

## Chapter 2

# What Is Gratitude and How Can It Be Measured?

*Thankfulness or gratitude is a desire or eagerness of love, by which we strive to benefit one who has benefitted us from a like affect of love.*

–Spinoza

Perhaps it is almost too obvious to say that before a construct can be investigated it must first be adequately defined. However trite that dictum seems to be, it is still important to emphasize, particularly when it comes to a construct such as gratitude. As with many words, gratitude is used in a number of ways in common usage. In various contexts gratitude can refer to an emotional state, an emotional expression, a character trait, or even a virtue. Thus, it is important that we are clear about the terms we are using in the study of gratitude. Many examples could be cited in the social sciences showing that when a construct has not been adequately operationalized, this has led investigators into many cul-de-sacs and needless debates. Until one knows what one is aiming at, one had best not pull the trigger. Gratitude is probably like other emotional states—we all know what it is until we attempt to define it—but defining it is still an important task. Until we clearly delineate what we are investigating, we cannot proceed to study it. In order for a science of gratitude to progress we must first operationalize this construct. Thus this chapter is devoted to explaining a clear definition of gratitude, and various approaches that have been taken to measuring it. Before presenting my definition of gratitude however, I feel it would be helpful to provide a brief linguistic history of the word. I will then review Rosenberg's helpful typology of emotion, followed by my preferred definition of gratitude. Here I will discuss an important issue in the understanding of gratitude: the relationship of gratitude to appreciation. I will then present an extensive section describing the current approaches to measuring gratitude, and will conclude the chapter with an important discussion about the relationship between gratitude and indebtedness.

## 2.1 The Legacy and Grammar of Gratitude

Before offering a definition of gratitude, I think it is helpful to provide a brief history of the words *grateful* and *thank*. The word *grateful* probably originated in the sixteenth century (Ayto, 1990). The adjective “grate”, which a person is full of when they feel grateful, is now obsolete. It was derived from the Latin “gratus” which means pleasing or thankful. In fact, often in sixteenth or seventeenth century literature a writer would use “grateful” when they simply meant that they felt pleased. All associations with “gratus” are positive, and this is consistent with research showing that gratitude belongs with the positive affects (Brunner, Watkins, & Webber, 2010; McCullough, Emmons, & Tsang, 2002; Watkins, Woodward, Stone, & Kolts, 2003). Interestingly, the word “grace” is also derived from “gratus.” Moreover, in Greek “charis” does double-duty for both gratitude and grace (Bruce, 1963). This etymology suggests interesting associations between unmerited favors and gratitude, and I will expand on this connection below.

“Thank” has an even longer history than “grateful”, and probably originated before the twelfth century. It was derived from “thoughtfulness” and then evolved into “favorable thought.” Thus, early in this word’s history thoughtfulness seemed to be essential to giving thanks. Indeed, we shall see that gratitude is a mindful and cognitively imbued emotion. Moreover, as I show in Chap. 3, favorable thought about another person is crucial to experiencing gratitude. Indeed, Lazarus and Lazarus (1994) have argued that because gratitude involves thoughtfulness about the benefits that one receives from others, it should be viewed as one of the empathic emotions. How mindful must one be about the mental state of one’s benefactor in order to experience gratitude? Is accuracy about the benefactor’s state of mind important to gratitude? Or is it simply a particular belief about the mindset of the benefactor that is important (regardless of whether this belief is accurate)? These are interesting questions that deserve research attention.

The history of gratitude as a practice is also illuminating. Virtually all major religions and cultures have encouraged gratitude (Emmons & Crumpler, 2000). While recorded civilizations seemed to have encouraged some form of grateful expression, not all languages have an equivalent for “thank you” (Visser, 2009). Cultural variations in grateful expressions are interesting. For example, often the Japanese will say “I’m so sorry” in situations where Americans would say “thank you.” In the South Indian culture they do not have a phrase for “thank you”, but they express their gratitude with some kind of return favor (Appadurai, 1985). A study of the cultural variations in the linguistics of gratitude is beyond the scope of this book, but see Visser for an intriguing review of this issue.

Although gratitude has largely been venerated as a virtue across time and cultures, there have been occasional detractors. Aristotle for example, did not think that gratitude was becoming to the noble man. This is because when one expresses gratitude they are admitting that someone else has contributed to their well-being. The source of well-being for the noble man however, is only to be found in himself. As one of the thinkers important to Western individualistic thought, I find Aristotle’s

view of gratitude informative. This may help explain some interesting gender and cultural differences in gratitude that I shall discuss later. Aristotle was not alone in his distaste for gratitude. For example, Henry Ward Beecher claimed, “Next to ingratitude, the most painful thing to bear is gratitude.” Joseph Stalin apparently had an even lower view of gratitude. He is said to have declared, “Gratitude is a sickness suffered by dogs.” Perhaps these quotes reflect the Western individualistic attitude that one should be independent and provide for one’s own welfare, but it is important to highlight that in general these opinions have been the exception rather than the rule.

Others have proposed that pivotal events in history have revolved around gratitude. Gerrish (1992) for example, has argued that the reformation teachings of Calvin and Luther were primarily “Eucharistic”—theologies that focused on God’s grace and the human response of gratitude. Thus, for the Reformers the primary motivation for the religious life was a response of gratitude for the Divine gift of salvation, rather than attempting to achieve good works to earn salvation from God. Karl Barth—perhaps the most influential theologian of the twentieth century—characterizes the Reformed attitude: “Grace and gratitude belong together like heaven and earth. Grace evokes gratitude like the voice an echo. Gratitude follows grace like thunder lightening” (Barth, 1956/1961, p. 41). It is interesting that although a significant amount of research has explored the impact of forgiving another, little research has investigated the potential benefits of *receiving* forgiveness. Indeed, the psychology of religion seems to have spent little time investigating experiences of grace in religious people. The history of gratitude suggests that experiences of grace may be important to gratitude, and this would seem to be a fruitful path for future research.

Perhaps influenced by the lingering impact of the Reformation, the history of the Thanksgiving holiday in the United States is an interesting study. On November 1st, 1777, Sam Adams wrote the first declaration for an official Thanksgiving Holiday that was adopted by the 13 original states:

It is therefore recommended . . . to set apart Thursday the eighteenth day of December next, for solemn thanksgiving and praise, that with one heart and one voice the good people may express the grateful feelings of their hearts and consecrate themselves to the service of their divine benefactor.

In 1789 George Washington then declared in his first Presidential Proclamation: “It is the duty of all Nations to acknowledge the providence of Almighty God, to obey his will, to be grateful for his benefits, and humbly to implore his protection and favor.” Abraham Lincoln then reinstituted the American holiday in 1863. Included in his Thanksgiving Proclamation he wrote: “We have been the recipients of the choicest bounties of Heaven; we have been preserved these many years in peace and prosperity; we have grown in numbers, wealth, and power as no other nation has ever grown.” It is worth noting that this was written in the midst of America’s brutal Civil War. The annual Thanksgiving Holiday has been maintained in the United States since Lincoln’s proclamation, and to this day this appears to be a vibrant holiday. Indeed, a recent Gallup poll showed that Thanksgiving was

the happiest day of the year for Americans. Although attempts have been made to secularize this celebration, the quotes above show that this was essentially a theocentric commemoration, and current Presidential Thanksgiving Proclamations illustrate that this event still appears to be focused on thanksgiving directed to the Divine. This highlights the spiritual aspects of gratitude, and this has become a vibrant area of research in the psychology of religion that I will explore in Chap. 5.

