus subscale was initially conceptualized to be a fundamental component of appreciation, and the PCA yielded a “Have” Focus component. The next strongest correlation with life satisfaction was with the Present Moment subscale ($r = .26$, $p < .01$).

Positive affect. All eight of the appreciation subscales were correlated significantly with positive affect (see Table 9). Correlations ranged from .11 to .47, indicating that more appreciation is associated with more positive affect. Positive affect showed a pattern of correlations similar to life satisfaction, as the subscales Have Focus, Loss/Adversity, and Present Moment are still the strongest correlations ($r = .47$, .38, and .38, respectively). However, the subscales Awe and Interpersonal also had significant correlations with positive affect that are worth noting ($r = .33$, and $r = .28$, respectively). The appreciation model predicts this pattern, as Present Moment and Awe, particularly, are direct affective manifestations of appreciation. In other words, these subscales measure the affective component of appreciation, which subsequently significantly correlated with positive affect.

Negative affect. Finally, four of the subscales were correlated significantly with negative affect: “Have” Focus, Present Moment, Self/Social Comparison, and Loss/Adversity (see Table 9). Of these, all but Self/Social Comparison were negative correlations, indicating that there is a slight tendency for greater appreciation to be associated with less negative affect. Given that “Have” Focus and Loss/Adversity showed the strongest correlations with positive affect and life satisfaction, it is understandable that they might be stronger here as well. However, as predicted by the nomological net of appreciation, these subscales, and the overall measures of appreciation, did not correlate with negative affect to the same extent as with positive affect and life satisfaction. This provides some evidence of discriminant validity and is consistent with the appreciation nomological net. As one experiences and/or expresses more appreciation, one’s

positive emotional experience is enhanced, while the negative emotional experience tends to decrease slightly. For Self/Social Comparison, the correlation of .10 indicates that the more one engages in self/social comparison as a pathway to appreciation, the greater one's negative affect. This sounds a cautionary note for Self/Social Comparison. It may be a risky strategy, having both emotional costs and benefits. This seems to be the position taken by Schneider (2001). She cautioned that "social comparison is not purely appreciation, because the positive evaluation of one's own situation comes into relief only by evoking negative evaluations of others" (p. 256).

Unique Contributions of Appreciation to SWB

Unique contributions of the appreciation subscales to SWB

Life satisfaction. Life satisfaction was regressed on the eight subscales of appreciation (see Table 10) in a simultaneous multiple regression analysis (Cohen & Cohen, 1983). Four subscales made significant unique contributions to life satisfaction: "Have" Focus, Ritual, Self/Social Comparison, and Loss/Adversity (all $ps < .001$). These contributions were still significant even when the analysis was rerun to control for participants' self-awareness, spirituality, and optimism.

Positive affect. A simultaneous multiple regression analysis of positive affect on the eight subscales of appreciation showed that three of the subscales made significant unique contributions to positive affect (see Table 10). They were "Have" Focus, Self/Social Comparison, and Loss/Adversity. Their contributions were significant even when participants' differences in self-awareness, spirituality, and optimism were controlled statistically.

Negative affect. A simultaneous multiple regression analysis of negative affect on the eight subscales of appreciation was computed. Three of the appreciation subscales also made significant unique contributions to negative affect (see Table 10). They were "Have" Focus, Awe, and Self/Social Comparison. Their contributions remained significant when self-awareness, spirituality, and optimism were controlled statistically.

Table 10
Beta Weights and Significance Tests From the Multiple Regressions
of the DVs on the Appreciation Subscales

Subscale	DVs		
	Life Satisfaction	Positive Affect	Negative Affect
“Have” Focus	.52***	.40***	– .38***
Awe	– .09	.01	.21**
Ritual	– .23***	– .03	.03
Present Moment	.02	.12	– .16
Self/Social Comparison	– .22***	– .19***	.24***
Gratitude	.04	– .03	.07
Loss/Adversity	.26***	.19**	– .12
Interpersonal	.001	– .01	.09
R squared	.26	.26	.13
F ratio	18.18***	18.39***	7.33***

Note. *N* = 418 or 419.

p* < .01. *p* < .001.