## 2.2 Levels of Analysis in Emotion Research

Erika Rosenberg wrote an influential paper on emotional phenomena that I believe is very helpful to organizing our understanding of gratitude. Rosenberg (1998) argued that in order to accurately understand the function of emotions, it was important to be clear about the level of analysis of the phenomena under study. Her approach followed philosopher William Wimsatt (1976), who attempted to resolve issues with reductionism and emergentism in the mind-body problem with this approach. He argued that while it is appropriate to explain higher mental processes in terms of molecular mechanisms (e.g., neurochemical processes), there are many higher-level functions that cannot be adequately understood through molecular explanations. Thus, higher-level accounts still provide explanatory models that cannot be reduced or “explained away” by lower level molecular explanations. Rosenberg cites a passage from Wimsatt’s chapter that illustrates his approach:

The point of reduction is not to get an “infinite regress” explanation for “essentially everything” in terms of “essentially nothing,” but only to make sure that everything gets explained—at some *level* or another. This in fact allows for the possibility that some things may require explanation at *higher* levels. (Wimsatt, 1976, p. 225)

Rosenberg applied Wimsatt’s levels of analysis approach to emotional phenomena, and I believe that her approach is helpful for understanding the various facets of gratitude as well.

Rosenberg divides affective phenomena into three levels of analysis: affective traits, emotions, and moods. An affective trait is an emotional disposition, and describes a particular person’s threshold for experiencing a particular emotion. For example, a cheerful person should have a relatively low threshold for experiencing joy, thus they should experience joy easily and relatively frequently. Similarly a hostile person would be prone to anger, would have a low threshold for anger and would become angry in situations of slight provocation where most people would not experience anger. Affective traits are seen to be at the top of the affective hierarchy (i.e., indicating higher level processes), because affective traits “exert an organizational influence on affective states” (Rosenberg, 1998, p. 250). Given that these are traits, affective traits are relatively stable compared to emotions and moods. Affective traits exert their influence at the background of consciousness, and individuals are typically unaware of their activity.

At the other end of the affective continuum are emotions. Emotions are relatively brief “psychophysiological changes” (p. 250) that result from an appraisal of a specific situation in one’s life. Rosenberg proposes (rightly I think) that these appraisals may be deliberative or automatic, and this will be an important issue when considering the appraisals that lead to gratitude. Of the three levels of affective phenomena, emotions are the most accessible to awareness and therefore tend to be in the foreground of consciousness. Moods share characteristics of emotions and affective traits. Like emotions, moods are transient states, but are usually longer in duration than emotions and tend to operate at the background of consciousness. Unlike emotional states, moods states are not about anything in particular, but Rosenberg argues that being in a particular mood state might facilitate the congruent emotion. For example, if one is in an angry mood, this is likely to lower the threshold for experiencing anger. If an individual is in an angry mood this would make it more likely for them to become angry in a situation that may not usually frustrate them. I have found that this typology has been very helpful for developing a comprehensive understanding of the phenomena of gratitude, and I will follow this schema in defining gratitude.

## 2.3 Defining Gratitude

### 2.3.1 *Defining Gratitude as an Emotion*

Following the approach of Emmons (2004), I have argued that the emotion of gratitude is experienced when one affirms “that something good has happened to them, and they recognize that someone else is largely responsible for this benefit” (Watkins, 2007). Several aspects of this definition deserve some elaboration. First, the “something good” is not only a benefit that has just taken place. Individuals may recall or become aware of a past benefit, and consequently experience gratitude. Indeed, the “benefit” may be a “good” that is not temporally limited. Many times individuals become grateful when they reflect on a “good” that has happened at some time in the past, and others become grateful when they become aware of a faithful benefit that has been consistent over time. So for example, on a wedding anniversary a husband may begin reflecting on the many benefits that his wife provides for him—things that he may have been taking for granted. Friendship in marriage is not a benefit that happens at a particular point in time and is a good that is not temporally limited. Even though this friendship is not confined to a particular event, one may become conscious of this benefit and consequently experience gratitude. In this sense someone may be grateful for a *person* because of the many benefits that they provide. Furthermore, I take a broad approach to defining what is “good.” Good things may be positive benefits that have been added to one’s life, but “good” things may also be the removal of unpleasant conditions. In this sense the perceived benefit may be the awareness of the absence of some

negative event. For example, after landing safely at an airport in the midst of a severe lightening storm, gratitude is a likely response. Some research has found that gratitude is the dominant emotion for survivors of a hurricane (Coffman, 1996). Presumably, this is because the hurricane makes one aware of the bad that might have happened (not surviving the hurricane), but in fact this undesirable situation did not take place (see also Teigen, 1997).

Secondly, I would like to note that the source of the benefit is external: someone else is largely responsible for the benefit. Thus, one cannot be grateful toward one's self. Affirming that I am responsible for something good is essentially the appraisal that leads to pride, a very different emotion from gratitude. A person may be grateful for aspects of their self, but this is because they feel that someone else has contributed to this quality. To illustrate, I may feel grateful that my parents developed in me an appreciation for beauty. One somewhat controversial aspect of my definition is that the external source of the benefit is *personal* in some way ("someone else is largely responsible for the benefit"). The "someone else" need not be a human benefactor (e.g., one may be grateful to God), but I submit that when one experiences gratitude they are personalizing the source of the benefit in some way; in some way the benefactor is viewed as an intentional agent that has benefitted them. The fact that people are grateful toward their pets, toward impersonal forces (e.g., "fate" or "luck"), or even inanimate objects may seem inconsistent with my proposal here, but the issue is not whether the "benefactor" is in fact intentionally benefitting the one experiencing gratitude, the issue is that the grateful individual has *personalized* the benefactor in some way. Thus, a pet may not intentionally provide benefits to his owner, but if the owner *feels* that her pet has intentionally benefitted her, she will experience gratitude. Even if the source of the benefit is vague, the grateful person feels that something has intentionally benefitted her. I submit that often in these cases this aspect of the appraisal is implicit or non-conscious. Clearly, I am taking a strong view of the personalization of the benefactor. Although some research supports this idea of perceived intentionality on the part of the benefactor, my position here is largely speculative and this might be an interesting research avenue to pursue. In this vein, I believe that more research could be devoted to experiences of gratitude where there is no obvious human benefactor. For example, in one study we found that exposure to natural beauty prompted gratitude (Watkins, GIBLER, Mathews, & Kolts, 2005).

Research largely supports the definition of gratitude provided above, but recent work has provided a more complete picture of the emotion of gratitude. Clearly, research has shown that gratitude is a positive affect—people experience gratitude as a pleasant emotion and it tends to covary with other positive emotions (e.g., Brunner et al., 2010; Watkins, Scheer, Ovnicek, & Kolts, 2006). Some studies have found that grateful emotion correlates negatively with negative affect, but most studies have found that the relationship is stronger with positive affect (e.g., McCullough et al., 2002; Watkins et al., 2003). Perhaps this is an obvious and expected finding, but I believe these results are significant because social science scholars have often equated gratitude with indebtedness, which is usually understood as an unpleasant state. The issue of the relationship of gratitude to indebtedness is an important

one, and I will present a more thorough discussion of this issue later. Others have proposed that gratitude should correlate with aesthetic emotions such as awe (Keltner & Haidt, 2003), and our study that I mentioned earlier has provided some support for this idea (Watkins et al., 2005). Furthermore, Algoe and Haidt (2009) found that gratitude is related to the “other-praising” emotions of elevation and admiration, and these three states seem to be distinct from other positive emotions. Is gratitude more strongly correlated with some positive emotions than others? I know of no published study that has looked directly at this question, but the answer would have some interesting implications for our understanding of gratitude. For example, some have proposed that gratitude is a subtle emotion, but some evidence suggests that it might be an invigorating emotion (Emmons & McCullough, 2003). More research on the subjective qualities of grateful emotion is needed.

The duration of gratitude appears to be like other emotions. Although this has been a neglected area in emotion research, Verduyn, Delvaux, Van Coillie, Tuerlinckx, and Van Mechelen (2009) found that like other emotions, gratitude lasts longer when the event is judged to be more important. Interestingly, they found that one’s initial intensity of experience also predicted duration, independently of the judged importance of the provoking event.

Although many different definitions have been presented on the basic components of emotions, all theorists seem to agree that every emotion is associated with action tendencies: each emotion prepares us to act in certain ways. When one is afraid, one feels like running, when one is angry, one has the urge to fight. Fredrickson (1998) has pointed out that this component of emotions is based on the prototype of negative emotions. She then argues (rightly I think) that consideration of positive affects leads us to the conclusion that we must consider thought tendencies as well as action tendencies when studying emotion. Thus, a comprehensive description of the emotion of gratitude should include thought/action tendencies that are associated with this state. When one is grateful, what does one have the urge to do or think? In a nutshell, the thought/action tendencies of gratitude can be characterized as prosocial, but I think it is important to flesh out this conclusion.