Unique contributions of appreciation, optimism, self-awareness, and spirituality to SWB

Three simultaneous multiple regression analyses were performed in which each of the three components of SWB was regressed on optimism, emotional self-awareness, spirituality, and scores on the short form of the Appreciation Scale. For predicting life satisfaction, significant unique contributions were made by appreciation, optimism, and spirituality (all *ps* < .01) with standardized regression coefficients (i.e., beta weights) of 0.15, 0.52, and 0.13 respectively. Self-awareness did not make a significant unique contribution in predicting life satisfaction when the other variables were partialled out.

For predicting positive affect, significant unique contributions were made by appreciation and optimism (both *ps* < .01) with beta weights of .32 and .41, respectively. Self-awareness also made a significant unique contribution in predicting positive affect (*p* < .05) with a standardized coefficient of 0.08. Spirituality did not make a significant contribution to positive affect when these other variables were controlled.

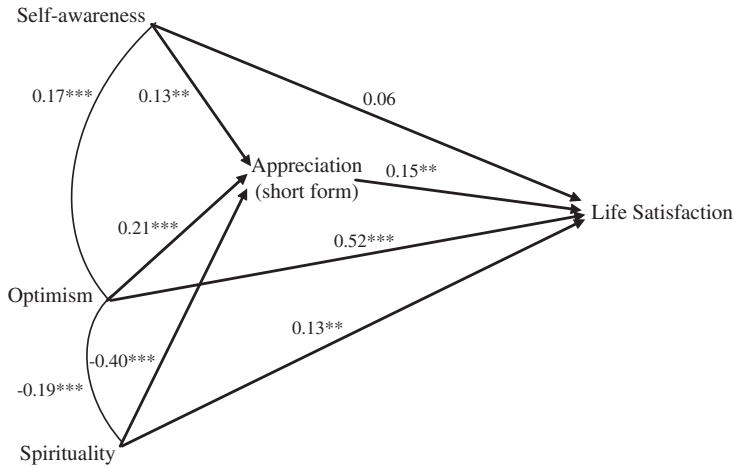


Figure 1
Path analysis for life satisfaction.
 ** $p < .01$. *** $p < .001$.

For predicting negative affect, significant unique contributions were made by optimism ($p < .01$) and by self-awareness ($p < .05$) with beta weights of -0.52 and 0.11 , respectively. Neither spirituality nor appreciation made significant unique contributions in predicting negative affect when the other variables were partialled out.

Known Groups Validity

A t test was computed comparing those who indicated they had a religious affiliation to those who did not (i.e., those who said none, left the question blank, or indicated they were atheists). As expected, those who indicated a religious affiliation were significantly more appreciative than those who did not; $t(418) = 4.14$, $p < .001$, for the long form of the Appreciation Scale. For the short form, $t(418) = 3.06$, $p = .002$.

Examining the Nomological Net

Three path analyses examined our hypotheses regarding the relationships between optimism, self-awareness, spirituality, overall appreciation (short form), and SWB. A separate figure is presented for each of the three components of SWB: life satisfaction, positive affect, and negative affect.

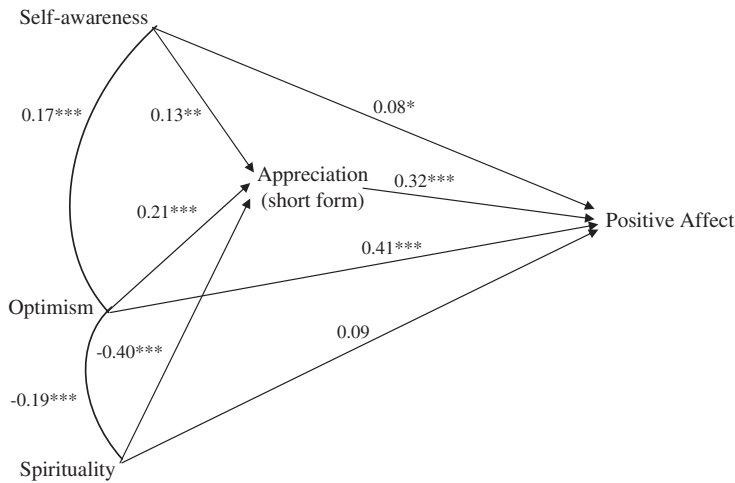


Figure 2
Path analysis for positive affect.
* $p < .05$. ** $p < .01$. *** $p < .001$.

As seen in each of the figures, optimism, emotional self-awareness, and spirituality all made significant unique contributions to appreciation. The strongest link was between spirituality and appreciation, as indicated by the path coefficient of $-.40$ ($p < .001$). Appreciation made significant unique contributions to life satisfaction and positive affect over and above optimism, self-awareness, and spirituality (see Figures 1 & 2). The largest path coefficient for appreciation was with positive affect ($.32$, $p < .001$). As hypothesized, appreciation did not make a significant unique contribution to negative affect (see Figure 3). Findings were virtually the same when the analyses were run using the long form of the Appreciation Scale or the total of the component scales derived from the PCA.

DISCUSSION

The goals of the study were to create an objective, quantitative measure of appreciation, to assess its reliability, and to provide preliminary evidence of construct validity. After successfully developing two reliable overall measures of appreciation (short and long forms), we developed reliable subscales assessing the eight aspects of appreciation: “Have” Focus, Awe, Ritual, Present Moment, Self/Social

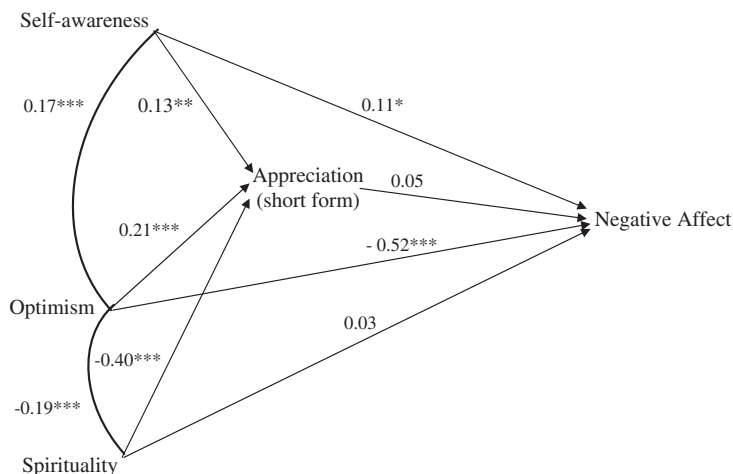


Figure 3
Path analysis for negative affect.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Comparison, Gratitude, Loss/Adversity, and Interpersonal. Then, in order to provide evidence of construct validity, we examined some of the links in the nomological net of appreciation proposed by Adler (2002; Adler & Fagley, 2001).

In addition, we were able to provide some “known groups” validity evidence. People indicating a religious affiliation were significantly more appreciative than those indicating atheism or no religious affiliation. This is what one would predict given that most organized religions encourage thankfulness, gratitude, and appreciation. Emmons and Crumpler (2000) expressed a similar view.

Based on the nomological net, a number of competencies and dispositions were hypothesized to correlate significantly with appreciation. This study examined three of those competencies and dispositions: optimism, emotional self-awareness, and spirituality. Results of Pearson correlations and the multiple regression analysis were consistent with predictions: each of the facilitating competencies and dispositions made a significant unique contribution to appreciation. The relationships were in the predicted direction, but they were not so strong as to call into question appreciation’s status as a distinct construct.

The nomological net also predicted appreciation’s relationship to SWB, which was examined in the Pearson correlations, multiple

regression analyses, and the path analyses. Appreciation was related to both the cognitive and affective components of SWB. Although the Pearson r between appreciation and negative affect was statistically significant at the .05 level ($r = -.10$, indicating a tendency for greater appreciation to be associated with less negative affect), its size was small. Furthermore, once we controlled for optimism, self-awareness, and spirituality in the multiple regression analysis, it was not significantly related to negative affect. In other words, although appreciation is associated with greater positive affect and life satisfaction, it does not have much of a relationship to negative emotions.

The major finding regarding appreciation as a predictor of SWB is that when the contributions of emotional self-awareness, optimism, and spirituality are partialled out, appreciation still makes a significant contribution to two components of SWB: life satisfaction and positive affect, which highlights its importance for understanding SWB. Thus, optimism, emotional self-awareness, and spirituality do not account for the ability of appreciation to predict life satisfaction or positive affect. This study provides evidence that appreciation accounts for aspects of SWB that the other constructs do not. This finding has major implications for future research regarding SWB and the development of appreciation as a unique construct.