In one study, we compared the action tendencies of gratitude to indebtedness (“feeling obligated to repay”) in a vignette study (Watkins et al., 2006). We investigated 26 action tendencies and reduced these to 6 factors. First, supporting Fredrickson’s *Broaden and Build* theory of positive emotions (1998), we found that gratitude was positively correlated to the number of action tendencies endorsed ( $r = .44$ ), but indebtedness was not ( $r = .08$ , *ns*). Thus, the more grateful a person reported that they would be in response to the situation in the scenario, the more thought/action tendencies they tended to endorse. This is consistent with Fredrickson’s idea that in contrast to negative emotions, positive emotions like gratitude tend to broaden a person’s repertoire of thought/action tendencies. Second, we found that gratitude was positively correlated with prosocial thought/action tendencies, and was negatively correlated with antisocial thought/action factors. Gratitude was most strongly correlated with the factor we called “Adoration” ( $r = .57$ ), but was also moderately correlated with “Approach” ( $r = .40$ ) and “Yielding” ( $r = .30$ ).

The Adoration factor included items such as “I would feel like praising my friend to others when my friend was not present”, “I would feel like expressing my happiness to my friend”, and “I would feel like giving my friend a gift.” Moreover, the more grateful a person reported that they would be, the less likely they reported *antisocial* thought/action tendencies such as doing things actively or passively against their benefactor. Thus, not only does gratitude promote prosocial action tendencies, it also seems to inhibit antisocial thought/action tendencies. This was not the case with indebtedness. Whereas gratitude was negatively associated with the total number of antisocial thought/action tendencies endorsed ( $r = -.25$ ), indebtedness was positively associated with the number of antisocial thought/action tendencies ( $r = .20$ ).

Although vignette studies such as this have fallen out of favor in recent years because of questions about subjects’ ability to make judgments in imagined scenarios, I believe that this methodology still has a role to play in gratitude research. Because appraisals can be carefully controlled in vignette studies in ways that cannot be controlled in studies that use actual benefits, this methodology will still prove to be useful. It is certainly true however, that in order to establish the prosocial nature of gratitude thought/action tendencies, studies that use actual benefits are needed. Fortunately, a number of studies have found that indeed, when a benefit is provided that produces gratitude, prosocial responses are likely (e.g., Bartlett & DeSteno, 2006; Grant & Gino, 2010; for a review, see McCullough, Kilpatrick, Emmons, & Larson, 2001). Indeed, the prosocial characteristics of gratitude are so notable that one of the prominent theories of gratitude has argued that gratitude is essentially a moral emotion (McCullough et al., 2001). This is an important aspect of gratitude and there is too much data to adequately review it here. Indeed, the prosocial aspect of gratitude may be one of the most important mechanisms that explains why grateful people tend to be happy people. Grateful people may tend to be happier because of the many social benefits that gratitude offers. Because of the importance and extensive results that speak to this issue, I have devoted an entire chapter to the prosocial components of gratitude (see Chap. 8).

How do lay people define gratitude? Recently, Lambert, Graham, and Fincham (2009) conducted an extensive investigation of lay conceptions of gratitude. In a series of studies they demonstrated that lay conceptions of gratitude conform to a prototype: gratitude is not so much determined by a rigid set of category rules, as it is by a compendium of central features. They also present evidence that people conceive of gratitude in at least two ways: *benefit-triggered gratitude* and *generalized gratitude*. Their evidence did not suggest that these were two qualitatively different types of gratitude, but people did report stronger gratitude responses to generalized gratitude scenarios than they did to the more specific “benefit-triggered” vignettes. In my view these are two ends of a dimension from more time-limited and specific benefits to more general benefits that are not limited by time and may in fact consist of a number of benefits. For example, one may be grateful for a salary raise (a specific or “benefit-triggered” gratitude event), or they may be grateful for their spouse (not a time limited benefit, and one’s spouse probably represents many benefits). This work highlights the importance of



allowing for a broad conception of the “good” that one is “affirming” in a grateful response, and their paper also brought forth the importance of distinguishing between gratitude as an emotional state and as an affective trait. I now turn to considering the affective trait of gratitude.

### 2.3.2 *Defining Gratitude as an Affective Trait*

Following Rosenberg’s (1998) levels of analysis approach to emotion, gratitude should consist of an affective trait as well as an emotional state. Thus, a person who is high on the affective trait of gratitude should experience gratitude easily and often. In an important seminal article in the science of gratitude, McCullough, Emmons, and Tsang defined the grateful disposition as “a generalized tendency to recognize and respond with grateful emotion to the roles of other people’s benevolence in the positive experiences and outcomes that one obtains” (2002, p. 112). It is difficult to improve on this definition, and I will follow their understanding here.

Moving beyond the basic definition of trait gratitude, we may ask, “What makes a person high in the disposition to gratitude?” In this context, McCullough et al. define “facets” of trait gratitude that are elements of this trait. The first facet is *intensity*: grateful people should experience gratitude more intensely after receiving a benefit than less grateful individuals. The second facet of *frequency* refers to how frequently a person experiences gratitude. Clearly, a grateful person should experience grateful emotions more frequently than those less grateful. McCullough and colleagues identify the third facet as *span*. “Span refers to the number of life circumstances for which a person feels grateful at a given time” (p. 113). At any given moment, grateful people may feel thankful for a number of different sources of benefits in their lives. Grateful people do not limit their gratitude to one area of their lives (e.g., their occupation), but feel grateful for a number of different life circumstances (e.g., friends, family, health, etc.). Finally, McCullough et al. introduce the facet of *density*. This refers to the number of different benefactors a person may feel grateful for in the context of a positive outcome. Thus, when a grateful person graduates from college she will likely feel grateful towards her parents, her professors, her advisors, and her fellow students. One implication of this facet is that there may be a closer tie between the emotions of pride and gratitude in grateful people. This is because when one achieves an accomplishment, they obviously attribute the outcome to their own contribution, but because of the facet of density a grateful person should be more likely to affirm other sources that contributed to their achievement as well. Many years ago when I was awarded an NIH grant I felt proud of this accomplishment, but I also felt deeply grateful; grateful to the grants department, grateful for the advice of colleagues, grateful for the time my family allowed me to work on the proposal, and even grateful to the committee that approved the project. I am not aware of any research that has directly investigated this association between gratitude and pride, but at least one study has shown that narcissists seem to have a more narrow density in their attributions for the success of a cooperative effort. Those high in narcissism

are more likely to attribute their success to themselves, and not to the contribution of their partner (Farwell & Wohlwend-Lloyd, 1998). To summarize, McCullough et al. submit that people high in the disposition of gratitude should show facets of *intensity* (they show a higher intensity in their grateful experiences), *frequency* (they should experience gratitude more frequently), *span* (they are more likely to feel grateful for a number of different life circumstances at any moment), and *density* (they are more likely to attribute successful outcomes to a wider variety of sources).