Relation of Appreciation Subscales to SWB

Which of the eight aspects of appreciation are key in predicting SWB? All the appreciation subscales have significant positive Pearson correlations with positive affect, and all but one (Self/social comparison) have significant positive correlations with life satisfaction (see Table 9). So, the more one exhibits the aspect of appreciation denoted by the subscale, the greater one's score tends to be on both life satisfaction and positive affect. For each of the components of SWB, "Have" Focus has the strongest correlation of any of the subscales. This is consistent with our view that a focus on what one has rather than on what one lacks is a fundamental feature of the appreciative person. Its strength of association ranges from a high of 22% of the variance for positive affect down to the low of 4% of the variance for negative affect. Only four subscales have significant Pearson correlations with negative affect: "Have" Focus, Loss/Adversity, Present Moment, and Self/Social Comparison. The first three of these are negative correlations, as one would expect. That

is, the more one exhibits the aspect of appreciation denoted by the subscale, the lower one's negative affect tends to be. The interesting thing is that the correlation between Self/Social Comparison and negative affect is positive. This indicates that the more one engages in self/social comparison to foster appreciation, the more negative affect one tends to experience. So, although greater self/social comparison is associated with more positive affect, it is also associated with greater negative affect as well. This certainly raises some important concerns about the benefit of self- and/or social comparison.

The picture becomes even more complex when the eight aspects of appreciation are considered together. Based on the Pearson correlations, the eight aspects of appreciation are more closely associated with life satisfaction and positive affect than with negative affect, as seven correlate with life satisfaction, eight correlate with positive affect, and only four correlate with negative affect. But as the subscales are intercorrelated, it is important to consider their unique contributions.

"Have" Focus and Self/Social Comparison make significant unique contributions to all three components of SWB: life satisfaction, positive affect, and negative affect. Loss makes a significant unique contribution to life satisfaction and positive affect. Ritual makes a significant unique contribution only to life satisfaction, and Awe makes a significant unique contribution only to negative affect. It is not surprising that "Have" Focus makes significant unique contributions to life satisfaction, positive affect, and negative affect, as it has the largest Pearson correlations with the three dependent variables (DVs). The unexpected finding is the significant unique contribution of Self/Social Comparison to life satisfaction and positive affect. Let us consider this finding more closely.

Self/Social Comparison shows very little relation, in terms of Pearson r , to any of the DVs (i.e., positive affect, negative affect, and life satisfaction), yet it correlates positively with the other appreciation subscales (r s = .35 to .49). When one of the DVs such as life satisfaction is regressed on the eight appreciation subscales, Self/Social Comparison appears to function as a suppressor. That is, Self/Social Comparison suppresses the variance in appreciation that is irrelevant to positive and negative affect and to life satisfaction. At this point, one can only speculate about the possible sources of variance tapped by the scale that could underlie such suppression. For example, it may be that people scoring high on the Self/Social

Comparison subscale are indicating that they spend time explicitly trying to make themselves “feel better” by comparing their situation to other times in their life that were worse, or to other people who are worse off. This resembles a kind of coping strategy and may be an indirect indicator of some degree of psychological distress. Alternately, endorsing the social comparison items on this subscale may indicate that these individuals lack an internal reference point. So, they develop one through explicit comparison to others.

Ritual also shows little relation to life satisfaction in terms of Pearson r , which may partly reflect that rituals lose their power with repetition, yet ritual is correlated moderately with the other subscales of the Appreciation Scale ($r_s = .38$ to $.63$). Consequently, it also functions as a suppressor variable in the prediction of life satisfaction. It suppresses the variance in appreciation that is irrelevant to life satisfaction. Again, one may speculate that there seem to be two aspects of regularly engaging in rituals that may clarify why it might not be related to life satisfaction and how it may function as a suppressor. One issue might be that repetition of particular thoughts or behaviors may represent some aspect of pathology that in its most extreme form is seen in obsessive-compulsive disorder. Another way that endorsing items on the ritual scale could represent variance irrelevant to the construct of appreciation is that it could represent belief in “magical thinking.” Some people endorsing the ritual items could be engaging in the rituals in order to “prevent” bad things from happening to them, expressing a superstitious view that if they remind themselves to appreciate what they have, then it will not be taken away.

Limitations

Several limitations of the instrument need to be considered. For instance, there may be aspects of appreciation that are not included, thereby underrepresenting the construct. However, inclusion of the pilot study makes this less likely, as those participants were asked to provide examples of their experiences of appreciation, and the original pool of items was generated to capture the range of responses seen in the pilot. Another concern is that, as with any self-report measure, the validity of the scores depends on participants’ ability and willingness to report their thoughts, behaviors, and feelings

accurately. Participants may have a biased idea of their own behavior, lack insight into their feelings, fail to recall their behavior accurately, be motivated to distort their behavior for social desirability, and so on. Additionally, only two of the items on the final measure were worded in a negative direction that required one to disagree in order to be scored as appreciative. Consequently, general response biases to agree (or disagree) could potentially be confounding the scores. Future research will need to examine these concerns.

Finally, the measure was developed based on undergraduates' responses to the initial pilot study and to the rating scale items. The experiences of appreciation of relatively well-educated, middle-income, young adults may not fully capture the construct of appreciation. Consequently, the applicability of the findings to mature adults or to those with less education or of other cultures may be limited. According to Cherniss and Adler (2000), emotional intelligence tends to increase throughout the life span. This raises the possibility that appreciation may change over the life course or that its relation to other constructs may differ for older adults in comparison to the undergraduates studied here.

Directions for Future Research

Research on appreciation could proceed in many useful directions. Further examination of the model of appreciation, as well as the broader nomological net is needed. More research is needed to investigate appreciation's relationship to other constructs, including social desirability, hope (e.g., Snyder, et al., 1991), forgiveness (McCullough, 2000), emotional intelligence (Salovey & Mayer, 1989), resiliency (Masten, 2001), self-determination (Ryan and Deci, 2000), wisdom (Baltes and Staudinger, 2000), empathy (Davis, 1983), and other measures of SWB than those examined here (such as the Quality of Life Inventory described by Frisch, Cornell, Vallanueva, Retzlaff, 1992).

Developing measures of appreciation that do not rely on self-report (e.g., 360 feedback in which self-report is supplemented by reports by peers and superiors) could provide a more complete picture of the construct and would enhance opportunities for examining convergent validity. For example, it would be informative to know if ratings by friends, family members, and co-workers agreed with self-ratings obtained on the current measure.

Measuring appreciation among middle-aged and older adults of varying demographics (e.g., SES, cultures, religions, etc.) could provide insight into the impact of culture on the development of appreciation. Research among children and teens that examines the relationship between appreciation and the adoption of positive health behaviors would be potentially useful. At a more basic level, cross-sectional research could examine whether or not there is a developmental sequence to developing the various aspects of appreciation. For example, does awe develop earlier than gratitude?

Research might investigate the degree to which aspects of appreciation can be learned. Adler (2002) offers suggestions for appreciation training that might be tested experimentally (e.g., giving students cameras to increase their appreciation of their surroundings; providing outdoor experiences such as camping to enhance appreciation of “creature comforts” typically taken for granted, such as a soft bed, warm shower water, etc.). In the workplace, the relationship between workers’ level of appreciation and their productivity, health, stress, and absenteeism could be examined. Do appreciative supervisors promote more appreciative employees? Do training programs in appreciation affect the “bottom line” for organizations? Developing scales based on the pathways to appreciation (triggers and strategies) might provide useful measures for evaluating the effects of training.

Research might further explore the relationship between appreciation and social connectedness by investigating the consequences of both expressing appreciation to others and feeling appreciated by others. Do appreciative people have stronger social support systems? Is there a downside to being overly appreciative? McCullough et al. (2001) noted that expressions of gratitude can have a negative impact when they are paired with attempts to take advantage of the benefactor’s generosity (such as thanking someone for giving one directions, then asking if he or she would like to buy a magazine subscription). Expressions of gratitude can also have a negative impact when used as substitutes for apologies. Research by Mehrabian (1967) indicated that when an offense was clearly due to the offender, then an expression of gratitude by the offender for forbearance was viewed more negatively than an apology. Similarly, it may be that expressions of appreciation may be negatively interpreted or have other drawbacks.

CONCLUSIONS

In sum, there are important individual differences in the tendency to experience appreciation. Future research on appreciation is warranted since appreciation appears to contribute unique variance in the prediction of life satisfaction and positive affect beyond that contributed by emotional self-awareness, optimism, and spirituality. The current scales provide some useful tools with which to pursue this research.

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