But what makes a person to be more likely to have these facets? What attitudes might be at the foundation of the gratitude facets of intensity, frequency, span, and density? In developing our approach to dispositional gratitude, we attempted to develop a simple theory of the attitude that is foundational to dispositional gratitude (Watkins et al., 2003). In brief, we argued that a grateful person has an appreciation for all of life as a gift. We went on to define three basic components of this attitude, which I have more recently called the “*three pillars of gratitude*” (Watkins, 2009). These are presumed to be three subordinate facets that contribute to and comprise the superordinate factor of trait gratitude (the attitude that all of life is a gift). First, we argued that grateful individuals should have a strong *sense of abundance*, or put negatively, they should have a lack of a sense of deprivation. Thus grateful people should feel that life has treated them well (indeed, the gifts of life have been abundant), and they will not feel that life has treated them unfairly or that they have been deprived of the benefits that they feel that they deserve. Secondly, people high in the grateful disposition should *appreciate simple pleasures*. If all of life is a gift, then grateful people should show more appreciation for the day-to-day benefits that come their way. Put differently, a grateful person should not have to wait for a trip to Maui to feel grateful. Finally, grateful people should be characterized by what we called *social appreciation* or *Appreciation of Others*: they recognize the importance of appreciating the contributions of others to their lives, and they also recognize the importance of expressing their appreciation. In sum, we argued that the attitude underlying trait gratitude should be characterized by a sense of abundance, an appreciation for simple pleasures, and social appreciation. I have spent some space describing these two approaches to trait gratitude not only to give a full understanding of the affective trait of gratitude, but also because an understanding of these approaches is critical to the development of the two measures that are most frequently used to assess dispositional gratitude: the Gratitude Questionnaire (GQ-6) and the Gratitude, Resentment, and Appreciation Test-Revised (GRAT-R). These two measures will be described in detail in the section below concerning the assessment of gratitude.

The disposition of gratitude is probably most similar to what has been described as the virtue of gratitude. As defined by Peterson and Seligman (2004), a virtue or character strength should be a trait, and thus a person high in the affective trait of gratitude would be viewed as possessing the virtue of gratitude. In this, trait gratitude may be viewed more as the being of gratitude whereas grateful emotion is related to the feeling of gratitude. Thus, those high in trait gratitude will often be referred to as grateful people. In this text I will use the term “grateful people” or a “grateful person”, and by this I mean someone high in the affective trait of gratitude.

In their “un-DSM” (their manual of character strengths and virtues), Peterson and Seligman grouped gratitude with the strengths under the virtue of “transcendence.” According to their approach, gratitude—along with other transcendence strengths such as hope, spirituality, appreciation of beauty, and humor—should lead to the development of the virtue of transcendence. This makes some sense, and as will be described later, strong relationships have been found between gratitude and various measures of hope, spirituality, and the appreciation of beauty. But one might also question whether gratitude would better be classified with the prosocial character strengths of “humanity and love”, or even with the strengths of “temperance” (self-control, humility, forgiveness). Just as with the taxonomy of the DSM, empirical work needs to provide confirmation for the structure of strengths and virtues. I am not aware of much work on this issue, but in one study investigating judgments of the importance of various virtues (Van Gelder, Elster, & Watkins, 2006) we found that gratitude did not fall in a factor with the transcendent virtues, rather it tended to cluster with what we called “Strengths of Learning” (love of learning, curiosity, perspective, appreciation of beauty, and bravery). We found that this was the most curious factor of the four that emerged. It should be pointed out that in this study we asked subjects to rate the importance of these virtues for themselves and for others. Although this is likely to be related to people’s actual self-rating scores on these strengths, they are certainly not synonymous. It is one thing to say that gratitude is an important virtue, it is quite another to report that one is high in the trait of gratitude. More research is needed on the clustering of character strengths so that we may have a more empirically driven taxonomy of virtue. It will be interesting to see how gratitude clusters with other strengths, and this should be information important to an understanding of the nature of gratitude.

### ***2.3.3 Defining Gratitude as a Mood***

Although a fair amount of work has been directed toward defining and investigating gratitude as an affective trait and as an emotional state, little work has attempted to study grateful moods. This is not atypical in emotion research however; often the subject of mood states is not even considered in research studies of emotions. This is probably because much of emotion research has not really distinguished emotion and mood states, and often these two terms are used interchangeably in the literature. When I first read Rosenberg’s (1998) treatise on the three levels of analysis needed for emotion research, I quite frankly wondered whether we really needed the intermediate territory of moods. But the more I have considered this issue, the more I believe that we need to look at affective states at the level of moods as well as emotions. To reiterate Rosenberg’s approach, both emotions and moods are transient states (in contrast to affective traits), but moods are longer in duration and should be more in the background of awareness than emotional states. In addition, if one is in a particular mood, this should facilitate the experience of the congruent emotional state, and emotional states may result in corresponding

lingering moods. Translating these ideas to gratitude then, grateful moods should be more enduring than grateful emotions, they should be more in the background of awareness, and if one is in a grateful mood this should facilitate the experience of grateful emotions. Additionally, grateful moods should not be about something in particular, thus grateful moods may be more related to the *span* facet of the grateful disposition. In this way, moods of gratitude may be more akin to what Lambert and colleagues (2009) have called “generalized gratitude.” Furthermore, experiencing a grateful emotion may prompt a grateful mood. Those high in the affective trait of gratitude should be more likely to experience grateful moods. This might be because grateful moods are more likely to result from emotional experiences of gratitude in grateful people. To illustrate, when a grateful person is unexpectedly assisted on a project, they should experience gratitude just as most people would, but they should have more lingering effects of their grateful experience—the grateful person should be more likely to be in a grateful mood long after the benefit has occurred. On the other hand, it could be that trait gratitude has a more direct impact on grateful moods, i.e., grateful people are more likely to be in a grateful mood because of a direct effect of the trait on mood. Most of what I have outlined here is speculation drawing from Rosenberg’s approach, but research has yet to investigate most of these ideas. Perhaps one of the reasons that we have not progressed in the investigation of grateful moods is because we have as yet to develop a valid measure of these states.

I am aware of only one investigation that has looked extensively at the “intermediate affective terrain” of grateful moods. In two studies McCullough, Tsang, and Emmons (2004) investigated grateful moods using a 3-week daily monitoring method. One may question whether these studies were actually investigating grateful moods or people’s daily summaries of their grateful emotions (see my discussion of the assessment of grateful moods below), but I believe this paper still provides us with some valuable information about gratitude at the mood level. In general, the data supported many of Rosenberg’s ideas as they may be applied to gratitude. First, on days where participants reported more gratitude-relevant events they also reported grateful moods that were greater than their typical day. Second, when individuals reported a higher average intensity in their gratitude emotion responses, they also reported more grateful moods. Third, on days where participants felt more gratitude in their moods than normal, they also reported that they were grateful to a greater number of people. All of these data are supportive of the Rosenberg approach, but because of the correlational nature of these studies the direction of causation cannot be determined. For example, it could be that the greater intensity of grateful emotional responses led to higher mood levels of gratitude, but it is also possible that because individuals were already in a more grateful mood, this facilitated more intense emotional responses of gratitude. It could be that a greater number of gratitude-relevant events created a more grateful mood, but it is also possible that because participants were already in a grateful mood, they noticed (and remembered) more gratitude-relevant events at the conclusion of the day. Whatever the interpretation, both directions of causality seem to be supportive of Rosenberg’s approach.

Also supporting Rosenberg, people who were higher in trait gratitude (measured at the beginning and the end of each study), reported higher daily grateful moods. But for me, the reason for this relationship was somewhat unexpected. I proposed previously that people high in trait gratitude might report higher grateful moods because the trait of gratitude would lead to more intense gratitude emotional responses to benefits, and thus these events would be more likely to result in lingering grateful moods for grateful people. It appeared however, that the data supported more of a top-down effect: high trait gratitude seemed to directly contribute to greater moods of gratitude irrespective of the number of gratitude-relevant events and intensity of gratitude emotional responses. McCullough et al. found that people low in the affective trait of gratitude showed greater grateful moods on days in which there were a greater number of gratitude-relevant events and more intense emotional responses to these events. This was not the case for grateful people, however. In these individuals there was very little evidence that the number of gratitude inducing events or the intensity of grateful emotional responses enhanced their grateful moods. In other words, in contrast to less grateful individuals, the grateful moods of grateful people did not seem to be as situationally dependent. Grateful people reported higher levels of grateful moods regardless of the number of benefits that came their way. Stated differently, the grateful mood of those high in trait gratitude seemed to be more of a top-down effect (their moods were primarily determined by their disposition to gratitude), whereas the gratitude moods of less grateful individuals showed more of a bottom-up effect (their moods were more driven by the events of the day). There may be a problem with these results in that it is more likely that the correlations between events and moods may have been inhibited in those high in trait gratitude because of a restriction in range in grateful moods. In other words, because the daily moods of grateful people were generally higher in the first place, they had less room to improve on days with many gratitude-relevant events, and thus this restriction of range may have hidden relationships between events and mood.

This unexpected result may have important implications. Grateful people appear to have greater moods of gratitude almost regardless of the number of gratitude-relevant events during the day, but it seems that for those less grateful, they need to experience specific benefits to elevate their grateful mood. Why? One interpretation might be that the moods of grateful people tend to be based on more general benefits that are not time-limited. For example, they may be more grateful because they are grateful for good things like their spouse, their job, their friends, or even for life itself. This seems to be similar to Lambert and colleagues (2009) concept of “generalized gratitude.” In contrast, grateful moods of less grateful individuals may be more dependent on specific and recent benefits. Thus, their gratitude may be more of a “What have you done for me lately?” response. If this is indeed the case, it seems clear that being grateful for more consistent benefits that are not time limited would be more adaptive, and this might be why grateful people tend to have higher grateful moods, and they tend to be happier as well. Whatever the case, these results are very helpful to our understanding of grateful moods, and this is an important level of analysis in gratitude because grateful moods are likely to have

a greater influence on a person's adaptive functioning than grateful emotions (see McCullough et al., 2004). It is surprising that more studies have not attempted to investigate moods of gratitude, and this appears to be a needed area of research.

## 2.4 Gratitude and Appreciation

Because some evidence has suggested that gratitude and appreciation are a unitary trait, discussion of the relationship between gratitude and appreciation is warranted (Wood, Maltby, Stewart, & Joseph, 2008). Even if gratitude and appreciation turn out to be distinct constructs, I submit that an exploration into appreciation is important to a full understanding of gratitude. First, it is important that we have a clear understanding and definition of appreciation. Adler and Fagley (2005) 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” (p. 81). This is an interesting definition, for it seems to define appreciation as a cognitive pattern as well as an emotion. I prefer to see appreciation as a pattern of cognitive processing, by which certain emotional responses (including gratitude) may result. In this sense I found the approach offered by Janoff-Bulman and Berger (2000) to be very helpful. I believe this to be an important seminal chapter that advances our understanding of appreciation. They defined appreciation as simply a cognitive process that involves increasing the subjective value of something. Therefore, when one psychologically appreciates something, one appraises it as having more value than it did before. This follows nicely from a literal understanding of the word appreciation. For example, when a home increases in value we say that the home's value has appreciated. Similarly, when we grow to appreciate classical music, the value that we attach to that genre of music has increased compared to how we appraised it before this appreciation took place. So in appreciation, we reappraise something so that it has more value in our eyes.

Wood et al. (2008) conducted the most extensive study into the relationship between appreciation and gratitude. In two studies Wood and colleagues compared three different measures of gratitude and appreciation: the GQ-6, the GRAT (two scales specifically designed to measure trait gratitude), and the Appreciation Scale (designed to measure the more global construct of appreciation as defined above; Adler & Fagley, 2005). The general finding of these studies was that a one-factor model provided the best fit for these measures. Thus, apparently gratitude and appreciation should be viewed as a unitary construct. In evaluating these results, it is important to highlight that these studies were conducted at the *affective trait* level of analysis. It is altogether possible that gratitude and appreciation are basically the same affective traits, but at the emotion level of analysis, they are in fact quite different (and appreciation per se, may not be an emotion at all). Second, when evaluating the items contained in the Appreciation Scale, it is difficult to see how the items and scales on this measure are tapping anything that is clearly distinct from gratitude, thus it is not surprising that these scales form a more unitary

factor with gratitude. Of the eight subscales on the Appreciation Scale, only one is titled “gratitude”, and this scale relates more to the practice of gratitude than to grateful affect (e.g., “I say please and thank you”). Items on the other Appreciation Scale subscales seem to relate directly or indirectly to gratitude. Examples include, “I count my blessings for what I have in this world”, “I have moments when I realize how fortunate I am to be alive” (recall that often people use “fortunate”, “lucky”, and “grateful” interchangeably, Teigen, 1997), “I give thanks for something at least once a day”, “The problems and challenges I face in life help me to value the positive aspects of my life”, and “I remind myself to appreciate my family.” All of these patterns of appraisal are likely to lead to gratitude. Indeed, almost all of the items on this scale refer to appreciating benefits that arise from outside sources—an appraisal that should lead directly to the experience of gratitude.

The personality trait that encourages one to appreciate positive things in one’s life is likely to be very similar to trait gratitude, but I propose that both of these traits should be seen as the affective traits most relevant to the emotion of gratitude in terms of Rosenberg’s (1998) levels of analysis approach. Appreciation therefore, should be seen more as a specific pattern of cognitive appraisals (appraisals that involve increasing the value of something), and in this sense appreciation is necessary but not sufficient for the production of the emotion of gratitude. In addition to increasing the psychological value of something (i.e., appreciation), one must also appraise the benefit as coming from the intentional benevolence of an outside source in order to experience gratitude.

It seems to me that much could be done to develop a psychology of appreciation, and because of the importance of appreciation to gratitude, advances in our understanding of the psychology of appreciation would move the science of gratitude forward. Specifically, what are the cognitive mechanisms that lead one to reappraising something so that it has increased value? People tend to take consistent benefits for granted because of the emotional *law of habituation* (Frijda, 1988). But an event may take place so that once again one recognizes the value of a benefit that has heretofore gone unnoticed or unappreciated. Indeed, Janoff-Bulman and Berger (2000) argued that this might be what traumatic events accomplish. I will describe these processes in more detail in Chap. 9, but because of the importance of the cognitive processes of appreciation to gratitude, I believe that more theoretical and empirical work on the construct of appreciation would be helpful.

## 2.5 Measuring Gratitude

In order to effectively investigate a variable, researchers must be able to reliably measure the construct. We now turn to instruments and issues in the measurement of gratitude. I first describe self-report instruments, and I will follow Rosenberg’s (1998) typology in describing emotional state, affective trait, and then mood state measurement approaches to gratitude. I shall then turn to behavioral measures of gratitude, and will conclude this section with a discussion of the potential use of indirect assessments of gratitude.



As with most emotions, the most developed and utilized measures of gratitude are self-report. These measures are relatively easy to use and are efficient. In the measurement of grateful emotion, one simple but effective approach has been used. McCullough et al. (2002) used three adjectives (grateful, thankful, and appreciative) that the participant responded to on a Likert-type scale. This is often referred to as the *Gratitude Adjectives Scale* (GAS). Although some researchers have used only “grateful” and “thankful” in their assessments, it seems efficient enough to include all three. Internal consistency on this short measure is quite good. In their initial study McCullough et al. reported an alpha of .87, and when we have used this measure in our work we have found similar internal consistencies. If used as a measure of emotional state, it is important that participants be instructed to report on their current emotional state (e.g., “Indicate to *what extent you feel that way right now, that is, at the present moment*, not necessarily how you feel generally or how you feel on average.”). In our work, we have successfully used these adjectives with the PANAS-X or the shorter PANAS (Watson, Clark, & Tellegen, 1988). The advantage of this approach is that it can hide the intent of the researcher to measure grateful affect, and the psychometric properties of the scale do not seem to suffer (see for example, Frias, Watkins, Webber, & Froh, 2011,  $\alpha = .92$ ).

Extensive work has also been accomplished in developing measures of the affective trait of gratitude. The two measures that have been used most in the literature are the GQ-6, developed by McCullough et al. (2002), and our GRAT (Watkins et al., 2003). Clearly, the GQ-6 has been used most by researchers. It is easy to administer and score, and has excellent psychometrics. The internal consistency of the GQ-6 is good (.82 and above), and it correlates moderately to strongly with various emotional well-being measures (McCullough et al.). Most notably, the GQ-6 correlates more strongly with positive than negative affectivity; something that would be expected if this is indeed a measure of a positive emotional disposition. The authors developed this measure to tap the four facets of gratitude that I described earlier. They began with 39 items but were able to reduce the items to 6 following their intent to create a unidimensional instrument. Their research has shown that indeed, a one-factor model provides the best fit for the GQ-6. One might question whether the GQ-6 is more of an assessment of grateful mood than trait gratitude, and it does appear to be more affectively loaded than the GRAT. It is clear however, that in terms of measuring gratitude at the level of affective trait, the GQ-6 has the strongest data supporting its use.

We initially developed the GRAT to measure a hierarchical attitude that we felt was most conducive to experiencing the emotion of gratitude frequently. As described earlier, this was the attitude that all of life was a gift. We wrote items (initially 54) that we felt would best tap the three lower order traits (Sense of Abundance, Appreciation of Simple Pleasures, and Social Appreciation) that contribute to the attitude that all of life is a gift. Our final instrument consisted of 44 items that showed a three-factor structure as we proposed (Watkins et al., 2003). More recently, we revised the GRAT and also introduced a shorter 16-item version (Thomas & Watkins, 2003; see also Diessner & Lewis, 2007). The short version has good internal consistency ( $\alpha = .92$ ) and it approximates the full version quite



well ( $r = .97$ ). This shorter version of the GRAT appears to retain the factor structure of the original, and because it is more efficient to administer than the full GRAT, researchers may prefer this tool.

Although the GQ and the GRAT appear to be effective tools to assess trait gratitude, they are not without their problems. Both of these measures are negatively skewed. This is likely because, like other positive psychology measures, people like to see themselves in a positive light and thus present themselves in this manner. In my view, the intent of the GRAT is a little less obvious than the GQ. Thus, participants are probably more likely to know that gratitude is being assessed with the GQ. But the GQ-6 is used much more than the GRAT and has more data supporting its use. The self-presentation issues with these scales remind us of all of the problems with self-report measures. Although these questionnaires are economical and easy to use, researchers should consider other non-self-report measures of gratitude, and I will discuss these approaches below.

Two additional self-report scales deserve mention. The gratitude subscale on the Virtues in Action (VIA) character strengths questionnaire appears to tap gratitude at the affective trait level of analysis (Peterson & Seligman, 2004). If one is interested in comparing or contrasting gratitude with other character strengths, this would appear to be an ideal measure. However, it does not appear that psychometric information is available on the subscales of this measure. The Appreciation Scale devised by Adler and Fagley (2005) offers the assessment of a number of facets of the general trait of appreciation. As I suggested earlier however, I am not convinced that this scale taps anything that is clearly distinct from trait gratitude (see Wood et al., 2008). That being said, this questionnaire has a number of interesting subscales that might fit specific gratitude research questions. Each of these measures of trait gratitude has their strengths and weaknesses, and it might be interesting to see if a measure that combines the strengths of these questionnaires could be developed.

As stated earlier, little research has attempted to measure gratitude at the mood level of analysis. The one exception is the McCullough et al. (2004) article that I described earlier. In two studies, they measured grateful mood by asking subjects to what extent they felt grateful that day. Participants responded on a 5-point Likert-type scale (1 = very slightly or not at all; 5 = extremely). To determine the grateful mood of each day, subjects responded to the three gratitude adjectives (grateful, thankful, and appreciative), that McCullough et al. (2002) had previously used for assessing the emotional state of gratitude. Internal consistency of this measure was excellent (Study 1:  $\alpha = .92$ ; Study 2:  $\alpha = .90$ ). Although this appears to be the only attempt in the literature to assess grateful mood, I wonder whether this approach taps gratitude at the mood level, or were subjects providing something of a summary of their gratitude emotional experiences of the day? When a subject judges how grateful they felt that day, do they assess what their general background mood was like over the course of the day, or do they recall grateful emotional experiences throughout the day and base their assessment on these experiences? Based on these studies, it is not possible to ascertain how subjects were making these judgments, and it is altogether possible that some people made one type of judgment while others made another. At present however, this appears to be the best approach that

we have. In my judgment, issues surrounding gratitude at the mood level of analysis may prove to be very important when considering the contribution of gratitude to well-being, but it appears that for the field to move forward in this area we need advancements in the assessment of grateful mood.

Some researchers have used behavioral measures of gratitude. For example, “thank you” responses to favors such as opening a door (Okamoto & Robinson, 1997) or giving candy (Becker & Smenner, 1986) have been interpreted as behavioral markers of gratitude. Other studies have taken reciprocal responses to benefits as indicators of gratitude. The advantage of these measures is that they are not subject to problems with self-report such as self-presentation biases. The major disadvantage however, is that one cannot be sure whether the person is exhibiting the grateful behavior out of gratitude, politeness, or a feeling of indebtedness. For this reason, if a researcher is clearly interested in investigating the state of gratitude, it is probably not wise to use behavioral measures in isolation. However, behavioral measures may provide useful information when used with self-report measures.

Because of the many problems inherent in self-report, there is great potential in the development of indirect measures of gratitude. One direction would be to follow the approach of Greenwald and associates, and develop an “implicit attitudes test” (IAT) of gratitude (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). There would be many advantages to developing such a tool, but I have my doubts as to whether a successful tool of this nature could be developed for gratitude. First, the IAT tends to rely on basic good/bad judgments of various stimuli. While this is a good approach on issues such as race and one’s judgments about one’s self, it is more difficult to see what kind of good/bad responses would relate to the trait or state of gratitude. It seems that gratitude involves a more nuanced response. Second, I am aware of several attempts to develop IAT type measures of happiness, without much success. I believe however, that the development of other indirect measures of gratitude is possible, and these assessments should provide useful additions to self-report measures. For example, Farwell and Wohlwend-Lloyd (1998) had subjects report their attributions for the success of a shared task. They compared participants’ attributions of their own ability and effort to the ability and effort of their partner. Indeed, the more subjects felt that the task success was due to their own versus their partners’ ability and effort, the less grateful they felt. Perhaps a standardized task could be developed that follows this approach. For example, one could follow the approach of Baumeister and Ilko (1995), who asked participants to write about a major success experience. One could then assess participants’ attribution for the success, with the idea that attributions to others for the success would be more likely to be exhibited by grateful people. I would be quick to add that it would be important to assess attributions to others independently from attributions to the self. It is not that grateful people never take any credit for success in their life, but rather that they should be much more likely to attribute their successes to the contributions of others as well.

Another useful indirect assessment of gratitude might be pursued through memory measures. For example, Seidlitz and Deiner (1993) found that happy people tend to recall more positive events from their lives than unhappy people.

Diener suggests that this could be used as an indirect assessment of happiness. We have also found that grateful people tend to recall more positive events from their past (Watkins, Grimm, & Kolts, 2004). One could simply ask participants to recall as many “blessings” as they could for a 3-min period. There would need to be considerable work accomplished in the development of such a measure. For example, I would recommend limiting the time frame for recollection to the last 3 months, but research would need to determine which time frame would be most sensitive. Additionally, it would be interesting to know whether this is a better measure of gratitude at the trait, mood or state level. Memory measures such as these are easy to administer, and avoid many of the self-presentation issues associated with self-report.

In sum, there have been several successful self-report measures of gratitude that have been developed. When measuring the emotional state of gratitude however, it is difficult to know whether the tests used are measuring emotion or mood. It seems that the development of valid mood measures of gratitude would be a significant advance for the field. There is also great potential for the development of indirect measures of gratitude. But in the final analysis, the best assessment of gratitude is likely to be found in a multi-method approach where self-report, behavioral, and indirect measures of gratitude are used. I am not aware however, of any accepted way of combining these diverse assessments of gratitude into a composite measure, and a standardized multi-method assessment of gratitude would be a significant development for the science of gratitude.

## 2.6 The Debt of Gratitude: Distinguishing Gratitude from Indebtedness

Until recently, many social science scholars treated gratitude and indebtedness as synonymous states. If gratitude is associated with a felt “obligation to repay” then there may be a significant downside to gratitude. This aversive aspect of gratitude is well illustrated in the following passage by Hobbes (cited in Greenberg, 1980, p. 17):

To have received from one, to whom we think ourselves equal, greater benefits than there is hope to requite, disposeth to counterfeit love; but really secret hatred; and puts a man into the estate of desperate debtor. . . . For benefits oblige; and obligation is thralldom; and unrequitable obligation, perceptual thralldom; which is to ones equal, hateful.

In this passage, Hobbes appears to equate gratitude with indebtedness. If gratitude and indebtedness are essentially equivalent emotions, gratitude may not be as pleasant an experience as is commonly assumed. Indeed, it appears that some in the social sciences have equated gratitude and indebtedness (e.g., Komter, 2004).

The reduction of gratitude and indebtedness into a single construct may be due to the influential work of Marcel Mauss (1925/2002), who argued that in pre-capitalist societies the community was held together by reciprocity. Thus,

expressions of gratitude are viewed as simple exchanges for benefits to restore social balance in obedience to the *norm of reciprocity* (Gouldner, 1960). In the past, psychology appears to have followed the lead of other social scientists. For example, in his earlier writings Greenberg treats gratitude and indebtedness as synonymous (Greenberg, 1980). Later however, Greenberg seemed to recognize the inherent problems with this view. In an important seminal study of gratitude, Tesser and colleagues combined gratitude and indebtedness into a composite dependent variable because they were significantly correlated (Tesser, Gatewood, & Driver, 1968), although they did not report the strength of association. In our experience, if there is any correlation between the states of gratitude and indebtedness, it is either trivial (less than .20) or non-significant. As a psychological construct, Greenberg first defined indebtedness as “a state of obligation to repay another” in the context of the receipt of a benefit from another (Greenberg, p. 4). Greenberg goes on to argue that indebtedness is an emotional state of “arousal and discomfort” (p. 4), and that when one is in this state one is alert to opportunities to reduce this discomfort. If gratitude and indebtedness are essentially the same construct, or if they are strongly related states, this would have important implications regarding the supposed benefits of gratitude.

Early research suggested that at least at the phenomenological level, these two constructs are not equivalent. For example, Greenberg, Bar-Tal, Mowrey, and Steinberg (1982) found that 92 % of their research participants said that being “indebted” to others was an unpleasant state, but a Gallup poll indicated that the vast majority of people feel that gratitude is a happy state (Gallup, 1998). It is reasonable to suppose however, that these subjective differences between gratitude and indebtedness are an artifact of Western individualistic cultures. Some have suggested that in more collectivist cultures gratitude and indebtedness are more intertwined, and thus gratitude may take on a more unpleasant emotional hue, or conversely indebtedness may feel more pleasant. Although more cross-cultural research needs to be accomplished here, the little data that we have on the subject suggests that those in Eastern cultures experience gratitude and indebtedness similarly to those in the West. One study found that indebtedness is an undesirable state to individuals in Eastern cultures. Naito, Wangwan, and Tani (2005) investigated feelings evoked by a favor and found that for both Japanese and Thai students, indebtedness loaded strongly on their negative affect factor (along with “shame”, “regret”, and “uneasiness”). “Thankfulness” however, loaded strongly on the positive affect factor. At least in the minds of most people, gratitude and indebtedness are experienced very differently (see also Gray, Emmons, & Morrison, 2001).

Not only do indebtedness and gratitude feel differently, there is also evidence to suggest that their thought/action tendencies are very different. For example, across two studies we found that gratitude was moderately to strongly correlated with positive approach responses to the benefactor, and was negatively associated with antisocial/rejecting/avoidance tendencies (Watkins et al., 2006). Thus, gratitude clearly promotes prosocial action tendencies, and seems to inhibit antisocial

behaviors. Indebtedness on the other hand, was not clearly associated with any thought/action tendencies. Most of the correlations with feeling “obligated to repay” were non-significant. Indeed, in Study 1 although trivial (and non-significant) correlations were found with indebtedness and some prosocial action tendencies, the correlations with antisocial correlations were also positive and of a similar magnitude. It was almost as if participants who felt indebted to a benefactor were unsure of how to think or act toward them.

Our study referred to above (Watkins et al., 2006) showed that the cognitive appraisals that lead to gratitude are distinct from indebtedness. The primary purpose of the two studies reported in this article was to attempt to dissociate gratitude from indebtedness by manipulating the return expectations of the benefactor. This followed from Heider’s idea (1958) that a receiver of a benefit would like to believe that her gratitude is self-motivated or freely chosen, rather than a response that is required from the person providing the favor. Thus, Heider predicted that if a beneficiary felt that her gratitude was required from the benefactor, she would actually be less grateful. Although Heider did not discuss indebtedness, one may infer that he would predict that feelings of indebtedness would increase with increasing expectations of return from the benefactor. We investigated this theory in two vignette studies. We used vignettes because we felt that perceived expectations of a benefactor would be very difficult to control in an actual gift situation. All participants read a story about a benefactor helping them move, and then participants were asked how they would respond emotionally to this situation with a number of emotions, including gratitude and indebtedness. The stories were manipulated by changing the last few sentences in the scenario. In the “no expectation” condition participants were told “As you consider your friend’s help, you know them well enough that you feel your friend does not expect any kind of return favor.” In the moderate expectation condition we informed participants “As you consider your friend’s help, you remember that others have told you that when this friend helps anyone, he or she expects a clear expression of thanks, usually in person and in the form of a card or written note.” In the “high expectation” condition, we told participants “As you consider your friend’s help, you remember that others have told you that when this friend helps anyone, he or she expects a clear expression of thanks, usually in person and in the form of a card or written note, and they also expect a return favor. You happen to know that your friend is moving next Saturday.” Consistent with our predictions, in both studies we found that with increasing benefactor expectations, gratitude decreased but indebtedness increased. Moreover, people in the “high expectation” condition reported that they would be less inclined to help their benefactor in the future than those in the “no expectation” condition. This presents a curious paradox of giving and gratitude: The more a giver expects in return, the less the receiver is likely to return the favor. Our results appear to affirm the observation of Rousseau: “Gratitude is a duty which ought to be paid, but which none have a right to expect.” Although our findings were limited because of the use of a vignette methodology, it appears that studies using actual benefits are largely consistent with our results.

In three studies, Tsang (2006) also demonstrated significant differences between gratitude and indebtedness. Similar to our research, Tsang used a scenario methodology in Study 1. She found that people reported less gratitude in the scenario where the benefactor had ulterior motives for their gift. Indebtedness however, did not vary across the scenarios. Approaching this issue from a different angle, in Study 2 she had subjects recall either a benefit provided with “selfish” motives, or one that was provided with benevolent intentions. Indeed, participants reported that they were experiencing more gratitude in response to recalling the benevolent intentions memory. Once again however, there were no differences in indebtedness across the two types of recollections. Although in general Tsang’s results were consistent with ours’, the patterns of indebtedness were somewhat different. In Tsang’s studies indebtedness went down somewhat in the “selfish” compared to the benevolent motives condition (although not significantly, and gratitude decreased much more). In both of our studies indebtedness increased somewhat in the conditions similar to Tsang’s “selfish” motives conditions. There are several aspects that may explain the differences. In our study, our ulterior motive conditions were specifically designed to communicate increased benefactor expectations, not necessarily “selfish” motives. Also, Tsang only measured emotions relating to gratitude and indebtedness, whereas we measured a number of additional emotional states. One reason we included states other than gratitude and indebtedness was to hide the purpose of our study, and it is possible that subjects in Tsang’s study were more aware of the study’s purpose. But what should be highlighted here is that the pattern of results in Watkins et al. (2006) and Tsang (2006) are essentially the same. In fact, one unexpected result emerged from both articles. In all of these studies there was a fairly strong main effect for type of emotion. Across all scenario and recall type conditions, participants reported significantly more gratitude than indebtedness. This was somewhat of a surprise for us as we thought that the “high expectation” condition would produce more indebtedness than gratitude. Although indebtedness increased slightly with increased benefactor return expectations, indebtedness never approached the levels of gratitude reported by our participants. Although I am somewhat at a loss to explain this effect, perhaps a return to Heider’s (1958) theory might help here. If people actually prefer to experience gratitude as a result of their own free will rather than experiencing it because others think they should, they might simply prefer to experience gratitude over indebtedness because this is another expression of their freedom. Even though it may be obvious that another person is attempting to put them in their debt, individuals may respond with gratitude anyway because they are “choosing” not to submit to the benefactor’s expectations of them. Will this dominance of gratitude over indebtedness maintain in studies that use actual benefits in an experimental setting? Is the dominance of gratitude over indebtedness unique to Western individualistic cultures? Research that investigates these issues would be informative.

One additional factor has been found to dissociate gratitude and indebtedness: self-focus. In two studies Mathews and Green (2010) provided evidence supporting the notion that self-focus enhances indebtedness but inhibits gratitude. These authors argued that self-focus might impact gratitude and indebtedness differentially

because an internal focus directs attention away from the giver and the gift, and focuses attention instead on the inequity of exchange and thus may direct individuals more toward the *Norm of Reciprocity* (Gouldner, 1960). Indeed, in Study 1 they found that dispositional public self-focus was correlated with gratitude and indebtedness in opposite directions. Consistent with their predictions, public self-focus was negatively correlated with gratitude and positively associated with indebtedness. While this evidence offered support for their theory, in Study 2 they used an experimental paradigm to provide stronger support for their ideas. In this study they manipulated self-focus experimentally and then subjects recalled a recent benefit. Again supporting their theory, participants who recalled benefits in the self-focus condition reported more indebtedness than those in the control condition. With gratitude however, although means were in the expected direction there were no significant differences between the self-focus conditions. Although the authors concluded that their manipulation impacted indebtedness more than gratitude, there may have been some issues with their gratitude dependent variables. They used the GQ-6, which is primarily used to measure trait gratitude, and thus would be unlikely to show changes from a one-session experimental manipulation. Their second gratitude measure seemed to show a ceiling effect, and thus changes due to their experimental manipulation would be difficult to observe. The take away message from these studies was clear: self-focus differentially impacts gratitude and indebtedness, and these findings may have important practical implications for considering how to best enhance state and trait gratitude. To summarize the differences that we have seen between gratitude and indebtedness thus far, they are experienced very differently (gratitude is experienced positively, indebtedness is experienced negatively), they have distinct thought/action tendencies (gratitude is associated with prosocial tendencies while indebtedness is not), benefactor expectations and intentions differentially impact gratitude and indebtedness, and finally, self-focus appears to enhance indebtedness but inhibit gratitude.

In discussing the differences between gratitude and indebtedness it is important to highlight the few studies that have evaluated how gratitude and indebtedness might function in different ways. How do gratitude and indebtedness impact our relationships and well-being? Algoe, Gable, and Maisel (2010) investigated gratitude and indebtedness in romantic relationships in a 2-week daily experience sampling study. As expected, when someone received a thoughtful benefit from their romantic partner, this enhanced both gratitude and indebtedness. However, whereas the gratitude that resulted from beneficial interactions predicted enhanced relationship connection and satisfaction in their relationship on the next day, indebtedness did not. This result was obtained for both males and females. The results from this study add to a growing number of findings that support the theory that gratitude enhances relationship formation and maintenance. More about this in Chap. 8, but for now the important point is that gratitude appears to have clear benefits for relationships, but indebtedness does not. Moreover, gratitude and indebtedness show differential predictions of well-being. In one study, we developed a reliable trait indebtedness measure (assessing a person's disposition to feel indebted in response to benefits), and compared it with trait gratitude



(the GRAT-R) and also several measures of well-being (Van Gelder, Ruge, Frias, & Watkins, 2007). Consistent with our previous work, we found that gratitude was strongly and positively associated with subjective well-being (as measured by the Satisfaction with Life Scale and the Subjective Happiness Scale) and self-esteem. We also found a strong negative correlation between gratitude and depression (as measured by the BDI). Indebtedness on the other hand, showed moderate but negative correlations with our well-being measures. Trait indebtedness was positively associated with depression, and negatively correlated with both of our subjective well-being measures. Perhaps most importantly, trait gratitude and trait indebtedness were inversely related, suggesting that the tendency to experience indebtedness might actually inhibit one's ability to experience gratitude. This makes some sense: if one is constantly thinking about how they must pay someone back for a benefit, they should have difficulty focusing on the goodness of the gift and the giver, thus inhibiting a grateful response. One paradox in the literature should be pointed out however: although trait gratitude and indebtedness are negatively correlated, in scenario and memory recall studies grateful and indebted emotional states tend to be positively correlated (albeit small to trivial correlations). I will speak to this conundrum in more detail below.

The distinction between gratitude and indebtedness appears to be important, and there is much to be investigated on this front. It seems to me that researchers would be wise to include measures of indebtedness in gratitude research, and we now have reliable state and trait measures of this construct. Fredrickson's Broaden and Build model of positive emotion makes some interesting predictions about differences between gratitude and indebtedness (Fredrickson, 1998, 2004). Her theory predicts that as a positive affect gratitude should promote more diverse and creative forms of reciprocity, but indebtedness might narrow one's options for recompense. Also, if recompense is motivated out of indebtedness, it should be more likely to occur quickly after the original benefit, if it occurs at all. Other research involving gratitude and indebtedness could investigate this in the context of exchange versus communal relationships (Clark & Mills, 1979). One would think that indebtedness would be the more probable response in exchange relationships while gratitude should be more common in communal relationships. There appear to be a number of promising avenues of research in this area.

I have outlined a number of differences between gratitude and indebtedness that have been documented in the literature. The evidence seems clear that gratitude and indebtedness should be viewed as distinct states and traits. Gratitude appears to be largely adaptive, whereas indebtedness may not be. Is there then no debt of gratitude? Recall that the states of gratitude and indebtedness are often positively correlated and gratitude seems to motivate what appear to be behaviors of reciprocity. If there is a debt of gratitude, it does not appear that it is analogous to an economic debt. An economic debt is one where the debtor *must* recompense the lender, the lender establishes the debt, and it is a state the debtor desires to be free of (cf. Berger, 1975; Card, 1988; Wellman, 1999). Thus, although gratitude appears to be associated with a desire to recompense the benefactor, people report enjoying this feeling, and if the obligation is externally imposed the desire to return



the favor *decreases*. Could gratitude be tied to a sense of debt, but one in which the individual feels he or she is not obligated to repay? Does the *receiver* rather than the giver establish the debt of gratitude? The approach of moral philosopher Roberts might shed some light on this dilemma (1991a, 1991b, 2004). He defines gratitude as *a glad acceptance of our debt to one who has acted for our benefit*. In this view gratitude is expressed as a token of appreciation for the benefit and for the beneficiary's relationship with the benefactor, and the beneficiary gives back to their benefactor not because they have to, but rather because they want to. If this is the case, then the grateful person may respond with grateful recompense, not necessarily to discharge the debt (as in paying off an economic debt), but rather to establish and encourage the interdependent relationship with her benefactor. Perhaps Milton (1667/1999, p. 238) has best summarized this paradox of gratitude:

A grateful mind  
By owing owes not, but still pays, at once  
Indebted and discharged.

## 2.7 Conclusion

In this chapter we have explored the “what” of gratitude; I have attempted to define and describe gratitude at several levels. In general, research seems to support Spinoza's definition of gratitude presented in the epigraph: “*Thankfulness or gratitude* is a desire or eagerness of love, by which we strive to benefit one who has benefitted us from a like affect of love.” Although the field has progressed to a point where we appear to have a fairly clear understanding of the definition of gratitude at both the state and trait levels, I believe that there is much to be accomplished in exploring the “what” of grateful moods. Moreover, although we have good measurement tools for state and trait gratitude, more progress would be seen with advancements in the measurement of moods of gratitude. Another important issue that deserves the attention of researchers concerns *appreciation*. Clearly, gratitude and appreciation are closely linked, and theoretical and empirical work on the mental chronometry of appreciation would greatly enhance our understanding of gratitude. Indeed, it may be that a good understanding of what creates appreciation is crucial to our understanding of what causes gratitude, and we turn to this issue in the next chapter.

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